

Wyoming Water Development Commission Workshop & Meeting
WWDO Conference Room, 6920 Yellowtail Road
Cheyenne, Wyoming
March 14-15, 2019

Audio only links for the workshop and meeting can be found on our website: <http://wwdc.state.wy.us/>
Please check back for any updates to the E-Notebook materials on our website

Workshop Schedule: Thursday, March 14, 2019 – 1:30 p.m.

- 1. Introduction of New Commissioners**
- 2. Roll Call**
- 3. Audience Introductions**
- 4. Legislative Update – Director LaBonde and State Engineer Tyrrell**
 - HB 0081 (Omnibus water bill - planning)
 - SF 0059 (Omnibus water bill - construction)
 - SF 0069 (Water development program) **(L)**
 - HB 0018 (Water well drillers)
 - HB 0047 (Senate Confirmation of water compact commissioners)
 - SF 0039 (Legislative approval of water compact amendments)
 - SF 0042 (Water division superintendents)
 - SF 0087 (Temporary instream water use)
- 5. Project Updates**
 - Sweetwater I&S District/Cambria I&S District/City of Newcastle Projects **(M)**
 - Lower Nowood I&S District Project
 - Big Sandy Reservoir Enlargement
- 6. Platte River Recovery Implementation Program (PRRIP) Update (Mc)**
- 7. New Level I and II Project Applications (Received March 1) (N)**
- 8. Proposed Johnson County Lake DeSmet Contract**
- 9. Savery Creek Instream Flow Filing – Senator Larry Hicks**
- 10. Location of the 2019 Summer Tour/Meeting (O)**

Meeting Agenda: Friday, March 15, 2019 – 8:30 a.m.

- 1. Call to Order**
- 2. Recognition of members present to establish a quorum**
- 3. Audience Introductions**
- 4. Election of Officers**
- 5. Approval of Minutes (P)**
 - December 12, 2018 – Workshop
 - December 13, 2018 – Meeting
- 6. Planning Amendments (Q)**
 - Alkali Creek Reservoir Final Design, Amendment No. 1
 - GVID Storage Enlargement, Level II Study, Amendment No. 2
 - Leavitt Reservoir Expansion Final Design, Amendment No. 1
 - New Fork Lake Dam Enlargement, Level II Study, Amendment No. 2
- 7. Planning Closeout Memos (R)**
 - Beaver Creek Watershed Study, Level I
 - Bitter Creek/East Flaming Gorge Watershed Study, Level I
 - Fontenelle Dam and Outworks Infrastructure Completion, Level II
 - Glendo Reservoir Full Utilization, Level II
 - Goose Creek Watershed Study, Level I
 - Shell Master Plan, Level I
- 8. Planning Project Contracts**
 - Evanston Water Master Plan, LI **(S)**
 - Salt Creek, Edgerton, Midwest Water Master Plan, LI **(T)**
 - Torrington Water Master Plan, LI **(U)**

 - Lake DeSmet Healy Reservoir Utilization, LII **(V)**

 - Bluff/Upper Bluff Irrigation District Master Plan, LI **(W)**

 - Boulder Irrigation District Rehabilitation, LII **(XYZ)**
 - LaPrele Irrigation District Rehabilitation, LII **(MM)**
- 9. UW Water Research Program MOU (McMc)**

10. Small Water Project Program – Funding Applications (NN)

- 80 Projects

11. 2019 Construction Project & Well Purchase Agreements – Account I (OO)

- Buffalo Wells & Transmission 2019
- Clearmont Well Connection 2019
- Etna Storage Tank 2019
- GR/RS/SC JPWB Pump Station 2019
- Lander Storage Tanks and Pump Station 2019
- Northwest Rural Water System Improvements 2019
- Rolling Hills Well No. 7 Connection 2019

12. 2019 Construction Project Agreements – Account II (PP)

- Eden Valley Irrigation District System Improvements 2019
- Wind River Inter-Tribal Council Rehab 2019

- Austin-Wall Reservoir Rehabilitation 2019
- Big Horn Canal Wasteway Rehabilitation 2019
- Bluff/Upper Bluff System Improvements 2019
- Dry Creek Irrigation District Rehabilitation 2019
- Heart Mountain Irrigation District Rattlesnake Liner Replacement 2018
- Interstate Diversion Structure Rehabilitation 2019
- Lakeview Carter Creek Siphon/Spillway 2019
- Wheatland Irrigation District Tunnel Dam Rehabilitation 2019

- Cody Canal Rehabilitation 2019
- Deaver Irrigation District Rehabilitation 2019
- Lovell Moncur Lateral Rehabilitation 2019
- Midvale Irrigation District Rehabilitation 2019
- Shoshone Irrigation District Rehabilitation 2019

13. 2019 Construction Project Amendments (QQ)

- Eden Valley Farson Lateral Rehabilitation
- Eden Valley Farson Lateral Rehabilitation (BSP Salinity Control)
- Casper Zone 3 Improvements
- Piney & Cruse Canal Piping
- Cokeville Tri-Diversion Structure
- Gillette Regional Extensions 2017
- Gillette Regional Extensions Phase IV 2018

14. Leavitt Reservoir Expansion – Account III, Level III (RR)

15. Commission Authorization for the WWD to Transfer Funds (SS)

- Transfer \$500,000.00 to the Middle Piney Reservoir Account as Authorized in SEA 0028 (SF 0059)

16. Water Service Contract with the Nebraska Community Foundation (TT)

- On Behalf of the Commission, authorize the Director to Execute a Water Service Contract with the Nebraska Community Foundation (PRRIP) for Water from the Pathfinder Modification Project

17. Consideration of a Water Service Contract with Genesis Alkali Wyoming, L.P. for water from Fontenelle Reservoir (UU)

- Authorize the Director to sign on behalf of the Commission

18. Proposed Game and Fish Commission Contract for Healy Reservoir (VV)

- Authorize the Director to sign on behalf of the Commission

19. 2019 Buffalo Bill Reservoir Winter Release Agreement (WW)

- Authorize the Director to sign on behalf of the Commission

20. Basin States Salinity Control – Applications (XYZ2)

21. Update of Level III Construction Projects (H)

- Cambria Tank
- Central Wyoming Regional Elevated Tank
- Douglas Box Elder Spring
- Goshen Irrigation District Rehabilitation 2017
- High Meadow Ranch Well, Tank & Pipeline 2017
- Lovell Tank/Zone 2 Improvements
- Midvale Irrigation District Rehabilitation 2018
- Opal Well Improvements 2017
- Wheatland Pipelines
- Wheatland Wells 2017

22. Future Meetings Schedule (K)

23. Discussion

- Re: Director's Position

24. Adjourn

WYOMING WATER DEVELOPMENT COMMISSION
COMMISSIONERS
March 2019

| | |
|--|-------------------------------|
| Vacant | Water Division IV |
| Vacant | Water Division I |
| Gerald Geis (R) (3/1/21) 600 Holly Avenue Worland, WY 82401 (H) 307-347-6443 | Water Division III |
| Clinton W. Glick (R) (3/1/22) P.O. Box 1308 Fort Washakie, WY 82514 (C) 307-349-0103 | Wind River Indian Reservation |
| Kellen Lancaster (R) (3/1/21) 287 Star West Drive Afton, WY 83110 (C) 307-887-1400 | Water Division IV |
| Sheridan Little (R) (3/1/19) P.O. Box 165 Leiter, WY 82837 (C) 307-620-0923 | Water Division II |
| Mike Purcell (R) (3/1/21) 317 Palm Springs Ave. Cheyenne, WY 82009 (H) 307-638-1118 (C) 307-630-7121 | Member-at-Large |
| Larry Suchor (R) (3/1/21) 21 Spruce Street Pine Haven, WY 82721 (H) 307-756-9491 | Water Division II |
| Rodney K. Wagner (R) (3/1/21) 3715 Road 86 Lingle, WY 82223 (H) 307-837-2786 | Water Division I |
| Bill Yankee (I) (3/1/23) 123 Dallas Dome Rd. Lander, WY 82520 (H) 307-332-6305 (C) 307-330-7922 | Water Division III |

WYOMING WATER DEVELOPMENT COMMISSION

COMMISSIONERS

| | |
|-----------------------------|-------------------------------|
| Vacant | Water Division IV |
| Vacant | Water Division I |
| Gerald Geis | Water Division III |
| Clinton W. Glick | Wind River Indian Reservation |
| Kellen Lancaster, Secretary | Water Division IV |
| Sheridan Little | Water Division II |
| Mike Purcell | Member-at-Large |
| Larry Suchor, Vice-Chairman | Water Division II |
| Rodney Wagner | Water Division I |
| Bill Yankee | Water Division III |

STAFF

| | |
|-----------------|-------------------------------------|
| Harry LaBonde | Director |
| Andrea Odell | Administrative/Fiscal Manager |
| Janet Belmonte | Accountant |
| Nancy Casner | Office Support Specialist |
| Barry Lawrence | Deputy Director – Planning |
| Kevin Boyce | Project Manager |
| Keith Clarey | Project Manager |
| Julie Gondzar | Project Manager |
| Jodie Pavlica | Project Manager |
| Katie Talbott | Outreach Coordinator |
| Chace Tavelli | Project Manager |
| Jodee Pring | Supervisor-River Basin Planning |
| Peter Gill | Project Manager |
| Mabel Jones | Project Manager |
| Jason Mead | Deputy Director – Dams & Reservoirs |
| Andrew Linch | Project Manager |
| Tony Rutherford | Project Manager |
| Brian Smith | High Savery Dam Technician |
| Bryan Clerkin | Deputy Director – Construction |
| Bill Brewer | Project Manager |
| Jason Fernandez | Project Manager |
| Keenan Hendon | Project Manager |
| Will Hensel | Project Manager |
| Ken Mitchell | Project Manager |
| Wade Verplancke | Project Manager |

ADVISORS

| | |
|----------------|---------------------------|
| Ryan Schelhaas | Attorney General's Office |
| Pat Tyrrell | State Engineer |
| Greg Kerr | University of Wyoming |
| Shawn Reese | Wyoming Business Council |



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Ryan Schelhaas

PRIVILEGED AND CONFIDENTIAL

December 12, 2017

Released to the Public on 1-11-18

Sheridan Little, Chairman
Wyoming Water Development Commission
6920 Yellowstone Rd.
Cheyenne, WY 82002

Dear Chairman Little:

You request that this Office determine whether article 16, section 10 of the Wyoming Constitution permits the Water Development Commission to fund water projects that aid private entities without an exchange of adequate consideration. In essence, you ask whether section 10 exempts the construction of water projects from all provisions contained in article 16, section 6 or merely the portion of that section prohibiting the State from constructing internal improvements unless authorized by a two-thirds vote of the people.¹

¹ Article 16, section 6 provides in full:

- (a) Neither the state nor any county, city, township, town, school district, or any other political subdivision, shall:
 - (i) Loan or give its credit or make donations to or in aid of any individual, association or corporation, except for necessary support of the poor; or
 - (ii) Subscribe to or become the owner of the capital stock of any association or corporation, except that:

Short Answer

As discussed below, article 16, section 10 exempts the portion of article 16, section 6 prohibiting the State from constructing internal improvements unless authorized by a two-thirds vote of the people. Because the amendment contains no additional exceptions, the remainder of article 16, section 6 continues to apply. Therefore, the Commission may not fund water projects that primarily benefit private entities without an exchange of adequate consideration.

Background

The answer to your question requires an examination of the history of constitutional limitations on public investment in the private sector. These restrictions arrived with the introduction of the railroads to the West in the 19th century. At that time, the presence of an adjacent railroad became vital to local economic growth. *Frank v. Cody*, 572 P.2d 1106, 1112 (Wyo. 1977). As a result, state and local governments began offering financial assistance to railroads, including the purchase of stock and the cosigning of railroad bond issues. *Id.* Several ventures failed, leaving taxpayers holding worthless investments or guaranteeing inadequately-secured debts. *Id.* The crisis led to restrictions against government involvement in private ventures in forty-five state. *Id.*

To protect against such private speculation with public funds, states employed both substantive and procedural safeguards. Susan P. Fino, *A Cure Worse than the Disease: Taxation and Finance Provisions in State Constitutions*, 34 Rutgers L.J. 959, 969 (2003). First, many constitutions prohibited the state from loaning money or credit to private entities or investing in their stock. *Id.* Second, state constitutions commonly required supermajority votes of the legislature or voter approval at a referendum before engaging in the construction of internal improvements. *Id.*

(A) Funds of public employee retirement systems and the permanent funds of the state of Wyoming may be invested in such stock under conditions the legislature prescribes;

(B) The legislature may provide by law for the investment of funds not designated as permanent funds of the state in the capital stock of any association or corporation and may designate which of these funds may be invested. The legislature may prescribe different investment conditions for each fund. Any legislation establishing or increasing the percentage of any fund that may be invested under this subparagraph shall be passed only by a two-thirds (2/3) vote of all the members of each of the two (2) houses voting separately.

(b) The state shall not engage in any work of internal improvement unless authorized by a two-thirds (2/3) vote of the people.

The delegates to the Wyoming Constitutional Convention enshrined both of these safeguards into article 16, section 6 of the Wyoming Constitution. The first sentence of the provision prohibits state and local government from loaning or donating public funds to the private sector or investing in the capital stock of associations or corporations. Wyo. Const. art. 16, § 6 (July 10, 1890). Its second sentence mandates that “[t]he state shall not engage in any work of internal improvement unless authorized by a two-thirds vote of the people.” *Id.*

In certain instances, the Wyoming Supreme Court and this Office have found inapplicable the prohibitions contained in the first sentence of the provision. *See, e.g., Op. Wyo. Att’y Gen. 1986-024* (Dec. 3, 1986). In this vein, article 16, section 6 does not forbid loans or grants to other governmental entities in Wyoming because these entities do not qualify as individuals, associations, or corporations. *Compare Bd. of Cty. Comm’rs v. Union Pac. R.R.*, 171 P. 668, 669 (Wyo. 1918) (finding art. 16, § 6 applied to a private fair association), *with Bd. of Cty. Comm’rs v. White*, 335 P.2d 433, 440 (Wyo. 1959) (finding art. 16, § 6 did not apply to public county fair board). Therefore, a grant or loan to cities, irrigation districts, or other public entities falls outside this constitutional prohibition.

Moreover, the restriction against making donations does not apply when a public entity contracts with a private entity. *Frank*, 572 P.2d at 1112. Thus, a public entity may transact with the private sector if the public entity receives consideration, that is, property or services in exchange for public funds. *Id.* In other words, a public entity may pay money to a private party for some benefit to the public, such as the construction of a building, without violating the constitution.

Without any limitations to this analysis, a public entity could pay much more than the fair market value of the property or services provided to the public, effectively donating money to a private entity. *Op. Wyo. Att’y Gen. 1986-024* (Dec. 3, 1986); *see also Turken v. Gordon*, 224 P.3d 158, (Ariz. 2010) (“[O]ur Gift Clause jurisprudence quite appropriately focuses on adequacy of consideration because paying far too much for something effectively creates a subsidy from the public to the seller.”). In 1986, this Office determined that the constitution requires an exchange of adequate consideration (i.e., benefit to the public) for the funds expended, foreclosing this loophole. *Op. Wyo. Att’y Gen. 1986-024* (Dec. 3, 1986).

While this Office has interpreted the first sentence of article 16, section 6, the second sentence has rarely been examined and the Attorney General has never opined as to article 16, section 10, one of its exceptions.

Analysis

To address your question, this Office must utilize well-established principles of constitutional interpretation. When interpreting or construing a provision of the Wyoming Constitution, the Wyoming Supreme Court follows the same rules governing the interpretation and construction of statutes. *Cantrell v. Sweetwater Cty. Sch. Dist. No. 2*, 2006 WY 57, ¶ 6, 133 P.3d 983, 985 (Wyo. 2006). In doing so, the Court seeks to **discern** the intent of the drafters of the Wyoming Constitution. *Id.*; *Cathcart v. Meyer*, 2004 WY 49, ¶ 39, 88 P.3d 1050, 1065 (Wyo. 2004). To this end, “[e]very statement in the [Wyoming] constitution must be interpreted in light of the entire document, with all portions thereof read in *pari materia*.” *Cathcart*, ¶ 39, 88 P.3d at 1065 (citations omitted). When performing constitutional or statutory analysis, courts consider as persuasive the interpretation of textually similar provisions from Wyoming or other jurisdictions. *State Farm Mut. Auto. Ins. Co. v. Shrader*, 882 P.2d 813, 822 (Wyo. 1994)(citations omitted).

If the language of the constitutional provision is unambiguous, then the provision must be given its plain meaning. *Cathcart*, ¶ 39, 88 P.3d at 1065. Should the Court find a provision to be ambiguous, it must look to “the mischief the statute was intended to cure, the historical setting surrounding its enactment, the public policy of the state, the conclusions of law, and other prior and contemporaneous facts and circumstances, making use of accepted rules of construction to ascertain a legislative intent that is reasonable and consistent.” *Dir. of the Office of State Lands & Invs. v. Merbanco, Inc.*, 2003 WY 73, ¶ 35, 70 P.3d 241, 253 (Wyo. 2003) (quoting *State ex rel. Motor Vehicle Div. v. Holtz*, 674 P.2d 732, 736 (Wyo. 1983)).

A. Article 16, section 10 unambiguously exempts the construction of water projects from the internal improvements provision of article 16, section 6.

To determine the intent of the drafters of article 16, section 10, we begin with an examination of the plain meaning of the amendment’s text. *Bender v. Decaria*, 998 P.2d 953, 955 (Wyo. 2000). In pertinent part, article 16, section 10 states that

The provisions of section 6 of article 16 of the constitution *prohibiting the state from engaging in any work of internal improvements*, unless authorized by a two-thirds vote of the people, shall not apply to or affect the construction or improvement of any works designed, constructed or operated for the purposes of the conservation or utilization of water

Wyo. Const. art. 16, § 10 (emphasis added). The amendment does not mention any other provision of article 16, section 6.

Because courts consider the omission of words from a provision to be an intentional act by its drafters, a court will not read additional words into a provision. *Stutzman v. Office of the State Eng'r*, 2006 WY 30, ¶ 16, 130 P.3d 470, 475 (Wyo. 2006)(citation omitted). Thus, a court may not read additional exceptions into a statutory or constitutional provision. *Scott v. Scott*, 918 P.2d 198, 200 (Wyo. 1996); *Hede v. Gilstrap*, 2005 WY 24, ¶ 39, 107 P.3d 158, 175 (Wyo. 2005); *Lo Sasso v. Braun*, 386 P.2d 630, 631 (Wyo. 1963). Accordingly, we must interpret the omission of additional exceptions to article 16, section 6 as an intentional decision to retain the other restrictions in that section. Because the adequate consideration requirement stems from those remaining restrictions, article 16, section 10 does not permit the Commission to fund water projects that primarily benefit private entities without an exchange of consideration.

B. The history of article 16, section 10 confirms that its drafters intended to provide the State with the power to fund water projects, not to alter the prohibitions against State funding of the private sector.

While courts primarily examine the plain meaning of a provision to determine the drafter's intent, a court may resort to extrinsic aids of interpretation to confirm that intent. *Parker Land & Cattle Co. v. Wyo. Game & Fish Comm'n*, 845 P.2d 1040, 1045 (Wyo. 1993). A review of the legislative and administrative history of article 16, section 10 confirms the above interpretation of the Constitution.

In 1937, the Legislature created the State Water Conservation Board, the predecessor to the Commission. 1937 Wyo. Sess. Laws 258. The legislation specifically provided that the Board would cooperate with local public entities and the federal government, "provided that such acts of cooperation shall not involve the construction of internal improvements by the board within or without the State of Wyoming[.]" *Id.* at 259. The State Engineer and other members of the Board expressed concern regarding this limitation on its authority, particularly in contrast with the Montana Water Conservation Board.² 1935-1936 State Eng'r of Wyo., Twenty-Third Biennial Rep. 29 (Nov. 30, 1936); 1939-1940 State Eng'r of Wyo., Twenty-Fifth Biennial Rep. 26-27 (Oct. 31, 1940); Minutes of Special Meeting of the Wyo. State Water Conservation Bd. 29-30 (Nov. 18, 1938). The State Engineer explained that the internal improvements provision arguably put Wyoming at a competitive disadvantage when it came to the conservation of water.

² Under the "Montana Plan," the Montana Water Conservation Board would not only investigate the feasibility of water conservation projects, but could proceed to construct projects either funded via state-backed bonds or grants obtained from the federal government. *State ex. rel. Normile v. Cooney*, 47 P.2d 637, 640 (Mont.1935).

1939-1940 State Eng'r of Wyo., Twenty-Fifth Biennial Rep. 26-27 (1940). He reported that, due to its more flexible constitution, "Montana has been able to use her water more extensively on account of rapid development that she will eventually be in a position to deprive Wyoming of the use of a great deal of water from the Yellowstone Basin." *Id.*

At a special meeting in November 1938, the Board determined that "in order for the Board to engage in construction and financing of conservation proposals, a Constitutional amendment would be necessary, and that each Member of the Board should make an effort to convince representatives to the Legislature from their respective districts" of the need for an amendment. Minutes of Special Meeting of the Wyo. State Water Conservation Bd. 29-30 (Nov. 18, 1938). In response, the Legislature passed Senate Joint Resolution No. 3, placing article 16, section 10 on the ballot. 1939 Wyo. Sess. 254-255. At the same time, the Legislature amended the Board's duties to include the recommendation of water projects to the Governor and removed the statutory prohibition against the construction of internal improvements. *Id.* at 180.

While this legislative and administrative history is replete with discussion of the internal improvements provision, the history contains no mention of the prohibition against the lending of credit or the donation of public funds to private entities.³ Given this focus, the history of article 16, section 10 confirms that its drafters intended to provide the State the authority to fund water projects, not to enable payment of public funds to the private sector.

³ In fact, the broader authority of the Montana Water Conservation Board, which the drafters of article 16, section 10 sought to emulate, remained subject to a constitutional provision similar to article 16, section 6. In the 1930s, article 13, section 1 of the Montana Constitution provided that: "[n]either the state, nor any county, city, town, municipality, nor other subdivision of the state shall ever give or loan its credit in aid of, or make any donation or grant, by subsidy or otherwise, to any individual, association or corporation, or become a subscriber to, or a shareholder in, any company or corporation, or a joint owner with any person, company or corporation, except as to such ownership as may accrue to the state by operation or provision of law." *State ex. rel. Normile v. Cooney*, 47 P.2d 637, 640, 646-47 (Mont.1935).

C. Other amendments to article 16, section 6 support the interpretation that article 16, section 10 excepts water projects from the internal improvements provision only.

Furthermore, interpreting article 16, section 10 as exempting water projects from the internal improvements provision accords with other amendments to article 16, section 6, namely, article 16, sections 9, 11 and 12. We will discuss each amendment in turn.

Ratified by the voters twenty-four years before section 10, section 9 includes a nearly identical exception concerning the construction of roads.⁴ Unlike article 16, section 10, the Wyoming Supreme Court interpreted the scope of this exception on several occasions. In *Simpkin v. Rock Springs*, the Court explained that highway construction had been excepted from the internal improvements provision of article 16, section 6, “by an amendment contained in what is now known as Section 9 of said article, but the provision is retained as to other works of internal improvement.” *Simpkin v. Rock Springs*, 237 P. 245, 251 (Wyo. 1925). Similarly, in *Ross v. Trustees of Univ.*, the Court opined that the duty to establish highways resides with the State because the internal improvements provision was “declared not to apply to or affect the construction or improvement of public roads and highways” *Ross v. Tr. of Univ.*, 228 P. 642, 646 (Wyo. 1924).

Extrinsic aids to interpretation confirm the Court’s determination. In a series of opinion pieces published shortly before the referendum on section 9, a committee of the Wyoming State Bar explained that the amendment served as a means to participate in a recent federal highway construction program. Editorial, *Good Road Amendment: Vote To Be Taken In State On Changing Constitution for Road Building*, *The Laramie Republican*, Sept. 26, 1916, at 6; Editorial, *Good Roads Amendment To Be Voted On This Fall*, *The Worland Grit*, Sept. 29, 1916, at 1. The program required the State to pay 50 percent of construction costs for each project. *Id.* Absent an amendment, the Constitution would require a two-thirds vote of the people in order to engage in each road construction project and the committee argued “[e]xperience has shown that it is practically impossible to secure a two-thirds vote in favor of any proposition submitted no matter how favorable it may appeal to the people; and such a method would be too cumbersome and slow in its operation to be practicable.” *Id.*

⁴ In pertinent part, section 9 states that “[t]he provisions of section 6 of article 16 of this constitution prohibiting the state from engaging in any work of internal improvement unless authorized by a two-thirds vote of the people shall not apply to or affect the construction or improvement of public roads or highways....”

Article 16, section 11, an exception concerning the construction of airports, bears a similar construction.⁵ While never subject to judicial interpretation, the Legislature's contemporary analysis of the provision suggests that the amendment solely concerned the internal improvements provision. Though not binding, the Supreme Court gives significant weight to legislative interpretation of a provision. *Hopkinson v. State*, 664 P.2d 43, 64 (Wyo. 1983). The Legislature required the Secretary of State to publish a statement on the ballot, which explained that the amendment related to the manner in which the State may engage in works of internal improvement and would permit the Legislature to provide for airport construction, "without first submitting the question of the State's authority to engage in such work of internal improvement to the people of the State, as is now required by Section 6 of Article XVI." 1947 Wyo. Sess. Laws 258, H.R.J. Res. 8, 29th Legis. (1947).

Finally, in placing article 16, section 12 on the ballot, the Legislature demonstrated the manner in which it could provide a blanket exception to article 16, section 6. In relevant part, section 12 states that the Legislature may appropriate funds to create a revolving investment fund for the promotion of economic development in the State "[n]otwithstanding ... Article 16, Sections 1, 2, and 6 of the Constitution[.]" Wyo. Const. art. 16, § 12. The Wyoming Supreme Court in *Ruppenthal v. State* confirmed the broad scope of this exception, explaining that article 16, section 12 of the Constitution established an economic development loan fund for the express purpose of enabling the state to make private sector loans entirely exempt from article 16, section 6. *Ruppenthal v. State*, 849 P.2d 1316, 1319 n.5 (Wyo. 1993).

In sum, both judicial and extrinsic aids of interpretation establish that article 16, sections 9 through 11 merely exempt road, water, and airport construction projects from the internal improvements provision rather than the entirety of article 16, section 6. Moreover, article 16, section 12 reveals the means by which the drafters of article 16, section 10 could have provided a blanket exception to section 6. The fact that article 16, section 10 does not use this language further confirms that the drafters intended to create an exception to the internal improvements provision only.

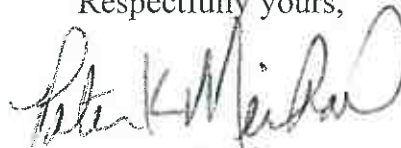
⁵ In relevant part, Article 16, section 11 provides that "[t]he provisions of section 6 of article 16 of this constitution prohibiting the state from engaging in any work of internal improvements, unless authorized by a two-thirds vote of the people, shall not apply to or affect the construction, maintenance or improvement of public airports, aircraft landing strips and related facilities"

Conclusion

Based on the language of article 16, section 10, its history, and the interpretation of constitutional amendments concerning the same subject matter, article 16, section 10 of the Wyoming Constitution merely exempts water projects from the prohibition against the construction of internal improvements unless authorized by a two-thirds vote of the people. Because the proscription against State investment in the private sector remains, the Water Development Commission may not fund water projects that primarily benefit private entities without an exchange of adequate consideration.

If we can be of further assistance, please feel free to contact us.

Respectfully yours,



Peter K. Michael
Attorney General



Ryan Schelhaas
Deputy Attorney General



Karl D. Anderson
Senior Assistant Attorney General

 FOR:

Daniel Solish
Assistant Attorney General



Harry Labonde <harry.labonde@wyo.gov>

Resignation.

1 message

Robert Strickland <nccsuper@rtconnect.net>

Mon, Feb 11, 2019 at 1:18 PM

To: Bill Brewer <bill.brewer@wyo.gov>, Camp Creek Engineering <ednowak@wyoming.com>, harry.labonde@wyo.gov

Cc: ggeis1933@gmail.com, cruzalick@yahoo.com, kellenklancaster@gmail.com, mkpurcell737@gmail.com, lfsucho@gmail.com, rodwagner@wyoboard.gov, Al Kisner <alkisnerforthewild@earthlink.net>, Julie Whetsell <jwhetsell@rtconnect.net>, Karmel Hoffman <khoffman@fsbnewcastle.com>, Oscar Johnson <oscarj@rtconnect.net>, Shirley Parks <sparks@rtconnect.net>, tina conklin <midnightbluewy@yahoo.com>, Tobey Cass <casst@wcsd1.org>, Alice Tratebas <tratebas@aol.com>, Colin McGuire <cjmac@rtconnect.net>, Shawn and Amy Brown <shawnandamybrown@gmail.com>

As of today, Feb. 11, 2019, I AM RESIGNING FROM MY POSITION as Director of the Sweetwater Improvement and Service District. As you know, we have had our house on the market for several months and have been slowly selling some things off to downsize. Please contact Toby Cass or Shirley Parks if you are interested in the position.

We have several projects to complete and several of the guys from our District have volunteered to help. Contact Ed Nowak to assist with getting past DEQ. I have all the maps and instructions, and will pass them off to Shirley. This District will fail WITHOUT her. From my point of view we need to bypass DEQ and apply for a grant to complete the pipeline north past Whetsell's house on the westside of the road. You will also see it crosses the road to 40 Breakneck and ties into the 1 ¼ inch line that goes to the shut off above the propane tank. You will also see that Grimm's stay hooked up on Shell Road.

It is unfortunate that Mr. La Bonde only completed half of what he should have done as far as our pipeline goes. He stopped short of the goals. Mr. La Bonde, WE STILL HAVE NO WATER and Cambria has been putting water through OUR PIPE without ASKING since JULY 29, 2018. Did you forget that they do not take possession of the pipeline until we have clean water in our pipeline. WE STILL HAVE NO WATER!

They have a new pump station and won't hook it up. Why is that? Last year they completed only two of the projects the engineer requested of them. I understand you commented at your Engineer Conference, "I THINK they are doing this on purpose."

I will make sure that all of the Commissioners are aware of how you have kicked us under the rug and completely IGNORED Sweetwater while you scurried around finding additional funds for Cambria. By the way Harry, WE STILL HAVE NO WATER!!! Since you didn't like the idea of us digging up the pipeline, maybe we should just fill it with POND water. At least we would have water in the line!

We finished our project on time and under budget. Yes, we had a couple of snags but it was completed in a timely manner. Yes, your assumption was correct, they have been doing everything they can to stall.

By the way Commissioners this project has been going on for over two years! Harry continues to tell us, "that he has No teeth and there is nothing he can do!" That is very strange because all he has to do is say, "Sorry we don't fund that." We as a district have heard this several times.

This has been a very interesting exercise in futility for the last **10 years**. It is amazing, I worked in Government for 37 years and have never encountered the likes of this. By the way Commissioners, WE STILL HAVE NO WATER!

Good Luck,

Robert Strickland



February 14, 2019

Senator John Barrasso
United States Senate
307 Dirksen Senate Office Building
Washington, D.C. 20510

Subject: Platte River Recovery Implementation Program (PRRIP) Extension

Dear Senator Barrasso,

As part of my transition to the Governor's Office, I was briefed by Harry LaBonde on the status to the Platte River Recovery Implementation Program (PRRIP) and its importance to Wyoming water users. As I understand the PRRIP, it is now entering the 13th and last year of the first increment which, will be ending on December 31, 2019.

The PRRIP is a multi-state, collaborative program where the three states of Wyoming, Colorado and Nebraska have been working with the Bureau of Reclamation, Fish and Wildlife Service, water users, and environmental groups to recover the target species of whooping cranes, least terns, piping plovers and pallid sturgeon in the central Platte River. In the first 12 years of the program, over 12,000 acres of critical habitat have been preserved and improved while water users in the basin have been able to continue their long-established beneficial use of Platte River water resources. Members of the PRRIP Governance Committee are seeking additional time to develop and implement key water projects for the program. As such they have proposed a 13 year extension of the first increment. The PRRIP functions as the reasonable and prudent alternative for Environmental Species Act (ESA) compliance regarding the four target species. It is viewed as a model program on how, with collaboration, the Environmental Species Act (ESA) can be integrated into the management of habitat and water use within a river basin.

In June 2018, Harry LaBonde (Wyoming's Representative on the Governance Committee) conveyed to you, Senator Enzi, and Congresswoman Cheney, draft federal legislation that will extend the PRRIP first increment for 13 additional years. This draft legislation was developed by the three state representatives on the Governance Committee and was supported by Governor Mead. It is important to continue the conservation efforts regarding the four threatened or

endangered species in the central Platte River region in Nebraska, while at the same time protecting water users in the three states.

I am now writing to express my support for extending the first increment of the PRRIP for an additional 13 years. The extension of the program represents the reasonable and prudent alternative for ESA compliance while at the same time protecting current water users and allowing development of new water uses. I hope you see the benefits to extending the program and I urge you sponsor and endorse the attached legislation in Congress.

If you should have any questions, please feel free to contact me.

Respectfully,

A handwritten signature in blue ink that reads "Mark Gordon". The signature is fluid and cursive, with the first name "Mark" and last name "Gordon" clearly legible.

Mark Gordon
Governor

Cc: Harry LaBonde – Wyoming Governance Committee Representative
Jeff Fassett – Nebraska Governance Committee Representative
Don Ament – Colorado Governance Committee Representative

Sec. XXX. PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM EXTENSION AUTHORIZATION

(a) **PURPOSES.**-The purposes of this section are to authorize-

(1) the Secretary of the Interior, acting through the Commissioner of Reclamation and in partnership with the States, other Federal agencies, and other non-Federal entities, to continue the cooperative effort among the Federal and non-Federal entities through the continued implementation of the Platte River Recovery Implementation Program First Increment Extension for threatened and endangered species in the Central and Lower Platte River Basin without creating Federal water rights or requiring the grant of water rights to Federal entities.

(b) **PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM.**-

(1) **DEFINITIONS.**- In this subsection:

(A) **AGREEMENT.**- The term “Agreement” means the Platte River Recovery Implementation Program Cooperative Agreement entered into by the Governors of the States and the Secretary, including an amendment or addendum to the Agreement to extend the Program.

(B) **FIRST INCREMENT.**- The term “First Increment” means the Program’s first 13 years from January 1, 2007 through December 31, 2019.

(C) **FIRST INCREMENT EXTENSION.** – The term “First Increment Extension” means the extension of the Program for 13 years from January 1, 2020 through December 31, 2032.

(D) **GOVERNANCE COMMITTEE.**-The term “Governance Committee” means the governance committee established under the Agreement and composed of members from the States, the Federal Government, environmental interests, and water users.

(E) **INTEREST IN LAND OR WATER.**-The term “interest in land or water” includes fee title, short- or long-term easement, lease, or other contractual arrangement that is determined to be necessary by the Secretary to implement the land and water components of the Program.

(F) **PROGRAM.**- The term “Program” means the Platte River Recovery Implementation Program established under the Agreement and continued under an amendment or addendum to the Agreement.

(G) **PROJECT OR ACTIVITY.**- The term “project or activity” means-

(i) the planning, design, permitting, or other compliance activity, construction, construction management, operation, maintenance, and replacement of a facility;

(ii) the acquisition of an interest in land or water;

(iii) habitat restoration;

(iv) research and monitoring;

(v) program administration; and

(vi) any other activity that is determined to be necessary by the Secretary to carry out the Program.

(H) **SECRETARY.**-The term “Secretary” means the Secretary of the Interior, acting through the Commissioner of Reclamation.

- (I) STATES.-The terms “States” means the States of Colorado, Nebraska, and Wyoming.
- (2) IMPLEMENTATION OF PROGRAM.-
- (A) IN GENERAL.-The Secretary, in cooperation with the Governance Committee, may-
- (i) participate in the Program; and
 - (ii) carry out any projects and activities that are designated for implementation during the First Increment Extension.
- (B) AUTHORITY OF THE SECRETARY.-For the purposes of carrying out this section, the Secretary, in cooperation with the Governance Committee, may-
- (i) enter into agreements and contracts with Federal and non-Federal entities;
 - (ii) acquire interests in land, water, and facilities from willing sellers without the use of eminent domain;
 - (iii) subsequently transfer any interests acquired under clause (ii); and
 - (iv) accept or provide grants.
- (3) COST SHARING CONTRIBUTIONS.-
- (A) IN GENERAL.-As provided in the Agreement, the States shall contribute not less than 50 percent of the total contributions necessary to carry out the Program.
- (B) NON-FEDERAL CONTRIBUTIONS.-The following contributions shall constitute the States’ share of the Program:
- (i) An additional \$28,000,000 in non-Federal funds, with the balance of funds remaining to be contributed to be adjusted for inflation on October 1 of the year after the date of enactment of this Act and each October 1 thereafter.
 - (ii) Additional credit for contributions of water or land for the purposes of implementing the Program, as determined to be appropriate by the Secretary.
- (C) IN-KIND CONTRIBUTIONS.-The Secretary or the States may elect to provide a portion of the Federal share or non-Federal share, respectively, in the form of in-kind good or services, if the contribution of goods or services is approved by the Governance Committee, as provided in Attachment 1 of the Agreement.
- (4) AUTHORITY TO MODIFY PROGRAM.-The Program may be modified or amended before the completion of the First Increment Extension if the Secretary and the States determine that the modifications are consistent with the purposes of the Program.
- (5) EFFECT.-
- (A) EFFECT ON RECLAMATION LAWS.-No action carried out under this subsection shall, with respect to the acreage limitations provisions of the reclamation laws-
- (i) be considered in determining whether a district (as the term is defined in section 202 of the Reclamation Reform Act of 1982 (43 U.S.C. 390bb)) has discharged the obligation of the district to repay the construction cost of project facilities used to make irrigation water available for deliver to land in the district;

- (ii) serve as the basis for reinstating acreage limitation provisions in a district that has completed payment of the construction obligations of the district; or
 - (iii) serve as the basis for increasing the construction repayment obligation of the district, which would extend the period during which the acreage limitation provisions would apply.
- (B) EFFECT ON WATER RIGHTS.-Nothing in this section-
 - (i) creates Federal water rights; or
 - (ii) requires the grant of water rights to Federal entities.
- (6) AUTHORIZATION OF APPROPRIATIONS.-
 - (A) IN GENERAL.-There is authorized to be appropriated to carry out projects and activities under this subsection an additional \$78,000,000 as adjusted under subparagraph (C).
 - (B) NONREIMBURSABLE FEDERAL EXPENDITURES.-Any amounts to be expended under subparagraph (A) shall be considered non-reimbursable Federal expenditures.
 - (C) ADJUSTMENT.-The balance of funds remaining to be expended shall be adjusted for inflation on October 1 of the year after the date of enactment of this Act and each October 1 thereafter.
 - (D) AVAILABILITY OF FUNDS.-At the end of each fiscal year, any unexpended funds for projects and activities made available under subparagraph (A) shall be retained for use in future fiscal years to implement projects and activities under the Program. Any unexpended funds appropriated during the First Increment shall be retained and carried over from the First Increment into the First Increment Extension.
- (7) TERMINATION OF AUTHORITY.-The authority for the Secretary to implement the First Increment Extension shall terminate on September 30, 2033.

Wyoming Water Development Program - 2019 Level I/II Applications

| Level I Projects - New Development | | Applicant | Div | County | Acct | Date Rcv | Description |
|-------------------------------------|-------------------------------------|--------------------------------------|-----|-------------|------|-----------|--|
| 1 | Bridger Valley Regional Water MP | Bridger Valley Joint Powers Board | IV | Uinta | I | 2/28/2019 | Regional Water Master Plan |
| 2 | Cody Water Master Plan Update | City of Cody | III | Park | I | 3/1/2019 | Muni Water MP (treated & raw) |
| 3 | Happy Valley Water Supply MP | Happy Valley I&SD (pending) | IV | Lincoln | I | 2/11/2019 | Rural Domestic/Water MP Update |
| 4 | LaGrange Water Master Plan | Town of LaGrange | I | Goshen | I | 2/28/2019 | Municipal Water Master Plan |
| 5 | Lower Shoshone River Watershed | Shoshone Conservation District | III | Big Horn | I | 1/28/2019 | Watershed Study |
| 6 | Pavillion Water Master Plan | Town of Pavillion | III | Fremont | I | 3/1/2019 | Municipal Water Master Plan |
| 7 | Pinedale Water Supply | Town of Pinedale | IV | Sublette | I | 3/1/2019 | Alternate Source of Supply Study |
| 8 | Shoshoni Water Master Plan Update | Town of Shoshoni | III | Fremont | I | 2/28/2019 | Municipal Water Master Plan |
| 9 | Skyline ISD Water Master Plan | Skyline Improvement & Service Dist. | IV | Teton | I | 1/23/2019 | Rural Domestic/Water MP |
| Level II Projects - New Development | | Applicant | Div | County | Acct | Date Rcv | Description |
| 10 | Cowley South End Water Pipelines | South End Water Users I&SD | III | Big Horn | I | 2/27/2019 | Transmission Line(s) Extension |
| 11 | CWRWS JPB GW Disinfection | Central WY Regional Water System JPB | I | Natrona | I | 2/22/2019 | Disinfection System Upgrade |
| Level II Projects - Rehabilitation | | Applicant | Div | County | Acct | Date Rcv | Description |
| 12 | Highland Hanover ID Pump Station | Highland Hanover Irrigation District | III | Washakie | II | 2/27/2019 | Pumps & Appurtenances Replacement |
| 13 | Owl Creek ID Lucerne Rehabilitation | Owl Creek Irrigation District | III | Hot Springs | II | 3/1/2019 | Rehabilitation of Major Infrastructure |

Past WWDC/SWC Tour Locations

| YEAR | LOCATION |
|------|--------------|
| 1989 | Greybull |
| 1990 | Riverton |
| 1991 | Riverton |
| 1992 | Sheridan |
| 1993 | Rock Springs |
| 1994 | Casper |
| 1995 | Rawlins |
| 1996 | Buffalo |
| 1997 | Rawlins |
| 1998 | Sheridan |
| 1999 | Worland |
| 2000 | Lander |
| 2001 | Rawlins |
| 2002 | Saratoga |
| 2003 | Saratoga |
| 2004 | Thermopolis |
| 2005 | Pinedale |
| 2006 | Cody |
| 2007 | Gillette |
| 2008 | Alpine |
| 2009 | Casper |
| 2010 | Cody |
| 2011 | Cheyenne |
| 2012 | Riverton |
| 2013 | Baggs |
| 2014 | Sheridan |
| 2015 | Worland |
| 2016 | Saratoga |
| 2017 | Green River |
| 2018 | Gillette |
| 2019 | ??? |

**Wyoming Water Development Commission
Workshop
Wyoming Water Development Office
6920 Yellowtail Rd, Cheyenne, WY
December 12, 2018**

1. Chairman David Evans called the workshop to order at 1:33pm.

Roll Call

Commission attendance:

David Evans, Chairman

Larry Suchor, Vice-Chairman

Kellen Lancaster, Secretary

Gerald Geis

Mike Purcell

Rodney Wagner

Sheridan Little

Jeanette Sekan

Nick Bettas

Clinton Glick - absent

Select Water Attendance:

Senator Glenn Moniz

Representative Stan Blake

Representative Dan Laursen

Representative John Eklund

2. **Audience Introduction**

3. **Review Public Hearing – Proposed Level III Projects**

Barry Lawrence gave a summary review of the fifteen (15) public hearings conducted around the state between December 3 and December 7, 2018.

4. **Financial Status Report**

Director LaBonde reviewed the financial projections provided to the Commission for Water Development Accounts I, II and III. Director LaBonde recommended requesting excess funds be transferred from the Buffalo Bill Reservoir account to Water Development Account II to fund 6 projects total; 3 planning and 3 construction.

5. **Discussion**

Director LaBonde provided updated project information for discussion at the Thursday, December 13, 2018 meeting.

The workshop adjourned at 2:18 pm

Respectfully submitted,

Kellen Lancaster, Secretary

**Wyoming Water Development Commission
Meeting
Wyoming Water Development Office
6920 Yellowtail Rd., Cheyenne, WY
December 13, 2018**

1. Chairman David Evans called the meeting to order at 8:31am.

2. Recognition of members present to establish a quorum

| | |
|-----------------------------|----------------------------|
| Commission attendance: | Select Water Attendance: |
| David Evans, Chairman | Senator Curt Meier |
| Larry Suchor, Vice-Chairman | Senator Glenn Moniz |
| Kellen Lancaster, Secretary | Representative Stan Blake |
| Gerald Geis | Representative Dan Laursen |
| Mike Purcell | Representative John Eklund |
| Rodney Wagner | |
| Nick Bettas | |
| Jeanette Sekan | |
| Clinton Glick | |
| Sheridan Little | |

3. Audience introductions

4. Approval of Minutes

Rodney Wagner made a motion to approve the November 7, 2018 Workshop minutes; Sheridan Little seconded the motion, and the motion carried unanimously. Jeanette Sekan made a motion to approve the November 8, 2018 WWDC/SWC Meeting minutes. Gerry Geis seconded the motion, and the motion carried unanimously.

5. Closeout of Planning Projects

- *Big Horn Regional Southern Supply Study, Level II*
Kevin Boyce, Project Manager provided a brief summary of project findings and final project costs.
Gerry Geis moved acceptance of the Big Horn Regional Southern Water Supply, Level II Study as being complete, and further, the WWDC makes the following findings relative to this project:
 1. That the Commission recommend: Terminating further consideration of the proposed project.
Nick Bettas seconded the motion; motion carried unanimously.

Greybull River Watershed Study, Level I

Jodee Pring, for previous Project Manager Dave Myer, provided a brief summary of project findings and final project costs. Gerry Geis moved acceptance of the Greybull River Watershed, Level I Study as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend proceeding to the next Level of project development upon the submittal of an appropriate funding application by the sponsor.

Clinton Glick seconded the motion. The motion carried unanimously.

Hanover Irrigation District Master Plan, Phases I & II, Level I

Peter Gill, Project Manager, provided a brief summary of project findings and final project costs. Discussion followed. Gerry Geis moved acceptance of the Hanover Irrigation District Level I, Phases I & II project report as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend: Proceeding to Level III of project development upon the submittal of an appropriate funding application by the sponsor.

Nick Bettas seconded the motion; motion carried unanimously.

Hog Island Water Supply Study, Level I

Kevin Boyce, Project Manager, provided a brief summary of project findings and final project costs. Gerry Geis moved acceptance of the Hog Island Water Supply, Level I Study as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend: Terminating further consideration of the proposed project. Discussion followed.

Sheridan Little seconded the motion; motion carried unanimously.

Kirby Ditch Rehabilitation Study, Level I

Chace Tavelli, Project Manager, provided a brief summary of project findings and final project costs. Jeanette Sekan moved acceptance of the Kirby Ditch Rehabilitation Study, Level I project report as being complete and further the WWDC makes the following findings relative to this project:

1. That the Commission recommend: Proceeding to Level III of project development upon the submittal of an appropriate funding application by the sponsor,

2. Based on the findings in the final report, the project is determined to be in the public interest,

3. The project functions and services cannot realistically be provided by any person, association or corporation engaged in private enterprise.

Gerry Geis seconded the motion; motion carried unanimously.

6. Planning Amendments

- *Powder/Tongue/Northeast Groundwater Study, Amendment No. 1*

An interim amendment to the Agreement with the Wyoming State Geological Survey (WSGS), was presented. The purpose of the amendment is to extend the term of the Agreement from December 31, 2018 through June 30, 2019. The Agreement amount is not changed by this Amendment.

Larry Suchor made a motion to approve the Amendment, Gerry Geis seconded the motion; motion carried unanimously.

- *Powder/Tongue/Northeast River Basin Plan Update, Amendment No. 3*

An interim amendment to the engineering Contract with RE/SPEC INC., was presented. The amendment serves to: a) correct the Consultant's name; and b) to extend the term of the contract from December 31, 2018 to June 30, 2019. The Contract amount is not changed by the Amendment.

Jeanette Sekan made a motion to approve the Amendment, Sheridan Little seconded the motion; motion carried unanimously.

7. Small Water Project Program

- *Muddy Creek Check Structure, Amendment No. 1*

An interim amendment to the Agreement with the Little Snake River Conservation District was presented. The amendment serves to extend the term of the agreement from December 31, 2018 through December 31, 2019.

Sheridan Little made a motion to approve the Amendment. Rodney Wagner seconded the motion; motion carried unanimously.

8. Preparation for 2019 Legislature

- *Omnibus Water Bill – Planning*

Director LaBonde reviewed the items included in the draft bill. Discussion followed regarding several items including the Crook County Rural Water Supply Plan as well as the three projects dependent upon the funds transfer from the Buffalo Bill Reservoir Account to WDA II. Additional funds for the Groundwater Grant program were discussed. Gerry Geis made a motion to approve the draft bill. Sheridan Little seconded the motion; motion carried unanimously.

- Omnibus Water Bill – Construction

Director LaBonde reviewed the items included in the draft bill. Due to legislation enacted in 2018 concerning sinking funds, the general conditions had to be updated. Director LaBonde also discussed the three projects dependent upon the funds transfer from the Buffalo Bill Reservoir account to WDA II. He also outlined the request for the funds transfer. Discussion followed. Gerry Geis made a motion to amend language in reference to the Eastern Shoshone Indian tribe and the Northern Arapaho Indian tribe to be the Business Council of each respective tribe on pages 2 and 52, as well as the Eden Valley Farson Lateral Rehabilitation Project to correct the grant amount to \$3,076,000.00, and the total appropriation amount to be \$3,276,000.00, Larry Suchor seconded the motion; motion carried unanimously. Motion carried unanimously.

9. Update of Level III Construction Projects

Bryan Clerkin gave an update on the following Level III Construction Projects:

- Dry Creek Irrigation District Pipeline Replacement 2017
- Melody Ranch Water System Improvements 2017
- Northwest Rural Water System Improvements 2018
- Wheatland Irrigation District Rehabilitation 2015

10. Discussion

- Lake DeSmet and Healy Reservoir Report – Director LaBonde reviewed the 2018 Annual Report on Operations of Lake DeSmet Reservoir, Healy Reservoir and Dam, and Administration of the Lake DeSmet Reservoir Account for the Commission and member of the Select Water Committee. The report was submitted to the Joint Appropriations Committee and the Select Water Committee.
- Legislative Report
Director LaBonde reported to the Commission and Select Water Committee the Annual Legislative Report was completed. Chapter 4 which lists all completed projects was taken out of the printed version, but available electronically.
- Future Contract Amendment
Jason Mead presented information regarding future contract amendments to the Leavitt Reservoir Expansion Final Design. Time being of the essence, it was most prudent to proceed with the additional work for this project in order to save time and money. An amendment will be presented to the Commission in March 2019.

- Director Announcements

Director LaBonde acknowledged and thanked Nick Bettas and Jeanette Sekan for their eight years of service to the Commission.

Director LaBonde announced his retirement effective March 15, 2019. He also indicated he would like to continue his work on the PRRIP Committee.

11. Future Meetings Schedule

The Commission will meet next on March 14-15, 2019 in Cheyenne.

12. Adjourn

Gerry Geis made a motion to adjourn, Sheridan Little seconded the motion.

Respectfully submitted,

Kellen Lancaster, Secretary

DAMS AND RESERVOIRS

LEVEL II AMENDMENTS - ACCOUNT III DAMS AND RESERVOIRS

| Project Name | Consultant | Amendment Amount | Description |
|--|-----------------------|------------------|---|
| Alkali Creek Reservoir Final Design, Amendment One | Trihydro Corporation | \$ 465,000.00 | Additional Geotech Investigation and Analysis, Discretionary Budget |
| GVID Storage Enlargement, Level II Study, Amendment Two | AECOM | \$ 300,000.00 | Risk Assessment, Additional Geotech Investigation and Analysis |
| Leavitt Reservoir Expansion Final Design, Amendment One | RJH Consultants, Inc. | \$ 177,977.45 | Additional Geotech Investigation and Analysis, Discretionary Budget |
| New Fork Lake Dam Enlargement, Level II Study, Amendment Two | RJH Consultants, Inc. | \$ 1,500,000.00 | Permitting & Design Services |



WYOMING WATER DEVELOPMENT OFFICE

6920 Yellowtail Road
Cheyenne, WY 82002

Phone: (307) 777-7626
wwdc.state.wy.us

Mark Gordon
Governor
Commissioners

| | |
|--|-----------------|
| Nick Bettas | Sheridan Little |
| David Evans | Mike Purcell |
| Gerald E. Geis | Jeanette Sekan |
| Clinton W. Glick | Larry Suchor |
| Kellen K. Lancaster | Rodney Wagner |
| Harry C. LaBonde, Jr., P.E. Director | |

MEMORANDUM

12 February, 2019

Harry C. LaBonde, Jr., P.E., Director
Wyoming Water Development Commission
6920 Yellowtail Road
Cheyenne, WY 82002

RE: Amendment One to Alkali Creek Reservoir Final Design Contract

Director LaBonde,

Under the existing Alkali Creek Reservoir Final Design Contract, Trihydro Corporation (Trihydro), along with their team partner, Engineering Analytics, completed the geotechnical field investigation outlined in the Contract Scope of Work during late summer/fall 2018. The results of this investigation provide much of the information necessary to complete the embankment design, including materials properties and embankment foundation conditions. However, based on Engineering Analytics' evaluation of the field and laboratory data and input from the team's senior geologists and Board of Consultant (BOC) members, additional field data are required to fully evaluate the subsurface conditions and to properly design the proposed dam embankment.

Evaluation of the 2018 geotechnical investigation, including on-site geologic mapping, shows the proposed dam and reservoir is in an area of complex geology. The complexity is beyond that expected based on the 2012 preliminary geotechnical investigation completed under the Nowood River Storage Level II, Phase II feasibility study. The borings advanced during the 2012 investigation were located along the proposed embankment centerline and were advanced between 25 and 50 feet below the ground surface. These borings generally were completed into the upper bedrock layer.

The 2018 geotechnical investigation was developed in consultation with the senior geotechnical team members and with input from members of the BOC. The 2018 boring locations were partially based on the interpretation that claystone was reasonably continuous along the dam foundation and that sandstone was present in the dam abutment locations, and boring depths were developed based on reservoir depths and proposed structures. However, after the 2018 geotechnical data were compiled, it is noted that the geology underlying the embankment is more complex than anticipated, especially in the east and west abutments. In several instances, claystone and

sandstone layers were encountered in one borehole, but the same layers were not defined in the neighboring borehole due to dipping beds and topography. Additionally, cross sections developed based on borehole logs also suggest that beds on the east side of Alkali Creek may be offset vertically from beds on the west side of Alkali Creek, suggesting a possible deep-seated fault. While a fault, if it exists, would be a very old fault and likely not a concern for the dam stability, deformation along a fault can act as a seepage pathway. The boreholes completed in fall 2018, as well as information provided from the 2012 investigation, do not adequately define the site geology. Additional field work and analysis is required to better delineate these subsurface layers and allow design of seepage controls. Trihydro and Engineering Analytics have included appropriate BOC members in the evaluation and discussion of the 2018 results and these BOC members agree that additional investigation is required.

Similar geologic complexity has been discovered with potential borrow soils. The 2018 geotechnical investigation included excavating test pits, collecting representative samples, and performing laboratory testing on prospective borrow soils. These soils would be used to construct the proposed embankment. The investigation was to define the extent and quantity of borrow soils and to provide material properties necessary for designing the proposed embankment. Index properties for the borrow soils (moisture content, grains size, Atterberg Limits, dry density) suggest that the materials are appropriate for embankment construction. However, strength testing (triaxial shear) completed on select samples indicated unacceptably low material strength. Additionally, strength test results varied for samples collected from neighboring test pits. The soil strengths encountered during the 2018 investigation are lower than the borrow material strength identified for a composite sample of potential borrow material tested during the 2012 preliminary geotechnical investigation.

The low borrow material strengths will adversely affect the embankment design and could increase dam construction costs to an unacceptable level. Additional field investigation and laboratory testing is required to determine if higher strength materials can be delineated from lower strength material, if there is sufficient quantity of higher strength material, and to evaluate options and costs for amending the lower strength materials.

Trihydro proposes completing the additional geotechnical investigation in three phases. The initial phase will focus on collecting and testing additional borrow materials as the low strength borrow materials are a concern relative to the proposed project's viability. The field work (test pit excavation) can also be completed sooner than other proposed investigation work and is less dependent on weather and site conditions. The second phase will include drilling additional boreholes to collect subsurface information to support seepage evaluation and seepage control designs. This work requires better site conditions to allow for drill rig access. The third phase will entail applying geophysics at the site to better define depth to bedrock and contacts between the sandstone and claystone layers. Information obtained from the boreholes will be evaluated prior to moving forward with the geophysics work to assess if the proposed geophysics scope is appropriate. Results from each phase of investigation performed will be evaluated and discussed with BOC members and the WWDO prior to proceeding with the subsequent phase. Results will be summarized in a technical memorandum.

The cost to complete the Borrow Source Investigation is \$34,300. The cost to install the additional borings and evaluate the field data is \$229,000, and the Geophysical Investigation cost is \$51,700. These costs include Trihydro and Engineering Analytics' costs as well as subcontractor costs to excavate test pits, drill boreholes, and complete the geophysics data collection and analysis.

As discussed at the December 13, 2018 Water Development Commission (WWDC) meeting, I briefly discussed my oversight of including a discretionary task as part of the Leavitt Reservoir Expansion final design contract, which could be drawn on for changes in scope as the project develops or as new issues are discovered. The same is true for the Alkali Creek Reservoir final design contract. With the potential of additional unforeseen circumstances arising throughout the completion of final design, I'm recommending \$150,000.00 of the Alkali Creek Reservoir permitting and final design appropriation be placed in a discretionary task. This amount plus the additional funding for the geotechnical investigation brings the total of proposed Amendment One to \$465,000.00.

Sincerely,



Jason Mead, P.E.
Deputy Director
Dam and Reservoir Division
Wyoming Water Development Office

**AMENDMENT ONE TO
CONSULTANT CONTRACT FOR SERVICES NO. 05SC0297090
ALKALI CREEK RESERVOIR FINAL DESIGN
BETWEEN
WYOMING WATER DEVELOPMENT COMMISSION
AND
TRIHYDRO CORPORATION**

1. Parties. This Amendment is made and entered into by and between the Wyoming Water Development Commission [Commission], whose address is: 6920 Yellowtail Road, Cheyenne, Wyoming 82002; and Trihydro Corporation [Consultant], whose address is: 1252 Commerce Drive, Laramie, Wyoming, 82070.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Contract between the Commission and the Consultant. The purpose of this Amendment is to: a) modify the Additional Geotechnical Analysis task and add tasks to complete supplemental geotechnical investigation, and assist the Commission in addressing unforeseen changes in scope during the completion of final design; b) increase the total Contract dollar amount by four hundred sixty-five thousand dollars (\$465,000.00) to two million three hundred twelve thousand four hundred dollars (\$2,312,400.00); c) replace Attachment A with a new Attachment A2; and d) replace Attachment C with a new Attachment C2.

The original Contract, dated September 5, 2017, required the Consultant to render certain technical or professional services for the final design of Alkali Creek Reservoir for a total Contract amount of one million eight hundred forty-seven thousand four hundred dollars (\$1,847,400.00) with an expiration date of December 31, 2023.

3. Term of the Amendment. This Amendment shall commence immediately upon the date the last required signature is affixed hereto, and shall remain in full force and effect through the term of the Contract, as amended, unless terminated at an earlier date pursuant to the provisions of the Contract, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. The second sentence of Section 4.A. of the original Contract is hereby amended to read as follows:

The total payment under this Contract shall not exceed two million three hundred twelve thousand four hundred dollars (\$2,312,400.00).

B. The entire section of 4.B. of the original Contract is hereby amended to read as follows:

4.B. Project Budget. The Project budget for each task included in Attachment A2 is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------|
| Task 1. Project Management, Meetings, and Coordination | \$ 175,700.00 |
| Task 2. Project Familiarity and Conceptual Design Review | \$ 36,900.00 |
| Task 3. Agency and Landowner Coordination and Support | \$ 108,900.00 |
| Task 4. General Design and Performance Criteria Coordination | \$ 12,000.00 |
| Task 5. Additional Surveying | \$ 45,800.00 |
| Task 6. Additional Geotechnical Analysis | \$ 217,900.00 |
| Task 7. Design | \$ 522,000.00 |
| Task 8. Technical Review | \$ 0.00 |
| Task 9. Construction Plans and Specifications | \$ 710,000.00 |
| Task 10. Emergency Action Plan | \$ 18,200.00 |
| Task 11. Supplemental Geotechnical Investigation | \$ 315,000.00 |
| Task 12. Discretionary Task | \$ 150,000.00 |
| Total Project Cost | \$ 2,312,400.00 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms provided by the Office. The Consultant may use alternate billing forms if approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

5. Amended Responsibilities of the Consultant.

Responsibilities of the Consultant are hereby amended as follows:

A. As of the Effective Date of this Amendment, Attachment A, Scope of Services, which was attached to the original Contract, is superseded and replaced by Attachment A2, Revised Scope of Services, which is attached to this Amendment and incorporated into the original Contract by this reference. All references to "Attachment A" in the original Contract, and in any amendments thereto, are amended to read: "Attachment A2".

B. As of the Effective Date of this Amendment, Attachment C, Scope of Services Assumptions and Deliverables, which was attached to the original Contract, is superseded and replaced by Attachment C2, Revised Scope of Services Assumptions and Deliverables, which is attached to this Amendment and incorporated into the original

Contract by this reference. All references to "Attachment C" in the original Contract, and in any amendments thereto, are amended to read: "Attachment C2".

6. Amended Responsibilities of the Commission.

Responsibilities of the Commission have not changed.

7. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Contract, and any previous amendments, between the Commission and the Consultant, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the Consultant of an originally signed counterpart of this Amendment by PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

8. General Provisions.

A. Entirety of Contract. The Original Contract, consisting of thirteen (13) pages, Attachment A Scope of Services, consisting of seventeen (17) pages, Attachment B Hourly Rate and Reimbursable Expenses, consisting of two (2) pages, Attachment C Scope of Services Assumptions and Deliverables, consisting of nine (9) pages; and this Amendment One, consisting of four (4) pages, Attachment A2 Revised Scope of Services, consisting of nineteen (19) pages, and Attachment C2 Revised Scope of Services Assumptions and Deliverables, consisting of ten (10) pages, represent the entire and integrated Contract between the parties and supersede all prior negotiations, representations, and agreements whether written or oral.

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9. Signatures. The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

This Amendment is not binding on either party until approved by A&I Procurement and the Governor of the State of Wyoming or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

TRIHYDRO CORPORATION

Jack Bedessem, P.E., President/CEO
Employer Identification Number: 83-0272860

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner
Assistant Attorney General

Date

ATTACHMENT A2 REVISED SCOPE OF SERVICES

A. **AUTHORIZATION**

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in D. Scope of Services. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. **PROJECT DESCRIPTION**

1. Location: The Project site is located near the Town of Hyattville, Wyoming primarily in T50N; R90W; Sections 26, 27, 33, 34 and 35.
2. Purpose: To prepare final designs, plans, and specifications for the Alkali Creek Reservoir Project for the WWDC. Preliminary designs from the latest study completed for WWDC have considered total storage of approximately 8,000 acre-feet with a zoned earthen embankment approaching 100 feet in height, and outlet works capable of delivering 200-225 cfs. The Reservoir is anticipated to be supplied from Paint Rock and Medicine Lodge Creeks through enlargement of the 4.3 mile long Anita Supplemental and Anita Ditches, to a capacity of approximately 150 cfs.
3. Purpose: The intent of the proposed Alkali Creek Reservoir is to firm water supplies and improve reliability, management, and operational flexibility for irrigators in portions of the Nowood River watershed.

The Commission has undertaken numerous studies of alternative dam sites and appurtenant infrastructure needed to provide supplemental water supplies for irrigators in the Nowood River watershed. These reports are available on the Commission website (wwdc.state.wy.us). Of particular importance and relevance is the Nowood River Storage Level II, Phase II Study completed in 2016:

- Anderson Consulting Engineers, Inc., Nowood River Storage/Watershed Study Level I, Final Report, Mar, 2010
- Anderson Consulting Engineers, Inc., Nowood River Storage/Watershed Study Level I, Executive Summary, Mar, 2010
- Trihydro Corporation, Nowood River Storage Level II Study Phase I Summary Report Volume I, Report, Tables, Figures, Sheets, Dec, 2013
- Trihydro Corporation, Nowood River Storage Level II Study Phase I Summary Report Volume II, Appendices, Dec, 2013
- Trihydro Corporation, Nowood River Storage Level II Study Phase I, Executive Summary, Dec, 2013

- Trihydro Corporation, Nowood River Storage Level II Study Phase II Summary Report Volume I, Report, Tables, Figures, Sheets, Jan, 2016
- Trihydro Corporation, Nowood River Storage Level II Study Phase II Summary Report Volume II, Appendices, Jan, 2016
- Trihydro Corporation, Nowood River Storage Level II Study Phase II Summary Report, Executive Summary, Jan, 2016

Other reports having been completed, which are not on the Commission web page, include the following listed documents (**NOTE: These are confidential documents not available to the general public for review**):

- LTA, Inc., Results of a 2014 Class III Cultural Resource Inventory: The Nowood River Storage Project, Alkali Creek Reservoir. February 2015. (For the confidential use by BLM staff)
- SWCA Environmental Consultants, Paleontological Survey Report for the Proposed Alkali Creek Reservoir Project, Big Horn County, Wyoming. September 2014

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Statement of Assumptions, Project Work File

- a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the associated final document, which contains the information generated by the programs.

b. To facilitate the Commission's accurate evaluation of the Consultant's work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in relevant documents a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that document.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the relevant project documents. The project notebook shall be submitted before Contract closeout.

3. Cost Estimates

The Consultant shall use the following guidelines in calculating project cost estimates.

| | |
|---|----------|
| Preparation of Final Designs and Specifications | \$ _____ |
| Permitting and Mitigation | \$ _____ |
| Legal Fees (Title of Opinion Only) | \$ _____ |
| Acquisition of Access and Rights of Way | \$ _____ |
| Pre-Construction Costs (Subtotal # 1) | \$ _____ |
| Cost of Project Components | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Total Component Cost (Subtotal #2) | \$ _____ |
| Construction Engineering Cost (Subtotal #2 x 10%) | \$ _____ |
| Components and Engineering Costs (Subtotal #3) | \$ _____ |
| Contingency (Subtotal #3 x 15%) | \$ _____ |
| Construction Cost Total (Subtotal #4) | \$ _____ |
| Total Project Cost (Subtotal #1 + Subtotal #4) | \$ _____ |

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Documents

The Consultant shall use the Contract Scope of Services as the outline for draft and final documents so that Consultant compliance with Contract provisions can be verified. If a final document contains information of an engineering nature, the cover of the final document and all plates must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final document contains information of a geologic nature, the cover of the final document and all plates must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final document contains information of both an engineering and geologic nature, the cover of the final document and all plates must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Documents - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital documents shall be contained on CD/DVD(s), and shall be in Searchable Image Adobe Acrobat format.

6. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

7. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

8. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

9. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

The Consultant shall be given Notice to Proceed on each task by the Office project manager, before the task is initiated.

Task 1. Project Management, Meetings, and Coordination

Project management activities include administrative project set-up, subcontractor management, project tracking, invoicing, activity reports, summary letters, as needed correspondence with the Consultant team, Sponsor and Office project manager, internal task coordination meetings, and any other routine items required to successfully complete the project. Written progress reports shall be developed and submitted monthly.

The Consultant shall also create Project-specific management tools that include a Project schedule formatted in a critical path format, progress tracking, communication protocols, and team organization matrix (that details roles and responsibilities).

Outside of daily project management, the Consultant shall provide quality control of all work, including subconsultant work. This type of review will be ongoing and include oversight by company principals or senior engineers knowledgeable of the project work and scope, but not associated with the project on a daily basis. Their review will include a check to see that all work scope items have been properly addressed and completed to the intent of the work scope and contract, and that the work products are technically sound.

Informal project phone calls and meetings with the Office project manager may be necessary during the course of final design to provide project direction. In addition, project progress meetings will be conducted monthly by teleconference with the Office and Sponsor.

The Consultant shall prepare for and conduct six (6) interim meetings in the study area, either with the Sponsor, or as public meetings to keep the local community informed of project progress and to obtain input as needed. The Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project manager. The Consultant shall prepare all notices and needed materials for the meetings. Formal public meetings shall be advertised in advance. The Consultant shall prepare meeting minutes for all meetings. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

Task 2. Project Familiarity and Conceptual Design Review

The Consultant shall gather and review any existing background information related to the development of the Alkali Creek Reservoir project. Data shall include, but not be limited to, WWDC feasibility reports and relevant Bureau of Land Management (BLM) and U.S. Army Corps of Engineers (USACE) NEPA documents, when available. The intent

of the review is for the Consultant to gain familiarity with the project and provide a foundation of information which will support subsequent tasks.

The Consultant will focus on developing improvements in the conceptual design. This will include reviewing the work to date, focusing the investigation and analyses on the critical areas to identify items that affect safety, function, and/or significant costs of the project.

The Consultant shall prepare for and attend a coordination meeting with the Office to discuss identified alternative configurations and potential modifications.

A summary report will be prepared presenting the results of the review and any recommended modifications to the conceptual design that will improve safety and operation objectives, reduce risk during construction and throughout the life of the facility, and identify areas where cost savings may be achieved.

Task 3. Agency and Landowner Coordination and Support

The Consultant shall prepare for and conduct up to four (4) meetings with the BLM in Worland to complete delineations and agreements for ROWs/Easements. Informal teleconference and/or video conference calls with the Office and BLM may be necessary. It should be assumed that services of a legal subconsultant will be required to complete draft and final agreements.

The Consultant shall prepare for and conduct up to four (4) meetings with private landowners in the project area to complete negotiations, delineations and agreements for required easements and purchase of affected private lands. Informal phone calls with the Office and landowners may be necessary. It should be assumed that services of a land negotiator and legal subconsultant will be required to complete draft and final easement/purchase agreements.

The Consultant shall prepare for and conduct up to two (2) meetings with the Wyoming Department of Transportation (WYDOT) and one (1) meeting with Big Horn County to coordinate and complete any required modifications to Wyoming Highway 31, and associated ROWs/Easements. Informal phone calls with the Office, WYDOT, and County may be necessary.

In support of this task, the Consultant shall complete appraisals of required project lands, including areas for the dam and reservoir, ditches, pipelines, access roads, wetlands, borrow areas, and other facilities. The lands that may be purchased include existing private lands as well as current BLM lands that may be exchanged with private landowners. Therefore, the Consultant shall appraise areas on both BLM and private land within the project area to estimate the current market value of the surface estate of the subject property, in conformity with the Uniform Standards of Professional Appraisal Practice.

Elements of comparison to be considered in the appraisal process will include, but are not limited to, conditions of sale, market conditions (time), productivity (if applicable), size, location, legal and physical access, terrain, streams/trees, view, recreational amenities, availability of utilities, zoning and any other relevant market factors that the Consultant may identify, which influence highest and best use, marketability and market value. Value adjustments will be derived and/or supported from market data whenever possible.

Task 4. General Design and Performance Criteria Coordination

The Consultant shall coordinate with the Office, and Wyoming State Engineer's Office (WYSEO) to develop the design and performance criteria for the project. Criteria will be based on nationally recognized standards and meet the approval of the BLM, USACE, and any other applicable agencies. The Consultant shall prepare a memorandum documenting the selected criteria. The memorandum will then be circulated to the appropriate agencies for review and concurrence before advancing to design.

Task 5. Additional Surveying

An aerial LiDAR survey was conducted in 2013. This survey covered the existing Anita Supplemental Ditch and Anita Ditch, the proposed reservoir pool and dam area, the proposed public access route and parking area, and Alkali Creek downstream from the proposed dam to its confluence with Paint Rock Creek. This survey, including the original data, aerial imagery, and topographic mapping in AutoCAD format is available from the Level II Consultant.

Additional survey will be required as part of the Final Design to supplement the 2013 LiDAR survey and to support potential land purchases and right-of-way (ROW) and/or easement establishment. Anticipated, minimum survey requirements include:

- Conduct supplemental topographic survey along the Anita Supplemental Ditch and Anita Ditch with specific interest on the ditch interior. Water was flowing and/or ponded in the ditches during the 2013 LiDAR survey, affecting the accuracy of the existing ground surface within the ditches. Supplemental survey of the ditch bottom is warranted to support final design. The Consultant shall survey both toes and the centerline of the ditches on 100-ft stations.
- Conduct topographic surveys at the Anita Supplemental Ditch diversion from Paint Rock Creek and the Anita Ditch diversion from Medicine Lodge Creek. These areas were covered by the 2013 LiDAR flight, but due to water, supplemental surveys are needed to support final design. Survey coverage shall extend from 500 ft upstream to 500 ft downstream of each diversion location.
- Survey and describe existing structures in the Anita Ditch and Anita Supplemental Ditch. These structures were captured by the 2013 LiDAR aerial imagery and were inventoried in 2014, but additional, specific structure details will be required to design upgrades/replacements after enlarging the ditches. Structures along the

ditches include concrete diversion structures, Parshal Flumes, farm turnouts, culvert crossings, drop structures, check structures, siphons across the ditch, wasteways, and a conveyance pipeline that replaced a concrete chute drop structure. The Consultant shall collect a survey location at each structure and collect sufficient measurements or survey points to describe the existing structure and to support design of replacement structures. For larger structures, such as the Cold Springs Road and Alkali Creek Road crossings, and some of the check structures, Consultant shall use a robotic total station to capture the necessary design elements.

- Conduct supplemental topographic and structure surveys downstream of the proposed embankment along Alkali Creek. The primary purpose is to provide accurate mapping of the Highway 31 bridge over Alkali Creek, survey and describe structures (flumes and culverts) located along or in the creek, and provide updated and detailed topographic survey to support design activities and monitoring of potential stream changes resulting from reservoir releases. The Alkali creek survey shall cover the channel bottom, banks, and overbank area to distance 50-feet out from the top of each bank. The Consultant will use a robotic total station to perform a detailed survey of the Highway 31 Bridge. This survey will be used to support discussions with WYDOT and evaluate the bridge capacity relative to the project design flows. Survey locations and detailed descriptions/measurements will be collected for other structures spanning or located in the creek.
- Survey the George and Bayne Ditch crossing of Alkali Creek and collect sufficient points along the ditch bottom, upstream (east) of the Alkali Creek crossing to calculate the ditch gradient. Collect a minimum of three cross sections along the George and Bayne Ditch to evaluate ditch capacity and evaluate likelihood of being served by the project.
- Establish a minimum of 10 permanent control points to be used for design and construction (minimum 24-inch long, #5 rebar with 2 ½-inch cap). A portion of these permanent control points may coincide with the temporary control points established for the 2013 LiDAR survey. Coordinates for the temporary control points are available from the Level II Consultant. Control points shall be established in locations to minimize the likelihood of disturbance during construction.
- Acquire Title Report, research county records, and map recorded descriptions and encumbrances. Perform boundary and encumbrance survey for the lands to create a Record of Survey to include the boundaries of the lands that may be purchased as part of the reservoir development. Monuments will be set or recovered at all outside boundary corners and any boundary control will also be found or re-established with suitable monumentation.

- Perform survey to support establishment of right-of-ways and easements for site access roads and the reservoir ROW, including surveying section or lot/tract, or other land boundary crossings.

The results of this task will be the necessary mapping, in a format suitable for use in computer-generated AutoCAD drawings, of the pertinent areas associated with the project for establishing location, preparing construction drawings, calculating earthwork volumes, preparing the area capacity curve, preparing ROW/easement/acquisition descriptions and exhibits, and any other necessary work to successfully complete the project.

Task 6. Additional Geotechnical Analysis

A geotechnical study was completed as part of the Level II, Phase II Nowood River Storage Study. The geotechnical study included installing 8 boreholes; 6 (BH-2 through BH-7) along the proposed dam centerline, 1 (BH-8) in the crest of the proposed auxiliary spillway, and 1 (BH-1) to the east of the proposed dam. Boring BH-1 was installed in the area where a small saddle dike was initially proposed. Based on accurate topographic mapping from the 2013 LiDAR survey (completed after the geotechnical field investigation), this saddle dike was removed from the design. The geotechnical investigation also included excavating 6 test pits upstream of the proposed embankment to evaluate the suitability of onsite borrow materials for embankment construction, and 1 test pit on the bench downstream of Highway 31 to evaluate suitability of granular material for embankment drain construction. Laboratory testing was completed on material samples from the test pits and borings. Surface geologic mapping was also performed, as was a desktop seismic evaluation. The field investigation, laboratory testing, surficial geology mapping, and geotechnical evaluation/recommendations are summarized in Appendix K of the Level II, Phase II Final Report.

Using extreme caution to avoid duplicating work previously performed, the Consultant shall determine and complete necessary or additional literature review, geologic mapping, geophysical surveys, geotechnical investigations, laboratory testing, and evaluations (seismic, stability, seepage, etc.) required to complete final design of the project. At a minimum, the geotechnical investigations should include the following:

- Advance 4 new borings along the proposed dam centerline; 1 between B-3 and B-4, 1 between B-4 and B-5, 1 between B-5 and B-6, and 1 between B-6 and B-7. Advance the borings to a depth of 80 feet (equal to the maximum hydraulic head) or 10 feet into bedrock, whichever is deeper. (Boring B-5 did not hit bedrock and B-6 stopped just at the bedrock interface – deeper borings are required to better understand the depth to and quality of bedrock).
- Advance 2 borings, installing one at the upstream embankment toe, and the other at the downstream embankment toe. Advance the borings to a depth of 80 feet (equal to the maximum hydraulic head) or 10 feet into bedrock, whichever is

deeper. The borings are proposed to further define the deep unconsolidated deposits found at the centerline in BH-5 and BH-6.

- Advance 1 boring in the left abutment and 2 borings in the right abutment to a depth of at least 80 feet. Advance a second boring in the left abutment to a depth of 50 feet. Complete packer or falling head tests, depending on field conditions. (Sandstone outcrops along both abutments, these borings are required to better understand the location and quality [seepage concerns] of the sandstone).
- Advance 1 boring in the proposed west dike. This boring should advance to bedrock (estimated to be 5 to 15 feet below ground surface [bgs]). (The west dike was added after the geotechnical investigation based on more detailed topography obtained from the LiDAR survey).
- Advance 2 borings at the location of the proposed roller compacted concrete (RCC) dike that forms the crest of the auxiliary spillway and the western portion of the north dike. Advance 1 boring to the east and 1 boring to the west of BH-8. The boring advanced to the east of BH-8 will serve to evaluate conditions for the north dike. Advance the borings to bedrock (estimated to be 5 to 10 feet bgs based on BH-8). (The north dike and the RCC dike, which forms part of the north dike was added after the geotechnical investigation based on topographic mapping).
- Advance 1 boring associated with the proposed stilling basin, 1 boring associated with the proposed intake structure, and 1 boring associated with the principal spillway. Each boring should advance to a depth of 10 feet below the proposed foundation bearing depth. (The layout and location of these facilities were added after the Level II, Phase II geotechnical investigation and the 2013 LiDAR mapping).
- Install piezometers in the proposed embankment area; 4 in the valley and 1 on each abutment. Complete falling head tests in the piezometers.
- Advance 4 borings along the proposed primary access road and 1 boring in the proposed parking/public access area. Each boring should be advanced to a depth of between 10 and 15 feet.
- Excavate paired test trenches to investigate possible tension cracks along the right abutment in the area of B-7.
- Excavate a minimum of 8 test pits to further evaluate on-site borrow materials. Test pit locations should include the proposed borrow area near the proposed boat ramp, and the proposed borrow area upstream of the embankment. The test pits should also target potential granular materials located near the Anita Ditch discharge into the proposed reservoir and the bench downstream of Highway 31. In addition to other standard laboratory tests, triaxial testing should be performed

on embankment materials – this test was not performed as part of the Level II, Phase II laboratory testing.

- In addition to evaluating foundation materials and borrow material suitability for embankment construction, the geotechnical investigation should evaluate materials to protect the upstream embankment face. The geologic mapping that will be performed in association with the geotechnical investigation will evaluate formations in the project area for the potential to produce riprap. If viable formations are identified, samples of representative material will be obtained and submitted for LA Abrasion and Sodium Soundness testing. The Consultant shall also evaluate the suitability of on-site aggregates for soil cement to protect the upstream embankment face. Depending on the availability of riprap and suitability of on-site aggregates, a cost analysis may be completed to compare using soil cement vs importing riprap from a commercial source to protect the upstream embankment and dike slopes.

The final geotechnical investigation program will be flexible and will be evaluated for possible modifications as further information is obtained. The Consultant shall visually classify all samples and perform laboratory tests according to a schedule appropriate for completion of final design. Anticipated test types and quantities are as follows:

| Proposed Laboratory Testing Program | | |
|-------------------------------------|----------|----------|
| Structures | Previous | Proposed |
| Moisture/Density (soil and rock) | 19 | 40 |
| Gradation | 19 | 25 |
| Atterberg Limits | 19 | 18 |
| Swell Consolidation (soil) | 3 | 6 |
| Swell-Consolidation (rock) | 3 | 3 |
| Time Consolidation (soil) | - | 2 |
| Direct Shear (soil) | 3 | - |
| Direct Shear (rock) | 3 | - |
| Pinhole Dispersion | 3 | 6 |
| WSS/Chlorides/pH | 2 | 8 |
| CERCHAR Abrasion (rock) | - | 4 |
| Unconfined (UC) peak load (rock) | - | 4 |
| Unconfined (UC) peak and E (rock) | - | 4 |
| Triaxial (UU) | - | 3 |
| Triaxial (CU) (soil) | - | 7 |
| Flexible Wall Permeability (soil) | 5 | 4 |
| Flexible Wall Permeability (rock) | - | 4 |
| Borrow Areas and Materials | | |

| | | |
|-----------------------------------|---|---|
| Gradation | 2 | 7 |
| Atterberg Limits | 2 | 6 |
| Specific Gravity | 1 | 6 |
| L.A. Abrasion | 1 | 3 |
| Sodium Soundness | 1 | 3 |
| Direct Shear (embankment) | 1 | - |
| Proctor | 1 | 4 |
| Flexible Wall Permeability (soil) | 1 | 4 |
| Pinhole Dispersion | 1 | 6 |
| WSS/Chlorides/pH | - | 7 |
| Triaxial (CU) (soil) | - | 6 |
| Triaxial (UU) soil | - | 6 |
| Swell-Consolidation | - | 4 |

The Consultant shall prepare and submit a complete, concise Geotechnical Report to summarize and interpret the work performed in this task. At a minimum, the report will contain the geologic mapping, seismic site characteristics, final boring and test pit logs, laboratory test results, characterization and distribution of surficial and subsurface soil and rock units at each structure location, and engineering characteristics of the various geologic units. The report shall present data and be suitable for including in bidding documents.

The Consultant will indicate the suitability of the project sites for the proposed development, and provide a description of the geotechnical impact to the various project structures and the suitability and availability of various construction materials. The Consultant will also develop design criteria and indicate potential impacts to previously completed cost estimates. These engineering evaluations and opinions shall be incorporated as a geotechnical design memorandum in Task 7 which will then be used in subsequent tasks.

Task 7. Design

Using accepted engineering practices and the design and performance criteria agreed to in Task 4, the Consultant shall complete design engineering evaluations and analysis for all components of the project, including, but not limited to;

- Hydrology and Hazard Classification - Perform hydrologic and hydraulic analyses to identify the Inflow Design Flood (IDF) and associated Hazard classification.
- Embankment - Design analysis and design of cross sections, grading, material zones, foundation preparation, key trench, seepage mitigation, filters, drains, dikes, abutments, grading of borrow areas, slope protection, etc.

- Construction Dewatering - evaluate existing surface water and groundwater conditions as they relate to dewatering requirements for project construction.
- Outlet Works
 - Design analysis to determine optimum size, alignment, and elevation of the outlet works;
 - Design of the intake structure with trashracks, shut-off gate, concrete and reinforcement, and other items necessary for the structure;
 - Design of the outlet works conduit through the dam embankment, including pipe size and type, reinforcement and concrete, and other items necessary for the conduit;
 - Design of the outlet works access conduit, including pipe, concrete structure, valve, reinforcement and concrete, electrical and mechanical items, and other items necessary for the structure;
 - Design of the outlet works control building, including water control elements such as pipe, fittings, valves, and meters, structure sizing, reinforcement and concrete, electrical and mechanical items, and other items necessary for the structure and contents; and
 - Design of the outlet works outflow to the downstream canal, and/or downstream channel, including pipe, fittings, valves, energy dissipation appurtenances, and other items necessary for the discharge.
- Spillways – Evaluate spillway design to be used for the project. Optimize crest geometry, capacity, width and location in conjunction with the free board requirements for peak flow estimates and location in the abutments. The following items will be analyzed as part of this work.
 - Spillway crest and chute sizing
 - Spillway rating curve
 - Excavation and foundation preparation
 - Typical plan, profile, and sections
 - Concrete and structural sections
 - Armoring
 - Hydraulics and design modifications of downstream structures, if necessary
- Instrumentation and Monitoring
 - Identify instrumentation and monitoring requirements.
 - Design power and backup power supplies.
 - Design SCADA.
 - Complete design/layout of monitoring instrumentation (displacement monitors, inclinometers, flowmeters/sensors).
 - Complete design and siting of monitoring wells/piezometers.

- Reservoir Water Supply
 - Design analysis to determine optimum size and location of the system.
 - Design diversion structure/weir and erosion protection for Paint Rock Creek (Anita Supplemental Ditch) and Medicine Lodge Creek (Anita Ditch).
 - Perform hydrology/hydraulic modeling for structure effects on stream mechanics/channels.
 - Design headgates for Anita Supplemental Ditch and Anita Ditch.
 - Design fish screens for diversion structures, if appropriate based on WGFD input.
 - Design enlargement, including new turnouts, grade controls, and culverts/crossing for Anita Supplemental Ditch.
 - Design enlargement, including new turnouts, road crossings/culverts, flumes, checks, siphons, and lined-sections for Anita Ditch.
 - Design drop structure from Anita Ditch into Alkali Creek reservoir.
- Downstream Channel Structures
 - Design fish-friendly drop/grade control structures.
 - Design culverts/ranch road crossings.
 - Design bank protection (vegetation, rock veins, revetment).
 - Develop channel grading.
- Mitigation
 - Determination of the required constructed wetland size(s), location(s), and type(s);
 - Design of grading, embankments, and materials for the wetlands;
 - Design of level control structures and outlet pipes; and
 - Determination of plant seed and seedling species to be placed in the constructed wetlands.
 - Design cultural and paleontological mitigation plans based on the Environmental Impact Statement and Record of Decision.
- Site Layout
 - Design construction staging areas, temporary roads, etc.
 - Design primary access roads for all project facilities and entry/tie-in with WY Highway 31.
 - Design secondary access roads and entry/tie-in with WY Highway 31.
 - Design of relocation for existing BLM trails inundated by reservoir if needed.
 - Design alignment, cross section, profile, and surfacing of access roads.
 - Design site drainage.
 - Layout and size culverts and design culvert inlets and outlets.
 - Design public parking area and fencing.

- Design/layout reservoir pool fencing.
- Design boat ramp and restroom facilities.
- Design signage plan.
- Design reclamation of disturbed areas.

Task 8. Technical Review

Technical review of the project work shall be performed by a group of senior level experts with extensive experience in the field of dam design, construction, and operation. The Consultant shall assemble a Board of Consultants (BOC), through use of subconsultants, company principals and/or senior engineers not associated with the project on a daily basis, or a combination of both. The BOC is to consist of six (6) members with experience that covers the following engineering principles: structural engineering, hydrology and hydraulics, engineering geology, geotechnical engineering, civil engineering, and constructability/cost estimating. The intent of the BOC is to provide an independent, unbiased review of the Consultant's work, and shall be approved by the Office.

Task 9. Construction Plans and Specifications

This task is to complete final designs, prepare the plans and specifications for bidding of the project, and develop the Engineer's Opinion of Probable Construction costs. It will also include preparation of a detailed design report.

Design Report and 60 Percent Design - The Consultant shall prepare a Design Report showing the general layout of the significant project features and presenting the project design criteria, assumptions, engineering evaluations and analysis completed in previous tasks. The Design Report will be reviewed by the Office, BOC, BLM and WYSEO, and comments will be provided for incorporation into the 60 percent design. If necessary for clarification, a review board meeting with the BOC, Office, BLM, WYSEO, and the designers will be held. Preparation of the 60 percent design will then include the following:

- Prepare construction drawings of the project showing layouts and details of the project features. Submit the 60 Percent Design Construction Drawings to the Office, BOC, BLM and WYSEO for review and comment.
- Prepare and submit an outline of the construction specifications, with draft bidding and construction schedules.
- Update and submit the design report documenting the basis of all final designs. The report will include all backup for the design criteria, design and construction schedule.
- Conduct a review board meeting with the BOC, Office, BLM, WYSEO and the designers. The 60 percent review will serve to evaluate constructability, identify areas that can be improved, gain feedback on operational aspects of the design

and to keep all parties involved in the design to facilitate factor of safety review and approval of the design for construction.

- Complete the Engineer's Opinion of Probable Construction costs based on the 60 percent design.

90 Percent Design - The Consultant will prepare a 90 percent design incorporating comments from the BOC, Office, BLM and WYSEO. The 90 percent design will also include complete specifications and a schedule of bid items. Preparation of the 90 percent design will include the following:

- Submittal of addenda to the Design Report, including additional design analyses performed for the project, an updated construction schedule, design operating criteria, and 90% construction drawings and specifications to the Office, BOC, BLM and WYSEO for review and comment.
- A summary and status report of all permits, clearances, easements, access, purchases, etc. This report will be prepared in conjunction with the Office.
- A review board meeting with the BOC, Office, BLM, WYSEO, and the designers.
- Complete the Engineer's Opinion of Probable Construction costs based on the 90 percent design.

Final Plans and Specifications – The Consultant shall incorporate 90 percent design comments to prepare the final construction drawings, specifications, design report and Engineer's Opinion of Probable Construction costs. The Consultant will prepare the construction drawings on 22-inch by 34-inch sheets using AutoCAD to assure that half-scale (11-inch by 17-inch) drawings can also be produced upon request. The Consultant will prepare the construction specifications in Construction Specification Institute (CSI) format, or approved other. The plans and specifications will be sealed and signed by a professional engineer registered in the State of Wyoming. The design report and Engineer's Opinion of Probable Construction costs will be two separate documents.

Task 10. Emergency Action Plan

Utilizing the final design, previous project work, resources from the Federal Emergency Management Agency (FEMA) and the USDA Natural Resources Conservation Service (NRCS), the Consultant shall coordinate with the appropriate state, federal and local agencies, to prepare an Emergency Action Plan (EAP) for the project. The EAP shall include, but not be limited to; identification of potential emergency conditions, actions that will be taken to prevent or delay dam failure, pre-planned actions to be followed in the event of emergency, notification flowcharts, inundation maps, and arrival times.

Up to three (3) public meetings will be held to discuss the preparation and implementation of the EAP with the local community. The Consultant will be responsible for scheduling

and conducting these meetings in coordination with the Office project manager. The Consultant shall prepare all notices and needed materials for the meetings. Formal public meetings shall be advertised in advance. The Consultant shall prepare meeting minutes for all meetings.

Task 11. Supplemental Geotechnical Investigation

The Consultant shall determine and complete supplemental geotechnical investigations, a geophysical survey, and laboratory testing required to fill data gaps identified during completion of Task 6. The supplemental geotechnical investigation shall be conducted in 3 phases: 1) supplemental borrow investigation; 2) supplemental borings; and 3) geophysical survey.

At a minimum, the supplemental borrow investigation should include the following:

- Excavate 6 additional test pits upstream of the proposed embankment and north of the proposed boat ramp location (north of TP-12), but still within the proposed reservoir pool. These test pits will be excavated to further evaluate potential embankment borrow materials. In addition to laboratory index testing (gradation, moisture content, Atterberg limits), perform triaxial strength testing on 4 samples and direct shear strength testing on 2 samples.
- Perform laboratory testing to evaluate amending embankment borrow materials with granular materials. Perform triaxial strength testing on 4 amended samples.
- Determine impacts on embankment design and corresponding potential increases to dam construction costs.

The supplemental borrow investigation shall be completed prior to installing supplemental boreholes. The Consultant shall prepare a technical memorandum summarizing the supplemental borrow investigation results and presenting the potential impacts to project feasibility and previous cost estimates. The Consultant shall evaluate and discuss the results of the supplemental borrow investigation with the BOC members and the Office project manager to determine impacts to project feasibility, prior to proceeding with the supplemental boreholes. The Consultant shall be given notice to proceed on the supplemental borehole investigation by the Office project manager, before the phase is initiated. At a minimum, the supplemental borehole investigation should include the following:

- Advance 3 deep borings along the proposed dam centerline; 1 west of B-7, 1 between B-6 and B-9, and 1 between B-3 and B-2. Advance the borings to depths between 150 feet and 250 feet, depending on the underlying sandstone and claystone beds.
- Advance 1 boring in the east abutment, north of B-15 and 1 boring in the west abutment west of B-22. Both borings will be located along an extension of the

approximate dam centerline. The boring in the east abutment will be advanced to a depth of 100 feet and the boring in the west abutment will be advanced to a depth of 200 feet, depending on the underlying sandstone and claystone beds.

- Advance 4 deep borings in the west abutment, along the ridge located west of Alkali Creek; 1 between B-22 and B-18, 1 between B-18 and B-17, and 2 between B-17 and B-19. Advance the borings to a depth of 200 feet, depending on the underlying sandstone and claystone beds.
- Advance 4 shallow borings within the proposed embankment borrow area north of the proposed dam. Two borings will be located north of the embankment and east of Alkali Creek and 2 borings will be located north of TP-12 and west of Alkali Creek. These boring locations will be adjusted based on materials encountered in the additional test pits. Advance the borings to a depth of 55 feet or to the underlying bedrock interface, whichever is shallower. Collect 3 samples and perform laboratory index testing (gradation, moisture content, Atterberg limits). In addition, perform triaxial strength testing on 2 samples and direct shear strength testing on 1 sample.

The Consultant shall prepare a technical memorandum summarizing the supplemental borehole investigation results. The Consultant shall discuss the results of the supplemental borehole investigation with the BOC members and the Office project manager to determine whether the geophysical survey is necessary, and if it is, whether the scope should be adjusted. The Consultant shall be given notice to proceed on the geophysical survey by the Office project manager, before the phase is initiated.

The geophysical survey will consist of acquiring and processing high-resolution seismic data along 2 seismic lines, each approximately 3,200 feet long. One line will run along the proposed dam embankment centerline and the second line will parallel the first line and be located approximately 800 feet to the north. Both seismic reflection and seismic refraction surveys will be completed. Seismic reflection surveys will be targeted at identifying interfaces between sandstone and claystone beds to a depth of approximately 250 feet. Seismic refraction will be targeted at identifying the depth of overburden.

The final supplemental geotechnical investigation program will be flexible and will be evaluated for possible modifications as further information is obtained. The Consultant shall visually classify all samples and perform laboratory tests according to a schedule appropriate for completion of final design. Anticipated test types and quantities are as follows:

| Proposed Laboratory Testing Program | |
|-------------------------------------|-----------------|
| Borrow Area Boreholes | Number of Tests |
| Gradation | 3 |
| Atterberg Limits | 3 |

| | |
|-----------------------------------|------------------------|
| Specific Gravity | 3 |
| Direct Shear | 1 |
| Flexible Wall Permeability (soil) | 4 |
| Pinhole Dispersion | 1 |
| Triaxial (UU) | 2 |
| Borrow Areas Test Pits | Number of Tests |
| Gradation | 6 |
| Atterberg Limits | 6 |
| Specific Gravity | 6 |
| Direct Shear (embankment) | 2 |
| Proctor | 7 |
| Flexible Wall Permeability (soil) | 4 |
| Pinhole Dispersion | 1 |
| WSS/Chlorides/pH | 2 |
| Triaxial (CU) (soil) | 8 |
| Swell-Consolidation | 2 |

The Consultant shall prepare and submit a complete, concise Supplemental Geotechnical Technical Memorandum to summarize and interpret the work performed in this task. The Technical Memorandum will incorporate the supplemental borrow investigation and supplemental borehole investigation technical memos. At a minimum, the Technical Memorandum will contain the final boring and test pit logs, geophysical survey results, laboratory test results, characterization and distribution of surficial and subsurface soil and rock units, and engineering characteristics of the various geologic units. The Technical Memorandum will also include design criteria and indicate potential impacts to previously completed cost estimates and project feasibility. The Technical Memorandum shall present data and be suitable for including in bidding documents.

The Technical Memorandum developed under Task 11 shall be included as an appendix to the Geotechnical Report under Task 6, and the results shall be incorporated into the evaluations and recommendations contained within the Geotechnical Report.

Task 12. Discretionary Task

The Consultant will place \$150,000.00 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

ATTACHMENT C2

REVISED SCOPE OF SERVICES ASSUMPTIONS AND DELIVERABLES

Task 1: Project Management, Meetings and Coordination

- **Assumptions**
 - Consultant Project Manager will act as the dedicated point-of-contact for the Office and NWID throughout the project.
 - The monthly progress report will serve as documentation for the monthly progress teleconferences.
 - The PMP will include an organization chart, communication flow chart, and direction on peer review/quality control, invoicing, budgets, and contracts.
 - Six interim meetings will be held in the project area with the NWID and Office.
 - Project area meetings will be coordinated with fieldwork or other meetings to the degree possible to control costs.
 - Meeting advertising will consist of a public notice in the newspaper, distribution of flyers, and notices on the Hyattville Community Center and NWID Facebook pages.
 - Consultant Project Manager and one additional technical team member will attend each meeting in the project area.
 - Consultant will coordinate the project meeting arrangements with the Office and NWID.
 - Additional, informal meetings will be held with the Office project manager in Cheyenne, in Laramie, or by teleconference or web conference during the course of completing other project tasks.
 - Meeting minutes and other communication notes will be maintained in OneNote and shared or distributed to the Office project manager and the NWID.
 - The NWID will assist in generating awareness for project area meetings.
 - Each project area meeting will also entail time meeting with the NWID chairperson and the primary landowner either before or after the meeting.
- **Deliverables**
 - Project Management Plan (PMP).
 - Kickoff Meeting agenda and meeting minutes.
 - Monthly invoice and progress report, including updated schedule and budget tracking.
 - Monthly progress teleconferences.
 - Public meeting notification for up to six meetings in the project area.
 - Meeting room coordination and setup for up to six meetings.
 - Professional presentation materials and supporting maps for each meeting.
 - Meeting minutes for each meeting.

- Day-to-day project coordination and management.

Task 2: Project Familiarity and Conceptual Design Review

- Assumptions
 - The project is currently in the NEPA process and additional documents will become available for review under Task 2.
 - Key technical staff will review the conceptual design in preparation for a conceptual design review meeting.
 - Key technical staff and the BOC will participate in a conceptual design review meeting in Laramie. Remote attendees (those located farther than 1 hour from Laramie will participate by web conference).
 - The coordination meeting with the Office project manager will be conducted in Laramie.
 - Assume that one hard copy and an electronic copy of the Conceptual Design Review Summary Report will be submitted. This report will also be included as an appendix or attachment to the Design Report. The report will also be published to the project document sharing site (Office 365 or similar) to allow access by the project team.
- Deliverables
 - Coordination meeting with the Office project manager to review recommended design modifications.
 - Summary report presenting the results of the review and any recommended modifications to the conceptual design.

Task 3: Agency and Landowner Coordination and Support

- Assumptions
 - The first BLM and landowner meeting will be scheduled with the Scoping meeting.
 - The third BLM and landowner meeting will be scheduled with Meeting 4 of Task 1.
 - Consultant will organize and participate in up to four meetings with BLM at the BLM Worland Field Office. Consultant's Project Manager will attend each meeting. Senior surveyor will attend one meeting and participate in a second meeting by teleconference. Consultant's legal subconsultant will attend one meeting and participate in two other meetings by teleconference.
 - Consultant will organize and participate in up to four meetings with private landowners at the landowners' residences or another location in Hyattville. Consultant's Project Manager will attend each meeting. Senior surveyor will attend one meeting. The appraiser will attend one meeting and participate in

- a second meeting by teleconference. Consultant's legal subconsultant will attend one meeting and participate in two other meetings by teleconference.
- The two meetings with WYDOT will be attended by Consultant's Project Manager and Daryl Jensen (BOC) (one by phone and one in person) will attend these meetings.
 - Consultant will organize and participate in one meeting with Big Horn County. This meeting will be coordinated with the initial WYDOT meeting.
 - Meetings will be coordinated to reduce travel time and project costs.
 - Informal phone calls and/or web/video conference calls with the Office, agencies, and/or landowners may be required.
 - Appraisals of BLM and private lands for current market value will be completed to conform to the Uniform Standards of Professional Appraisal Practice.
 - Elements of comparison to be considered in the appraisal process will include, but are not limited to:

| | |
|--------------------------------|--|
| - Conditions of sale | - Streams/trees |
| - Market conditions (time) | - View |
| - Productivity (if applicable) | - Recreational amenities |
| - Size | - Availability of utilities |
| - Location | - Zoning |
| - Legal and physical access | - Any other relevant market factors that the |
| - Terrain | - Consultant may identify |
 - Consultant will coordinate the project meeting arrangements with the Office and the NWID.
 - Deliverables
 - Meeting room coordination.
 - Professional presentation materials and supporting maps for each meeting.
 - Meeting minutes for each meeting.
 - Documentation for informal communication and teleconferences/web conferences.
 - Draft and final purchase, easement, and ROW agreements.
 - BLM and private land appraisals report estimating current market value.

Task 4: General Design and Performance Criteria Coordination

- Assumptions
 - Design and performance criteria will be developed for dam design/construction, reservoir operation, road designs, and county or state road bridges and culverts.

- The BLM, USACE, WYDOT, WSEO, Big Horn County will be willing to provide applicable standards.
- Criteria will be based on nationally recognized standards and meet the approval of the BLM, USACE, WYDOT, Big Horn County, and WSEO.
- Consultant will review criteria developed from applicable standards with the Office and the WSEO after review of the criteria by the BOC.
- Deliverables
 - A list of applicable standards.
 - A matrix of approved, project design and performance criteria.

Task 5: Additional Surveying

- Assumptions
 - Additional survey is required to supplement the 2013 LiDAR survey.
 - Topographic survey areas will include diversion areas and ditch bottoms, as well as Alkali Creek stream channel, banks, and overbanks, and the George and Bayne crossing at Alkali Creek.
 - Additional survey areas will overlap with 2013 LiDAR data sufficiently to allow the surfaces to be accurately joined.
 - Topographic survey of the ditches, diversions, creek, and structures will be performed during the same mobilization.
 - Consultant will use a UAS to map the larger diversion area; this data will be supplemented by groundbased stream cross section surveys using a survey-grade GPS unit. Cross sections will be surveyed on 100-foot stations.
 - Both toes and the centerline of the Anita and Anita Supplemental ditches will be surveyed on 100-foot stations.
 - A robotic total station will be used to survey the Highway 31 Bridge.
 - The boundary survey to support the Record of Survey and the survey to support establishing ROWs and easements will be performed during the same mobilization. These surveys will be coordinated with coordination meetings with the BLM and the landowners described under Task 3.
 - Consultant will establish 2 control points in conjunction with performing the diversion topographic surveys. The remaining control points will be established before the 90% design submittal.
 - Surveying will be combined with meetings and other field work in the area to reduce project costs whenever possible.
 - Structures to be surveyed include:
 - Ditch headgates
 - Check structures
 - Culverts

- Drop Structures
- Farm turnouts
- Pipe inlets and outlets
- Pipelines and inverted siphons crossing the ditches.
- Deliverables
 - AutoCAD survey base map.
 - AutoCAD topographic map and existing ground surface XML.
 - Digital data collected during the surveys.
 - Copy of field notes.
 - Minimum of 10 control points.
 - Data sheets for control points, including photos and descriptions of control point locations.
 - Record of Survey (10 copies).
 - ROW, easement, and acquisition descriptions and exhibits.

Task 6: Additional Geotechnical Analysis

- Assumptions
 - The Draft Geotechnical Report, including the Geology Report will be submitted in electronic format for the Office project manager's review.
 - Ten hardcopies of the Final Geotechnical Report will be submitted. An electronic copy of the report will be included on a CD attached to the front or back cover of each hard copy report.
 - The BOC and the Office project manager will review and approve the proposed field program before the program is implemented.
 - A Work Plan describing the field and laboratory program will be prepared. One hard copy and one electronic copy of this Work Plan will be provided to the Office. The Work Plan will be included as an appendix to the Final Geotechnical Report.
 - Subconsultant will subcontract Paint Rock Angus Ranch personnel to excavate test pits and pioneer drilling access roads and pads, similar to the approach to the 2012 geotechnical investigation.
 - Laboratory testing will be completed in subconsultant's in-house geotechnical laboratory.
 - Costs for the proposed field program, including the drilling subcontractor and test-pitting subcontractor, are estimated based on quotes received from potential subcontractors at the time of this proposal. Subcontractor costs may change before field work based on potential changes to fuel prices and availability between the proposal submittal and the proposed NTP date.
 - Subconsultant will complete site utility locate meetings.

- Deliverables
 - Field program and laboratory testing Work Plan.
 - Geotechnical Report, including investigation mapping and laboratory test results.
 - Geology Report (as an appendix to the Geotechnical Report), including geologic mapping.
 - Six piezometers.

Task 7: Design

- Assumptions
 - The draft Hazard Classification letter report will be submitted electronically for the Office's review.
 - Three hard copies of the final Hazard Classification letter report will be submitted; two to the WSEO and one to the Office. The final report will also be included as an appendix to the Design Report.
 - Results and output from Task 7 Design will be represented in the Task 9 Construction Plans and Specifications.
 - Design assumptions, design criteria, models, and calculations will be summarized and included with the Design Report submitted under Task 9.
 - Pertinent sections of the Design Report will be developed concurrent with each design step outlined in Task 7.
 - Suitable power for instrumentation and controls is located at Highway 31 adjacent to the project site.
 - The design team will coordinate with the Office project manager and the NWID continuously through the design process to reduce comments during Task 9.
 - The design team will meet and coordinate with affected landowners to gain their input and assist them with understanding the irrigation infrastructure designs, diversion designs, ditch enlargement designs, and downstream structure designs.
 - The design team will also coordinate with the primary affected landowner and the BLM during the design process to gain input and explain the designs and project footprints/impacts.
 - The design team will work closely with the NWID to develop an operational plan so that the Final Design best represents their approach to reservoir operation.
- Deliverables
 - Hazard Classification letter report.
 - Progress updates and meeting minutes.

Task 8: Technical Review

- Assumptions
 - BOC consultation and review will be tracked to the respective design or technical task and will fall under other project tasks as described throughout the Consultant's proposal.
 - Consultant will propose BOC assignments for individual design or technical tasks and will notify the Office project manager. The Office project manager will in turn notify Consultant if they have concerns or suggestions relative to the proposed assignments.
- Deliverables
 - No specific deliverables are anticipated for this task.

Task 9: Construction Plans and Specifications

- Assumptions
 - One hard copy of the plans, specifications, and Design Report will be provided to each review committee member (6 BOC members, Office project manager, WSEO representative, and BLM representative) for the 60% and 90% Design submittals. A hard copy will also be provided to the NWID, and a hard copy of the plans will be provided to WYDOT and WGFD at the 60% Design submittal. Total of 12 copies for 60% Design and 9 copies for 90% Design. Electronic copies of each will accompany the hard copies. Electronic copies of the Engineer's Opinion of Probable Cost will be submitted to the BOC members and the Office project manager for the 60% and 90% Design submittal.
 - Ten hard copies of the Final Plans and Specifications, Design Report, Bid Schedule, and Engineer's Opinion of Probable Costs will be submitted to the Office. Two hard copies of the same, except the cost estimate and bid schedule, will be submitted to BLM, WYDOT, WSEO, USACE, and WGFD. Total of 20 hard copies. Electronic copies will accompany each hard copy.
 - Design report will show at least the general layout of the significant project features and present the project design criteria, assumptions, engineering evaluations and analysis completed in Tasks 4, 5, 6, and 7.
 - The design report and addenda to the design report will be reviewed by the Office, BOC, BLM and WYSEO, and comments will be provided for incorporation into the 90% and Final Designs.
 - A review board meeting with the BOC, Office, BLM, WYSEO, and the designers will be held for the 60% and 90% Design submittals. The NWID will be invited to these meetings.
 - The Draft Operations Plan, EAP, and Reclamation and Weed Management Plan submitted with the 2017 PODs will be updated and included as an appendix to the Design Report beginning with the 90% Design Submittal.

- Construction drawings will be produced on 22-inch by 34-inch sheets using AutoCAD to assure that half-scale (11-inch by 17-inch) drawings can also be produced upon request.
- The construction specifications will be prepared according to the CSI format, or approved other.
- The summary and status report of all permits, clearances, easements, access, purchases, etc. will be prepared in conjunction with the Office.
- The plans and specifications will be sealed and signed by a Professional Engineer and, as applicable, a Professional Geologist registered in Wyoming.
- The Design Report and Engineer's Opinion of Probable Construction costs will be two separate documents.
- The BOC, Office, WSEO, and BLM will be involved and/or consulted during preceding tasks and design development, limiting the level of comments received on the various design submittals.
- Deliverables
 - 60% Design Submittal.
 - 60% construction drawings of the project showing layouts and details of the project features.
 - Outline of the construction specifications, with draft bidding and construction schedules.
 - Engineer's Opinion of Probable Construction costs based on the 60% design.
 - Design report documenting the basis of all designs.
 - Report will include all backup for the design criteria, design and construction schedule.
 - 60% review committee meeting minutes.
 - Compiled review committee comments.
 - 90% Design Submittal.
 - Addenda to the Design Report including additional design analyses performed for the project, an updated construction schedule, design operating criteria, Operation Plan, and 90% construction drawings and specifications.
 - A summary and status report of all permits, clearances, easements, access, purchases, etc.
 - 90% review committee meeting minutes.
 - Compiled review committee comments.
 - Draft Bid Schedule.
 - Engineer's Opinion of Probable Construction costs based on the 90% design.
 - Final Design Submittal.
 - Final construction plans and specifications.

- Final Design Report.
- Final Bid Schedule.
- Final Engineer's Opinion of Probable Construction costs.

Task 10: Emergency Action Plan

- Assumptions
 - The EAP will be based on the final design; the preliminary Draft EAP submitted in January 2017 with the Reservoir POD to be used as the starting point.
 - Dam breach analyses and inundation mapping will be updated under Task 7.
 - Up to three public meetings to discuss and test the EAP will be held.
 - Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project manager.
 - Consultant will prepare all notices and needed materials for the meetings.
 - Formal public meetings will be advertised in advance.
- Deliverables
 - Emergency Action Plan (included as part of Task 9 deliverables).
 - Meeting minutes for all meetings.

Task 11: Supplemental Geotechnical Investigation

- Assumptions
 - A Work Plan describing the field and laboratory program will be prepared. One hard copy and one electronic copy of this Work Plan will be provided to the Office. The Work Plan will be included as an appendix to the Final Supplemental Geotechnical Technical Memorandum.
 - Appropriate members of the BOC and the Office project manager will review and approve the proposed field program before the program is implemented.
 - Subconsultant will subcontract Paint Rock Angus Ranch to excavate test pits and pioneer drilling access roads and pads.
 - Paint Rock Angus Ranch and the Bureau of Land Management will provide access consent for field investigations and geophysical surveys.
 - Laboratory testing will be completed in subconsultant's in-house geotechnical laboratory.
 - Costs for the proposed field program, including the drilling subcontractor, test-pitting subcontractor, and geophysical survey subcontractor are based on quotes received from potential subcontractors at the time of Amendment No. One. Subcontractor costs may change before field work based on potential changes to fuel prices and availability between the amendment request submittal and the date field work is completed.

- The supplemental borrow investigation will be completed prior to completing other supplemental geotechnical investigations.
- Not more than 8 test pits will be excavated.
- Not more than 13 borings will be installed.
- No more than 6,400 feet of geophysical survey line will be completed. The geophysical survey will only be completed if evaluation of the supplemental boreholes indicates the survey is required.
- Subconsultant will complete site utility locate meetings.
- A concise technical memorandum (tech memos) will be prepared and submitted to the Office following completion of the supplemental borrow investigation and following completion of the supplemental borehole investigation.
- A Supplemental Geotechnical Investigation Technical Memorandum (Tech Memo) will be prepared. This Tech Memo will include test pit logs, field logs, geophysical survey data and analysis report, and laboratory test results in appendices. The Tech Memo will also evaluate impacts to project feasibility and will be included as an appendix to the Geotechnical Report included under Task 6.
- The Draft Tech Memo will be submitted in electronic format for the Office project manager's review.
- Deliverables
 - Field program and laboratory testing Work Plan.
 - Concise Supplemental Borrow Investigation tech memo
 - Concise Supplemental Borehole Investigation tech memo
 - Supplemental Geotechnical Investigation Tech Memo, including investigation mapping and laboratory test results, as an appendix to the Task 6 Geotechnical Report.

**AMENDMENT TWO TO
CONSULTANT CONTRACT FOR SERVICES NO. 05SC0296324
GREYBULL VALLEY IRRIGATION DISTRICT STORAGE ENLARGEMENT,
LEVEL II STUDY
BETWEEN
WYOMING WATER DEVELOPMENT COMMISSION
AND
AECOM TECHNICAL SERVICES, INC.**

1. Parties. This Amendment is made and entered into by and between the Wyoming Water Development Commission [Commission], whose address is: 6920 Yellowtail Road, Cheyenne, Wyoming 82002; and AECOM Technical Services, Inc. [Consultant], whose address is: 6200 S Quebec Street, Greenwood Village, CO 80111.

2. Purpose of Amendment. This Amendment shall constitute the second amendment to the Contract between the Commission and the Consultant. The purpose of this Amendment is to: a) add Phase II tasks to assist the Commission in further analyzing storage enlargement for the Greybull Valley Irrigation District; b) increase the total Contract dollar amount by three hundred thousand dollars (\$300,000.00) to one million ninety-six thousand dollars (\$1,096,000.00); and c) replace Exhibit "A" with a new Exhibit "A2".

The original Contract, dated June 15, 2015, required the Consultant to investigate the feasibility associated with enlarging surface water storage capacity for the Greybull Valley Irrigation District for a total Contract amount of two hundred ninety-eight thousand dollars (\$298,000.00) with an expiration date of June 30, 2017.

Amendment One, dated March 21, 2017, amended the original Contract to: a) add Phase II tasks to assist the Commission in further analyzing the storage enlargement for the Greybull Valley Irrigation District; b) increase the total Contract dollar amount by four hundred ninety-eight thousand dollars (\$498,000.00) to seven hundred ninety-six thousand dollars (\$796,000.00); and c) extended the term of the Contract through June 30, 2020.

3. Term of the Amendment. This Amendment shall commence immediately upon the date the last required signature is affixed hereto, and shall remain in full force and effect through the term of the Contract, as amended, unless terminated at an earlier date pursuant to the provisions of the Contract, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. The second sentence of Section 4.A. of the original Contract is hereby amended to read as follows:

The total payment under this Contract shall not exceed one million ninety-six thousand dollars (\$1,096,000.00).

B. The entirety of section 4.B. of the original Contract is hereby amended to read as follows:

“4.B. Project Budget. The Project budget for each task included in Exhibit “A2” is as follows:

| <u>Phase I Tasks</u> | <u>Estimated Cost</u> |
|---|-----------------------|
| Task 1. Scoping, Project Meetings, and Results Presentation | \$ 42,420.00 |
| Task 2. Review of Background Information | \$ 3,570.00 |
| Task 3. Hydrologic Analysis | \$ 88,770.00 |
| Task 4. Purpose and Need | \$ 3,330.00 |
| Task 5. Conservation and Screening | \$ 11,460.00 |
| Task 6. Temporary Stream Gauging | \$ 13,710.00 |
| Task 7. Alternatives Analysis | \$ 20,580.00 |
| Task 8. Geotechnical Investigation | \$ 7,390.00 |
| Task 9. Environmental and Permitting Analysis | \$ 31,870.00 |
| Task 10. Economics Analysis | \$ 19,000.00 |
| Task 11. Discretionary Task | \$ 30,000.00 |
| Task 12. Structure Evaluation | \$ 9,820.00 |
| Task 13. Reports | \$ 16,080.00 |
| Phase I Subtotal | \$ 298,000.00 |

| <u>Phase II Tasks</u> | <u>Estimated Cost</u> |
|--|-----------------------|
| Task 1. Meetings and Project Management | \$ 49,540.00 |
| Task 2. Hydrologic Model Refinement | \$ 27,000.00 |
| Task 3. Environmental Assessment and Permitting | \$ 87,240.00 |
| Task 4. Geotechnical Investigation | \$119,020.00 |
| Task 5. Surveying | \$ 30,000.00 |
| Task 6. PMP/PMF/Spillway Erodibility | \$ 23,200.00 |
| Task 7. Outlet Conduit Inspection | \$ 10,390.00 |
| Task 8. Conceptual Design and Cost Estimates | \$ 96,790.00 |
| Task 9. Economic Analyses | \$ 5,780.00 |
| Task 10. Discretionary Task | \$ 31,000.00 |
| Task 11. Public Interest | \$ 1,420.00 |
| Task 12. Creation of Geographic Information System | \$ 2,380.00 |
| Task 13. Draft Report | \$ 25,840.00 |
| Task 14. Report Presentations | \$ 8,080.00 |
| Task 15. Final Report and Deliverables | \$ 5,320.00 |
| Task 16. Semi-Quantitative Risk Assessment | \$ 50,000.00 |

| | | |
|----------|---------------------------------------|-----------------------|
| Task 17. | Additional Geotechnical Investigation | <u>\$225,000.00</u> |
| | Phase II Subtotal | <u>\$ 798,000.00</u> |
| | PROJECT TOTAL COST | \$1,096,000.00 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms provided by the Office. The Consultant may use alternate billing forms if approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing."

5. Amended Responsibilities of the Consultant.

Responsibilities of the Consultant are hereby amended as follows:

A. As of the Effective Date of this Amendment, Exhibit "A", Scope of Services, which was attached to the original Contract, is superseded and replaced by Exhibit "A2", Revised Scope of Services, which is attached to this Amendment and incorporated into the original Contract by this reference. All references to "Exhibit 'A'" in the original Contract, and in any amendments thereto, are amended to read: "Exhibit 'A2'".

6. Amended Responsibilities of the Commission.

Responsibilities of the Commission have not changed.

7. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Contract, and any previous amendments, between the Commission and the Consultant, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the Consultant of an originally signed counterpart of this Amendment by PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

8. General Provisions.

A. Entirety of Contract. The Original Contract, consisting of twelve (12) pages, Exhibit "A" Scope of Services, consisting of fourteen (14) pages, and Exhibit "B" Hourly Rate and Reimbursable Expenses, consisting of two (2) pages; Amendment One, consisting of nineteen (19) pages; this Amendment Two, consisting of five (5) pages, and Exhibit "A2" Revised Scope of Services, consisting of thirty-two (32) pages, represent the entire and integrated Contract between the parties and supersede all prior negotiations, representations, and agreements whether written or oral.

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9. Signatures. The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

This Amendment is not binding on either party until approved by A&I Procurement and the Governor of the State of Wyoming or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

AECOM TECHNICAL SERVICES, INC.

Gregory G. Glunz, Department Manager
Employer Identification Number: 95-2661922

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner
Assistant Attorney General

Date

**EXHIBIT “A2”
REVISED SCOPE OF SERVICES**

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in D. Scope of Services. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location. Greybull and Wood Rivers, Big Horn River Basin, Big Horn and Park Counties, Wyoming.
2. Purpose. To perform a Level II study for the Greybull Valley Irrigation District Storage Enlargement Project.
3. History. The Greybull Valley Irrigation District (District), located in Park and Bighorn Counties along the Greybull and Wood Rivers, has interest in exploring the possibility of increasing storage capacity to provide additional late season water supply for agricultural irrigation operations.

Through the early 1990's, feasibility studies investigated storage sites that would provide a target of 30,000 acre-feet of water to be used as late season irrigation supply within the District. Several sites, including enlargements of both Upper and Lower Sunshine Reservoirs, were considered during this study with Roach Gulch Reservoir ultimately being constructed in the early 2000's. In 2014, the District applied for a Level II, Phase I study to investigate the feasibility of increasing their surface water storage capacity. The study was approved and, later, finalized in March, 2017. Based on Phase I hydrologic modeling, seasonal irrigation water shortages and additional, seasonal, surface water availability revealed the need to continue analyzing storage alternatives. The results of the Phase I investigation indicated that the most feasible alternative was the enlargement of Lower Sunshine Reservoir.

In 2017, the District received additional funding to continue studying the Lower Sunshine Enlargement with a Level II, Phase II study. The objective of the Phase II analysis is to further refine previous work including hydrologic modeling, environmental analysis, and geotechnical investigation / analysis which would lead to the refinement of design, estimates of construction costs, and economic components to enlarge the reservoir approximately 20,000 acre-feet.

Additional information may be found at the Wyoming Water Library supported by the Water Resources Data System, located at the University of Wyoming.

C. **PROJECT REQUIREMENTS**

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. To facilitate the Commission's accurate evaluation of the Consultant's work product, computations, conclusions and recommendations, the Consultant shall:

- * Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

- * Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

- * Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of

the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

The Consultant shall use the following guidelines in calculating project cost estimates.

| | |
|---|----------|
| Preparation of Final Designs and Specifications | \$ _____ |
| Permitting and Mitigation | \$ _____ |
| Legal Fees | \$ _____ |
| Acquisition of Access and Rights of Way | \$ _____ |
| Pre-Construction Costs (Subtotal # 1) | \$ _____ |
| Cost of Project Components | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Total Component Cost (Subtotal #2) | \$ _____ |
| Construction Engineering Cost (Subtotal #2 x 10%) | \$ _____ |
| Components and Engineering Costs (Subtotal #3) | \$ _____ |
| Contingency (Subtotal #3 x 15%) | \$ _____ |
| Construction Cost Total (Subtotal #4) | \$ _____ |
| Total Project Cost (Subtotal #1 + Subtotal #4) | \$ _____ |

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming. At a minimum, the reproducible original to be submitted as part of the deliverables required herein must utilize an original seal(s) and original signature(s).

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant and a 33% loan. The Commission loan will be financed at an interest rate of 4% with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

The Consultant will complete the following set of tasks for the Greybull Valley Irrigation District Storage Enlargement Level II Study:

PHASE I

Task 1. Scoping, Project Meetings, and Results Presentation

One meeting shall be conducted early in the project schedule. The purpose is to familiarize interested parties with the scope of the project and to obtain input from affected parties. The Consultant shall prepare a presentation including maps and other visual aids to explain the project. Project meetings will be conducted as necessary for the coordination of project activities and for keeping the Greybull Valley Irrigation District (Sponsor) informed of project progress. Informal meetings with the Sponsor will be necessary during the course of the study. The Consultant shall assume that they will conduct three informal project meetings. The Consultant shall also assume three joint formal meetings with the Sponsor. These formal meetings shall be open to the public. The Consultant will be responsible for setting and conducting the informal and formal joint meetings in coordination with the Office project manager. No meeting shall be conducted without approval in advance by the Office project manager. Formal joint meetings shall be advertised in advance. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

Upon completion of the draft final report, the Consultant will present their findings at a public meeting in the project area. The Consultant shall also budget for a presentation of results to the Commission and Office in Cheyenne, Wyoming, if requested to do so. Findings and results presentations will be in addition to the formal and informal meetings mentioned above.

The Consultant will prepare all notices and needed materials for the meetings. The Consultant shall prepare meeting minutes for all meetings.

Task 2. Review of Background Information

The Consultant shall gather and review any existing background information related to storage studies and the enlargement of existing reservoirs in the Greybull and Wood River Basins, available through the Office, Water Resources Data System, and other state and federal entities. Of particular importance is the review of the following literature available through the Wyoming Water Development Office: (1) The Phase II Summary Report, Greybull Valley Dam and Reservoir Project, by GEI Consultants, Aug., 1991; (2) Geotechnical Investigation Report of Alternative Borrow Sources on Private Property Downstream of the Lower Dam Site, Greybull Valley Dam and Reservoir Project, by GEI Consultants, Apr., 1992; (3) Greybull Valley Dam and Reservoir Project Level II, Phase III, Draft

Conceptual Design Report, by GEI Consultants, Aug., 1992; (4) Greybull Valley Dam and Reservoir, Wyoming, Economic Evaluation, by Bureau of Reclamation, Jan., 1994; (5) Greybull Valley Dam and Reservoir Project Level II, Phase V, Final Report, Conceptual Design Report, by GEI Consultants, Aug., 1994; (6) Greybull Valley Dam and Reservoir Project Level II, Phase VI, Alternatives Evaluation Report, by GEI Consultants, Aug., 1994; (7) Greybull Hydropower Study Level II Project, Final Report, by ECI, Apr., 2003; (8) Wind/Bighorn River Basin Plan, Final Report, by BRS, Inc., Oct., 2003; (9) Wind/Bighorn River Basin Plan, Technical Memoranda Chapters I, II, III, IV, V, by BRS, Inc., Oct., 2003; (10) Wind – Bighorn Basin Plan Update, Final Report, by MWH Americans, Inc., May, 2010; (11) Wind – Bighorn Basin Plan Update, Technical Memoranda, May, 2010. (12) Greybull Valley Rehabilitation and GIS Level II Study, Final Report, by Sage Civil Engineering, Dec., 2010; (13) Greybull Valley Rehabilitation/Upper Sunshine Diversion Level II Study, Final Report, by Anderson Consulting Engineers, Inc., Jun., 2010; (14) Greybull Valley Irrigation District Hydropower Level II Study, Final Report, by AECOM, Jan., 2014.

There has been a significant amount of work completed on water storage in the Greybull River Basin, and it is the Consultants responsibility to review this and any other applicable material to ensure that no duplication of effort occurs. Review of background information should be completed prior to any meetings being held.

Task 3. Hydrologic Analysis

The Consultant shall identify a study period that captures the historical variability required for this project and is well supported by data.

The Consultant shall perform an irrigated lands assessment to understand demands at the river. This shall include a review of any water supply contracts that are currently active in the watershed and a complete inventory of water right permits in the basin. Permits will be associated with irrigated parcels in a GIS database and will tie both the permits and the irrigated parcels back to a headgate diversion location and water source. The Consultant shall collect available streamflow data, diversion records, reservoir data, and climate data. Where streamflow data is not available, the Consultant shall use appropriate filling methods on available historical data, potentially including regression against gauge data in nearby drainages; rainfall-runoff equations using gauging data, climate data, and watershed characteristics information; and USGS standard regression equations. In regards to historical diversion data, missing data will be filled using historical monthly averages or filled based on calculated crop water requirements. Missing records in the historical climate data will be filled using historical averages coupled with climate data at nearby stations or in nearby drainages. The Consultant shall estimate crop demands and perform a consumptive use analysis. Crop irrigation requirements (CIR) will be developed for all diversion structures based on acreage, crop types, and climate data from local weather stations over the irrigation season. CIR estimates will be compared

to measured or estimated water supply to determine actual consumptive use. Conveyance and application efficiency shall be considered.

Using the above mentioned analyses, the Consultant shall conduct hydrologic and water right analyses of the Greybull and Wood River drainages and associated tributaries to verify needs (water shortages) and the volume of water available for storage. To facilitate the estimate of need and water availability, the Consultant will review existing hydrologic models. The Consultant will use data from the spreadsheet model and hydrologic data compiled during the "Wind – Bighorn Basin Plan Update, 2010" and any relevant hydrologic data compiled for any previous study, such as the "Greybull Valley Dam and Reservoir Project, Level II, Phase V, 1994", for the development of a more robust water right simulation model capable of reflecting Wyoming's seasonal variability in water supply and priority based water right administration scheme.

"StateMod," developed and maintained by the State of Colorado, has been selected as the appropriate modeling platform for simulating water rights and water demands for the project. The Consultant should strive to develop routines and sufficient modeling flexibility that reflects on-the-ground irrigation/water use practices and opportunities that typically arise due to efficient management and changes in irrigation/water use practices that accompany construction of new storage. The goal is to develop a working "what if" model and be able to define timing and locations of shortages in the study area that could be served by improved management and additional surface water storage. The Consultant shall budget for four meetings with the Office, Wyoming State Engineer's Office, and Sponsor to review assumptions pertaining to irrigation parameters and hydrologic system demands. The assumptions must be approved in advance by the Office project manager.

Complete documentation shall be developed for the irrigated lands assessment, consumptive use analysis, available flows analysis, and data development supporting the work.

Task 4. Purpose and Need

Data gathered during this study, particularly information from Task 3, should address the following areas: the Purpose, the Need, and Goals and Objectives. The Purpose will define the problem to be solved. The Need will provide data to support the problem (Purpose). The Goals and Objectives will describe other issues that need to be resolved or opportunities that can be realized as part of a successful solution to the problem. Goals and objectives can also be thought of as ancillary or secondary benefits and may have the potential to mitigate adverse effects of a project.

As appropriate, the objectives of the US Army Corps of Engineers, Bureau of Land Management, US Forest Service, State of Wyoming, Sponsor, Office, and the local

community should be considered during this effort. This will include, but not be limited to, the Clean Water Act, section 404 permitting process and the National Environmental Policy Act (NEPA).

Consideration should be given to a single purpose approach to permitting. The data gathered shall be summarized and set the stage for the consideration of alternatives.

Prior authorization is required from the Office project manager before any work is performed subsequent to this task, in order to verify purpose and need for additional water storage, and justify further study.

Task 5. Conservation and Screening

The Consultant will investigate potential water conservation measures and their relationship with storage. The StateMod model shall be utilized to analyze the effectiveness of implementing conservation measures to improve water availability.

Utilizing the “Wind/Bighorn River Basin Plan, 2003” and other information gathered in Task 2, Review of Background Information, a long list of storage alternatives shall be developed that can address purpose and need. The Consultant shall build upon the long list of alternatives through desktop analyses (topographic maps) and discussions with the Office and Sponsor, to focus on the need in the study area. The Consultant will then conduct a screening of the long list of alternatives to identify potential fatal flaws. Screening criteria will be approved by the Office project manager and include, but not be limited to physical, legal and institutional, economic, social, and environmental issues. Screening shall be utilized to develop the top three (3) storage alternatives. The Consultant shall work with the Office project manager on documenting alternative site characteristics, scoring process, and screening results.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 6. Temporary Stream Gauging

Upon review of the study area hydrology, stream gauge coverage, period of record, and potential water storage alternatives, the Consultant will make recommendations regarding supplemental temporary gauging sites and data collection in order to further refine water availability and needs. Protocol will be developed outlining siting criteria, installation, maintenance, data collection, and removal. Data loggers and pressure transducers, or other approved means of data acquisition, will be purchased and installed during the summer of 2015, removed prior to freeze-up, if necessary, then reinstalled prior to the 2016 spring runoff. The Consultant will be responsible for landowner clearance, permitting, equipment

purchase, protocol, installation, operation, maintenance, development of rating curves, data collection, seasonal removal, and all appurtenances associated with the operation of the stream gauges during the life of the Contract. The Consultant will budget for five (5) new stream gauges. To avoid duplication of efforts, installation of temporary gauges should be coordinated with the Wyoming State Engineer's Office, and the US Geological Survey. All gauging equipment purchased under this Contract and data collected will be the sole property of the Office.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 7. Alternatives Analysis

The Consultant, in close coordination with the Office project manager, will perform all hydrologic analyses and modeling necessary to support the top three (3) storage alternatives. The Consultant will also analyze the potential impacts to existing water rights and the implications related to any water right decree and/or compact, if any. The StateMod model, developed in Task 3, will be used in the analysis. In addition, recreational opportunities and needs, and determination of public benefits such as enhanced flows and fisheries benefits will be evaluated.

The Consultant will prepare conceptual level designs and cost estimates of the top three (3) storage alternatives. These designs and cost estimates will include the dam, spillway, appurtenances, and support facilities such as access roads, boat ramps, and other features necessary for the comparison of alternatives.

If any sites appear favorable for hydropower potential, a reconnaissance level evaluation will be performed. The analysis will include an assessment of power generation based on flow duration and head available. StateMod modeled reservoir water levels and releases will be used to determine turbine head and flowrate. Revenue generated from the hydropower unit will be estimated based on an estimated power purchase price.

The Consultant will prepare construction cost estimates in tabular form for each of the top three storage alternatives. The table will be broken down into both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement will be prepared as outlined in Exhibit "A2", Revised Scope of Services, Subsection C. 3.

The Consultant will also prepare a life-cycle cost analysis for the top three storage alternatives. This analysis should estimate the life cycle of each component including operation, maintenance, and replacement costs.

The construction cost estimates will include costs of design, permitting, land acquisition, construction engineering, construction, and construction

contingencies. The cost estimates should be based on the year this study is completed. The Consultant will work with the Office project manager to determine an appropriate inflation factor that will be applied to the project's current year total cost and projected into the future per the schedule of activities and time-lines developed herein.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 8. Geotechnical Investigation

The Consultant will prepare detailed, site specific, geological reports for the top three (3) alternatives. Neither a drilling program nor back-hoe test pit program is included as part of this study. Depending on the results of this study, they will be included in subsequent phases. The geological investigations for this study will include:

a. Surface and Bedrock Geological Conditions

The Consultant will prepare a detailed, site specific report of the surface and bedrock geology of the dam, spillway, and reservoir area, the diversion, the supply canal, and outlet canal associated with any of the top three (3) alternatives. The report will include a detailed geologic map of the project site delineating the rock types, their age relationships, and the structural characteristics of the site, including faults, folds, etc. The Consultant will utilize existing information to the extent possible and field reconnaissance to confirm conditions as they are described in other reports, journals, geologic maps/records etc.

b. Borrow Material Investigation

The Consultant will use existing data, i.e. geologic maps/ studies, etc., coupled with field reconnaissance to identify whether potential sources of material are available to meet the requirements of the top three (3) alternatives. Depending upon the results of this study, drilling and/or coring programs will be undertaken during subsequent phases of study to verify the adequacy of the borrow area.

c. Seismic Considerations

The Consultant shall review, and update as appropriate, seismic analysis described in any and all previous reports pertaining to the study area. A design earthquake will be determined for the sites and the seismicity characteristics of the area will be considered for the proposed projects. The goal is to reflect the geologic limitations and/or strengths in the cost estimates prepared for the top three (3) alternatives.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 9. Environmental and Permitting Analysis

The Consultant will identify the permits and clearances needed for the top three (3) alternatives; including but not limited to those that fall within the jurisdiction of the Clean Water Act, Endangered Species Act, Historic Preservation Act, 1964 Wilderness Act, the Fish and Wildlife Coordination Act, the Wyoming State Engineer's Office, the Wyoming Department of Environmental Quality, the US Forest Service, the State Lands and Investments Board and the Bureau of Land Management or any other agency with jurisdiction that may affect the construction of a project. The Consultant will seek initial feedback from agencies as to potentially significant issues and related permitting requirements for the top three (3) alternatives, i.e.:

Wetlands: The Consultant will review National Wetland Inventory Maps to determine the extent of wetlands present at each of the top three (3) alternatives. The Consultant will review recent court decisions and agency guidelines relative to wetland jurisdictional issues and will contact the US Army Corps of Engineers Cheyenne Field Office to seek their input for determining whether wetland mitigation will be required within identified off channel reservoir sites or reservoirs located within ephemeral or intermittent drainages. It is assumed that jurisdiction would be assumed by the US Army Corps of Engineers and that wetland mitigation will be required on perennial flowing streams. The Consultant will also estimate the number of acres of wetland mitigation likely to be required at each potential site and recommend and outline a process which best implements the watershed approach, as described in "40 CFR Part 230, Compensatory Mitigation for Losses of Aquatic Resources; Final Rule." An on-the-ground wetland delineation program is not included in this study but, depending on the results of this Study, will be included in subsequent phases of analysis. However, the Consultant shall plan for field reconnaissance of each of the top three (3) alternatives to estimate accuracy of NWI acreage.

The Consultant shall follow the Wyoming Stream Mitigation Procedure to determine stream classification and assess stream loss calculations for the top three (3) alternatives.

Wildlife/Fisheries Habitat: The Consultant will seek council of the US Fish and Wildlife Service and Wyoming Game and Fish Department to identify potential environmental impacts of the top three (3) alternatives.

Safety of Dams, High Hazard Dam Classification: The Consultant will seek council of the Wyoming State Engineer's Office, the US Army Corps of Engineers, Federal Emergency Management Agency, and affected towns to identify potential hydrologic consequences downstream of the top three (3) alternatives.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 10. Economic Analysis

a. Benefits Analysis

The Consultant will perform a benefit-cost analysis on the top three (3) alternatives utilizing data generated herein and from various state and federal agencies. The analysis should include an estimate of direct and indirect benefits which can be used to assist with screening potential storage alternatives needed to eventually select a “preferred alternative” and to determine and justify a recommended level of State funding assistance.

b. Ability to Pay

The purpose of this task is to determine the amount water users could pay for the storage project along with all of the operation, maintenance, and replacement costs and to provide information that can be used to develop a financing plan.

The Consultant will generate recommendations relative to the annual financial commitments that the project beneficiaries could make to retire the construction debt. The Consultant will provide funding scenarios for consideration by the Sponsor and the Office. The Consultant will work with local agencies, the Sponsor, and the Office project manager to gain data for this task.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 11. Discretionary Task

The Consultant will place \$30,000 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 12. Structure Evaluation

Should an enlargement to an existing facility prove to be the preferred alternative, the Consultant shall gather and analyze relevant background material related to the physical characteristics of the existing structure in an effort to ascertain requirements necessary for an increase in elevation of the existing structure. The Consultant will document needed repairs/improvements and consider all cost effective options associated with the preferred alternative.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 13. Reports

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study no later than July 1, 2016. Five (5) CD/DVD copies containing the draft report in a Searchable Image Adobe Acrobat (pdf) format will also be provided, and two (2) CD/DVD copies of the draft ArcGIS coverages (if applicable). The digital report will be completely assembled into one standalone Acrobat file, and will be the same version as the hard copy. Each CD/DVD shall have a hard copy table of contents attached.

After receipt and incorporation of the Office and the Sponsor's review comments, the Consultant shall submit all final documents and materials to the Office on or before September 1, 2016. These final documents and materials shall include: 1) Fifteen (15) hard copies and one (1) unbound reproducible original of the final report, 2) Fifteen (15) hard copies and one (1) unbound reproducible original of the executive summary. The unbound originals shall have original seals/signatures pursuant to Section C. above. The summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages.

Fifteen (15) CD/DVD copies containing the final report and executive summary in a Searchable Image Adobe Acrobat (pdf) format will be provided. The digital report will be completely assembled into one standalone Acrobat file for each report, and will be the same version as the hard copy. Each CD/DVD shall have a hard copy table of contents attached.

Three (3) CD/DVD copies containing the final report and executive summary in their original formats (Word, Cad, Excel, etc.), and Searchable Image Adobe Acrobat (pdf) format will be provided. The Acrobat version will be completely assembled and contained in one pdf file. These files will be the same version as the hard copies. Each CD/DVD shall have a hard copy table of contents attached.

Three (3) CD/DVD copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD/DVD shall have a hard copy table of contents attached. One of these copies will be included in the project notebook.

Four (4) CD/DVD/Flash Drive/Portable Hard Drive copies of the Arcview GIS project file, and all associated files will be provided. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources, and shapefiles saved in the decimal degree coordinate system for all mapped features. A hard copy table of contents shall be attached.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report.

If any wells are drilled, chip trays or vials of all washed well drilling cuttings shall be submitted along with their documentation.

PHASE II

Task 1. Meetings and Project Management

Project meetings shall be conducted as approved by the Office project manager for the coordination of project activities and for keeping the Sponsor informed of project progress. Informal project meetings with the Office project manager may be necessary during the course of the study to provide project direction. In addition, project progress meetings will be conducted monthly by teleconference with the Sponsor and Office.

The Consultant should assume a minimum of two (2) formal public project meetings in the study area with the Sponsor and local stakeholders. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices and needed materials for the meetings. The Consultant shall prepare meeting minutes for all meetings. In the interest of economy, meetings shall be scheduled to coincide with fieldwork, if possible.

Should additional meetings be required, these meetings, schedule, agenda and additional costs will be approved by the Office project manager prior to conducting said meetings.

Project management activities include administrative project set-up, subcontractor management, project tracking, invoicing, and project closeout. Written progress reports shall be developed and submitted monthly.

Task 2. Hydrologic Model Refinement

StateMod Model

To further refine water availability and needs estimates, the Consultant shall continue to collect and incorporate available streamflow data, diversion records, reservoir data, and climate data into the StateMod model developed during Phase I of the Greybull Valley Irrigation District Storage Enlargement Level II Study (Phase I). Input data and model runs incorporating new reservoir operations shall be refined based on updated designs and information to determine the ability of

the preferred alternative to address shortages. To develop reasonable assumptions, historical records and previous studies will be consulted and local experts will be interviewed. The Consultant shall budget for two (2) meetings with the Office to review assumptions pertaining to irrigation parameters and hydrologic system demands and should corroborate the analysis with the pertinent State Engineer's Office representative(s). The assumptions must be approved by the Office project manager. Complete documentation shall be developed for all work completed.

It is anticipated that the previously developed StateMod model results will need to be summarized at various locations within the watershed to quantify streamflow changes to aid in evaluating impacts to the aquatic resources as presented in Task 3. The StateMod model will be revised to include the proposed reservoir enlargement and other operational constraints identified during discussions with the Sponsor and regulatory agencies. The Consultant shall develop a draft operating plan for the reservoir, reflecting considerations and constraints developed as part of this task.

The Consultant shall prepare a hydrologic analysis memorandum suitable for inclusion as an appendix in the final report. The memorandum shall summarize the findings from this task and all models and accompanying data shall be packaged and delivered with the final report.

Continued Temporary Stream Gauging

Should the Consultant, in consultation with the Office project manager, find it necessary to install additional temporary stream gauging equipment in order to further refine water availability and needs, the Consultant shall budget for the use of five (5) Office stream gauges. Should gauges be installed, the Consultant will be responsible for landowner clearance, permitting, protocol, installation, operation, maintenance, development of rating curves, data collection, seasonal removal, and all appurtenances associated with the operation of the stream gauges during the life of the Contract.

To avoid duplication of efforts, installation of temporary gauges should be coordinated with the State Engineer's Office, US Geological Survey, and the National Weather Service.

All proposed work and expenditures of funds under this task must be reviewed and approved by the Office project manager prior to initiating this effort.

Task 3. Environmental Assessment and Permitting

The Consultant shall review and refine requirements of applicable state and federal permits and clearances necessary to construct the top candidate reservoir site as

identified during Phase I. Permits and clearances shall include, but not be limited to, those that fall within the jurisdiction of the Clean Water Act, Endangered Species Act, Historic Preservation Act, 1964 Wilderness Act, the Fish and Wildlife Coordination Act, the Wyoming State Engineer's Office, the Wyoming Department of Environmental Quality, the US Forest Service, the State Lands and Investments Board, and the Bureau of Land Management or any other agency with jurisdiction that may affect the construction of a project. Work shall include providing timelines and levels of effort.

This task will consist of coordination with permitting agencies, wetland mapping, an aquatic biological resources/fisheries assessment, and other tasks crucial to the refinement of environmental and permitting considerations as outlined herein.

Meetings

The Consultant project manager and one additional project team member will attend up to six (6) meetings in Cheyenne to discuss permitting related issues with the Wyoming Game and Fish Department (WGFD), United States Army Corps of Engineers (USACE), or others as requested by the Office project manager. The purpose of these meetings is to corroborate analysis and any assumptions developed through the progression of this project. As part of this coordination effort, the Consultant shall prepare for a wetlands and aquatic resources delineation and a functional assessment for the wetlands by scheduling a work plan review meeting with the USACE Cheyenne, WY office to identify specific data to be collected during the site visit and review the survey plan. The Consultant shall incorporate revisions to the survey plan as mutually agreed to between the Consultant, the Office project manager, and the USACE as may be needed to address any comments. When the work for this subtask is substantially complete, the Consultant shall schedule a follow up meeting with the USACE to discuss the results and obtain input.

Wetland Mapping

The Consultant shall delineate wetlands and aquatic resources with a site visit in accordance with current USACE guidance. The survey area should consist of the proposed reservoir inundation area, proposed dam footprint, potential laydown and work areas, a 50 foot buffer around those areas, and any other potential project disturbance areas and drainage features that could be of aquatic resource interest to the USACE. The delineated wetlands shall be classified according to methodologies set forth in Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979) or others as deemed appropriate by the permitting agency.

The wetlands and aquatic resources should be surveyed with a GPS unit capable of sub-meter accuracy. Procedures laid out in Task 12. Creation of a Geographic Information System should be followed. Wetland conditions shall be documented on the USACE Western Mountains, Valleys, and Coasts regional data forms.

Exhibit "A2"

Sample points and potentially jurisdictional features shall be photographed and included with the documentation. The Consultant shall coordinate with the Sponsor and/or other necessary landowners to obtain the required permissions to access identified areas.

The Consultant shall prepare an Aquatic Resource Inventory (ARI) with the intent of submitting it to the USACE for a preliminary jurisdictional determination and feedback. The ARI should include descriptions of any wetland or aquatic resources identified within the survey area, wetland datasheets, photographs, and feature positions plotted on aerial backgrounds.

The Consultant shall identify up to five potential mitigation site locations. The locations should be selected to meet the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule (40 CFR Part 230). This rule states a watershed approach should be used during mitigation planning. The five locations should be evaluated during the field effort to ensure wetlands are not already present, to verify the potential size of individual sites, and to ensure the ecological conditions are such that a properly designed and constructed wetland mitigation site could be supported. Efforts should be made to locate the potential mitigation sites as close to the project as reasonably possible. The Consultant shall develop preliminary design alternatives, drawings, and associated cost estimates for each of the potential mitigation site locations to be incorporated into Task 8. Drawings for mitigation areas will include plans for the sites, wetland excavation, berm placement, and water management. A draft set of plans will be provided to Office project manager and Sponsor for review and comment prior to inclusion in the draft report. A final set of plans will be delivered to the Office with the final report.

Functional Assessment

The Consultant shall complete a functional assessment of the wetlands delineated using the Montana Wetland Assessment Method (2008) and prepare a technical memorandum that summarizes the functional assessment results. This should include a description of field indicators recorded during the site visit that were used to identify how the wetlands may be impacted by reservoir water level fluctuations and/or water associated with natural stream flow. Hydrologic data should also be reviewed to assess what hydrologic conditions currently support wetlands and to aid in evaluating what changes in hydrology may occur as a result of proposed reservoir modifications.

The technical memorandum should also provide a summary of literature that discusses the potential survival of wetland vegetation after hydrological modifications have occurred. This memorandum will be shared and discussed with the USACE with the goal of providing the USACE information that can be used to support the determination of wetland impacts resulting from the reservoir expansion.

Aquatic Biological Resources/Fisheries Assessment

The aquatic biological resources/fisheries assessment will involve tasks to define the study area; information gathering to characterize/identify important aquatic species and habitat; identification of potential impact issues; and review/evaluation of hydrologic data to understand the spatial extent and relative magnitude of flow changes on aquatic species. The following information provides a brief summary of the scope for these tasks.

- *Define Study Area* – The study area will be defined based on a review of the areas of proposed disturbance as well as reservoir and stream segments where flow or water levels will change due to the preferred alternative. The flow/water level aspect of the study area will require a review of the hydrology model results.
- *Habitat Characterization* – A site visit will be conducted as part of the characterization of aquatic habitat at the reservoirs (Upper Sunshine, Lower Sunshine, and Roach Gulch) and streams (Greybull River, Wood River, and Sunshine Creek). This information will be combined with published or unpublished data from WGFD or other sources.
- *Important Species and Habitat* – A literature review will be conducted to obtain information on aquatic species and habitat within the study area. The focus of the species information will be the occurrence and distribution of game fish or other special status fish or amphibian species in the study area. The Phase I Study indicated that Yellowstone cutthroat trout and mountain whitefish are present in the reservoirs and most of the stream segments. Fish abundance data also will be obtained if available. Habitat information to be obtained will include trout spawning and rearing locations and possible migration corridors. A key information source will include WGFD and the U.S. Fish and Wildlife Service (USFWS).
- *Identify Impact Issues* – The Consultant shall, based on experience in conducting impact analyses for water development projects, identify and characterize the impact issues associated with aquatic biological resources. Examples of impact issues include effects of flow diversions and flow changes on fish and special status aquatic species in stream segments; effects of water volume/level changes on aquatic species in reservoir sites; and effects of water quality changes on aquatic species from water input or surface disturbance. Issues that represent constraints or fatal flaws also will be identified, as well as any mitigation efforts anticipated.
- *Review/Evaluate Spatial Extent and Magnitude of Flow Changes* – Hydrology model results will be reviewed to estimate the spatial extent and magnitude of flow-related effects on aquatic species. The Consultant and Office project manager will discuss the scenarios that should be used for the evaluation. It is

Exhibit "A2"

suggested that monthly flow data for representative dry, average, and wet years should be used in these scenarios.

- *Technical Memorandum* – Information resulting from the above tasks will be used to describe aquatic biological resources in the preferred alternative study area, as well as identification of impact issues and an evaluation of potential flow changes on aquatic species and habitat.

Water Quality

The Consultant shall identify anticipated impacts on, or improvements to, water quality which may occur as a result of constructing the preferred alternative (i.e. – total dissolved solids or total suspended solids, metal concentrations, etc.). Reservoir sedimentation and longevity shall be determined.

Cultural and Paleontological Resources

The Consultant shall refine cultural/archeological resource survey data developed during Phase I by completing a Class III survey to evaluate impacts of the preferred alternative. The Consultant shall identify whether impacts have a potential to be considered a fatal flaw and develop preliminary mitigation plans, in coordination with the appropriate agencies, where appropriate.

The Consultant shall coordinate with the appropriate agencies to determine if geologic units associated with the modification of the preferred alternative have potential for the presence of paleontological resources. If present, the Consultant shall evaluate the potential impacts to the project and determine the level of effort to complete a paleontological survey as part of future efforts.

Purpose and Need

Based on information gathered in other tasks within this study, and the previous work conducted, the Consultant shall draft a “purpose and need” statement written from the State of Wyoming and the beneficiaries’ perspective. The Consultant shall also identify any secondary benefits that would mitigate adverse impacts. This shall include, but not be limited to, recreation, flood control, and wildlife and fisheries habitat enhancement.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 4. Geotechnical Investigation

The Consultant shall conduct a geotechnical engineering investigation of the preferred alternative site to evaluate subsurface conditions. The Consultant shall review site geology and map site features. Mapping will include roads, ditches,

Exhibit “A2”

and utilities in borrow area, embankment footprint, spillway, and reservoir area. Mapping will also include field-adjusted embankment centerline, spillway alignment(s), access roads, and other infrastructure. The Consultant shall drill soil borings, excavate test pits, and complete laboratory testing necessary to characterize the embankment and spillway foundation conditions and the on-site materials available for construction. Potential borrow areas will be identified. The Consultant shall be responsible for obtaining any permits necessary to carry out the geotechnical investigation.

The Consultant shall conduct a seismic evaluation of the preferred reservoir alternative. The location of significant faults throughout the general area shall be determined along with earthquakes which have occurred within the vicinity of each alternative. A design earthquake shall be determined for the site, and the seismicity characteristics of the area shall be considered in the stability calculations. The data produced by previous Commission studies and published USGS information shall be used wherever possible to prevent duplication of effort.

The primary objectives of the investigations are to: 1) supplement existing archival information to support layout and preliminary analyses of the proposed dam and wing dikes raise; and 2) identify any potential fatal flaw or challenging geologic or geotechnical conditions that may significantly impact the technical feasibility and/or construction cost of the proposed dam raise.

Dam and Wing Dikes

Existing Dam Embankment and Right Abutment Foundation – Complete two (2) soil/rock core borings to investigate seepage conditions in the right abutment at the following locations:

- One (1) boring through the dam crest, right of centerline, extending through the dam embankment and into the underlying Mesa Verde Formation; this boring is intended to sample Zone 1 embankment fill, the embankment/foundation contact zone, and sample and water test selected intervals of the Mesa Verde Formation.
- One (1) boring into the Mesa Verde Formation from the crest of the dam at the right abutment; this boring is intended to further sample and test the Mesa Verde Formation in the section not penetrated by the boring above.

Based on review of the recovered soil and bedrock core combined with historical data on leakage-prone zones, in-situ hydraulic conductivity testing will be performed in selected intervals of the bedrock portions of the embankment and right abutment borings using wireline packer equipment deployed from the drill rig. Depending on conditions encountered during drilling, downhole bedrock logging may be completed in these borings using optical and/or acoustic televiewer

equipment, and the borings may be completed as piezometers to monitor water levels in the bedrock section.

Downstream in Raise Footprint – Complete up to two (2) soil borings to investigate foundation conditions in the footprint of the proposed dam raise embankment. These borings would penetrate overburden materials and far enough into underlying bedrock to confirm its presence and condition.

Wing Dike – Complete one (1) boring through one of the existing wing dikes on the left abutment of the dam. This boring is intended to provide information on the Zone 1 fill used to construct the dikes (as shown on the as-built drawings) and confirm the depth to and condition of the underlying bedrock.

These borings will be completed using truck-mounted drilling equipment, hollow-stem augers, and split-spoon and tube sampling techniques to sample embankment fill and native overburden soils, and triple-tube, H-size, wireline (i.e., HQ3) diamond coring methods to sample bedrock. Standard penetration tests (SPTs) will be performed in embankment and overburden materials. Drilling source water is assumed to be available from the reservoir or outlet works with drilling return fluid discharged away from the reservoir pool and discharge channel.

Proposed Borrow Areas

After initial engineering geologic reconnaissance, the Consultant shall complete up to 15 test pits in the proposed borrow areas for Zone 1 and Zone 2 material using a track-mounted excavator. The goal is to sample candidate materials for the core extension (Zone 1) from exposures of weathered Cody Shale in the upstream reservoir rim and for the downstream shell of the dam raise section (Zone 2) in the terrace deposits flanking the right side of the reservoir. Bulk samples will be collected from the test pits for testing as described below. Potential sources for processing or purchasing filter and drainage aggregate will be assessed by reconnaissance observation and contact with suppliers in the vicinity. Accessible outcrops in the vicinity of the Mesa Verde Formation sandstone for potential use as Zone 3 riprap will also be mapped and described.

Spillway

After initial sidewall and floor geologic mapping and logging by an engineering geologist, the Consultant shall complete up to two (2) shallow borings and up to three (3) shallow test trenches in the floor of the spillway to characterize any overburden encountered and the condition of the anticipated bedrock for use in erodibility analyses discussed in Task 6. The logging of bedrock exposures in the trenches and of core from the borings will focus on rock types and the orientation and condition of discontinuities (e.g., joints, fractures and bedding planes). If encountered to significant depth, bulk soil samples will be collected from the test trenches for testing as described below. Rock core will also be sampled for testing.

Laboratory Testing

Select soil samples from the borings, test pits and/or test trenches will be tested for: index properties including moisture content, grain size (sieve plus 200 wash or sieve plus hydrometer) and Atterberg limits. Zone 1 material from the dam or wing dikes may be tested for consolidation and/or shear strength pending the results of in-situ SPT and penetrometer or torvane testing during drilling. Potential Zone 1 and Zone 2 material will be tested for Modified Proctor moisture/density relationships. Selected rock core specimens from the spillway borings will be tested for unconfined compressive strength.

Documentation

The results from the field exploration and laboratory testing programs will be documented for incorporation in the Phase II draft and final reports. A narrative will be prepared describing the work completed, methods used, and key findings of conditions for the existing dam and wing dikes, raise footprint area, spillway, and potential borrow areas/sources. Documentation will include: geologic maps of the spillway and potential riprap outcrop exposures; logs for all of the field exploration features (field boring logs will be finalized in gINT format); in-situ water loss test results; piezometer completion logs (if installed); televiewer logs (if run); photographs of rock core and test pits/trenches; and laboratory data sheets and a summary table of laboratory test results.

Task 5. Surveying

A topographic survey of the existing Lower Sunshine dam, dike, spillway and reservoir will be performed to support the development of the conceptual design. The survey will be of the accuracy to produce 1 foot contours. A scalable topographic map will be prepared, along with an electronic version prepared in CAD showing all features.

Task 6. PMP/PMF/Spillway Erodibility

The Probable Maximum Precipitation (PMP) and corresponding Probable Maximum Flood (PMF) will be developed to determine conceptual spillway layouts for the enlarged reservoir. An evaluation of the bedrock erodibility will also be completed to confirm an unlined spillway chute is appropriate for the enlarged reservoir.

PMP/PMF

A flood hydrology study for the watershed will be performed in accordance with current Wyoming Dam Safety guidelines. The flood hydrology shall be developed using the USACE computer program HEC-HMS, version 4.1 or newer. The Consultant shall coordinate with the Office project manager and the State

Engineer's Office Safety of Dams Engineers to incorporate the utilization of the State of Wyoming PMP Evaluation GIS Tool to develop the PMP analysis. The basin wide infiltration rates and unit hydrograph will be developed using the methodologies presented in the Flood Hydrology Manual (Cudworth). A technical memorandum will be developed to summarize the development of the PMP and corresponding PMF.

Erodibility Evaluation

An evaluation of the erodibility of the bedrock that would be exposed on the proposed spillway chute will be performed. This evaluation will include mapping the existing exposed bedrock surfaces in the vicinity of the spillway, utilizing previous and new laboratory tests on rock cores, and using current state-of-the-practice methods on erosion potential of bedrock for spillways. A technical memorandum will be prepared summarizing the findings of this evaluation, and recommendations will be made as to the suitability of using exposed bedrock for the proposed spillway chute.

Task 7. Outlet Conduit Inspection

An outlet conduit inspection will be performed to assess the existing condition of the outlet conduit. It is assumed that the outlet conduit observation discussed in this scope of work will take place in the dry, but that the reservoir will not be lowered to below the intake invert. It is hence assumed that the intake slide gate can be closed (and locked-out/tagged-out), the outlet conduit can be dewatered, and that there will be little to no gate leakage. The Consultant will provide two engineers to access the interior of the outlet conduit for inspection purposes. The Consultant shall inspect the outlet conduit from the upstream end of the 48-inch Howell-Bunger valve to the vertical-to-horizontal bend. The vertical portion of the outlet pipe and the interior of the 24-inch-diameter will not be accessed, but will be observed as conditions allow.

Observations made during the inspection, recommendations, and representative photographs will be documented in a technical memorandum. The overall condition of the interior of the steel pipe will be documented including the type and condition of the pipe joints, joint offsets (if observed), spacing of the joints, alignment of the pipe (vertical and horizontal), roundness, condition of the coating (if applicable), and signs of deterioration such as corrosion, pitting, and water infiltration.

The Consultant shall submit a draft technical memorandum, in pdf-format, for the Office project manager to review prior to submission of the draft report. A final copy of the technical memorandum will be included as an appendix in the draft and final reports.

It is assumed that Sponsor personnel will close the intake gate prior to inspection, remove the existing flange to provide access to the interior of the pipe, and that the Sponsor will support the Consultant with incorporating a “lock-out/tag-out” procedure to protect against operation of the intake slide gate, which guards against flow into the outlet works, during the inspection.

Task 8. Conceptual Designs and Cost Estimates

For the preferred alternative, the Consultant shall complete the following analysis and actions, using new information to build upon and refine Phase I data as appropriate.

Geotechnical Analyses

A static slope stability analysis will be performed using two-dimensional limit-equilibrium procedures on the maximum section of the proposed main embankment configuration and maximum section of the proposed wing dike configuration. The steady state (normal maximum pool) loading condition and the rapid drawdown loading condition will be analyzed.

Based on a review of available data, liquefaction potential at the site is anticipated to be limited. Therefore, a deformation analysis will be performed using a simplified pseudo-static method. Simplified methods considered suitable for the pseudo-static analysis include: Newmark (1965), Makdisi-Seed (1977), Swaisgood (2003), and/or Pells and Fell (2003).

A filter compatibility analysis will be completed to evaluate the internal erosion potential of the existing materials of the zoned embankment and the new materials proposed for the embankment raise. The evaluation will utilize methods established by Foster and Fell (2001) to determine if the existing materials are sufficiently fine to be characterized as either no erosion potential, excessive erosion potential, or continuing erosion potential.

Material characterization will be performed for existing embankment materials and materials identified for the embankment raise. The characterization of these materials will be based on available information and additional information obtained from the planned geotechnical investigations.

Erodibility parameters will be established based on available information and additional information obtained from the planned geotechnical investigations. The erodibility parameters will be used in the spillway erodibility evaluation.

Conceptual Design Drawings

Conceptual design drawings will be prepared to aid in evaluation of the project feasibility. The conceptual design drawings shall include development of all

anticipated project components including, but not limited to existing site conditions, a plan view, section and details for the main dam embankment, dike and spillway, wetland mitigation plans from Task 3, as well as construction details (e.g. – limits of construction, staging areas, etc.). Additional design drawings may include details related to foundation treatment for the right abutment or modifications to the outlet works. It is assumed that the total number of conceptual design drawings will not exceed fifteen. A draft set of conceptual design drawings will be provided to the Office project manager for review and comment prior to inclusion in the draft report. A final set of conceptual design drawings will be delivered with the final report.

The Consultant shall develop a draft of the construction sequencing and activities necessary to complete the preferred reservoir alternative (Gantt Chart) for the Office project manager to review which will later be refined and delivered with the final report.

Construction Cost Estimate

The Consultant shall revise preliminary construction cost estimates prepared during Phase I and life cycle cost analyses based on the conceptual design drawings for the preferred alternative. This task will involve calculating material quantities and estimating equipment, material, and labor costs for the proposed construction and preparing an engineer's Opinion of Probable Project Costs (OPPC) based on local material supplier price data, data from R.S. Means' Heavy Construction Cost Data, other industry standard sources, and price data developed by the Consultant for previous final design/construction projects.

The Consultant shall prepare an itemized project budget that includes costs for design engineering, permitting, mitigation, land acquisition, legal, access, right of ways, construction, construction engineering, operation, maintenance and replacement, and a financing plan. In addition, the Consultant shall estimate costs for water management during and after construction. The estimate will include unit and lump sum prices of the required construction items. The cost estimate will include estimated overhead, profit, taxes, and fees for cost allowances.

The Consultant shall prepare the OPPC in tabular form. The table will be broken down into both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement will be prepared as outlined in Exhibit "A2" Revised Scope of Services, Subsection C. 3.

The OPPC should be based on the year when this work is performed. The Consultant will work with the Office project manager to select an appropriate inflation factor that will be applied to the project's current year total cost and projected into the future per the schedule of activities and time-lines developed herein.

Task 9. Economic Analyses

The Consultant shall prepare an economic analysis of the costs and benefits of the preferred reservoir alternative site using new information to build upon and refine Phase I data as appropriate. The purpose of this analysis is to assist in determining a fair and equitable financing plan for the preferred reservoir alternative and provide information on the beneficiaries' ability to pay for a portion of the project and all of the operation, maintenance, and replacement costs. The analysis should include an estimate of direct and indirect benefits which can be used to justify a recommended increased level of State funding assistance. The Consultant shall work with the beneficiaries to determine anticipated system revenues and expenses that will accrue once the project is constructed. The Consultant shall generate recommendations relative to the annual financial commitments that the beneficiaries could make to retire the construction debt and make the project financially self-supporting.

The Consultant shall also consider any potential alternative funding sources available to the area.

Task 10. Discretionary Task

The Consultant will place \$31,000 of the added project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. **No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.**

Task 11. Public Interest

The Consultant shall evaluate whether the project is in the public interest stipulating if the proposed project functions and services can be served by any person, association, or corporation engaged in private enterprise. The Consultant shall also determine if private enterprise has refused to provide the functions and services identified as being required by the proposed project. This information shall be included in the draft and final reports for the project.

Task 12. Creation of a Geographic Information System

The Consultant shall complete the following tasks for any GIS created as part of the project.

- a. **DATA PLAN.** The Consultant will create a GIS using certain specified data collected during this study. A plan will be developed for the GIS system which will include but may not be limited to data collection methods, features mapped, attributes collected, projections, documentation, and software version. Metadata shall be included in the plan consistent with the standards set by the Bear River Data Model Steering Committee. **No work**

shall proceed until this plan is approved in writing by the Office project manager.

- b. **FEATURE MAPPING.** The Consultant will request a data template for feature mapping from the Office project manager prior to any GIS work. As a minimum, this data will include location of system components, information related to those components, digital photographs, and other pertinent information. Mapped features will be attributed according to attribution standards developed through the Bear River Data Model Steering Committee. Digital photos collected in the field will be hyperlinked to the mapped features. The Consultant shall use the most recent/or accurate USGS topographic maps, DOQQs, and/or aerial photos for data creation or backgrounds as discussed with the Office project manager in the data plan. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps in the final project report.
- c. **FORMATS and STANDARDS.** The Consultant will provide GIS vector data in an ESRI geodatabase or as shapefiles. GIS data shall be saved in the Decimal Degree Coordinate system with a NAD83 datum and stored in feet for all mapped features. Project GIS deliverables may also include linked non-spatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). As a minimum, collection of geographic information should be accomplished utilizing a portable GPS unit capable of containing a “data dictionary” with post processing to sub-meter accuracy. Attributes collected in support of the project shall be described in the metadata. Data shall be delivered within the Office geodata template if provided by the Office project manager.
- d. **PROJECT AREA.** Included in the GIS deliverables shall be a single shapefile with the project area boundaries. Metadata, projection, datum, and general attribute data related to the project area boundaries should be included as ancillary files.

Task 13. Draft Report

The Consultant shall submit to the Office up to five (5) hard copies of a draft report describing the results of all work completed in this study no later than March 1, 2019. Five (5) CD/DVD copies containing the draft report in a Searchable Image Adobe Acrobat (pdf) format will also be provided, and two (2) CD/DVD copies of the draft ArcGIS coverages (if applicable). The digital report will be completely assembled into one standalone Acrobat file and will be the same version as the hard copy.

The project Sponsor shall be provided a copy of this draft report for their review. The Office project manager shall also provide the Water Resources Data System

Exhibit “A2”

(WRDS) with both a hard copy and PDF copy of the draft report for comparison purposes. Issues discovered by WRDS during this comparison are the responsibility of the Consultant to correct. Upon completion of the rectification process, WRDS will assign an URL for the online posting of the final report.

Task 14. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only); any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and any other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The report presentation for this Phase II Study shall also serve as a public hearing with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager and shall include the question as to whether there is a private entity interested in providing the proposed project functions and services in lieu of the sponsor. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper once each week for three (3) weeks prior to the hearing and in the local publication up to three (3) times prior to the hearing.

Task 15. Final Report and Deliverables

After receipt and incorporation of the Office and the Sponsor's review comments, the Consultant shall submit all final documents and materials to the Office on or before August 1, 2019. These final documents and materials shall include: 1) Twelve (12) [MIN] hard copies of the final report and 2) Twelve (12) [MIN] hard copies of the executive summary. The summary shall outline the purpose, findings, recommendations, and configuration of the project and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant, and date.

Four (4) [MIN] CD/DVD copies containing the final report and executive summary in a Searchable Image Adobe Acrobat (pdf) format will be provided. The digital report will be completely assembled into one standalone Acrobat file for each report, and will be the same version as the hard copy.

Five (5) [MIN] CD/DVD copies containing the final report and executive summary in their original formats (Word, Excel, etc.), and Searchable Image Adobe Acrobat (pdf) format will be provided. The Acrobat version will be completely assembled and contained in one pdf file. These files will be the same version as the hard copies.

Five (5) [MIN] CD/DVD/Flash Drive/Portable Hard Drive copies of the hydraulic model project file, and all associated files, shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. One of these copies will be included in the project notebook.

Five (5) [MIN] CD/DVD/Flash Drive/Portable Hard Drive copies of the Arcview GIS project file, and all associated files, will be provided. The GIS project files should be provided as ESRI ArcGIS .mxd files saved with relative path names to data sources, and shapefiles shall be saved in the decimal degree coordinate system with a NAD83 datum, and stored in feet, for all mapped features.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, consultant, and date.

Task 16. Semi-Quantitative Risk Assessment

The Consultant shall conduct a semi-quantitative risk assessment (SQRA), focused on the foundation seepage, to confirm final scoping for the geotechnical investigations and to support development of geotechnical design for the raised embankment. A SQRA is a relatively simplistic method to quickly assess risks. The method uses simple tools and approaches in a systematic manner. The main purpose of a SQRA is to determine which potential failure modes require additional study or risk reduction and which potential failure modes do not need additional study.

The SQRA approach will include two (2) meetings in Cheyenne. The first meeting will include a two (2) day workshop facilitated by the Consultant. The intent of the first meeting will be to identify and evaluate Potential Failure Modes (PFMs) associated with foundation seepage related to the enlarged dam, review of

potential mitigation measures for the identified PFMs, and confirm that the proposed field investigations are reasonable for refining the foundation treatment/seepage collection for a potential dam raise. The workshop will be documented in a memorandum and will contain opinions from all workshop participants.

The second meeting will be a one (1) day workshop where the results of the geotechnical investigations will be presented to the group, and the previously identified mitigation measures will be reviewed for development of recommendations on a path forward. The second workshop will be documented in a memorandum and will contain opinions from all workshop participants.

The SQRA will generally follow the guidance outlined in the Bureau of Reclamation's Best Practices in Dam and Levee Safety Risk Analysis and will be focused on PFMs associated with seepage through the foundation for an enlarged reservoir. In this approach, likelihood categories and consequence categories are used rather than detailed quantitative estimates of probabilities of failure and consequences. The steps in the SQRA process include:

- Assemble and critically review all available information about the dam, including design and construction records, performance records, instrumentation data, analyses, and photographs.
- Compile a complete list of possible ways the dam could fail, known as PFMs; compiled without consideration of the likelihood of failure for each failure mode.
- Screen the PFMs to identify which ones are credible and are potential risk-drivers for the dam or are remote enough in likelihood as to be judged not credible, documenting the reasons for that judgment.
- For the credible PFMs, the Consultant shall: (1) compile lists of adverse/unfavorable factors (factors making the PFM more likely) and positive/favorable factors (factors making the PFM less likely), (2) identify measures for reducing the risk of the PFM, and (3) identify missing data or analyses that would be required to evaluate the likelihood of the PFM.
- Elicit likelihood category.
- Elicit consequence category.

The results will be plotted in a risk matrix.

Task 17. Additional Geotechnical Investigation

The Consultant shall supplement Task 4 Geotechnical Investigation of the preferred alternative (Lower Sunshine Reservoir). The primary objectives of the additional investigations are to: 1) supplement existing geologic and geotechnical data and seepage information of the right abutment of the dam to support preliminary foundation treatment alternatives; 2) obtain additional geologic data of the zone 1 and zone 2 materials used in the main dam to support a filter compatibility analysis of these two material types; and 3) install piezometers in the embankment and foundation bedrock to collect groundwater data to advance the current raise design analyses.

Dam

Existing Dam Embankment and Right Abutment Foundation – Complete two (2) soil/rock core borings to investigate seepage conditions and to obtain a better understanding of the bedrock structure in the right abutment at the following locations:

- One (1) boring through the dam crest, right of centerline, extending through the dam embankment and into the underlying Mesa Verde Formation; this boring is intended to sample Zone 1 embankment fill, the embankment/foundation contact zone, and sample and packer (i.e. water pressure loss) test selected intervals of Mesa Verde Formation. This boring will be located between prior borings DH-1 and DH-2.
- One (1) boring into the Mesa Verde Formation from the crest of the dam at the right abutment; this boring is intended to further sample and test the Mesa Verde Formation in the section not penetrated by the boring above.

Both borings will be inclined 60 degrees from horizontal and oriented to intersect vertical and sub-vertical joint sets based on the previous geologic mapping and downhole televiewer surveys. In situ packer (i.e. hydraulic conductivity) testing will be performed in selected intervals of the bedrock portions of the embankment and right abutment borings using wireline packer equipment deployed from the drill rig intended to intersect and test higher leakage prone zones. Depending on conditions encountered during drilling, downhole bedrock logging may be completed in these borings using optical and/or acoustic televiewer equipment.

Downstream Right Abutment – Complete one (1) boring to investigate bedrock foundation conditions on the downstream right abutment near the location of high seepage exiting the hill-slope (upstream of the access road). This boring would penetrate overburden materials and be advanced into underlying bedrock where in situ hydraulic conductivity testing would be performed.

Maximum Section – Complete one (1) boring through the maximum section of the dam. This boring is intended to provide information on the Zone 1 fill used to construct the dam (as shown on the as-built drawings), obtain bulk samples to complete additional laboratory testing on, and confirm the depth to, and condition of, the underlying bedrock.

These borings will be completed using truck, or track, -mounted drilling equipment, hollow-stem augers, and split-spoon and tube sampling techniques to sample embankment fill and native overburden soils, and triple-tube, H-size, wireline (i.e., HQ3) diamond coring methods to sample bedrock. Standard penetration tests (SPTs) will be performed in embankment and overburden materials. Sampling may also be performed with a thick-wall, ring-lined, split barrel drive sampler. Drilling source water is assumed to be available from the reservoir or outlet works with drilling return fluid discharged away from the reservoir pool and discharge channel.

Dam - Downstream Shell

The Consultant shall observe excavation of up to 4 test pits on the downstream shell of the dam. The goal is to collect bulk samples of Zone 2 material from within the dam to check the filter compatibility analysis between the Zone 1 and Zone 2 material. It is anticipated the test pits will be excavated at different locations and elevations to obtain a range of representative samples. The test pits should be excavated near the crest and downstream toe/right abutment areas. The pits near the downstream toe and right abutment may involve constructing a temporary access ramp/bench in order to obtain representative samples. The test pits will be backfilled in approximately 12-inch lifts and compacted using the bucket of the excavator. It is assumed that the Sponsor will provide the excavator and operator for completing the test pits.

Laboratory Testing

Select soil samples from the borings and test pits will be tested for: index properties including moisture content, grain size (sieve plus 200 wash or sieve plus hydrometer), and Atterberg limits. Zone 1 material from the dam will be checked for dispersion potential by pinhole and crumb testing.



WYOMING WATER DEVELOPMENT OFFICE

6920 Yellowtail Road
Cheyenne, WY 82002

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wwdc.state.wy.us

Mark Gordon
Governor
Commissioners

| | |
|---------------------|-----------------|
| Nick Bettas | Sheridan Little |
| David Evans | Mike Purcell |
| Gerald E. Geis | Jeanette Sekan |
| Clinton W. Glick | Larry Suchor |
| Kellen K. Lancaster | Rodney Wagner |

Harry C. LaBonde, Jr., P.E.
Director

MEMORANDUM

11 February, 2019

Harry C. LaBonde, Jr., P.E., Director
Wyoming Water Development Commission
6920 Yellowtail Road
Cheyenne, WY 82002

RE: Amendment One to Leavitt Reservoir Expansion Final Design Contract

Director LaBonde,

Under the existing Leavitt Reservoir Expansion Final Design Contract, RJH Consultants, Inc. (RJH) has completed the bulk of their geotechnical analysis. As discussed at the December 13, 2018 Water Development Commission (WWDC) meeting, near the completion of their initial investigations last fall, RJH identified concerns with the foundation of the saddle dam (i.e. the ridge between the reservoir and Davis Draw). Based on the few borings they had at the time, the foundation consisted of tens of feet of potentially erodible material. RJH provided preliminary data to the Board of Consultants and had a conference call with them on November 20, 2018 to discuss the data. The Board of Consultants shared RJH's concerns and was of the opinion a barrier wall, or removal and replacement of material in the saddle dam foundation, may be necessary to address potential internal erosion concerns. The addition of any one of these internal erosion control measures was a change in the concept developed during the April, 2018 Concept Review workshop, which led to the initial geotechnical investigation plan.

To address the foundation condition, RJH and the Board of Consultants recommended advancing four additional borings in the saddle dam area to further characterize the material so as to develop the most efficient designs and reduce uncertainty in the understanding of the foundation. The drilling contractor was on site at the time finishing their last borings and planned to demobilize in advance of the Thanksgiving holiday. For efficiencies sake, both in time and money, I recommended moving forward with the additional borings in the saddle dam foundation. With your acceptance of the recommendation, the field work plus associated development of logs and data reduction was completed for \$34,880.00.

Also at the December 13, 2018 WWDC meeting, I briefly discussed my oversight of including a discretionary task as part of the final design contract, which could be drawn on for changes in

scope as the project develops or as new issues are discovered. A good example is how the BLM required an environmental assessment to be completed for initial approval of the geotechnical drilling plan established in April, 2018. This was outside the scope of RJH's contract, but fortunately they were able to find cost savings in other areas to accommodate the work under the existing budget. With this extra effort having already tightened the remaining budget, and the potential of unforeseen circumstances arising throughout the completion of final design, I'm recommending the balance of the Leavitt Reservoir Expansion permitting and final design appropriation, in the amount of \$143,097.45 be placed in a discretionary task. This amount would be the balance in the appropriation once the budget for the additional geotechnical work is considered. In summary, the total of proposed Amendment One is \$177,977.45.

Sincerely,



Jason Mead, P.E.
Deputy Director
Dam and Reservoir Division
Wyoming Water Development Office

**AMENDMENT ONE TO
CONSULTANT CONTRACT FOR SERVICES NO. 05SC0297091
LEAVITT RESERVOIR EXPANSION FINAL DESIGN
BETWEEN
WYOMING WATER DEVELOPMENT COMMISSION
AND
RJH CONSULTANTS, INC.**

1. Parties. This Amendment is made and entered into by and between the Wyoming Water Development Commission [Commission], whose address is: 6920 Yellowtail Road, Cheyenne, Wyoming 82002; and RJH Consultants, Inc. [Consultant], whose address is: 9800 Mt. Pyramid Court, Suite 330, Englewood, CO 80112.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Contract between the Commission and the Consultant. The purpose of this Amendment is to: a) modify the Additional Geotechnical Analysis task and add a discretionary task to assist the Commission in addressing unforeseen changes in scope during the completion of final design; b) increase the total Contract dollar amount by one hundred seventy-seven thousand nine hundred seventy-seven dollars and forty-five cents (\$177,977.45) to two million nine hundred fifty-four thousand seven hundred seventy-seven dollars and forty-five cents (\$2,954,777.45); and c) replace Attachment A with a new Attachment A2.

The original Contract, dated September 6, 2017, required the Consultant to render certain technical or professional services for the final design of the Leavitt Reservoir Expansion for a total Contract amount of two million seven hundred seventy-six thousand eight hundred dollars (\$2,776,800.00) with an expiration date of December 31, 2023.

3. Term of the Amendment. This Amendment shall commence immediately upon the date the last required signature is affixed hereto, and shall remain in full force and effect through the term of the Contract, as amended, unless terminated at an earlier date pursuant to the provisions of the Contract, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. The second sentence of Section 4.A. of the original Contract is hereby amended to read as follows:

The total payment under this Contract shall not exceed two million nine hundred fifty-four thousand seven hundred seventy-seven dollars and forty-five cents (\$2,954,777.45).

B. The entire section of 4.B. of the original Contract is hereby amended to read as follows:

4.B. Project Budget. The Project budget for each task included in Attachment A2 is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------|
| Task 1. Project Management, Meetings, and Coordination | \$ 357,300.00 |
| Task 2. Project Familiarity and Conceptual Design Review | \$ 155,900.00 |
| Task 3. Agency and Landowner Coordination and Support | \$ 177,400.00 |
| Task 4. General Design and Performance Criteria Coordination | \$ 22,000.00 |
| Task 5. Additional Surveying | \$ 75,300.00 |
| Task 6. Additional Geotechnical Analysis | \$ 489,280.00 |
| Task 7. Design | \$ 496,300.00 |
| Task 8. Technical Review | \$ 144,400.00 |
| Task 9. Construction Plans and Specifications | \$ 860,300.00 |
| Task 10. Emergency Action Plan | \$ 33,500.00 |
| Task 11. Discretionary Task | \$ 143,097.45 |
| Total Project Cost | \$ 2,954,777.45 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms provided by the Office. The Consultant may use alternate billing forms if approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

5. Amended Responsibilities of the Consultant.

Responsibilities of the Consultant are hereby amended as follows:

A. As of the Effective Date of this Amendment, Attachment A, Scope of Services, which was attached to the original Contract, is superseded and replaced by Attachment A2, Revised Scope of Services, which is attached to this Amendment and incorporated into the original Contract by this reference. All references to "Attachment A" in the original Contract, and in any amendments thereto, are amended to read: "Attachment A2".

6. Amended Responsibilities of the Commission.

Responsibilities of the Commission have not changed.

7. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Contract, and any previous amendments, between the Commission and the Consultant, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the Consultant of an originally signed counterpart of this Amendment by PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

8. General Provisions.

A. Entirety of Contract. The Original Contract, consisting of thirteen (13) pages, Attachment A Scope of Services, consisting of seventeen (17) pages, Attachment B Hourly Rate and Reimbursable Expenses, consisting of one (1) page, Attachment C Scope of Services Assumptions and Deliverables, consisting of five (5) pages; and this Amendment One, consisting of four (4) pages, and Attachment A2 Revised Scope of Services, consisting of seventeen (17) pages, represent the entire and integrated Contract between the parties and supersede all prior negotiations, representations, and agreements whether written or oral.

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

9. Signatures. The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

This Amendment is not binding on either party until approved by A&I Procurement and the Governor of the State of Wyoming or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

RJH CONSULTANTS, INC.

Robert J. Huzjak, P.E., President
Employer Identification Number: 20-3590903

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner
Assistant Attorney General

Date

ATTACHMENT A2 REVISED SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in D. Scope of Services. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: The Project site is located near the Town of Shell, Wyoming Primarily in T54N; R92W; Sections 13, 14, 23, 24 and 25.
2. Purpose: To prepare final designs, plans, and specifications for the Leavitt Reservoir Expansion Project for the WWDC. Preliminary designs from the latest study completed for WWDC have considered total storage of approximately 6,600 acre-feet with a zoned earthen embankment approaching 100 feet in height, and outlet works capable of delivering 100-125 cfs. The Reservoir is anticipated to be supplied from Beaver Creek through an approximate 2 mile long, 75 cfs capacity pipeline. Furthermore, an approximate 3.5 mile long, 50 cfs capacity transfer pipeline is proposed to deliver storage water from a downstream point on Beaver Creek to several ditches, including the Shell Canal, and Shell Creek.
3. Purpose: The intent of the proposed Leavitt Reservoir Expansion is to firm water supplies and improve reliability, management, and operational flexibility for irrigators in the Beaver Creek and Shell Creek drainages.

The Commission has undertaken numerous studies of alternative dam sites and appurtenant infrastructure needed to provide supplemental water supplies for irrigators in the Shell Valley Watershed Improvement District. These reports are available on the Commission website (wwdc.state.wy.us). Of particular importance and relevance is the Shell Valley Storage Level II, Phase II Study completed in 2015:

- Engineering Associates, Shell Valley Watershed Plan Level I Study, Final Report, Mar, 2010
- Engineering Associates, Shell Valley Watershed Plan Level I Study, Executive Summary, Mar, 2010
- Engineering Associates, Shell Valley Watershed Plan Level I Study, Appendices, Mar, 2010
- States West Water Resources Corporation, Project Report for the Shell Valley Storage Level II Study, Final Report, Feb, 2013

- States West Water Resources Corporation, Shell Valley Storage Level II Study, Executive Summary, Feb, 2013
- States West Water Resources Corporation, Shell Valley Storage Level II Study, Appendices, Feb, 2013
- Wenck Associates, Inc., Shell Valley Storage Level II, Phase II Study, Final Report, Jun, 2015
- Wenck Associates, Inc., Shell Valley Storage Level II, Phase II Study, Executive Summary, Jun, 2015
- Wenck Associates, Inc., Shell Valley Storage Level II, Phase II Study, Appendices, Jun, 2015

Other reports having been completed, which are not on the Commission web page, include the following listed documents (**NOTE: These are confidential documents not available to the general public for review**):

- Office of the Wyoming State Archaeologist, A Class III Cultural Resource Inventory of the Proposed Leavitt Reservoir Enlargement, Big Horn County, Wyoming, September 2012
- Office of the Wyoming state Archaeologist, Addendum to the Class III Cultural Resource Inventory of the Proposed Leavitt Reservoir Enlargement, Big Horn County, Wyoming: Testing and Evaluation of Sites 48BH612-Segnebt 1, 48BH4239, and 48BH4240, October 2012
- Arcadis U.S., Inc., Paleontological Resource Report Leavitt Reservoir, June 2012
- Arcadis U.S., Inc., States West Water Resources, Leavitt Reservoir Geotechnical Site Assessment Cultural Monitoring Project, Big horn County, Wyoming, January 2013
- Arcadis U.S., Inc., States West Water Resources, Leavitt Reservoir Geotechnical Additional Site Assessment (2013) Cultural Monitoring Project, Big horn County, Wyoming, November 2013
- Arcadis U.S., Inc., Leavitt Reservoir - Phase III Paleontological Resource Report, November 2013

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the associated final document, which contains the information generated by the programs.

b. To facilitate the Commission's accurate evaluation of the Consultant's work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in relevant documents a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that document.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the relevant project documents. The project notebook shall be submitted before Contract closeout.

3. Cost Estimates

The Consultant shall use the following guidelines in calculating project cost estimates.

| | |
|---|----------|
| Preparation of Final Designs and Specifications | \$ _____ |
| Permitting and Mitigation | \$ _____ |
| Legal Fees (Title of Opinion Only) | \$ _____ |
| Acquisition of Access and Rights of Way | \$ _____ |

Pre-Construction Costs (Subtotal # 1) \$ _____

Cost of Project Components \$ _____

\$ _____

\$ _____

Total Component Cost (Subtotal #2) \$ _____

Construction Engineering Cost (Subtotal #2 x 10%) \$ _____

Components and Engineering Costs (Subtotal #3) \$ _____

Contingency (Subtotal #3 x 15%) \$ _____

Construction Cost Total (Subtotal #4) \$ _____

Total Project Cost (Subtotal #1 + Subtotal #4) \$ _____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Documents

The Consultant shall use the Contract Scope of Services as the outline for draft and final documents so that Consultant compliance with Contract provisions can be verified. If a final document contains information of an engineering nature, the cover of the final document and all plates must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final document contains information of a geologic nature, the cover of the final document and all plates must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final document contains information of both an engineering and geologic nature, the cover of the final document and all plates must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Documents - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital documents shall be contained on CD/DVD(s), and shall be in Searchable Image Adobe Acrobat format.

6. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

7. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

8. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

9. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

The Consultant shall be given Notice to Proceed on each task by the Office project manager, before the task is initiated.

Task 1. Project Management, Meetings, and Coordination

Project management activities include administrative project set-up, subcontractor management, project tracking, invoicing, activity reports, summary letters, as needed correspondence with the Consultant team, Sponsor and Office project manager, internal task coordination meetings, and any other routine items required to successfully complete the project. Written progress reports shall be developed and submitted monthly.

The Consultant shall also create Project-specific management tools that include a Project schedule formatted in a critical path format, progress tracking, communication protocols, and team organization matrix (that details roles and responsibilities).

Outside of daily project management, the Consultant shall provide quality control of all work, including subconsultant work. This type of review will be ongoing and include oversight by company principals or senior engineers knowledgeable of the project work and scope, but not associated with the project on a daily basis. Their review will include a check to see that all work scope items have been properly addressed and completed to the intent of the work scope and contract, and that the work products are technically sound.

Informal project phone calls and meetings with the Office project manager may be necessary during the course of final design to provide project direction. In addition, project progress meetings will be conducted monthly by teleconference with the Office and Sponsor.

The Consultant shall prepare for and conduct six (6) interim meetings in the study area, either with the Sponsor, or as public meetings to keep the local community informed of project progress and to obtain input as needed. The Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project

manager. The Consultant shall prepare all notices and needed materials for the meetings. Formal public meetings shall be advertised in advance. The Consultant shall prepare meeting minutes for all meetings. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

Task 2. Project Familiarity and Conceptual Design Review

The Consultant shall gather and review any existing background information related to the development of the Leavitt Reservoir Expansion project. Data shall include, but not be limited to, WWDC feasibility reports and relevant Bureau of Land Management (BLM) and U.S. Army Corps of Engineers (USACE) NEPA documents, when available. The intent of the review is for the Consultant to gain familiarity with the project and provide a foundation of information which will support subsequent tasks.

The Consultant will focus on developing improvements in the conceptual design. This will include reviewing the work to date, focusing the investigation and analyses on the critical areas to identify items that affect safety, function, and/or significant costs of the project. As part of the review, the Consultant shall lead and participate in a Potential Failure Modes Analysis (PFMA) and Qualitative Risk Assessment (QRA).

The Consultant shall prepare for and attend a coordination meeting with the Office to discuss identified alternative configurations and potential modifications. The meeting will be a workshop in Greybull, Wyoming and will include a site visit.

A summary report will be prepared presenting the results of the review and any recommended modifications to the conceptual design that will improve safety and operation objectives, reduce risk during construction and throughout the life of the facility, and identify areas where cost savings may be achieved.

Task 3. Agency and Landowner Coordination and Support

The Consultant shall prepare for and conduct up to four (4) meetings with the BLM in Cody to complete delineations and agreements for ROWs/Easements. Informal teleconference and/or video conference calls with the Office and BLM may be necessary. It should be assumed that services of a legal subconsultant will be required to complete draft and final agreements.

The Consultant shall prepare for and conduct up to four (4) meetings with private landowners in the project area to complete negotiations, delineations and agreements for required easements and purchase of affected private lands. Informal phone calls with the Office and landowners may be necessary. It should be assumed that services of a land negotiator and legal subconsultant will be required to complete draft and final purchase agreements.

The Consultant shall prepare for and conduct up to two (2) meetings with Big Horn County to coordinate and complete required modifications to Bear Creek Road, and associated ROWs/Easements. Informal phone calls with the Office and County may be necessary.

In support of this task, the Consultant shall complete appraisals of required project lands, including areas for the dam and reservoir, pipelines, access roads, wetlands, borrow areas, and other facilities. The lands that may be purchased include existing private lands as well as current BLM lands that may be exchanged with private landowners. Therefore, the Consultant shall appraise areas on both BLM and private land within the project area to estimate the current market value of the surface estate of the subject property, in conformity with the Uniform Standards of Professional Appraisal Practice.

Elements of comparison to be considered in the appraisal process will include, but are not limited to, conditions of sale, market conditions (time), productivity (if applicable), size, location, legal and physical access, terrain, streams/trees, view, recreational amenities, availability of utilities, zoning and any other relevant market factors that the Consultant may identify, which influence highest and best use, marketability and market value. Value adjustments will be derived and/or supported from market data whenever possible.

Task 4. General Design and Performance Criteria Coordination

The Consultant shall coordinate with the Office, and Wyoming State Engineer's Office (WYSEO) to develop the design and performance criteria for the project. Criteria will be based on nationally recognized standards and meet the approval of the BLM, USACE, and any other applicable agencies. The Consultant shall prepare a memorandum documenting the selected criteria. The memorandum will then be circulated to the appropriate agencies for review and concurrence before advancing to design.

Task 5. Additional Surveying

An aerial LiDAR survey was conducted in 2016. This survey covered the proposed reservoir pool and dam area, the proposed public access route and parking area, the proposed water supply pipeline alignment and diversion, the proposed borrow areas, the un-named tributary below the proposed dam location to its confluence with Beaver Creek, Beaver Creek from the water supply diversion to the confluence with the un-named tributary, and the proposed downstream water transfer pipeline alignment and diversion. This survey, including the original data, aerial imagery, and topographic mapping in AutoCAD format is available from the Level II Consultant.

Additional survey will be required as part of the Final Design to supplement the 2016 LiDAR survey and to support potential land purchases and right-of-way (ROW) and/or easement establishment. Anticipated, minimum survey requirements include:

- Conduct topographic surveys at the proposed water supply pipeline diversion and the proposed water transfer pipeline diversion from Beaver Creek. These areas

were covered by the 2016 LiDAR flight, but due to water and vegetation, supplemental surveys are needed to support final design.

- Establish a minimum of 10 permanent control points to be used for design and construction (minimum 24-inch long, #5 rebar with 2 ½-inch cap). A portion of these permanent control points may coincide with the temporary control points established for the 2016 LiDAR survey. Coordinates for the temporary control points are available from the Level II Consultant. Control points shall be established in locations to minimize the likelihood of disturbance during construction.
- Acquire Title Report, research county records, and map recorded descriptions and encumbrances. Perform boundary and encumbrance survey for the lands to create a Record of Survey to include the boundaries of the lands that may be purchased as part of the reservoir development. Monuments will be set or recovered at all outside boundary corners and any boundary control will also be found or re-established with suitable monumentation.
- Perform survey to support establishment of right-of-ways and easements for site access roads, pipelines, and the reservoir ROW, including surveying section or lot/tract, or other land boundary crossings.
- Any other survey required to successfully complete the project.

The results of this task will be the necessary mapping, in a format suitable for use in computer-generated AutoCAD drawings, of the pertinent areas associated with the project for establishing location, preparing construction drawings, calculating earthwork volumes, preparing the area capacity curve, preparing ROW/easement/acquisition descriptions and exhibits, and any other necessary work to successfully complete the project.

Task 6. Additional Geotechnical Analysis

Geotechnical investigations and analyses were performed as part of the Level II Phase II study for the Shell Valley Storage Study. This investigation included:

- Geologic mapping
- Advancing five borings within the foot print of the proposed embankment
- Advancing one boring downstream of the proposed embankment within the existing embankment
- Excavating 25 test pits within the reservoir, embankment footprint, and potential borrow areas.

Laboratory testing was performed on representative samples. Ground motions were estimated for the site using United States Geological Survey information. Collected data is presented in the Level II Phase II report published in 2015.

Using extreme caution to avoid duplicating work previously performed, the Consultant shall determine and complete any necessary or additional literature review, geologic mapping, geophysical surveys, geotechnical investigations, laboratory testing, and evaluations (seismic, stability, seepage, etc.) required to complete final design of the project. The following are the minimum number of geotechnical investigations and analyses that should be performed to complete final design of the Leavitt Dam and Reservoir and to address outstanding issues from the Level II Phase II study.

- Advance three borings within the footprint of the main embankment to further characterize the strength and permeability of foundation bedrock and confirm subsurface interpretations, including the geometry of the contact between the Unit V mudstone and sandstone layers and the hydraulic conductivity of the materials. The borings shall be a minimum of 50 to 125 feet deep and penetrate at least 10 feet into the lower mudstone layer. Up to 20 Packer tests will be performed in the foundation borings at a typical frequency of about one test for every 15 feet of rock coring, but with an understanding to focus on better characterizing the permeability of the upper sandstone layer.
- Advance seven borings along the dam under the road and left abutment to identify seepage and internal erosion control measures. The borings shall be a minimum of 20 to 65 feet deep and shall penetrate at least 5 feet into the lower mudstone. Up to 15 packer tests will be performed along the dam under the road alignment at a typical frequency of about one test for every 15 feet of rock coring to evaluate permeability and identify if treatment of the materials is required for dam safety or to reduce seepage losses. Perform a long-term packer test to evaluate potential for internal erosion of foundation material. If packer testing is unsuccessful because of failure to seal packer to the rock, perform a falling head permeability test.
- Excavate 42 test pits in the vicinity of the proposed reservoir and below the footprints of the embankment to confirm borrow availability, material excavatability, refine the contact between the Unit V upper mudstone and upper sandstone, and confirm the general extent of faulting anticipated downstream of the proposed embankment.
- Excavate 11 test pits outside of the existing and proposed reservoir footprints within terrace deposits to confirm material properties and available borrow quantities.
- Advance two borings below the tower foundation to identify foundation conditions. Complete one of the borings near the left abutment as a piezometer in the Unit V lower sandstone layer. Periodically collect and review observation well data to identify seasonal fluctuations in groundwater and establish baseline water levels for construction.

- Advance one boring where the main dam meets Bear Creek Road to evaluate foundation rock quality and hydraulic conductivity.
- Perform televising of three borings to evaluate in-situ fracturing and rock quality.
- Advance two borings within terrace gravel materials and performed falling head tests to evaluate permeability of terrace gravel materials.
- Advance two borings into the right abutment to evaluate seepage losses and foundation conditions. Perform seven packer tests. Borings will be up to 85 feet deep.
- Excavate two test trenches and perform field testing to evaluate erodibility of sandstone bedrock materials.
- Advance two borings and ten test pits along the supply pipeline and at the diversion structure on Beaver Creek. The boring shall be up to 30 feet deep at the diversion structure.
- Advance three borings and excavate twenty test pits along the transfer pipeline and the existing diversion structure on Beaver Creek. The boring shall be up to 40 feet deep and located at the diversion structure, the Beaver Creek Crossing, and the Shell Creek Crossing.
- Advance three borings and three test pits for the outlet works conduit and facilities downstream of the main embankment including 1) junction structure, 2) Beaver Creek outlet structure, and 3) tributary outlet structure. The borings shall be up to 30 feet deep.
- Excavate three test pits within the mitigation wetlands and one boring beneath the wetlands embankment to confirm excavatability and embankment foundation conditions. Perform two packer tests. The boring shall be up to 30 feet deep.
- Identify potential commercial riprap sources and conduct laboratory testing to assess suitability of material for riprap.
- Perform laboratory testing to characterize site conditions, and to improve the understanding and accuracy of material properties with focus on the foundation and borrow. This would include at a minimum:
 - Unit V mudstone strength at various moisture contents and confining stresses to confirm the behavior of the material under various moisture contents that could be expected from reservoir conditions.
 - Further evaluate swell pressure of the Upper Mudstone of Unit V to confirm the required thickness of fill over the mudstone to prevent softening and strength loss.

- Evaluate the dispersivity of Unit VI sandstone to identify the appropriate gradation of filter materials and if other foundation treatment is required for this material.
- Young's modulus of upper sandstone and upper mudstone (foundation) to identify the potential for differential settlement of the embankment in the vicinity of the contact between these materials.
- Test types and quantities are as follows:

| Laboratory Test Description | ASTM No. | No. of Tests |
|---|-------------------------------|------------------|
| Moisture and Density | D 2216 and D 7263 | 50 |
| Unconfined Compressive Strength | D 2166 or D 7012 (Method C) | 22 |
| Proctor (Compaction Testing) | D 698 | 5 |
| Triaxial Unconsolidated Undrained | D 2850 | 10 |
| Triaxial Consolidated Undrained with Pore Pressure Measurements | D 4767 | 1 ⁽¹⁾ |
| Direct Shear | D 3080 | 1 ⁽¹⁾ |
| Moisture Content | D 2216 | 22 |
| Atterberg Limits | D 4813 | 58 |
| Shrinkage Limits | D 4943 | 2 |
| Grain Size Analysis | D 6913 | 37 |
| Percent Minus #200 Sieve | D 1140 | 29 |
| Large Scale Terrace Deposit Gradation | | 2 |
| Consolidation | D 2435 | 3 |
| Swell/Consolidation | D 4546 | 9 |
| Backpressure Permeability | D 5084 | 1 |
| Coarse Aggregate Specific Gravity and Absorption | C 127 | 1 |
| Dimension Stone Specific Gravity and Absorption | C 97 | 2 |
| Soundness | C 88 | 3 |
| LA Abrasion | C 535 | 3 |
| Corrosion Testing (Suite of 5 tests) | C 1580, D 4972, D 1411, G 187 | 8 |
| Crumb Test | Reclamation (USBR 5400) | 15 |
| Mudstone/Concrete Interaction | N/A | 1 |

Note:

1. Each test is a suite of three tests.

- Evaluate steeper embankment slopes, which could reduce the quantity of construction materials, but could increase the difficulty of maintenance.

- Evaluate possible methods to mitigate seepage and reduce uplift pressures through the Unit V upper sandstone below the embankment.
- Evaluate the possibility of using smaller stability berms on the left portion of the embankment where the foundation consists of Unit V upper sandstone.
- Further evaluate foundation treatment and required excavation depths in both the Unit V upper sandstone and upper mudstone.
- Evaluate the benefit of re-grading the cliffs along the western reservoir rim to mitigate shallow slides or toppling failures versus removing failed material as part of typical maintenance.

The final geotechnical investigation program will be flexible and will be evaluated for possible modifications as further information is obtained. The Consultant shall visually classify all samples and perform laboratory tests according to a schedule appropriate for completion of final design.

The entire duration of field investigations shall be observed by paleontological and cultural specialists provided by the Consultant. Final resource monitoring reports will be prepared for the geotechnical investigations and will comply with the BLM requirements and guidelines. The report will be marked sensitive and confidential because it will contain information regarding sensitive resource information. BLM Locality forms will be included in an appendix. All digital photos and an electronic copy of the report will be provided to BLM along with the hard copies. All GPS/GIS data and copies of all field notes will be provided to BLM.

The Consultant shall prepare and submit a complete, concise Geotechnical Data Report to summarize and interpret the work performed in this task. At a minimum, the report will contain the geologic mapping, seismic site characteristics, final boring and test pit logs, laboratory test results, characterization and distribution of surficial and subsurface soil and rock units at each structure location, and engineering characteristics of the various geologic units. The report shall present data and be suitable for bidding.

The Consultant will indicate the suitability of the project sites for the proposed development, and provide a description of the geotechnical impact to the various project structures and the suitability and availability of various construction materials. The Consultant will also develop design criteria and indicate potential impacts to previously completed cost estimates. These engineering evaluations and opinions shall be included as a geotechnical design memorandum in Task 7 which will then be used in subsequent tasks.

Task 7. Design

Using accepted engineering practices and the design and performance criteria agreed to in Task 4, the Consultant shall complete design engineering evaluations and analysis for all components of the project, including, but not limited to;

- Hydrology and Hazard Classification - Perform hydrologic and hydraulic analyses to identify the Inflow Design Flood (IDF) and associated Hazard classification.
- Embankment - Design analysis and design of cross sections, grading, material zones, foundation preparation, key trench, seepage mitigation, filters, drains, dikes, abutments, grading of borrow areas, slope protection, etc.
- Construction Dewatering - evaluate existing surface water and groundwater conditions as they relate to dewatering requirements for project construction.
- Outlet Works
 - Design analysis to determine optimum size, alignment, and elevation of the outlet works;
 - Design of the intake structure with trashracks, shut-off gate, concrete and reinforcement, and other items necessary for the structure;
 - Design of the outlet works water conduit through the dam embankment, including pipe size and type, reinforcement and concrete, and other items necessary for the conduit;
 - Design of the outlet works access conduit, including pipe, concrete structure, valve, reinforcement and concrete, electrical and mechanical items, and other items necessary for the structure;
 - Design of the outlet works control building, including water control elements such as pipe, fittings, valves, and meters, structure sizing, reinforcement and concrete, electrical and mechanical items, and other items necessary for the structure and contents; and
 - Design of the outlet works outflow to the downstream wetlands, canal, and/or downstream channel, including pipe, fittings, valves, energy dissipation appurtenances, and other items necessary for the discharge.
- Spillways – Evaluate spillway design to be used for the project. Optimize crest geometry, capacity, width and location in conjunction with the free board requirements for peak flow estimates and location in the abutments. The following items will be analyzed as part of this work.
 - Spillway crest and chute (or pipe) sizing
 - Spillway rating curve
 - Excavation and foundation preparation
 - Typical plan, profile, and sections
 - Concrete and structural sections

- Armoring
- Hydraulics and design modifications of downstream structures, if necessary
- Instrumentation and Monitoring
 - Identify instrumentation and monitoring requirements.
 - Design power and backup power supplies.
 - Design SCADA.
 - Complete design/layout of monitoring instrumentation (displacement monitors, inclinometers, flowmeters/sensors).
 - Complete design and siting of monitoring wells/piezometers.
- Reservoir Water Supply
 - Design analysis to determine optimum size and location of the system;
 - Design of the diversion structure, including embankment, configuration, gates, valves, meters, reinforcement and concrete, and other items necessary for the structure;
 - Perform hydrology/hydraulic modeling for structure effects on stream mechanics/channels.
 - Design of the pipeline from the diversion to the reservoir, including pipe size and type, fittings, installation type, reinforcement and concrete, and other items necessary for the pipeline; and
 - Design of discharge facilities to the upstream wetlands, including pipe size and type, fittings, valves, meters, energy dissipation elements, and other items necessary for the structure.
- Water Transfer Pipeline
 - Design analysis to determine optimum size and location of the system;
 - Design of the diversion structure, including embankment, configuration, gates, valves, meters, reinforcement and concrete, and other items necessary for the structure;
 - Design of the pipeline from the diversion to the canals, including pipe size and type, fittings, installation type, reinforcement and concrete, and other items necessary for the pipeline; and
 - Design of discharge facilities to the canals, including pipe size and type, fittings, valves, meters, energy dissipation elements, and other items necessary for the structures.
- Downstream Channel Structures
 - Identify if modifications are required if a majority of the flow is discharged to Beaver Creek.
 - Design fish-friendly drop/grade control structures.
 - Design culverts/ranch road crossings.

- Design bank protection (vegetation, rock veins, revetment).
- Develop channel grading.
- Mitigation
 - Determination of the required constructed wetland size(s), location(s), and type(s);
 - Design of grading, embankments, and materials for the wetlands;
 - Design of level control structures and outlet pipes; and
 - Determination of plant seed and seedling species to be placed in the constructed wetlands.
 - Design cultural and paleontological mitigation plans based on the Environmental Impact Statement and Record of Decision.
- Site Layout
 - Design construction staging areas, temporary roads, etc.
 - Design primary access roads for all project facilities and entry/tie-in with Bear Creek Road.
 - Design secondary access roads and entry/tie-in with Bear Creek Road.
 - Design of relocation for existing BLM trails inundated by reservoir if needed.
 - Design alignment, cross section, profile, and surfacing of access roads.
 - Design site drainage.
 - Layout and size culverts and design culvert inlets and outlets.
 - Design public parking area and fencing.
 - Design/layout reservoir pool fencing.
 - Design boat ramp and restroom facilities.
 - Design signage plan.
 - Design reclamation of disturbed areas.

Task 8. Technical Review

Technical review of the project work shall be performed by a group of senior level experts with extensive experience in the field of dam design, construction, and operation. The Consultant shall assemble a Board of Consultants (BOC), through use of subconsultants, company principals and/or senior engineers not associated with the project on a daily basis, or a combination of both. The BOC is to consist of five (5) members with experience that covers the following engineering principles: structural engineering, hydrology and hydraulics, engineering geology, geotechnical engineering, and civil engineering. The intent of the BOC is to provide an independent, unbiased review of the Consultant's work, and shall be approved by the Office. The BOC shall be engaged at the following milestones:

- Conceptual design workshop associated with Task 2 in Greybull Wyoming.
- Design report review – this will occur independently and comments will be provided

- by each reviewer to Consultant.
- 60-percent design review meeting held in Cheyenne Wyoming.
- 90-percent design review meeting held in Cheyenne Wyoming.
- The Consultant shall also coordinate with individual BOC members on an as-needed basis to review key design decisions.

Task 9. Construction Plans and Specifications

This task is to complete final designs, prepare the plans and specifications for bidding of the project, and develop the Engineer's Opinion of Probable Construction costs. It will also include preparation of a detailed design report.

Design Report and 60 Percent Design - The Consultant shall prepare a Design Report showing the general layout of the significant project features and presenting the project design criteria, assumptions, engineering evaluations and analysis completed in previous tasks. The Design Report will be reviewed by the Office, BOC, BLM and WYSEO, and comments will be provided for incorporation into the 60 percent design. If necessary for clarification, a review board meeting with the BOC, Office, BLM, WYSEO, and the designers will be held. Preparation of the 60 percent design will then include the following;

- Prepare construction drawings of the project showing layouts and details of the project features. Submit the 60 Percent Design Construction Drawings to the Office, BOC, BLM and WYSEO for review and comment.
- Prepare and submit an outline of the construction specifications, with draft bidding and construction schedules.
- Update and submit the design report documenting the basis of all final designs. The report will include all backup for the design criteria, design and construction schedule.
- Conduct a review board meeting with the BOC, Office, BLM, WYSEO and the designers. The 60 percent review will serve to evaluate constructability, identify areas that can be improved, gain feedback on operational aspects of the design and to keep all parties involved in the design to facilitate factor of safety review and approval of the design for construction.
- Complete the Engineer's Opinion of Probable Construction costs based on the 60 percent design.

90 Percent Design - The Consultant will prepare a 90 percent design incorporating comments from the BOC, Office, BLM and WYSEO. The 90 percent design will also include complete specifications and a schedule of bid items. Preparation of the 90 percent design will include the following:

- Submittal of addenda to the Design Report, including additional design analyses performed for the project, an updated construction schedule, design operating

criteria, and 90% construction drawings and specifications to the Office, BOC, BLM and WYSEO for review and comment.

- A summary and status report of all permits, clearances, easements, access, purchases, etc. This report will be prepared in conjunction with the Office.
- A review board meeting with the BOC, Office, BLM, WYSEO, and the designers.
- Complete the Engineer's Opinion of Probable Construction costs based on the 90 percent design.

Final Plans and Specifications – The Consultant shall incorporate 90 percent design comments to prepare the final construction drawings, specifications, design report and Engineer's Opinion of Probable Construction costs. The Consultant will prepare the construction drawings on 22-inch by 34-inch sheets using AutoCAD to assure that half-scale (11-inch by 17-inch) drawings can also be produced upon request. The Consultant will prepare the construction specifications in Construction Specification Institute (CSI) format, or approved other. The plans and specifications will be sealed and signed by a professional engineer registered in the State of Wyoming. The design report and Engineer's Opinion of Probable Construction costs will be two separate documents.

Task 10. Emergency Action Plan

Utilizing the final design, previous project work, resources from the Federal Emergency Management Agency (FEMA) and the USDA Natural Resources Conservation Service (NRCS), the Consultant shall coordinate with the appropriate state, federal and local agencies, to prepare an Emergency Action Plan (EAP) for the project. The EAP shall include, but not be limited to; identification of potential emergency conditions, actions that will be taken to prevent or delay dam failure, pre-planned actions to be followed in the event of emergency, notification flowcharts, inundation maps, and arrival times.

Up to three (3) public meetings will be held to discuss the preparation and implementation of the EAP with the local community. The Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project manager. The Consultant shall prepare all notices and needed materials for the meetings. Formal public meetings shall be advertised in advance. The Consultant shall prepare meeting minutes for all meetings.

Task 11. Discretionary Task

The Consultant will place \$143,097.45 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

**AMENDMENT TWO TO
CONSULTANT CONTRACT FOR SERVICES NO. 05SC0296336
NEW FORK LAKE DAM ENLARGEMENT, LEVEL II STUDY BETWEEN
WYOMING WATER DEVELOPMENT COMMISSION
AND
RJH CONSULTANTS, INC.**

1. Parties. This Amendment is made and entered into by and between the Wyoming Water Development Commission [Commission], whose address is: 6920 Yellowtail Road, Cheyenne, Wyoming 82002; and RJH Consultants, Inc. [Consultant], whose address is: 9800 Mt. Pyramid Court, Suite 330, Englewood, CO 80112.

2. Purpose of Amendment. This Amendment shall constitute the second amendment to the Contract between the Commission and the Consultant. The purpose of this Amendment is to: a) add Phase III permitting and design tasks; b) increase the total Contract dollar amount by one million five hundred thousand dollars (\$1,500,000.00) to two million two hundred forty-four thousand dollars (\$2,244,000.00); c) replace Exhibit "A" with a new Exhibit "A2"; d) replace Exhibit "B" with a new Exhibit "B2"; e) clarify Phase III assumptions and deliverables with the addition of Exhibit "C"; and f) extend the term of the Contract through June 30, 2023.

The original Contract, dated June 16, 2015, required the Consultant to render certain technical and professional services analyzing New Fork Lake Dam enlargement alternatives for a total Contract amount of two hundred ninety-six thousand dollars (\$296,000.00) with an expiration date of June 30, 2017.

Amendment One, dated March 30, 2017 amended the original Contract to: a) add Phase II tasks to assist the Commission in further analyzing the enlargement of New Fork Lake Dam; b) increase the total Contract dollar amount by four hundred forty-eight thousand dollars (\$448,000.00) to seven hundred forty-four thousand dollars (\$744,000.00); and c) extend the term of the contract through June 30, 2020.

3. Term of the Amendment. This Amendment shall commence immediately upon the date the last required signature is affixed hereto, and shall remain in full force and effect through the term of the Contract, as amended, unless terminated at an earlier date pursuant to the provisions of the Contract, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. The second sentence of Section 4.A. of the original Contract is hereby amended to read as follows:

The total payment under this Contract shall not exceed two million two hundred forty-four thousand dollars (\$2,244,000.00).

B. The entire section of 4.B. of the original Contract is hereby amended to read as follows:

4.B. Project Budget. The Project budget for each task included in Exhibit “A2” is as follows:

| <u>Phase II Tasks</u> | <u>Estimated Cost</u> |
|--|-----------------------|
| Task 1. Meetings and Project Management | \$ 41,000 |
| Task 2. Bathymetric and Topographic Surveys | \$ 95,000 |
| Task 3. PMP and Hydrologic Analysis | \$ 62,000 |
| Task 4. Environmental Assessment and Permitting | \$ 50,000 |
| Task 5. Geotechnical Investigation | \$ 65,000 |
| Task 6. Conceptual Designs and Cost Estimates | \$ 49,000 |
| Task 7. Economic Analysis | \$ 10,000 |
| Task 8. Discretionary Task | \$ 25,000 |
| Task 9. Public Interest | \$ 2,000 |
| Task 10. Creation of a Geographic Information System | \$ 5,000 |
| Task 11. Draft Report | \$ 20,000 |
| Task 12. Report Presentations | \$ 4,000 |
| Task 13. Final Report and Deliverables | \$ 20,000 |
| Phase II Subtotal | \$ 448,000 |

| <u>Phase III Tasks</u> | <u>Estimated Cost</u> |
|---|-----------------------|
| Task 1. Project Management, Meetings and Coordination | \$ 217,200 |
| Task 2. Permitting | \$ 176,700 |
| Task 3. Existing Spillway Alt. Analysis & Project Design Criteria | \$ 86,600 |
| Task 4. Landowner Coordination | \$ 40,900 |
| Task 5. Geotechnical Investigation | \$ 119,000 |
| Task 6. Final Design Analysis | \$ 250,800 |
| Task 7. Drawings and Specifications | \$ 333,200 |
| Task 8. Special Use Permit and Operating Plan | \$ 33,200 |
| Task 9. Emergency Action Plan | \$ 33,600 |
| Task 10. Technical Review | \$ 120,200 |
| Task 11. Discretionary | \$ 88,600 |
| Phase III Subtotal | \$ 1,500,000 |
| Phase I Subtotal (completed) | \$ 296,000 |
| PROJECT TOTAL COST | \$ 2,244,000 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms provided by the Office. The Consultant may use alternate billing forms if approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. The second sentence of Section 3 of the original Contract is hereby amended to read as follows:

The term of this Contract is from June 4, 2015 through June 30, 2023.

5. Amended Responsibilities of the Consultant.

A. As of the Effective Date of this Amendment, Exhibit "A", Scope of Services, which was attached to the original Contract, is superseded and replaced by Exhibit "A2", Revised Scope of Services, which is attached to this Amendment and incorporated into the original Contract by this reference. All references to "Exhibit 'A'" in the original Contract, and in any amendments thereto, are amended to read: "Exhibit 'A2'".

B. As of the Effective Date of this Amendment, Exhibit "B", Hourly Rate and Reimbursable Expenses, which was attached to the original Contract, is superseded and replaced by Exhibit "B2", Revised Hourly Rate and Reimbursable Expenses, which is attached to this Amendment and incorporated into the original Contract by this reference. All references to "Exhibit 'B'" in the original Contract, and in any amendments thereto, are amended to read: "Exhibit 'B2'".

C. As of the Effective Date of this Amendment, Exhibit "C", Phase III - Assumptions and Deliverables which is attached to this amendment is incorporated into the original Contract by this reference.

D. The first sentence of Section 5(A) of the original Contract is hereby amended to read as follows:

The Consultant shall perform the specific services required under this Contract in a satisfactory and proper manner as outlined in Exhibit "A2" and Exhibit "C".

6. Amended Responsibilities of the Commission.

Responsibilities of the Commission have not changed.

7. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Contract, and any previous amendments, between the Commission and the Consultant, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the Consultant of an originally signed counterpart of this Amendment by PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

8. General Provisions.

A. Entirety of Contract. The Original Contract, consisting of twelve (12) pages, Exhibit "A" Scope of Services, consisting of fourteen (14) pages, and Exhibit "B" Hourly Rate and Reimbursable Expenses, consisting of one (1) page; Amendment One, consisting of sixteen (16) pages; and this Amendment Two, consisting of five (5) pages, Exhibit "A2" Revised Scope of Services, consisting of twenty-six (26) pages, Exhibit "B2" Revised Hourly Rate and Reimbursable Expenses, consisting of one (1) page, and Exhibit "C" Phase III - Assumptions and Deliverables, consisting of eight (8) pages, represent the entire and integrated Contract between the parties and supersede all prior negotiations, representations, and agreements whether written or oral.

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK

9. Signatures. The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

This Amendment is not binding on either party until approved by A&I Procurement and the Governor of the State of Wyoming or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

RJH CONSULTANTS, INC.

Robert J. Huzjak, P.E. President
Employer Identification Number: 61-8994268

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner
Assistant Attorney General

Date

**EXHIBIT “A2”
REVISED SCOPE OF SERVICES**

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location. New Fork River, Green River Basin, Sublette County, Wyoming.
2. Purpose. To perform a Level II study for the New Fork Lake Dam Enlargement Project.
3. History. New Fork Lake Irrigation District (Sponsor) proposed a Level II feasibility study in 2015 to investigate the potential to enlarge the reservoir at New Fork Lakes by 4,000 – 5,200 ac-ft to address shortages and the aging dam infrastructure. The Sponsor was also seeking an enhanced outlet works with the ability to remotely operate and monitor reservoir stage and discharge rates to more efficiently utilize their resource.

The Level II, Phase I study, completed in 2017, evaluated the hydrology of the basin and found that the currently irrigated acreage average annual shortage could be reduced with 9,400 ac-ft of additional usable storage from the current reservoir. The project’s alternatives analysis examined twelve storage concepts at eight locations within the District to assess their environmental impacts and ability to meet irrigation demands, so as to identify the top three alternatives for further development. Once identified, no fatal flaws were encountered in the structural, geotechnical, or environmental analysis conducted on the top three alternatives. Considering said analysis, conceptual designs, and economic analysis, additional storage in the basin appeared technically feasible and likely permissible. Further analysis of the preferred alternative, which proposed to reconstruct the dam and lower the existing outlet elevation at New Fork Lakes, was recommended.

Therefore, the Sponsor proposed a Level II, Phase II feasibility study to further analyze dam reconstruction and the lowering of the outlet at New Fork Lakes to enlarge the active capacity. This work began in 2017 and focused on bathymetric and topographic surveys, hydrologic model refinement, environmental field work, geotechnical investigation, alternatives evaluation and refinement, and continued coordination with the local community and appropriate agencies. As the Level II, Phase II work

EXHIBIT “A2”

Amendment Two to the New Fork Lake Dam Enlargement, Level II Study
between the Wyoming Water Development Commission and RJH Consultants, Inc.

was nearing completion, and since no fatal flaws to the project were identified, the Sponsor proposed a Level II, Phase III study to facilitate a more timely process and maintain momentum with the USFS. The Level II, Phase III study will seek to initiate the National Environmental Policy Act (NEPA) review process and complete final design if a favorable permitting decision is reached, in effect preparing the project for a Level III construction funding request.

Additional information may be found at the Wyoming Water Library supported by the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

- a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.
- b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS

project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

- (i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.
 - (ii) **FORMATS and STANDARDS.** Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.
 - (iii) **MAPS.** Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.
- c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:
- (i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.
 - (ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the

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Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS

CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | | |
|---|----------|---------------|
| Itemized Costs of Ineligible Project Components | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Additional Cost for Construction Engineering | \$ _____ | |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ | |
| Total WWDC Ineligible Project Costs Total | \$ _____ | (subtotal #6) |

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TOTAL PROJECT COST

Total Project Cost (subtotal #5 + subtotal #6) \$_____

MATERIALS ONLY TOTAL

Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) \$_____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall

prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Phase II Tasks:

Phase II tasks are brought forward from Amendment One and remain unchanged except for *Task 10 Creation of a Geographic Information System* subsection b. and c. and the draft report due date in Task 11.

Task 1. Meetings and Project Management

Project meetings shall be conducted as approved by the Office project manager for the coordination of project activities and for keeping the sponsor informed of project progress. Informal project meetings with the Office project manager may be necessary during the course of the study to provide project direction. In addition, project progress meetings will be conducted monthly by teleconference with the Sponsor and Office.

The Consultant should assume two (2) formal public project meetings in the study area with the sponsor and local stakeholders. During these trips, the Consultant shall also schedule individual meetings with the Sponsor and United States Forest Service (USFS) to keep them informed of project progress and to obtain input. The Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project manager. The Consultant shall prepare all notices and needed materials for the meetings. Formal public meetings shall be advertised in advance. The Consultant shall prepare meeting minutes for all meetings. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

Should additional meetings be required, these meetings, schedule, agenda and additional costs will be approved by the Office project manager prior to conducting said meetings.

Project management activities include administrative project set-up, subcontractor management, project tracking, invoicing, and project closeout. Written progress reports shall be developed and submitted monthly.

Task 2. Bathymetric and Topographic Surveys

The Consultant shall perform the following topographic and bathymetric survey subtasks at the New Fork Lake site as needed to refine the Phase I concepts and to advance the project.

- Establish survey control network, define elevation datum, and horizontal coordinate system for use on subsequent work.
- Perform topographic and site surveys of the following features:
 - Dam site including the associated abutments, inlet, outlet, downstream corridor (1,300 ft. +/-), existing access road located south of the dam (1,000 ft. +/-) and north of dam (500 ft. +/-).
 - Public boat launch area
 - Boy Scout Camp area on the southern shoreline boundary
 - The area between the upper lake and lower lake known as “the narrows” above existing water line and to the bottom of the existing waterway (bathymetric)
 - Proposed access road alignment
 - Survey installed piezometers and investigation locations
 - Mapping shall include roads, ditches, utilities, and any other pertinent features in borrow area, embankment footprint, spillway, and reservoir area. Mapping shall also include field-adjusted embankment centerline, spillway alignment(s), access roads, and other infrastructure.
- Perform a topographic/bathymetric survey of the lower lake and upper lake with the lower limits being approximately 25 ft. below current dead pool elevation and approximately 20 ft. above current emergency spillway elevation. This task shall also include the survey of the perimeter of the lower and upper lakes. The goals

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of this task are to obtain accurate stage-storage information and identify the area and topography of land that will be exposed by the revised operations to support permitting and refinement of the design concepts and costs. This work should be done during the fall and winter seasons when the reservoir is lower.

- Integrate the surveys and prepare a topographic base map for the project.
- Survey the horizontal coordinates and ground surface elevation of the geotechnical explorations.
- Perform field surveying to support wetland delineation mapping.

The Consultant shall prepare a survey memorandum with maps and charts suitable for inclusion as an appendix in the final report. The memorandum shall summarize the findings from this task and all data collected packaged and delivered with the final report.

Task 3. PMP and Hydrologic Modeling

The Consultant shall refine the inflow design flood (IDF) analysis, flood routing and spillway sizing based on updated topographic survey information and a more refined assessment of the drainage basin in accordance with current Wyoming Dam Safety Guidelines. This effort shall consist of the following subtasks:

- Perform a site visit to evaluate basin characteristics and delineate the drainage basin and develop hydrologic modeling parameters for the basin.
- Obtain and review topographic, hydrologic, and other site information required to develop the Inflow Design Flood (IDF).
- Develop the reservoir elevation-area-capacity curve.
- Develop precipitation depths for the long-duration (general) and short-duration (thunderstorm) Probable Maximum Precipitation (PMP) using the Applied Weather Associates (AWA) Probable Maximum Precipitation Study for Wyoming or other as required by the appropriate permitting entity.
- Develop a HEC-HMS hydrologic model to perform rainfall-runoff analyses and reservoir and spillway routing for the long-duration and short-duration PMP rainfall events.

To further refine water availability and needs estimates, the Consultant shall continue to collect and incorporate available streamflow data, diversion records, reservoir data, and climate data into the StateMod model developed during Phase I of the New Fork Dam Enlargement Level II Study. Input data and model runs incorporating new reservoir operations shall be refined based on updated designs and information to determine the

ability of the preferred alternative to address shortages. To develop reasonable assumptions, historical records and previous studies will be consulted and local experts will be interviewed. The Consultant shall budget for two (2) meetings with the Office to review assumptions pertaining to irrigation parameters and hydrologic system demands and should corroborate the analysis with the pertinent State Engineer's Office representative(s). The assumptions must be approved by the Office project manager. The Consultant shall perform model runs using the StateMod model developed during Phase I of the New Fork Dam Enlargement Level II Study (Phase I) to support evaluation of existing and proposed wetland and stream flow hydrologic conditions and evaluate the feasibility and impact of conservation measures with respect to the selected storage enlargement alternative. The StateMod model shall be revised to include the proposed reservoir enlargement and other operational constraints identified during discussions with the sponsor and regulatory agencies. The Consultant shall develop a draft operating plan for the reservoir, reflecting considerations and constraints developed as part of this task. The Consultant shall prepare a hydrologic analysis memorandum suitable for inclusion as an appendix in the final report. The memorandum shall summarize the findings from this task and all models and accompanying data shall be packaged and delivered with the final report.

Task 4. Environmental Assessment and Permitting

The Consultant shall review and refine requirements of applicable state and federal permits and clearances necessary to construct the top candidate reservoir site as identified during Phase I. Permits and clearances shall include, but not be limited to, those that fall within the jurisdiction of the Clean Water Act, Endangered Species Act, Historic Preservation Act, 1964 Wilderness Act, the Fish and Wildlife Coordination Act, the Wyoming State Engineer's Office, the Wyoming Department of Environmental Quality, the US Forest Service, the State Lands and Investments Board, and the Bureau of Land Management or any other agency with jurisdiction that may affect the construction of a project. Work shall include providing timelines and levels of effort.

This task shall consist of coordination with permitting agencies, wetland mapping, an aquatic resource inventory, biological resources/fisheries, and other tasks crucial to the refinement of environmental and permitting considerations as outlined herein.

Meetings

The Consultant project manager and one additional project team member will attend up to six (6) meetings in Cheyenne to discuss permitting related issues with the Wyoming Game and Fish Department (WGFD), United States Army Corps of Engineers (USACE), or others as requested by the Office project manager. The purpose of these meetings is to corroborate analysis and any assumptions developed through the progression of this project. As part of this coordination effort, the Consultant shall prepare for a wetlands and aquatic resources delineation and a functional assessment for the wetlands by scheduling a work plan review meeting with the USACE Cheyenne, WY office to identify specific data to be collected during the site visit and review the survey plan. The

Consultant shall incorporate revisions to the survey plan as mutually agreed to between the Consultant, the Office project manager, and the USACE as may be needed to address any comments. When the work for this subtask is substantially complete the Consultant shall schedule a follow up meeting with the USACE to discuss the results and obtain input.

Wetland Mapping

The Consultant shall delineate the wetlands and aquatic resources with a site visit in accordance with current USACE guidance. The survey area should consist of the proposed reservoir inundation area, proposed dam footprint, potential laydown and work areas, a 50 foot buffer around those areas, and any other potential project disturbance areas and drainage features that could be of aquatic resource interest to the USACE. The delineated wetlands shall be classified according to methodologies set forth in Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979) or others as deemed appropriate by the permitting agency.

The wetlands and aquatic resources should be surveyed with a GPS unit capable of sub-meter accuracy. Procedures laid out in Task 10, Creation of a Geographic Information System, should be followed. Wetland conditions shall be documented on the USACE Western Mountains, Valleys, and Coasts regional data forms. Sample points and potentially jurisdictional features shall be photographed and included with the documentation. The Consultant shall coordinate with the sponsor and/or USFS to obtain the required permissions to access identified areas.

The Consultant shall prepare an Aquatic Resource Inventory (ARI) with the intent of submitting it to the USACE for a preliminary jurisdictional determination and feedback. The ARI should include descriptions of any wetland or aquatic resources identified within the survey area, wetland datasheets, photographs, and feature positions plotted on aerial backgrounds.

The Consultant shall identify up to five potential mitigation site locations. The locations should be selected to meet the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule (40 CFR Part 230). This rule states a watershed approach should be used during mitigation planning. The five locations should be evaluated during the field effort to ensure wetlands are not already present, to verify the potential size of individual sites, and to ensure the ecological conditions are such that a properly designed and constructed wetland mitigation site could be supported. Efforts should be made to locate the potential mitigation sites as close to the project as reasonably possible. The Consultant shall develop preliminary design alternatives, drawings, and associated cost estimates for each of the potential mitigation site locations to be incorporated into Task 6. Drawings for mitigation areas will include plans for the sites, wetland excavation, berm placement, and water management. A draft set of plans will be provided to Office project manager and Sponsor for review and comment prior to inclusion in the draft report. A final set of plans will be delivered to the Office with the final report.

Functional Assessment

The Consultant shall complete a functional assessment of the wetlands delineated using the Montana Wetland Assessment Method (2008) and prepare a technical memorandum that summarizes the functional assessment results. This should include a description of field indicators recorded during the site visit that were used to identify how the wetlands may be impacted by reservoir water level fluctuations and/or water associated with natural stream flow. Hydrologic data should also be reviewed to assess what hydrologic conditions currently support wetlands and to aid in evaluating what changes in hydrology may occur as a result of proposed reservoir modifications.

The technical memorandum should also provide a summary of literature that discusses the potential survival of wetland vegetation after hydrological modifications have occurred. This memorandum will be shared and discussed with the USACE with the goal of providing the USACE information that can be used to support the determination of wetland impacts resulting from the reservoir expansion.

Aquatic Biological Resources/Fisheries Assessment

The aquatic biological resources/fisheries assessment will involve tasks to define the study area; information gathering to characterize/identify important aquatic species and habitat; identification of potential impact issues; and review/evaluation of hydrologic data to understand the spatial extent and relative magnitude of flow changes on aquatic species. The following information provides a brief summary of the scope for these tasks.

- *Define Study Area* – The study area will be defined based on a review of the areas of proposed disturbance as well as reservoir and stream segments where flow or water levels will change due to the preferred alternative. The flow/water level aspect of the study area will require a review of the hydrology model results.
- *Habitat Characterization* – A site visit will be conducted as part of the characterization of aquatic habitat at the reservoir and stream. This information will be combined with published or unpublished data from USFS and WGFD, or other sources.
- *Important Species and Habitat* – A literature review will be conducted to obtain information on aquatic species and habitat within the study area. The focus of the species information will be the occurrence and distribution of game fish or other special status fish or amphibian species in the study area. Fisheries abundance data also will be obtained if available. Habitat information to be obtained will include trout spawning and rearing locations and possible migration corridors. Coordination with the USFS, WGFD, and the U.S. Fish and Wildlife Service (USFWS) will be key. The discussion should include the known Kokanee salmon population.

- *Identify Impact Issues* – The Consultant shall, based on experience in conducting impact analyses for water development projects, identify and characterize the impact issues associated with aquatic biological resources. Examples of impact issues include effects of flow changes on fish and special status aquatic species in stream segments; effects of water volume/level changes on aquatic species in reservoir sites; and effects of water quality changes on aquatic species from water input or surface disturbance. Issues that represent constraints or fatal flaws will be identified, as well as any mitigation efforts anticipated. The Consultant shall also coordinate with the Upper Colorado River Endangered Fish Recovery Program to obtain information on the program and potential project mitigation (fees) associated with the proposed depletions.
- *Review/Evaluate Spatial Extent and Magnitude of Flow Changes* – Hydrology model results will be reviewed to estimate the spatial extent and magnitude of flow-related effects on aquatic species. The Consultant and Office project manager will discuss the scenarios that should be used for the evaluation. It is suggested that monthly flow data for representative dry, average, and wet years should be used in these scenarios.
- *Technical Memorandum* – Information resulting from the above tasks will be used to describe aquatic biological resources in the preferred alternative study area, as well as identification of impact issues and an evaluation of potential flow changes on aquatic species and habitat.

Cultural and Paleontological Resources

The Consultant shall refine cultural/archeological resource survey data developed during Phase I by completing a Class III survey to evaluate impacts of the preferred alternative. The Consultant shall identify whether impacts have a potential to be considered a fatal flaw and develop preliminary mitigation plans, in coordination with the appropriate agencies, where appropriate.

The Consultant shall coordinate with the appropriate agencies to determine if geologic units associated with the modification of the preferred alternative have potential for the presence of paleontological resources. If present, the Consultant shall evaluate the potential impacts to the project and determine the level of effort to complete a paleontological survey as part of future efforts.

Purpose and Need

The Consultant shall refine the purpose and need statement based on information gathered from this study and previous work conducted. The statement shall be written from the State of Wyoming and beneficiaries' perspective. The Consultant shall also identify any secondary benefits that would mitigate adverse impacts. This shall include,

but not be limited to, recreation, flood control, and wildlife and fisheries habitat enhancement.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 5. Geotechnical Investigation

The Consultant shall conduct a geotechnical engineering investigation of the preferred alternative site to evaluate subsurface conditions. The Consultant shall review site geology and map site features. The Consultant shall drill soil borings, excavate test pits, and complete laboratory testing as necessary to characterize the in-situ conditions and suitability for future construction efforts. Potential borrow areas shall be identified, mapped, and investigated. The Consultant shall be responsible for obtaining any permits necessary to carry out the geotechnical investigation.

The primary objectives of the investigations are to: 1) supplement existing archival information to support layout and preliminary analyses of the proposed dam improvements; and 2) identify any potential fatal flaw or challenging geologic or geotechnical conditions that may significantly impact the technical feasibility and/or construction cost of the proposed dam improvements.

Field boring logs and samples from borings should be checked and reviewed to confirm material types and geologic structures in the samples. Representative samples shall be selected for testing to evaluate the material type and grain size, in-situ moisture content, and estimate compaction properties. Final boring logs shall be prepared based on the field logs, office review of samples, and results of laboratory testing.

The Consultant shall advance three concrete cores into the existing concrete spillway to evaluate the condition of the existing concrete. Representative samples shall be selected for testing to evaluate the shear and compressive strength of the concrete and dispersivity of the materials.

The Consultant shall install one pressure transducer in both the seepage pool downstream of the dam and in the New Fork River adjacent to the seepage pool to determine if the seepage pool level fluctuates with the reservoir and river levels.

The Consultant shall conduct a seismic evaluation of the preferred reservoir alternative. The location of significant faults throughout the general area shall be determined along with earthquakes which have occurred within the vicinity of each alternative. A design earthquake shall be determined for the site, and the seismicity characteristics of the area shall be considered in the stability calculations. The data produced by previous Commission studies and published USGS information shall be used wherever possible to prevent duplication of effort.

The Consultant shall prepare a geotechnical data memorandum suitable for inclusion as an appendix in the final report. The memorandum shall summarize the findings from this task.

Task 6. Conceptual Designs and Cost Estimates

For the preferred alternative, the Consultant shall complete the following analysis and actions, using new information to build upon and refine Phase I data as appropriate.

Conceptual Design Drawings

Conceptual design drawings will be prepared to aid in evaluation of the project feasibility. The conceptual design drawings shall include development of all anticipated project components including, but not limited to existing site conditions, a plan view, section and details for the main dam embankment, dike and spillway, wetland mitigation plans from Task 4, as well as construction details (e.g. – limits of construction, staging areas, etc.). Additional design drawings may include details related to foundation treatment or modifications to the outlet works. Furthermore, the Consultant shall refine the access road and bridge preliminary design through meetings and on-site investigations with USFS officials, Sponsor, USACE, WGFD, and other vested parties as applicable. The Consultant shall also estimate the quantity of additional reservoir rim slope area that will be impacted based on the proposed new reservoir operation limits. The estimate should be prepared based on field observations of existing slopes and any new data that is collected in other tasks. This information will be used to identify the potential increase in Special Use Permit fees. A draft set of conceptual design drawings will be provided to the Office project manager for review and comment prior to inclusion in the draft report. A final set of conceptual design drawings will be delivered with the final report.

The Consultant shall develop a draft of the construction sequencing and activities necessary to complete the preferred reservoir alternative (Gantt Chart) for the Office project manager to review which will later be refined and delivered with the final report.

Construction Cost Estimate

The Consultant shall revise preliminary construction cost estimates prepared during Phase I and life cycle cost analyses based on the conceptual design drawings for the preferred alternative. This task will involve calculating material quantities and estimating equipment, material, and labor costs for the proposed construction and preparing an engineer's Opinion of Probable Project Costs (OPPC) estimate based on local material supplier price data, data from R.S. Means' Heavy Construction Cost Data, other industry standard sources, and price data developed by the Consultant for previous final design/construction projects.

The Consultant shall prepare an itemized project budget that includes costs for design engineering, permitting, mitigation, land acquisition, legal, access, right of ways, construction, construction engineering, contingencies, operation, maintenance and

replacement, and a financing plan. In addition, the Consultant shall estimate costs for water management during and after construction. The estimate will include unit and lump sum prices of the required construction items. The cost estimate will include estimated overhead, profit, taxes, and fees for cost allowances.

The Consultant shall prepare the OPPC in tabular form for both of the storage alternatives. The table will be broken down into both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement will be prepared as outlined in Exhibit "A2" Revised Scope of Services, Subsection C. 3.

The OPPC should be based on the year when this work is performed. The Consultant will work with the Office project manager to select an appropriate inflation factor that will be applied to the project's current year total cost and projected into the future per the schedule of activities and time-lines developed herein.

Task 7. Economic Analysis

The Consultant shall prepare an economic analysis of the costs and benefits of the preferred reservoir alternative site using new information to build upon and refine Phase I data as appropriate. The purpose of this analysis is to assist in determining a fair and equitable financing plan for the preferred reservoir alternative and provide information on the beneficiaries' ability to pay for a portion of the project and all of the operation, maintenance, and replacement costs. The analysis should also include an estimate of direct and indirect benefits which can be used to justify a recommended increased level of State funding assistance. The Consultant shall work with the beneficiaries to determine anticipated system revenues and expenses that will accrue once the project is constructed. The Consultant shall generate recommendations relative to the annual financial commitments that the beneficiaries could make to retire the construction debt and make the project financially self-supporting.

The Consultant shall also consider any potential alternative funding sources available to the area.

Task 8. Discretionary Task

The Consultant shall place \$25,000 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. **No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.**

Task 9. Public Interest

The Consultant shall evaluate whether the project is in the public interest stipulating if the proposed project functions and services can be served by any person, association, or corporation engaged in private enterprise. The Consultant shall also determine if private enterprise has refused to provide the functions and services identified as being required

by the proposed project. This information shall be included in the draft and final reports for the project.

Task 10. Creation of a Geographic Information System

The Consultant shall complete the following tasks for any GIS created as part of the project.

- a. DATA PLAN. The Consultant will create a GIS using certain specified data collected during this study. A plan will be developed for the GIS system which will include but may not be limited to data collection methods, features mapped, attributes collected, projections, documentation, and software version. Metadata shall be included in the plan consistent with the standards set by the Bear River Data Model Steering Committee. **No work shall proceed until this plan is approved in writing by the Office project manager.**
- b. FEATURE MAPPING. Refer to Exhibit “A2” Revised Scope of Services, Subsection C. 2.
- c. FORMATS and STANDARDS. Refer to Exhibit “A2” Revised Scope of Services, Subsection C. 2.
- d. PROJECT AREA. Included in the GIS deliverables shall be a single shapefile with the project area boundaries. Metadata, projection, datum, and general attribute data related to the project area boundaries should be included as ancillary files.

Task 11. Draft Report

The Consultant shall submit to the Office up to five (5) hard copies of a draft report describing the results of all work completed in this study no later than June 1, 2019. Five (5) CD/DVD copies containing the draft report in a Searchable Image Adobe Acrobat (pdf) format will also be provided, and two (2) CD/DVD copies of the draft ArcGIS coverages (if applicable). The digital report will be completely assembled into one standalone Acrobat file and will be the same version as the hard copy.

The project sponsor shall be provided a copy of this draft report for their review. The Office project manager shall also provide the Water Resources Data System (WRDS) with both a hard copy and PDF copy of the draft report for comparison purposes. Issues discovered by WRDS during this comparison are the responsibility of the Consultant to correct. Upon completion of the rectification process, WRDS will assign an URL for the online posting of the final report.

Task 12. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at

the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only); any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and any other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The report presentation for this Phase II Study shall also serve as a public hearing with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager and shall include the question as to whether there is a private entity interested in providing the proposed project functions and services in lieu of the sponsor. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper once each week for three (3) weeks prior to the hearing and in the local publication up to three (3) times prior to the hearing.

Task 13. Final Report and Deliverables

After receipt and incorporation of the Office and the sponsor's review comments, the Consultant shall submit all final documents and materials to the Office on or before October 1, 2019. These final documents and materials shall include: 1) Twelve (12) [MIN] hard copies of the final report and 2) Twelve (12) [MIN] hard copies of the executive summary. The summary shall outline the purpose, findings, recommendations, and configuration of the project and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant, and date.

Four (4) [MIN] CD/DVD copies containing the final report and executive summary in a Searchable Image Adobe Acrobat (pdf) format will be provided. The digital report will be completely assembled into one standalone Acrobat file for each report, and will be the same version as the hard copy.

Five (5) [MIN] CD/DVD copies containing the final report and executive summary in their original formats (Word, Excel, etc.), and Searchable Image Adobe Acrobat (pdf) format will be provided. The Acrobat version will be completely assembled and contained in one pdf file. These files will be the same version as the hard copies.

Five (5) [MIN] CD/DVD/Flash Drive/Portable Hard Drive copies of the hydraulic model project file, and all associated files, shall be provided if applicable. The files shall create

a working model that is fully functional and can be modified. One of these copies will be included in the project notebook.

Five (5) [MIN] CD/DVD/Flash Drive/Portable Hard Drive copies of the Arcview GIS project file, and all associated files, will be provided. The GIS project files should be provided as ESRI ArcGIS .mxd files saved with relative path names to data sources, and shapefiles shall be saved in the decimal degree coordinate system with a NAD83 datum, and stored in feet, for all mapped features.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, consultant, and date.

Phase III Tasks:

The Consultant shall be given Notice to Proceed on each task by the Office project manager, before the task is initiated. Tasks related to Final Design may not be completed if the NEPA review process does not reach a favorable outcome.

Project management activities include administrative project set-up, subcontractor management, project tracking, invoicing, activity reports, summary letters, as needed correspondence with the Consultant team, Sponsor and Office project manager, internal task coordination meetings, and any other routine items required to successfully complete the project. Written progress reports shall be developed and submitted monthly.

The Consultant shall also create Project-specific management tools that include a Project schedule formatted in a critical path format, progress tracking, communication protocols, and team organization matrix (that details roles and responsibilities).

Outside of daily project management, the Consultant shall provide quality control of all work, including subconsultant work. This type of review will be ongoing and include oversight by company principals or senior engineers knowledgeable of the project work and scope, but not associated with the project on a daily basis. Their review will include a check to see that all work scope items have been properly addressed and completed to the intent of the work scope and contract, and that the work products are technically sound.

Informal project phone calls and meetings with the Office project manager may be necessary during the course of Phase III scope of work to provide project direction. In addition, project progress meetings will be conducted monthly by teleconference with the Office and Sponsor.

The Consultant will organize and host regular and recurring conference calls with United States Forest Service (USFS) and Office project manager throughout the project to discuss the permitting progress and possible issues that may arise. These meetings are assumed to be at least monthly.

On general matters, coordination shall take place on an as needed basis with the USFS, Office, cooperating agencies, and any other Federal, State, regional and local agencies and other groups as determined appropriate by USFS and Office, to accomplish the task.

The Consultant shall prepare for and conduct four (4) interim meetings in the study area as public meetings to keep the local community informed of project progress and to obtain input as needed and four (4) interim meetings with permitting agencies (USFS, USACE, etc.). The Consultant will be responsible for scheduling and conducting these meetings in coordination with the Office project manager.

The Consultant shall prepare all notices and needed materials for the meetings. Public meetings shall be advertised in advance. The Consultant shall prepare meeting notes for all meetings. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

Task 1. Permitting

The Consultant will prepare an exhaustive list, summary, and working status report of all permits, clearances, etc., required to complete the project. This report will be prepared in conjunction with the Office project manager. It will be the Consultant's responsibility to coordinate with the USFS, USACE, USFWS, WGFD, Wyoming State Engineer's Office (WYSEO), Wyoming Department of Environmental Quality (WYDEQ), and any other agencies as needed to ensure that all clearances and permits are obtained.

It is assumed that an Environmental Assessment (EA) will be required as part of the permitting process. The Consultant will be the third-party contractor preparing this EA on behalf of the USFS and shall obtain all necessary clearances in coordination with the Sponsor to construct the project. This shall include, but not be limited to:

- (1) National Environmental Policy Act - Environmental Assessment;
- (2) Endangered Species Act;
- (3) Fish and Wildlife Coordination Act;
- (4) National Historic Preservation Act;
- (5) Migratory Bird Treaty Act;
- (6) Golden and Bald Eagle Protection Act;

- (7) Wyoming State Engineer's Office, Safety of Dams;
- (8) Wyoming Game and Fish Department;
- (9) USFS Land and Resource Management Plans;
- (10) Federal and State Executive Orders

The Consultant shall obtain all permits required to construct the project. This shall include, but not be limited to:

- (1) USFS Special Use Permit;
- (2) Section 401, Clean Water Act, Certification;
- (3) Section 404, Clean Water Act, Permit;
- (4) Wyoming State Engineer's Office, Water Rights;

Task 2. Existing Spillway Alt. Analysis & Project Design Criteria

An alternatives analysis for the existing spillway will be performed to evaluate constructability and cost and to determine the most efficient spillway design in conjunction with the other proposed design features. The Consultant will coordinate with the USFS, Office project manager and the Sponsor to develop the preferred alternative for the spillway and ensure that the analysis is completed in coordination with the completion of the Environmental Assessment, as appropriate. Alternative concepts to be evaluated in addition to the concept developed in Phase II, should include, but not be limited to the following:

- Identify if retaining only a portion of the spillway is more cost effective
- Removing the existing spillway and installing a RCC overtopping spillway

The Consultant shall perform additional hydrologic modeling to design the downstream channel improvements between the spillway stilling basin and stream channel.

The Consultant shall prepare a memorandum summarizing the analyses completed and providing a recommendation of the preferred alternative. The memorandum will be prepared in conjunction with the Office project manager and after review and comments have been received a final memorandum will be prepared suitable for use in design.

The Consultant shall coordinate with the Office, WYSEO, and USFS to develop the design and performance criteria for all components of the project. Criteria will be based on nationally recognized standards and meet the approval of the USFS, WYSEO, and any other applicable agencies. The Consultant shall prepare a memorandum documenting the selected criteria. The memorandum will then be circulated to the

appropriate agencies and Board of Consultants (BOC) for review and concurrence before advancing to design. After review and comments have been received, a final memorandum will be prepared suitable for use in design.

Task 3. Landowner Coordination

The Consultant will perform a survey of borrow areas and prepare legal documents suitable to execute an agreement between the Sponsor and the borrow area(s) landowner to allow for borrow of material, placement of excavated material from the dam and narrows, temporary roads, and reclamation.

The Consultant will prepare an exhaustive list, summary, and working status report of all easements and access agreements required to complete the project. This report will be prepared in conjunction with the Office project manager.

Task 4. Geotechnical Investigation

The Consultant will conduct geotechnical investigations and laboratory testing to the extent necessary to characterize the in-situ conditions which will help guide construction methodology and final design of the embankment, borrow areas, spillway, spillway approach channel, and narrows excavation including:

- Seven land-based borings using sonic drilling methods within the existing dam, adjacent to the existing spillway and below the foot print of the enlarged dam
- Eight test pits within or adjacent to the approach channel excavation and narrows excavation to evaluate material that will be removed during construction
- Ten test pits within selected borrow areas to confirm the lateral and vertical extents of borrow materials
- The locations and number of borings and test pits shall be subject to concurrence with the BOC review from Task 10, and may be adjusted as needed to suit the project and site requirements

The primary objective of these investigations will be to gather additional data which will be used to reduce uncertainty with foundation conditions, reduce uncertainty with excavated materials from the approach channel and narrows, confirm availability of borrow materials, and provide data for bidding. Laboratory testing will include index, permeability, and strength tests on foundation and borrow materials. The Consultant shall be responsible for obtaining any permits and/or permissions necessary to carry out the geotechnical investigations.

The Consultant will compile a draft technical memorandum summarizing the data and findings from this task. The memorandum will be prepared in conjunction with the Office project manager and after review and comments have been received a final memorandum will be prepared suitable for bidding and use in design and construction.

Task 5. Final Design Analysis

Using accepted engineering practices and the design and performance criteria agreed to in Task 3, the Consultant will perform evaluations and analyses to design all components of the project including, but not limited to the following:

- Embankment – Design analysis and design of cross sections, grading, material zones, foundation preparation, key trench, seepage mitigation, filters, drains, dikes, abutments, grading of borrow areas, slope protection, embankment geometry, etc.
- Construction Dewatering – evaluate existing surface water and groundwater conditions as they relate to dewatering requirements for project construction
- Outlet Works
 - Design analysis to select optimum size and alignment of the outlet works
 - Design of the intake structure with trash racks, guard gate, concrete and reinforcement, and other items necessary for the structure
 - Design of the outlet works water conduit through the dam embankment, including pipe size and type, concrete and reinforcement, and appurtenances
 - Design of the outlet works terminal structure
 - Abandonment of existing outlet works
- Spillways – advance the spillway design based on hydrology from Task 3. Optimize crest geometry, capacity, width and location in conjunction with the freeboard requirements for peak flow estimates. The following items will be analyzed as part of this work:
 - Spillway crest and chute sizing
 - Stilling basin sizing
 - Spillway rating curve
 - Excavation, foundation preparation, and seepage management
 - Concrete and structural sections
 - Armoring
 - Hydraulics and design modifications of downstream channel
- Roadway design – Identify required design criteria and dimensions from the USFS. Perform analyses to design the bridge crossing the spillway stilling basin.
- Stream diversion during construction
 - Develop requirements that will be implemented by the contractor to control and convey stream flows during construction

- Instrumentation and Monitoring
 - Identify instrumentation and monitoring requirements thru coordination with the USFS, Sponsor and Office project manager
 - Design power and backup power supplies using solar power and batteries
 - Design SCADA to monitor and operate the outlet works gates
 - Complete design/layout of monitoring instrumentation (displacement monitors, inclinometers, flowmeters/sensors)
 - Complete design and siting of monitoring wells/piezometers
- Site Layout
 - Design construction staging areas, temporary roads, etc.
 - Demolition plan
 - Design boat ramp improvements
 - Design reclamation of disturbed areas

Design Report – The Consultant shall prepare a Draft Design Report showing the general layout of all project features and presenting the project design criteria, assumptions, engineering evaluations and analysis completed in other tasks. The Design Report will be reviewed by the Office, BOC, USFS, and WYSEO, and comments will be provided for incorporation into the 60 percent design.

Task 6. Drawings and Specifications

The Consultant shall complete final designs, prepare plans and specifications for bidding of the project, and develop the Engineer's Opinion of Probable Construction Costs. The Consultant shall also prepare the final design report and addenda to the design report.

60 Percent Design – Preparation of the 60 percent design will include the following:

- Prepare construction drawings of the project showing layouts and details of the project features. Submit the 60 Percent Design Construction Drawings to the Office, BOC, USFS and WYSEO for review and comment.
- Prepare and submit an outline of the construction specifications, with draft bidding and construction schedules in the Construction Specifications Institute (CSI) format.
- Update and submit the final Design Report documenting the basis of all final designs. The report will include all backup for the design criteria, design and construction schedule.
- Complete the Engineer's Opinion of Probable Construction costs based on the 60 percent design.

- Conduct a review board meeting with the BOC, Office, USFS, WYSEO and the designers. The 60 percent review will serve to evaluate constructability, identify areas that can be improved, gain feedback on operational aspects of the design and to keep all parties involved in the design and approval of the design for construction.

90 Percent Design – The Consultant will prepare a 90 percent design incorporating comments from the BOC, Office, USFS and WYSEO to the 60 percent design submittal. The 90 percent design will also include complete specifications and a schedule of bid items. Preparation of the 90 percent design will include the following:

- Submittal of addenda to the Design Report, including additional design analyses performed for the project and 90% construction drawings and specifications to the Office, BOC, BLM and WYSEO for review and comment.
- A summary and status report of all permits, clearances, easements, access, purchases, etc. This report will be prepared in conjunction with the Office.
- A review board meeting with the BOC, Office, USFS, WYSEO, and the designers.
- Complete the Engineer's Opinion of Probable Construction costs based on the 90 percent design.

Issued-For-Bid Drawings and Specifications – The Consultant shall incorporate 90 percent design comments and updated quantities to prepare issued-for-bid construction drawings, specifications, design report and Engineer's Opinion of Probable Construction costs. The Consultant will prepare the construction drawings on 22-inch by 34-inch sheets using AutoCAD at an appropriate scale such that half-scale (11-inch by 17-inch) drawings can also be produced upon request. The Consultant will prepare the construction specifications in Construction Specification Institute (CSI) format, or approved other. The plans and specifications will be sealed and signed by a professional engineer registered in the State of Wyoming. The design report and Engineer's Opinion of Probable Construction costs will be two separate documents.

It will be the Consultant's responsibility to ensure all reviews and approvals required of the USFS are attained and completed to the satisfaction of the USFS. Therefore, it will be critical to coordinate with all required parties throughout the completion of this task.

Task 7. Special Use Permit and Operating Plan

The Consultant will assist the Sponsor with amending the special use permit for construction and future management of the project with the USFS.

The Consultant will develop a preliminary Operating Plan which identifies specific operation and maintenance needs and responsibilities to ensure timely repairs and safe operation of the reconstructed New Fork Lakes Dam. The Consultant will coordinate with the USFS, Office project manager, and the Sponsor to develop the contents of the preliminary Operating Plan and coordinate this effort with the development of the EAP in Task 9 as these will likely be submitted with the special use permit for the project. The Operating Plan will need to be revised and updated once construction is complete. The Operating Plan should follow a format acceptable to the USFS customized to the specifics of this project and will include but not be limited to the following sections:

- Facility Description
- Statistical Information
- Operating Plan
- Maintenance Plan
- Instrumentation
- Tables and Figures as needed to depict the information in an understandable way
- Appendices with Forms, Manufacturer Operation and Maintenance Recommendations for gates, valves, hydraulics, electronics, etc.

Task 8. Emergency Action Plan

Utilizing the final design, previous project work, and potential resources from the U.S. Bureau of Reclamation (Reclamation), Federal Emergency Management Agency (FEMA), the USDA Natural Resources Conservation Service (NRCS), and the USFS, and by completing a breach analysis and subsequent flood routing, the Consultant shall coordinate with the appropriate federal, state, and local agencies to prepare an Emergency Action Plan (EAP) for the project. The EAP should follow an industry accepted format customized to the specifics of this project and will include, but not be limited to:

- Basic Dam Characteristics
- EAP Plan Overview Flowchart
- Roles and Responsibilities
- Incident Detection
- Emergency Level Determination
- Notification and Communication Flowcharts
- Emergency Actions
- Termination and Follow-up
- EAP Maintenance Plan (Review, Exercise, and Update)
- Record of Holders of Control Copies
- Record of Revisions and Updates
- Concurrences
- Appendices which include: Contact Checklist, Unusual or Emergency Event Log, Dam Emergency Situation Report, Glossary of Terms, Available Resources, Location and Vicinity Maps, Evacuation Map, Inundation Maps

EXHIBIT "A2"

Amendment Two to the New Fork Lake Dam Enlargement, Level II Study
between the Wyoming Water Development Commission and RJH Consultants, Inc.

Residents/Businesses/Highways at Risk, Plan View of Dam and Profile of Outlet Works, Reservoir Elevation, Volume, and Spillway Capacity Data, National Inventory of Dams (NID) Data, etc.

Task 9. Technical Review

Technical review of the project work shall be performed by a group of senior level experts with extensive experience in the field of dam design, construction, and operation. The Consultant shall assemble a Board of Consultants (BOC), through use of subconsultants, company principals and/or senior engineers not associated with the project on a daily basis, or a combination of both. The BOC is to consist of three (3) members with experience that covers the following engineering principles: hydraulic structures, civil design, and geotechnical engineering. The intent of the BOC is to provide an independent, unbiased review of the Consultant's work. BOC reviews will be at the following deliverables:

- Project familiarity review workshop
 - The Consultant shall prepare for and lead a project familiarity and coordination meeting with the project Sponsor, Office, and BOC to discuss identified alternative configurations and potential modifications. As part of the review, the Consultant shall lead and participate in a Potential Failure Modes Analysis (PFMA) and Semi-Quantitative Risk Assessment (SQRA). The geotechnical investigations will also be reviewed and modified as appropriate based on the results of the workshop.
 - A summary report will be prepared presenting the results of the review and any recommended modifications to the conceptual design that will improve safety and operation objectives, reduce risk during construction and throughout the life of the facility, and identify areas where cost savings may be achieved.
- Spillway alternatives analysis memorandum and design criteria memorandum
- Geotechnical data technical memorandum
- Design report memorandum
- 60% design – 1 day review board meeting
- 90% design – 1 day review board meeting

Task 10. Discretionary

The Consultant shall place \$88,600 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. (i.e. data gaps, biological assessment, etc.) **No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.**

EXHIBIT “B2”
REVISED HOURLY RATE AND REIMBURSABLE EXPENSES
RJH CONSULTANTS, INC.

| Labor Category | Billing Rate per Hour (\$) |
|-------------------------------------|---|
| Technical Expert | 272 |
| Principal – Grade 8 | 234 |
| Senior Professional – Grade 7 | 217 |
| Senior Professional – Grade 6 | 192 |
| Professional – Grade 5 | 178 |
| Professional – Grade 4 | 149 |
| Engineer/Geologist – Grade 3 | 133 |
| Engineer/Geologist – Grade 2 | 123 |
| Engineer/Geologist – Grade 1 | 113 |
| CAD Designer | 112 |
| Word Processor/Administrative Staff | 87 |

*These rates are billed for both regular and overtime hours in all categories.

General Expenses

Reimbursement for general expenses, which include field and laboratory equipment; computer equipment and software; printing and reproduction; communications and mailing; local transportation, tolls and parking; field vehicles; and field equipment will be invoiced based on a percentage of labor costs and type of project as follows:

- Geotechnical investigations, permitting support, analyses, and design and bid document preparation – 4%

Out of Town Travel and Subsistence

Reimbursement for expenses for travel, rental vehicles, hotels, meals, and other costs associated with out of town and overnight travel will be invoiced at cost.

Subcontractors and Subconsultants

Reimbursement for work performed by subconsultants and subcontractors will be invoiced at cost.

Contract Labor

Contract labor provided by independent consultants and temporary agencies for activities such as drafting, engineering, and word processing will be invoiced at the appropriate labor category as described above for professional services.

EXHIBIT “C”

PHASE III - ASSUMPTIONS AND DELIVERABLES

General Design Concept

This scope and fee estimate were developed based on a Phase II understanding of the project components and the work that is anticipated to be required to complete an Environmental Assessment (EA) with the USFS as the lead agency. The Consultant and the Wyoming Water Development Office understand that the actual scope of work needed and the associated fee to complete that work will be highly influenced by the environmental process and the direction provided by the USFS and it is likely that the scope of work and associated fee may need to be revised as the work progresses. The final design of the New Fork Lake Dam enlargement currently includes the following primary components:

- Installing a new outlet works 5.5 feet lower than the existing invert elevation to provide an additional 8,000 acre-feet of active storage.
- Resurfacing the existing spillway and extending a new stilling basin downstream to enable the dam to safely convey the probable maximum flood (PMF).
- Abandoning the exiting outlet works will be in place.
- Reconstructing the embankment with modern safety facilities that address existing dam seepage. The embankment height and length will be increased to allow safe conveyance of the PMF.
- Upgrading the existing road on the dam to modern roadway and dam safety standards.
- Excavating an approach channel from the new outlet works into the lake to allow access to the additional storage.
- Deepening an existing channel in the “narrows” between the two existing lakes to allow access to the additional storage, improve recreation, and improve fisheries. (Currently, the two lakes are hydraulically disconnected at the channel during low reservoir conditions.)
- Hauling excavated materials from the lakes to be disposed of offsite to avoid a dredging permit from the USACE.
- Borrowing materials for embankment fill, filters, drains, and slope protection from adjoining property.
- Boat ramp improvements to accommodate lower lake levels.

The general layout of the components that the above is based on was presented at a public meeting on March 6, 2019 and sketches are available in the meeting minutes.

Task 1: Project Management, Meetings and Coordination

Assumptions

- Work will begin in June 2019

- The task duration is no more than 30 months, understanding these months may not be continuous
- 4–in-person meetings in Jackson, WY; includes preparation, travel, participating in meeting and follow-up, meeting notes
- 4-in person meetings in Pinedale, WY, includes preparation, travel, participating in meeting and follow-up, meeting notes
- 18 one-hour conference calls related to permitting with federal agencies; includes preparation; conducting the call; follow-up, meeting notes

Deliverables

- Monthly invoices and progress report, 30 total in electronic .pdf format
- Meeting notes from public and agencies meetings in electronic .pdf format

Task 2: Permitting

Assumptions

- The level of Permitting will be an EA
- USACE permitting will be done under nationwide permits
- The USFS will accept the previously completed alternative screening process with moderate alterations to address the use of “cost” and “permitability”
- The Class III Cultural Survey completed in the Phase II work can be used in the NEPA analysis and is appropriate for the EA
- A Biological Assessment will not need to be prepared
- **Scoping**
 - The scoping meeting will occur in Pinedale, WY
 - The Consultant will cover costs for rental of facility, postage for mailing approximately 30 scoping notices, and the cost to publish a legal notice in an appropriate newspaper
 - The Consultant will provide a sign in sheet, comment response forms, and resource boards for display at an anticipated open house format scoping meeting
 - Approximately 15 scoping letters will be submitted
 - Assumes NEPA scoping efforts do not result in new analyses or alternatives
- **Preliminary Draft EA**
 - The Preliminary Draft EA addresses in detail, the Proposed Action and No Action alternatives
 - The work that has been completed in Phase I and Phase II of the project can be directly used in the EA
 - Except for the *Vegetation Monitoring*, field work will not be required
 - Comments on the Preliminary Draft EA from the USFS are addressed prior to sending the document to other Cooperating Agencies for review and comment

EXHIBIT “C”

Amendment Two to the New Fork Lake Dam Enlargement, Level II Study
between the Wyoming Water Development Commission and RJH Consultants, Inc.

- Up to two days of *Vegetation Monitoring* field work will be conducted on approximately 750 acres of potentially restored Core sage grouse habitat and a memo prepared to aid discussions with the WGFD to determine if polygons can be reclassified as suitable habitat and removed from DDCT disturbance areas so the total disturbance area does not exceed the 5% threshold
- **Draft EA and Comment Management**
 - A Draft EA will be assembled after receiving and resolving comments on the Preliminary Draft EA
 - The Consultant will cover costs to publish notice of the Draft EA in the legal section of an appropriate newspaper in accordance with USFS requirements
 - A consolidated file of comments received by USFS on the Draft EA will be provided to the Consultant
 - Approximately 20 comment letters will be submitted with up to 4 discrete comments each
 - Draft responses to the comments received will be submitted to the USFS for review and approval
 - A database will be prepared to record the comments, responses, and how they were addressed in Final EA
 - Edits to the Draft EA will be editorial in nature
- **Final EA**
 - A Draft Final EA will be assembled after receiving and resolving comments on the Draft EA and submitting to the USFS for final review and approval
 - A Final EA will be assembled in coordination with the USFS in electronic pdf format
 - Edits to the Final EA will be editorial in nature
 - The Consultant will cover costs to publish notice of the Final EA in the legal section of an appropriate newspaper in accordance with USFS requirements
 - The Consultant assumes that USFS will manage the distribution of the Final EA document, the publishing of the notice, and filing of five copies of the Final EA document with the EPA office
- **Prepare Finding Document**
 - The Consultant assumes that a FONSI will be prepared; although costs would include developing a NOI, they would not include any other tasks associated with starting an EIS process
 - The FONSI will be prepared in accordance with USFS requirements and is assumed to include the following items:
 - States the decision (i.e., identifies the selected alternative);
 - Presents the basis for the decision
 - Identifies all other alternatives considered and why they were not selected

EXHIBIT "C"

- Identifies the environmentally preferable alternative and, if applicable, why it was not chosen
 - Lists and identifies all environmental commitments made in the EA
 - Adopts and summarizes a monitoring and enforcement program, if applicable, for any mitigation
 - If an EIS is determined to be necessary, the NOI will be prepared in accordance with USFS requirements and is assumed to include the following items:
 - Summarizes the findings of the EA
 - Informs the public that the USFS will be preparing an EIS to evaluate the impacts
 - The Consultant assumes that USFS will manage the distribution of the Decision document, the publishing of the notice, and filing of five copies of the Decision document with the EPA office
- **Administrative Record**
 - An administrative record will be maintained that adheres to USFS guidance and is assumed to include the following items:
 - Project Planning: Project Team Members, Planning Schedule, and all Public Notices
 - Internal Correspondence: Project Team Correspondence, Meeting Agendas and Notes, and Agency Inter-Office Correspondence.
 - External Correspondence: Media Contacts, Cooperative and Other Agencies Correspondence, Tribal Correspondence, Correspondence from Elected Officials/Offices, Organizations, and Individuals, and Project related FOIA Requests/Responses
 - Public Communication: Public Information Documents, Mailings and Mailing Lists, News Reports/Articles, and Public Comments from Scoping and Draft EA review
 - Data Used in Support of Decision and Planning Documents: Public Comments from Scoping, Draft EA, Final EA, FONSI
 - The USFS will provide the Consultant with the documents to be included in the administrative record
 - A draft administrative record will be prepared for USFS comment and review
 - The Consultant will address any USFS comments and revise the administrative record for final submission to the USFS

Deliverables

- Meeting notes in electronic .pdf format
- Draft EA in electronic .pdf format
- Comment management document in in electronic .pdf format
- Final EA in electronic .pdf format
- Administrative record in electronic .pdf format

EXHIBIT "C"

Task 3: Existing Spillway Alt. Analysis & Project Design Criteria

Assumptions

- Review comments from all agencies will be resolved in one iteration
- The proposed alternative concepts for evaluation will not increase the disturbance boundary; therefore we do not anticipate that this would impact permitting activities
- Up to four storm recurrence flow rates will be used to design the downstream channel improvements

Deliverables

- Spillway Alternatives Analysis and Hydrology memorandum in electronic .pdf format
- Design Criteria memorandum in electronic .pdf format

Task 4: Landowner Coordination

Assumptions

- Appraisals will not be performed.
- The landowner is a willing participant
- Attorneys will not need to be consulted to prepare the documents

Deliverables

- Access agreement for borrow excavation and fill placement on private property

Task 5: Geotechnical Investigation

Assumptions

- The Consultant will have unrestricted access to boring and test pit locations
- Drilling will be performed with a truck mounted drilling rig
- One mobilization to the Site will be required to complete drilling
- Water for drilling and Packer testing will be available from the existing storage in the reservoir
- Borings will be backfilled with cement bentonite grout
- Temporary access will not impede investigations
- Reclamation of temporary access road, drilling locations, and test pit excavations will consist of minor raking and seeding in areas outside of the reservoir footprint
- Delays resulting from muddy site conditions or inclement weather are not included in Consultant fee estimate
- Consultant fee estimate is based on 10-hour work days
- Prices for gasoline and diesel will be within about 10 percent of their current value
- The reservoir will be lowered to elevation approximately 7914 to excavate test pits within or near the outlet works approach channel and the narrows

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between the Wyoming Water Development Commission and RJH Consultants, Inc.

excavations. If the reservoir cannot be lowered to this elevation, test pits will be excavated at the edge of the water level. This data will be used to infer subsurface materials within the excavation.

- Total drill footage will not exceed 320 lineal feet

Deliverables

- Draft Geotechnical Data Technical Memorandum in electronic .pdf format
- Final Geotechnical Data Technical Memorandum in electronic .pdf format

Task 6: Final Design Analysis

Assumptions

- The bridge will be founded on the spillway stilling basin walls and separate abutments will not be required
- Comments on reviewed documents will be resolved in one iteration

Deliverables

- Draft Design Report in electronic .pdf format

Task 7: Drawings and Specifications

Assumptions

- The following sections and number of drawings for 60 percent design are anticipated as follows:
 - General 13 drawings
 - Embankment 14 drawings
 - Outlet Works 15 drawings
 - Spillway 7 drawings
 - Mitigation and Reclamation 2 drawings
 - Road 7 drawings
 - Recreation 3 drawings
- The following divisions and number sections for 60 percent design specifications are anticipated as follows:
 - General 18 sections
 - Demolition 1 sections
 - Concrete 11 sections
 - Metals 3 sections
 - Finishes 1 sections
 - Special Construction 1 sections
 - Integrated Automation 4 sections
 - Electrical 7 sections
 - Earthwork 15 sections
 - Exterior Improvements 5 sections
 - Utilities 3 sections
 - Waterway and Marine Construction 3 sections

EXHIBIT "C"

- Review board meetings at 60 and 90-percent design will be 1 day long each and will occur in Cheyenne, Wyoming
- Existing topographic information obtained in Level II Phase II is suitable for design

Deliverables

- 60 Percent Drawings in electronic .pdf format
- 60 Percent Specification List in electronic .pdf format
- 60 Percent OPCC in electronic .pdf format
- Final Design Report in electronic .pdf format
- Summary and status of permits, clearances, easements, access, purchases, etc. at the 90 Percent submittal in electronic .pdf format
- 90 Percent Drawings in electronic .pdf format
- 90 Percent Specifications including a schedule of bid items in electronic .pdf format
- 90 Percent OPCC in electronic .pdf format
- Issued-For-Bid Drawings in electronic .pdf format
- Issued-For-Bid Specifications in electronic .pdf format
- Issued-For-Bid OPCC in electronic .pdf format
- 90 Percent operating criteria
- Addenda to the Design Report (as necessary)
- Meeting notes from each review board meeting in electronic .pdf format

Task 8: Special Use Permit and Operating Plan

Assumptions

- USFS special use permit can be obtained without any travel for meetings and work is related to guiding the Sponsor in preparation of USFS applications
- The Operating Plan will be developed from previously prepared design reports, drawings, operation and maintenance compilations, and a first filling plan developed for the dam. No other new information will be developed.

Deliverables

- Operating Plan in electronic .pdf format

Task 9: Emergency Action Plan

Assumptions

- Breach inundation maps will be developed for a sunny-day failure
- Survey data of the downstream drainage will not be required
- Inundation maps will be developed as part of this task

Deliverables

- Draft EAP
- Final EAP in paper and electronic .pdf format
- Meeting minutes in electronic .pdf format

EXHIBIT "C"

Amendment Two to the New Fork Lake Dam Enlargement, Level II Study
between the Wyoming Water Development Commission and RJH Consultants, Inc.

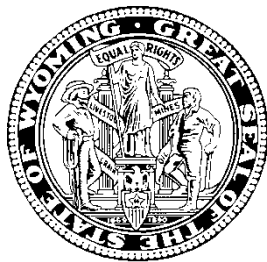
Task 10: Technical Review

Assumptions

- The BOC will consist of three individuals located in Denver, Colorado
- Project familiarity review workshop will be 2 days long and will be held in Denver, CO
- Review of the spillway alternatives analysis, design criteria, geotechnical, and design report memorandums by the BOC will occur independently and comments will be provided by each reviewer to the Consultant
- Review board meetings at 60 and 90-percent design will be 1 day long each and will occur in Cheyenne, Wyoming
- The Consultant will also coordinate with individual BOC members on an as-needed basis to review key design decisions

Deliverables

- Design Review Summary Memorandum in electronic .pdf format



**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Beaver Creek Watershed Study
LEVEL: I
SPONSOR: Weston County Natural Resource District
LOCATION: Weston County
PROGRAM: New Development
PROJECT MGR: Jodee Pring
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level I | 65 | 2017 | I | \$1,087,500* | 2020 |

* The 2017 Wyoming State Legislature authorized a “block appropriation” for one or more of seven watershed studies for which applications had been received and for which the Commission was instructed to establish a prioritized list. This study was one of four prioritized and approved for funding by the Commission with a project specific budget of \$271,875.

CURRENT CONTRACT:

Consultant

Olsson Associates, Inc.

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296974 | 6-14-17 | \$270,800 | \$270,567.41 | \$232.59 | 6-30-19 |

PROJECT DESCRIPTION:

The Weston County Natural Resource District requested a watershed study to evaluate current watershed function, irrigation diversion/conveyance systems, and upland livestock/wildlife water management and rehabilitation opportunities. Surface water storage including enlargement and/or rehabilitation of existing water storage facilities, current condition of wetlands and riparian areas within the drainage, and geomorphic classification were also of interest. The Beaver Creek watershed, located primarily in Weston County, covers approximately 760,029 acres. Land ownership in the watershed is predominately private (~74%), federal (~15%), and state (~8%). The Beaver Creek Watershed includes the primary stream system of Beaver Creek, Stockade Beaver Creek, Parmalee Creek, Bear Creek, Salt Creek, Sweetwater Creek, Freshwater Creek, Oil Creek, West Plum Creek, Big Plum Creek, and Skull Creek. The purpose of this study was to assess current conditions, suggest resolutions for any water-related issues, and provide insight into opportunities for improvements. The study included a GIS inventory on hydrography, soils, geology, climate, vegetation, wildlife and infrastructure. The study, among other things, provided an analysis of rangeland conditions and a geomorphic classification of the stream system. Working with landowners, stakeholders, the community, state, federal and local agencies, the consultant identified needed water projects, including: livestock/wildlife water improvement projects, water supply/storage improvement projects, irrigation system improvement projects, and projects described as other management practice improvement projects which includes vegetation restoration and sediment reduction opportunities.

PROJECT FINDINGS/RECOMMENDATIONS:

During the course of the project, conservation district board members, landowners, stakeholders, and representatives from state, local and federal agencies were involved in 6 public meetings and multiple site visits. Key issues and opportunities in the watershed were identified and discussed. The site visits included an evaluation of conceptual designs to ensure that all proposed projects in the watershed study were evaluated holistically.

An evaluation of varied systems resulted in 75 potential watershed improvement projects. These projects include:

- 39 livestock/wildlife water improvement projects totaling over \$2.2 million
- 18 water supply/storage improvement projects totaling over \$1 million
- 10 irrigation system improvement projects totaling \$380,000
- 8 projects described by other management practice improvement projects totaling \$236,000

PUBLIC REPORT PRESENTATION

HEARING: N

Date

Location

City/Town

10-16-18

Weston County Natural Resource District Office

Newcastle

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report: http://library.wrds.uwyo.edu/wwdcrept/Beaver_Creek/Beaver_Creek-Watershed_Study_Level_I-Final_Report-2018.html

Executive Summary: http://library.wrds.uwyo.edu/wwdcrept/Beaver_Creek/Beaver_Creek-Watershed_Study_Level_I-Executive_Summary-2018.html

WWDO RECOMMENDATION:

The Beaver Creek Watershed Study provides an analysis of watershed conditions, and through the projects identified in the Watershed Management and Rehabilitation Plan, demonstrates how these types of projects provide public benefit. Based on this study, the Office recommends supporting the funding of Small Water Program projects and conventional projects within this watershed on a case by case basis.

WWDC PROPOSED MOTION:

I move acceptance of the Beaver Creek Watershed Study project report as being complete and further, the WWDC makes the following findings relative to this project:

That the Commission recommend proceeding to the next Level of project development upon the submittal of an appropriate funding application by the sponsor.



**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Bitter Creek / East Flaming Gorge Watershed Study
LEVEL: I
SPONSOR: Sweetwater County Conservation District
LOCATION: Sweetwater County
PROGRAM: New Development
PROJECT MGR: Peter Gill
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level I | 65 | 2017 | I | \$1,087,500* | 2020 |

*The 2017 Wyoming State Legislature authorized a “block appropriation” for one or more of seven watershed studies for which applications had been received and for which the Commission was instructed to establish a prioritized list. This study was one of four prioritized and approved for funding by the Commission with a project specific budget of \$271,875.

CURRENT CONTRACT:

Consultant

Anderson Consulting Engineers, Inc.

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296975 | 6-14-17 | \$259,500 | \$259,499.79 | \$0.21 | 6-30-19 |

PROJECT DESCRIPTION:

The Sweetwater County Conservation District requested funding from the WWDC for the completion of a watershed management plan for Bitter Creek, Killpecker Creek, and East Flaming Gorge watersheds. The District is interested in enhancing watershed processes and repairing or developing new water supplies for livestock. Understanding the condition of rangeland, wetlands, and riparian areas within the drainage will help with erosion and bacteria and Chloride water quality listings in the watershed.

PROJECT FINDINGS/RECOMMENDATIONS:

The watershed inventory compiled GIS data and reports related to the physical, biological, and built systems of the watershed. Analysis of the data resulted in a characterization of land use, stream flows, upland water availability, stream conditions, and water infrastructure. Based on this analysis and community outreach a number of projects have been developed.

There are 180 small surface water diversions and eleven irrigation reservoirs in the watershed. The supply of surface water for irrigation is significantly reduced by July and August once snowmelt ceases. With extremely arid conditions in most of the watershed there is minimal interest in improving irrigation projects. Two irrigation projects were identified in the study area. Both could take advantage of the Small Water Program.

Remote analysis of 440 stock reservoirs/ponds indicates that 179 reservoirs are “non-functional” water sources, as they are breached, sediment filled, or in need of a site visit to determine issues. This illustrates the numerous opportunities to improve range and riparian conditions. Conceptual plans and conceptual level cost estimates were prepared for twenty-six livestock/wildlife water supply projects. Projects ranged from installation of stock tanks to well spring development and pipeline construction. Steel jack fencing has been recommended for all new water sources to protect the resource from damages related to horses. Increased fencing costs should be considered on a case by case basis. Total costs for these projects is \$1,631,019.

Based on the geomorphic assessment and input from the project Sponsor, the project team concluded that channel degradation appears to be systemic throughout the watershed. Numerous factors likely have contributed to the existing conditions, including channel alterations due to railroad construction, historic mine dewatering, grazing practices, climatic changes. Several specific stream channel stabilization projects were identified, including: Pierotto Ditch Stabilization Monitoring, Big Pond Stabilization, the Union Pacific RR headcut, and the Killpecker Creek Stabilization project. The cost of these efforts were not totaled.

Several environmental enhancement opportunities were identified. Two of the projects involve construction barriers to fish passage to facilitate fisheries management objectives. Total cost for these projects is \$429,775.

A large number of unimproved roads exist in the watershed; particularly in areas of energy development. Coordination among participating parties should be encouraged to implement recommended strategies which could result in improved habitat, grazing conditions, and reduced erosion and sediment contribution to surface waters.

Oil and gas pads and pipelines traverse the area. Field observations indicated that reclamation of the disturbed areas is frequently incomplete, unsuccessful or apparently non-existent. In addition, vehicular activity appears to have destroyed some reclamation attempts. Investigation of site-specific reclamation responsibility and obligations could lead to completed improvements.

PUBLIC REPORT PRESENTATION HEARING: N

| <u>Date</u> | <u>Location</u> | <u>City/Town</u> |
|-------------|---|------------------|
| 10-2-18 | Sweetwater County Conservation District | Rock Springs, WY |

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report:

http://library.wrds.uwyo.edu/wwdcrept/Bitter_Creek/Bitter_Creek_East_Flaming_Gorge-Watershed_Study_Level_I-Final_Report-2018.html

Executive Summary:

http://library.wrds.uwyo.edu/wwdcrept/Bitter_Creek/Bitter_Creek_East_Flaming_Gorge-Watershed_Study_Level_I-Executive_Summary-2018.html

WWDO RECOMMENDATION:

Projects described in the Watershed Study are intended to incrementally rehabilitate watershed function, improve riparian areas, stream stability, rangeland management, fish passage, and water quality. The Watershed Study provides analysis of watershed conditions, and through the projects identified in the rehabilitation plan, demonstrate how these types of projects provide public benefit.

Based on this study, the Office recommends supporting the funding of Small Water Program projects within this watershed on a case by case basis.

WWDC PROPOSED MOTION:

I move acceptance of the Bitter Creek / East Flaming Gorge Watershed Study Level I project report as being complete and further, the WWDC makes the following findings relative to this project:

That the Commission recommends proceeding to the next Level of project development upon the submittal of an appropriate funding application by the sponsor.



**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Fontenelle Dam and Outworks Infrastructure Completion
LEVEL: II
SPONSOR: State of Wyoming
LOCATION: Lincoln County, WY
PROGRAM: New Development
PROJECT MGR: Tony Rutherford
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level II | 38 | 2016 | I | \$200,000 | 2019 |

CURRENT CONTRACT:

Consultant

Engineering Analytics, Inc.

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296683 | 6-17-16 | \$197,339.00 | \$177,255.95 | \$20,083.05 | 12-31-18 |

PROJECT DESCRIPTION:

Fontenelle Dam, located on the Green River in Southwest Wyoming, is a 139 foot tall dam with a total capacity of 345,360 acre-feet. Originally constructed as part of the Bureau of Reclamation's Seedskaadee Project, the facility regulates Green River flows and stores water that is currently used for power generation, fish and wildlife, and recreation. Municipal, industrial, and irrigation are also permitted uses, but have not been exercised.

From Leading the Charge, Wyoming Water Strategy, Governor Mathew H. Mead, 2015, Water Development Initiatives:

Capacity to store and beneficially use water is a protection to the state, municipalities, business, and individuals. It makes use in the future possible. An accessible pool of stored water provides assurance that commitments can be met to deliver water to other states as agreed to by compact.

Fontenelle Dam has 346,000 acre-feet of storage. Two factors limit the utility of the structure to realize its capacity to maximize beneficial use: lack of armoring to protect the lower interior dam face and lack of requisite infrastructure to utilize stored water. Completion of the dam and updating of infrastructure could potentially allow from 100,000 to 200,000 acre-feet of usable storage to be accessed on the Upper Green, without noticeable change to the environmental footprint of the development. This initiative will state the planning, permitting, and collaborative agreements necessary to realize the full potential of this asset.

The Level II project specifically investigated making the 80,796 acre-feet of currently inactive capacity usable (see attached Teacup diagram). The State of Wyoming has also considered options for contracting the remainder of the active capacity (139,000 acre-feet) that is currently available for contract; however, that was not further analyzed by this project. In order to address the practicality of making the inactive pool available for use, the project investigated the feasibility associated with adding armoring to the dam face from the current elevation (approximately 6,460') to the top of the currently "inactive" pool (approximately 6,408'). Furthermore, the project included investigation of potential environmental impacts and benefits, both during construction and as a result of a potential change in management of stored water and operations, hydrology, alternatives analysis, NEPA, scheduling, economic analysis, and interagency coordination.

While the Water Strategy did not define a particular future use for the additional water, there may be a variety of potential uses that could benefit the State of Wyoming and the Upper Colorado River Basin. One option may be to utilize it to mitigate Colorado River Compact Curtailment and, perhaps, offset an involuntary curtailment of consumptive use in Wyoming. Another potential option may be use as "system water" in the Colorado River to help boost levels in Lake Powell potentially avoiding a Colorado River Curtailment situation.

PROJECT FINDINGS/RECOMMENDATIONS:

The Level II Study was conducted with the intent to evaluate both the technical and economic feasibility of expanding the active storage pool in Fontenelle Reservoir by adding armoring to the unprotected portion of the upstream face. Analyzed alternatives for armoring material included traditional riprap, soil cement, Submar Mats, and Contech Wave Attack Blocks. In addition, placement of the armoring materials were compared with a drained reservoir ("in the dry") and in a partially full reservoir ("in the wet"). Estimated implementation costs developed for the analyzed alternatives ranged from \$8.2 M to \$37.6 M. Ultimately, the recommended approach to protecting the dam face is to place traditional riprap material "in the wet" with an estimated implementation cost of \$15.3 M (~\$16.5 M estimated 2020 cost). The placement of material from a barge would take an estimated nine months with the caveat that this operation is not feasible when the surface of the reservoir is frozen.

Three uses of the additional water were analyzed during the project including a new, direct water supply (to meet future water demands), a drought mitigation supply (direct mitigation to meet curtailment obligations when presented with such), and a drought avoidance supply (use as "system water" to elevate storage pools downstream, potentially, avoiding a curtailment situation). The most likely, and only use in current discussion with Reclamation, is use as a drought mitigation supply. The computed net present value for the additional volume and most likely use is ~\$9.0 M which equates to a 0.59 b/c ratio when compared with the above noted cost estimate. It is important to note that economic values were established from assumptions of drought duration and magnitude base upon historical data. A 9-year drought was assumed, based on the 2000-2008 drought period, with the first 6 years reducing system storage, and the subsequent 3 years being administered under a curtailment. Of the 3 year curtailment, only in the third year would a portion of the 80,796 acre-foot storage pool under consideration (29,200 acre-feet) be utilized. Therefore, the economic analysis did not consider a longer duration drought. It is also important to note that the b/c ratios may not include all potential costs which require additional negotiation with Reclamation.

It is likely that, for the project to move forward, a minimum of an Environmental Assessment (EA) would need to be conducted. Further, potential changes to the long-term operations of the reservoir, and the associated purpose and need for the project, could lead to a more intensive NEPA process.

In addition, toward the conclusion of the Level II project, Reclamation suggested the potential for an "extreme event alternative" with the thought being that, should access to the bottom portion of Fontenelle Reservoir only be necessary during an extreme drought event (Colorado River Curtailment), it may be

possible to draw the reservoir down with the dam face unprotected as a temporary solution. The alternative will require a risk analysis by Reclamation's Technical Service Center to determine the potential for erosion of the embankment and the acceptable frequency and duration of exposure before armoring would be necessary. Standby contracts for the remainder of the active capacity (139,000 acre-feet) and the 80,796 acre-feet will need to be developed so as to define authorities, provisions of use, allowed beneficial uses and priorities, payment conditions, etc. NEPA would be carried out to include operational changes leading into an extreme drought event, use of the inactive pool without armoring, contracting of the water, and the potential riprapping of the dam face in coordination with the drawdown. The actions stated would occur as soon as possible, so that if curtailment of the Colorado River occurred, the alternative could be implemented without delay. Based on the Level II Study, it is felt there will be sufficient forewarning of a curtailment, on the order of six years. Should it be necessary to armor the unprotected portion of the dam face upon drawdown, the best approach to the timing of plans and specifications will need to be determined, as well as the implementation of Reclamation's procurement and contracting process for a construction contractor.

The public has been presented with the results of the study, and comments received have been incorporated into the final report where pertinent.

PUBLIC REPORT PRESENTATION HEARING: N

| <u>Date</u> | <u>Location</u> | <u>City/Town</u> |
|-------------|---|------------------|
| 12-18-18 | Western Wyoming Community College Green River Campus, 1 College Way Green River, WY 82935 | Green River |

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report: http://library.wrds.uwyo.edu/wwdcrept/Fontenelle_Dam/Fontenelle_Dam-Outworks_Infrastructure_Completion_Level_II_Study-Final_Report-2018.html

Executive Summary: http://library.wrds.uwyo.edu/wwdcrept/Fontenelle_Dam/Fontenelle_Dam-Outworks_Infrastructure_Completion_Level_II_Study-Executive_Summary-2018.html

WWDO RECOMMENDATION:

The Fontenelle Dam and Outworks Infrastructure Completion, Level II study provided an analysis of the impacts, risks, and benefits of armoring the entirety of the upstream face of Fontenelle Dam, and found the potential for limited benefit associated with the project under a nine year long drought scenario that lead to Colorado River Curtailment for three consecutive years. Therefore, the Office recommends the WWDC should continue to pursue this effort by coordinating with the State Engineer's Office, Attorney General's Office, Governor's Office, the State of Wyoming's congressional delegation, and Reclamation to determine the most efficient path forward in project implementation including further analysis and discussion regarding the potential for the "extreme event alternative" noted above.

WWDC PROPOSED MOTION:

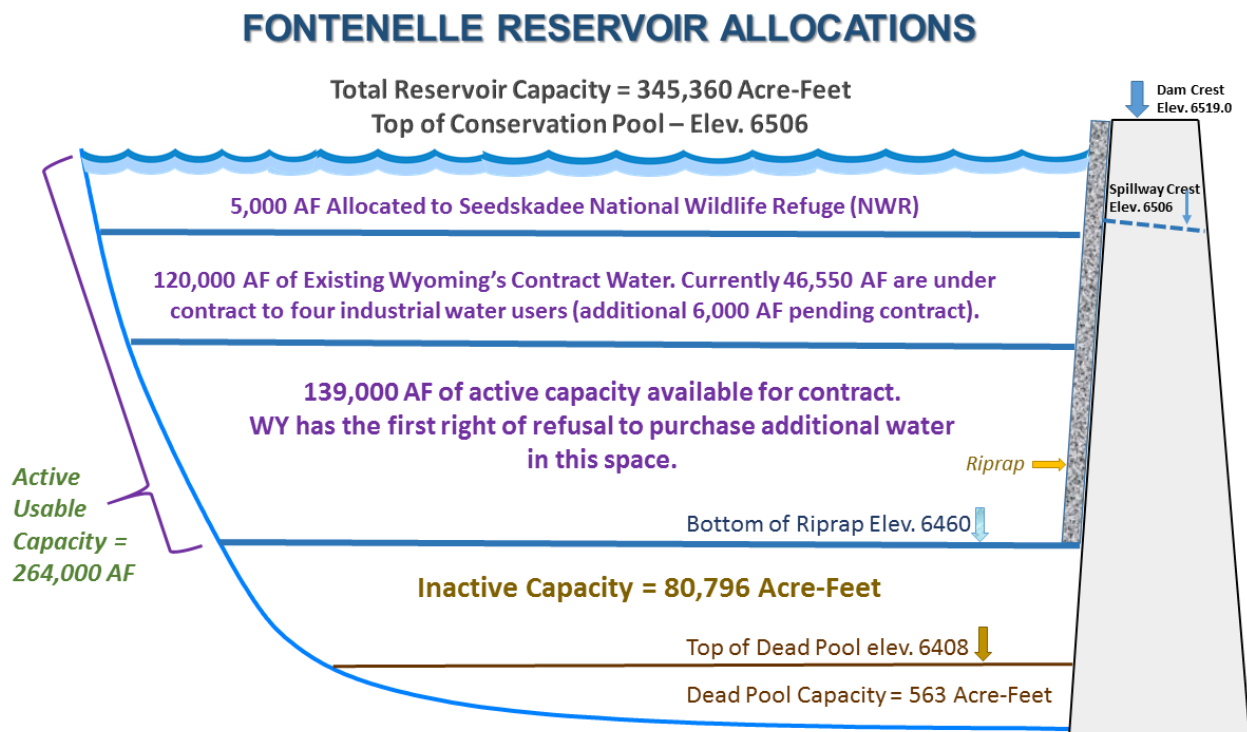
I move acceptance of the Fontenelle Dam and Outworks Infrastructure Completion, Level II Study report as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend:

- The Office continue to coordinate with the State Engineer's Office, Attorney General's Office, Governor's Office, and Wyoming's congressional delegation to pursue the most

efficient means of securing additional water assets in the Green River Basin with Reclamation to provide opportunity for Wyoming's use in mitigating involuntary Curtailment in Wyoming.

- The Office continue to coordinate Reclamation to perform the necessary Risk Analysis on the potential for erosion of the embankment and the acceptable frequency and duration of exposure before armoring would be necessary.
- The Office continue to coordinate with Reclamation to pursue and negotiate Standby Contracts for the remainder of the active capacity (139,000 acre-feet) and the 80,796 acre-feet be developed so as to define authorities, provisions of use, allowed beneficial uses and priorities, payment conditions, etc.
- The Office continue to coordinate with Reclamation on a path forward regarding the required NEPA to include operational changes leading into an extreme drought event, use of the inactive pool without armoring, contracting of the water, and the potential riprapping of the dam face in coordination with the drawdown.





**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Glendo Reservoir Full Utilization
LEVEL: II
SPONSOR: State of Wyoming
LOCATION: Glendo, Wyoming
PROGRAM: New Development
PROJECT MGR: Andrew Linch, P.E.
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level II | 38 | 2016 | I | \$300,000 | 2019 |

CURRENT CONTRACT:

Consultant

RTI International

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296633 | 6-15-16 | \$296,984 | \$281,949.44 | \$15,034.56 | 12-31-18 |

PROJECT DESCRIPTION:

Glendo Dam and Reservoir is located on the North Platte River in eastern Wyoming and is a 190 foot tall dam with a total of 1,092,290 acre-feet of storage capacity owned by the U.S. Department of the Interior Bureau of Reclamation (Reclamation). The original project was authorized as part of the Flood Control Act of December 22, 1945, Public Law 534. However, due to controversy over project details, construction did not begin until 1954 and was completed in 1958. Approximately half of the available storage is reserved for flood control and surcharge; only being used if there is a minor or major flood event, respectively. Currently, this flood pool is released downstream “as rapidly as possible” once the flood risk subsides.

From Leading the Charge, Wyoming Water Strategy, Governor Mathew H. Mead, 2015, Water Development Initiatives:

Glendo Reservoir has a total capacity of 800,000 acre-feet. Capacity is divided between a 525,000 acre-foot “active operations” pool managed by the Bureau of Reclamation, and a 275,000 acre-foot “flood control” pool managed by the Army Corps of Engineers (Corps). The flood control capacity is only used to store high inflow events that the Corps believes might cause a flood in Wyoming or Nebraska. The Corps allows the flood control space to be filled only until the flood risk subsides, then evacuates the space as quickly as possible. In 57 years of operation, the spillway on Glendo Dam has never been used.

This initiative will seek federal authorization to re-purpose a portion of the flood control space and use that water for operational purposes, thereby extending and more efficiently using water during good runoff years. The re-purposed space would be the first water to be used and the full 275,000 acre-feet of flood control space would still be available by October 1st of every year.

In 2016, an appropriation for \$300,000 was approved by the Legislature to complete a Level II Feasibility study in response to the Governor's water strategy initiative. It was evident before the study started that coordination with stakeholder agencies would be paramount to the successful implementation of the project. As such, a multidisciplinary interagency group was formed, which included Reclamation, United States Army Corps of Engineers (USACE), Nebraska Department of Natural Resources (NDNR), Wyoming State Engineer's Office (SEO), Wyoming State Parks, Historic Sites and Trails (SPHS), U.S. Fish and Wildlife Service (USFWS), and the Wyoming Game and Fish Department (WGFD). The study coordinated with the interagency group on the details of the water strategy and decisions made throughout the process, and has developed a proposed level of flood retention to be retimed for more efficient use.

PROJECT FINDINGS/RECOMMENDATIONS:

Field work and meetings with SPHS were conducted to determine incremental impacts to Glendo State Park's operation and infrastructure. Three public meetings were held during the course of the project and generally positive feedback was received. A reservoir modeling strategy, which developed 12 levels of operating scenarios for the project, was used to determine limiting factors and acceptable levels of risk for the managing agencies. From the work completed, optimization of benefits versus impacts, and through coordination with the interagency group, a level of 6 feet into the flood pool (approx. 80k ac-ft) was selected for re-timing of releases. Further environmental and economic analyses were completed on the proposed alternative to screen for fatal flaws and determine the level of benefits expected from the project. The findings were summarized in a draft report and distributed to the interagency group, along with downstream water users and irrigation districts, to solicit comments. In general, comments were positive and in support of the project. However, the downstream irrigation districts in Nebraska were wary of the project and anticipated impacts to their operations. As such, they have requested further study to analyze downstream effects more in depth.

After significant coordination with the interagency group and as the study was nearing completion, the WWDO received a letter from the USACE stating that the USACE lacked the necessary authority to change its operations at Glendo Reservoir for any purpose other than flood control. They characterized the project's proposal as a permanent change of operations to their exclusive "flood control zone", assumed that water would be used primarily for irrigation, and directed the WWDC to Reclamation to pursue a reallocation of storage process. In short, implementing the proposal would require Congressional authorization. This marked a change in the USACE's initial position which indicated that the goals of the project could be met with a Water Control Plan Modification Study conducted by them and funded by the WWDC. The WWDO responded in writing to the USACE, indicating the mischaracterization of the request and clarifying WWDC's intent was not reallocation of storage; rather, a proposal for re-timing the release of a portion of the water temporarily held in the Glendo flood pool; the goal being to realize increased benefits to the North Platte River system during an operation season. Additionally, the letter noted, all flood storage released from Glendo Reservoir is considered natural flow by the State Engineer's Office and is available for any water uses below the reservoir. The letter also summarized the WWDO's 2015 and 2016 requests for the re-timing of releases, when Glendo Reservoir had entered its flood pool due to high runoff and how those requests were met with direction from the USACE that the next step would be a Water Control Plan Modification Study. The WWDO letter concluded by asking for the USACE's reconsideration of their position. No response has been received since the WWDO letter was sent to the USACE in November of 2018.

The public has been presented with the results of the study and all the comments received have been compiled into a final report.

PUBLIC REPORT PRESENTATION HEARING: N

| <u>Date</u> | <u>Location</u> | <u>City/Town</u> |
|-------------|---|------------------|
| 11-26-18 | Glendo Town Hall, 204 S Yellowstone Hwy | Glendo |

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report: http://library.wrds.uwyo.edu/wwdcrept/Glendo/Glendo_Reservoir-Full_Utilization_Level_II_Study-Final_Report-2018.html

Executive Summary: http://library.wrds.uwyo.edu/wwdcrept/Glendo/Glendo_Reservoir-Full_Utilization_Level_II_Study-Executive_Summary-2018.html

WWDO RECOMMENDATION:

The Glendo Reservoir Full Utilization, Level II study provided an analysis of the impacts, risks, and benefits of re-timing the release of a portion of the flood waters, occasionally accumulated in Glendo Reservoir, and found benefit associated with the project. Therefore, the Office recommends the WWDC should continue to pursue this effort by coordinating with the Governor's Office, the State of Wyoming's congressional delegation, Reclamation, and the USACE to determine the most efficient path forward in project implementation.

WWDC PROPOSED MOTION:

I move acceptance of the Glendo Reservoir Full Utilization, Level II Study report as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend:
 - The Office coordinate with the Governor's Office and Wyoming's congressional delegation to pursue future project implementation actions with Reclamation and the USACE.



**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Goose Creek Watershed Study
LEVEL: I
SPONSOR: Sheridan County Conservation District
LOCATION: Sheridan and Johnson Counties
PROGRAM: New Development
PROJECT MGR: Jodee Pring
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level I | 38 | 2016 | I | \$375,000 | 2019 |

CURRENT CONTRACT:

Consultant
Entech, Inc.

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296631 | 6-14-16 | \$360,000 | \$349,462.73 | \$10,537.27 | 12-31-18 |

PROJECT DESCRIPTION:

The Sheridan County Conservation District requested a watershed study to evaluate watershed function and provide plans for watershed management and rehabilitation to address key issues identified by landowners and agencies. The Goose Creek watershed, located primarily in Sheridan County, covers approximately 265,766 acres. Land ownership in the watershed is private (~54%), federal (~44%) and state (~3.5%). The Goose Creek Watershed includes the subwatersheds of Goose Creek, Little Goose Creek and Big Goose Creek. The purpose of this study was to assess current conditions, suggest resolutions for any water-related issues, and provide insight into opportunities for improvements. The study included a GIS inventory on hydrography, soils, geology, climate, vegetation, wildlife and infrastructure. The study, among other things, provided an analysis of rangeland conditions and a geomorphic classification of the stream system. Working with landowners, stakeholders, the community, state, federal and local agencies, Entech identified needed water projects, including: irrigation system infrastructure rehabilitation and improvement projects, surface water storage opportunities, upland water development opportunities and fisheries mitigation.

PROJECT FINDINGS/RECOMMENDATIONS:

During the course of the project, conservation district board members, landowners, stakeholders, and representatives from state, local and federal agencies were involved in 4 public meetings and multiple site visits. Key issues and opportunities in the watershed were identified and discussed. The site visits included an evaluation of conceptual designs to ensure that all proposed projects in the watershed study were evaluated holistically.

An evaluation of varied systems resulted in 89 potential watershed improvement projects. These projects include:

- 70 irrigation system infrastructure rehabilitation and improvement projects totaling \$5.2 million
- 5 surface water storage opportunity projects totaling \$181 million
- 9 upland water development projects totaling \$275,000
- 5 fisheries mitigation projects totaling \$1 million

PUBLIC REPORT PRESENTATION HEARING: N

| <u>Date</u> | <u>Location</u> | <u>City/Town</u> |
|-------------|--------------------------------|------------------|
| 12-18-17 | Sheridan County Fulmer Library | Sheridan |

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report: http://library.wrds.uwyo.edu/wwdcrept/Goose_Creek/Goose_Creek_Watershed-Level_I_Study-Final_Report-2018.html

Executive Summary: http://library.wrds.uwyo.edu/wwdcrept/Goose_Creek/Goose_Creek_Watershed-Level_I_Study-Executive_Summary-2018.html

WWDO RECOMMENDATION:

The Goose Creek Watershed Study provides an analysis of watershed conditions, and through the projects identified in the Management and Rehabilitation Plan, demonstrates how these types of projects provide public benefit. Based on this study, the Office recommends supporting the funding of Small Water Program projects and conventional projects within this watershed on a case by case basis.

WWDC PROPOSED MOTION:

I move acceptance of the Goose Creek Watershed Study project report as being complete and further, the WWDC makes the following findings relative to this project:

That the Commission recommend proceeding to the next Level of project development upon the submittal of an appropriate funding application by the sponsor.



**FINAL PROJECT CLOSEOUT MEMO
FOR LEVEL I AND II PLANNING PROJECTS
WYOMING WATER DEVELOPMENT OFFICE
PLANNING DIVISION**



The Planning Project listed below is complete and scheduled for closeout. This memo serves to summarize the findings of the final report and to document the final contract amount.

PROJECT: Shell Water Master Plan
LEVEL: I
SPONSOR: Shell Town Water Consolidation Group
LOCATION: Shell, WY
PROGRAM: New Development
PROJECT MGR: Kevin J. Boyce, P.G.
WWDC MTG DATE: March 15, 2019

AUTHORIZING LEGISLATION:

| <u>Purpose</u> | <u>Chapter</u> | <u>Session</u> | <u>Account</u> | <u>Appropriation</u> | <u>Due Date</u> |
|----------------|----------------|----------------|----------------|----------------------|-----------------|
| Level I | 38 | 2016 | I | \$85,000 | 2019 |

CURRENT CONTRACT:

Consultant

Black Willow Oars, LLC

| <u>Contract Number</u> | <u>Executed</u> | <u>Original Contract Amount</u> | <u>Final Contract Amount</u> | <u>Contract Savings Amount</u> | <u>Expiration Date</u> |
|------------------------|-----------------|---|--------------------------------------|--|----------------------------|
| 05SC0296759 | 10-3-16 | \$74,700 | \$71,719.25 | \$ 2,980.75 | 12-31-18 |

PROJECT DESCRIPTION:

The Town of Shell, Wyoming (Shell) is an unincorporated rural community located along US Highway 14 at the base of the Bighorn Mountains 15 miles east of Greybull, Wyoming. Two separate private water companies have supplied Shell residents for over 30 years. The systems have separate master tap/meters off the Town of Greybull's municipal pipeline. Both systems have recurrent issues of leaks and system failure. The desire of both entities is to update and combine the supply systems into a single current engineering standard. A Level I study was formulated to determine the feasibility of joining and improving the systems such that a single system serves the town and is administered as such. Although the Town of Shell has a reliable and safe supply, by purchasing water from the Town of Greybull, the residents have realized a need to consolidate, modernize, and adopt efficient and responsible means of operating and maintaining distribution in Town. The Level I master plan study evaluates the current conditions of water systems and provides the tools and guidance needed to assist in the planning, rehabilitating, upgrading, and managing of their systems while also investigating the potential of combining the systems into a unified integrated system for administrative, safety, and maintenance purposes. The desire is to combine operations to provide efficiencies and reduced costs overall.

PROJECT FINDINGS/RECOMMENDATIONS:

Operational concerns called into question the sustainability of two privately operated water distribution systems serving most of the residents in Shell. Although the water supply infrastructure that comprise these systems was constructed in the early 1970s (East-side) and early 1980's (West-side) the distribution systems are constructed of PVC piping that functions reasonably well and continues to be a viable asset to the

community. The condition of the existing water delivery infrastructure does not appear to be the most important challenge facing Shell. Rather, the most imminent concerns identified during the Study regard sustainable administration, operation and maintenance of the two utilities. Importantly, leaders in the community during the course of the study began to address these concerns by seeking to establish a water improvement district pursuant to Wyoming Statute §18-12-101 to 141. **On November 20, 2018 the Big Horn County Board of Commissioners passed a resolution forming the Shell Town Water Improvement District.**

With the establishment of the District, the district's governing body should begin to implement the following actions:

1. Engage technical and professional services to provide necessary support for administration, operation and maintenance of the existing water supply infrastructure. This recommendation implies that ownership of the existing infrastructure is transferred to a new district. Professional services are integral to sustaining the community's infrastructure and providing reliable service into the future. The governing body for the district should endeavor to contract for legal, accounting and engineering services (including a licensed operator) on an annual or multi-year basis. Regular and timely access to these support services are critical to the successful operation of any utility, public or private.
2. Install and read meters at every service connection. A budgetary cost estimate for purchase and installation of 15 new meters for the West-side system is \$4,500. The new service meters are the same model being installed at services on the East-side system. Once installed, monthly service readings can be efficiently obtained by the district operator. Meter readings should be used to monitor and assess potential leakage in the distribution systems as well as for billing purposes. If losses exceed 5 percent of measured deliveries at a master meter, a leak detection investigation should be initiated.
3. Seek a water service agreement with the Town of Greybull and establish a Public Water Supply (PWS) with the EPA consistent with the service area for the new improvement district.
4. An annual operations and maintenance (O&M) report should be prepared summarizing the meter records, estimated system leakage, and any repairs and improvements to the system. The annual O&M report should be reviewed by the district's engineer, for recommendations to sustain the utility infrastructure and shared with the Town of Greybull to coordinate findings and recommendations for action from the engineer that may affect services.
5. The district's governing body should seek to confirm legal easements and establish physical access to the district's infrastructure, as needed for regular operation and maintenance activities when needed.
6. The district's governing body should seek to initially establish and maintain an O&M enterprise fund of not less than \$20,000. The value of the O&M fund should be assessed annually based on the O&M report. Water rates should be reviewed every three years, or more frequently as needed to maintain adequate funding for ongoing operation and maintenance.
7. The Study Report should be reviewed annually to address possible improvements to the system identified through the activities in the first five recommendations. Updates to the plan should focus on the goal of maintaining a sustainable water utility. The WWDC revisits Level I master plans on a 10-year cycle. The costs developed during this Study may be updated and used to prepare budgetary estimates for infrastructure improvements that are considered in the future.

PUBLIC REPORT PRESENTATION

HEARING: N

Date

Location

City/Town

6-6-18

Shell Community Hall

Shell

FINAL REPORT/EXECUTIVE SUMMARIES ONLINE:

Final Report: http://library.wrds.uwyo.edu/wwdcrept/Shell/Shell-Water_Master_Plan_Level_I_Study-Final_Report-2018.html

Executive Summary: http://library.wrds.uwyo.edu/wwdcrept/Shell/Shell-Water_Master_Plan_Level_I_Study-Executive_Summary-2018.html

WWDO RECOMMENDATION:

- Accept Final Report submittals
- Encourage the Sponsor to responsibly operate and maintain the existing water supply system to ensure future reliability in providing safe drinking water

WWDC PROPOSED MOTION:

I move acceptance of the Shell Water Master Plan Level I Study project report as being complete and further, the WWDC makes the following findings relative to this project:

1. That the Commission recommend:

- Proceeding to the next Level of project development upon the submittal of an appropriate funding application by the sponsor.

PLANNING

LEVEL I - ACCOUNT I NEW DEVELOPMENT

| Project Name | Consultant | Contract Amount | Description |
|---|--------------------------------------|-----------------|----------------|
| Evanston Water Master Plan | William H. Smith & Associates Inc. | \$ 125,700.00 | Master Plan |
| Salt Creek-Edgerton-Midwest Master Plan | Morrison-Maierle Systems Corporation | \$ 159,900.00 | Master Plan |
| Torrington Water Master Plan | AVI, PC | \$ 173,830.00 | Master Plan |
| UW Water Research Program | N/A | \$ 350,511.00 | Water Research |

LEVEL II - ACCOUNT I NEW DEVELOPMENT

| Project Name | Consultant | Contract Amount | Description |
|---|--------------|-----------------|-------------------|
| Lake DeSmet/Healy Reservoir Utilization | Entech, Inc. | \$ 268,000.00 | Feasibility Study |

LEVEL I - ACCOUNT II REHABILITATION

| Project Name | Consultant | Contract Amount | Description |
|--|---|-----------------|-------------|
| Bluff / Upper Bluff Irrigation Districts Master Plan | Western Heritage Consulting & Engineering | \$ 122,500.00 | Master Plan |

LEVEL II - ACCOUNT II REHABILITATION

| Project Name | Consultant | Contract Amount | Description |
|--|---------------------------|-----------------|-------------------|
| Boulder Irrigation District Rehabilitation | Sunrise Engineering, Inc. | \$ 171,000.00 | Feasibility Study |
| LaPrele Irrigation District Rehabilitation | Re/Spec Inc. | \$ 290,000.00 | Feasibility Study |

**EVANSTON WATER MASTER PLAN, LEVEL I STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and William H. Smith and Associates Inc. [Consultant], P.O. Box 820, Green River, Wyoming 82935.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed one hundred twenty-five thousand, seven hundred dollars (\$125,700).

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| Task 1. Scoping and Project Meetings | \$ 16,100 |
| Task 2. Information Review | \$ 4,100 |
| Task 3. Inventory, Evaluation, and GIS | \$ 8,900 |
| Task 4. Hydraulic Model | \$ 26,900 |
| Task 5. Water Sources | \$ 3,500 |
| Task 6. Growth and Demand Projections | \$ 7,900 |
| Task 7. Recommendations and Cost Estimates | \$ 13,800 |
| Task 8. Water System Financing | \$ 5,500 |
| Task 9. Discretionary Task | \$ 10,000 |
| Task 10. Draft Report and Presentations | \$ 19,200 |
| Task 11. Final Report and Deliverables | <u>\$ 9,800</u> |
| TOTAL PROJECT COST | \$ 125,700 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the Commission on any amounts withheld under this provision. This provision is not intended to limit or in any way prejudice any other right of the Commission.

E. Withholding of Payment. If a work element has not been received by the Commission by the dates established in Attachment A, the Commission may withhold all payments beginning with the month following that date until such deficiency has been corrected.

F. Final Payment. The final payment shall be made upon acceptance of the final report and receipt of the final billing.

5. Responsibilities of Consultant.

A. Scope of Services. The Consultant shall perform the specific services required under this Contract in a satisfactory and proper manner as outlined in Attachment A.

B. Personnel. All of the services required hereunder will be performed by the Consultant or under its supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized, licensed, or permitted under state law to perform such services, if state law requires such authorization, license, or permit.

C. Subcontracts.

(i) Approval Required for Subcontracts. Any subcontractors and outside associates or consultants required by the Consultant in connection with the services, work performed or rendered under this Contract will be limited to such individuals or firms as were specifically identified in the proposal and agreed to during negotiations or are specifically authorized by the Commission during the performance of this Contract. The Consultant shall submit a list of the proposed subcontractors, associates or consultants; the scope and extent of each subcontract; and the dollar amount of each subcontract prior to Contract execution to the Commission for approval. During the performance of the Contract, substitutions in or additions to such subcontracts, associates, or consultants will be subject to the prior approval of the Commission. The Commission approval of subcontractors will not relieve the Consultant from any responsibilities outlined in this Contract. The Consultant shall be responsible for the actions of the subcontractors, associates, and subconsultants.

(ii) Billings for Subcontractors. Billings for subcontractor, associates or sub-consultants services will not include any mark up. The subcontract costs will be billed to the Commission at the actual costs as billed to the Consultant. Subcontract costs will be documented by attaching subcontractor billings to the Consultant's billing submittals. Subcontractors will utilize billing forms provided by the Office, or alternate forms if approved in advance by the Office project manager.

(iii) Copies of Subcontracts. The Consultant shall provide to the Commission copies of each subcontractor contract immediately following execution with the subcontractor. All subcontracts between the Consultant and a subcontractor shall refer to and conform to the terms of this Contract. However, nothing in this Contract shall

be construed as making the Commission a party of any subcontract entered between the Consultant and a subcontractor.

D. Requests from the Commission. The Consultant shall be responsible and responsive to the Commission and the Office in their requests and requirements related to the scope of this Contract.

E. Presentation of Data. The Consultant shall select and analyze all data in a systematic and meaningful manner so as to contribute directly in meeting the objectives of the project, and shall present this information clearly and concisely, in a professional and workmanlike manner.

F. Draft of Final Report. The Consultant shall provide to the Commission in Cheyenne, Wyoming, a draft of the final report covering all work elements of the project including maps, charts, conclusions and recommendations prior to the publication of any final report and no later than the date specified in Attachment A. The Commission will respond promptly with written comments to the Consultant. The Consultant will address the comments of the Commission in the final report.

G. Project Completion Report. A final project completion report in the form described in Attachment A shall be submitted to the Commission by the date specified in Attachment A.

H. Reports, Maps, Plans, Models and Documents. One (1) copy of maps, plans, worksheets, logs, field notes or other documents prepared under this Contract, and one (1) copy of each unpublished report prepared under this Contract shall be submitted to the Commission. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. All user manuals shall be submitted by the Consultant to Commission providing complete documentation of computer programs developed under this Contract. The user manual shall also specify the source code language and the type of computer equipment necessary to operate the program(s). Any programs or computer software generated as a part of this Contract shall be the sole property of the Commission.

6. Responsibilities of the Commission.

A. Designated Representative. The Director of the Office shall act as the Commission's representative with respect to the Consultant's service to be performed under this Contract and shall have complete authority to transmit instructions, receive information, and interpret the Commission's policies and decisions with respect to services covered by this Contract.

B. Data to be Furnished to the Consultant. All information, data, reports, and maps as are available to the Commission and necessary for the carrying out of the Scope of Services set forth herein shall be furnished to the Consultant without charge and the Office shall cooperate with the Consultant in every way possible in the carrying out of the project.

C. Review Reports. The Office shall examine all studies, reports, sketches, opinions of the construction costs, and other documents presented by the Consultant to the Commission and shall promptly render in writing the Commission's decisions pertaining thereto within the time periods specified in Attachment A.

D. Provide Criteria. The Office shall provide all criteria and full information regarding its requirements for the project.

7. Special Provisions.

A. No Finder's Fees. No finder's fee, employment agency fee, or other such fee related to the procurement of this Contract, shall be paid by either party.

B. Publicity. Any publicity given to the projects, programs or services provided herein, including, but not limited to, notices, information, pamphlets, press releases, research, reports, signs, and similar public notices in whatever form, prepared by or for the Consultant, shall identify the Commission as the sponsoring agency and shall not be released without prior written approval from the Commission.

C. Monitoring Activities. The Commission shall have the right to monitor all activities related to this Contract that are performed by Consultant or its subcontractors. This shall include, but not be limited to, the right to make site inspections at any time and with reasonable notice; to bring experts and consultants on site to examine or evaluate completed work or work in progress; to examine the books, ledgers, documents, papers, and records pertinent to this Contract; and to observe all Consultant personnel in every phase of performance of Contract related work.

D. Kickbacks. The Consultant certifies and warrants that no gratuities, kickbacks, or contingency fees were paid in connection with this Contract, nor were any fees, commissions, gifts, or other considerations made contingent upon the award of this Contract. If the Consultant breaches or violates this warranty, the Commission may, at its discretion, terminate this Contract without liability to the Commission, or deduct from the Contract price or consideration, or otherwise recover, the full amount of any commission, percentage, brokerage, or contingency fee.

8. General Provisions.

A. Amendments. Any changes, modifications, revisions, or amendments to this Contract which are mutually agreed upon by the parties to this

Contract shall be incorporated by written instrument, executed by all parties to this Contract.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation, and enforcement of this Contract shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms “hereof,” “hereunder,” “herein,” and words of similar import, are intended to refer to this Contract as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Contract and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Assignment Prohibited and Contract Shall Not be Used as Collateral. Neither party shall assign or otherwise transfer any of the rights or delegate any of the duties set out in this Contract without the prior written consent of the other party. The Consultant shall not use this Contract, or any portion thereof, for collateral for any financial obligation, without the prior written permission of the Commission.

D. Audit and Access to Records. The Commission and its representatives shall have access to any books, documents, papers, electronic data, and records of the Consultant which are pertinent to this Contract. The Consultant shall immediately, upon receiving written instruction from the Commission, provide to any independent auditor or accountant all books, documents, papers, electronic data, and records of the Consultant which are pertinent to this Contract. The Consultant shall cooperate fully with any such independent auditor or accountant during the entire course of any audit authorized by the Commission.

E. Availability of Funds. Each payment obligation of the Commission is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Contract, the Contract may be terminated by the Commission at the end of the period for which the funds are available. The Commission shall notify the Consultant at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the Commission in the event this provision is exercised, and the Commission shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

F. Award of Related Contracts.

(i) The Commission may undertake or award supplemental or successor contracts for work related to this Contract or may award contracts to other contractors for work related to this Contract. The Consultant shall cooperate fully with other contractors and the Commission in all such cases.

(ii) The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional phases beyond the scope of services included in this Contract.

G. Certificate of Good Standing. The Consultant shall provide to the Commission a Certificate of Good Standing from the Wyoming Secretary of State, or other proof that Consultant is authorized to conduct business in the State of Wyoming, if required, before performing work under this Contract. Consultant shall ensure that all annual filings and corporate taxes due and owing to the Secretary of State's office are up-to-date before signing this Contract.

H. Compliance with Laws. The Consultant shall keep informed of and comply with all applicable federal, state, and local laws and regulations in the performance of this Contract.

I. Confidentiality of Information. All documents, data compilations, reports, computer programs, photographs, data, and other work provided to or produced by the Consultant in the performance of this Contract shall be kept confidential by the Consultant unless written permission is granted by the Commission for its release. If and when Consultant receives a request for information subject to this Contract, Consultant shall notify Commission within ten (10) days of such request and shall not release such information to a third party unless directed to do so by Commission.

J. Conflicts of Interest

(i) Consultant shall not engage in providing consultation or representation of clients, agencies or firms which may constitute a conflict of interest which results in a disadvantage to the Commission or a disclosure which would adversely affect the interests of the Commission. Consultant shall notify the Commission of any potential or actual conflicts of interest arising during the course of the Consultant's performance under this Contract. This Contract may be terminated in the event a conflict of interest arises. Termination of the Contract will be subject to a mutual settlement of accounts. In the event the contract is terminated under this provision, the Consultant shall take steps to insure that the file, evidence, evaluation and data are provided to the Commission or its designee. This does not prohibit or affect the Consultant's ability to engage in consultations, evaluations or representation under agreement with other agencies, firms, facilities, or attorneys so long as no conflict exists.

(ii) A conflict of interest warranting termination of this Contract may include, but is not necessarily limited to, acting on behalf of a client in an adversarial proceeding against the State of Wyoming, its agencies, boards, commissions, or the University of Wyoming, or initiating suits in equity including injunctions, declaratory judgments, writs of prohibition, or quo warranto.

K. Entirety of Contract. This Contract, consisting of fourteen (14) pages, Attachment A, consisting of sixteen (16) pages, and Attachment B, consisting of

two (2) pages, represent the entire and integrated Contract between the parties and supersede all prior negotiations, representations, and agreements, whether written or oral. In the event of a conflict or inconsistency between the language of this Contract and the language of any attachment or document incorporated by reference, the language of this Contract shall control.

L. Ethics. Consultant shall keep informed of and comply with the Wyoming Ethics and Disclosure Act (Wyo. Stat. § 9-13-101, *et seq.*), and any and all ethical standards governing Consultant's profession.

M. Force Majeure. Neither party shall be liable for failure to perform under this Contract if such failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays.

N. Indemnification. The Consultant shall release, indemnify, and hold harmless the State, the Commission, and their officers, agents, and employees from any and all claims, suits, liabilities, court awards, damages, costs, attorneys' fees, and expenses arising out of Consultant's failure to perform any of Consultant's duties and obligations hereunder or in connection with the negligent performance of Consultant's duties or obligations, including, but not limited to, any claims, suits, liabilities, court awards, damages, costs, attorneys' fees, and expenses arising out of Consultant's negligence or other tortious conduct.

O. Independent Contractor. The Consultant shall function as an independent contractor for the purposes of this Contract and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Contract, the Consultant shall be free from control or direction over the details of the performance of services under this Contract. The Consultant shall assume sole responsibility for any debts or liabilities that may be incurred by the Consultant in fulfilling the terms of this Contract and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Contract. Nothing in this Contract shall be interpreted as authorizing the Consultant or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the Commission or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The Consultant agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance, or similar benefits available to State of Wyoming employees will inure to the benefit of the Consultant or the Consultant's agents or employees as a result of this Contract.

P. Notices. All notices arising out of, or from, the provisions of this Contract shall be in writing either by regular mail, e-mail, or delivery in person at the addresses provided under this Contract. Notice provided by e-mail shall be delivered as follows:

Office: Kevin J. Boyce, P.G., kevin.boyce@wyo.gov, (307) 777-7626.

Consultant: Kye Kreusel, P.E., kkreusel@whsmithpc.com, (307) 362-6065.

Q. Notice of Sale or Transfer. The Consultant shall provide the Commission with notice of any sale, transfer, merger, or consolidation of the assets of the Consultant. Such notice shall be provided in accordance with the notices provision of this Contract and, when possible and lawful, in advance of the transaction. If the Commission determines that the sale, transfer, merger, or consolidation is not consistent with the continued satisfactory performance of the Consultant's obligations under this Contract, then the Commission may, at its discretion, terminate or renegotiate the Contract.

R. Ownership and Return of Documents and Information. The Commission is the official custodian and owns all documents, data compilations, reports, computer programs, photographs, data, and other work provided to or produced by the Consultant in the performance of this Contract. Upon termination of services, for any reason, Consultant agrees to return all such original and derivative information and documents to the Commission in a useable format. In the case of electronic transmission, such transmission shall be secured. The return of information by any other means shall be by a parcel service that utilizes tracking numbers. Upon Commission's verified receipt of such information, Consultant agrees to physically and electronically destroy any residual Commission-owned data, regardless of format, and any other storage media or areas containing such information. Consultant agrees to provide written notice to Commission confirming the destruction of any such residual Commission-owned data.

S. Patent or Copyright Protection. The Consultant recognizes that certain proprietary matters or techniques may be subject to patent, trademark, copyright, license or other similar restrictions, and warrants that no work performed by the Consultant or its subcontractors will violate any such restriction. The Consultant shall defend and indemnify the Commission for any infringement or alleged infringement of such patent, trademark, copyright, license, or other restrictions.

T. Prior Approval. This Contract shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Contract has been fully executed, approved as to form by the Office of the Attorney General, filed with and approved by A&I Procurement, and approved by the Governor of the State of Wyoming, or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

U. Insurance Requirements.

(i) During the term of this Contract, the Consultant shall obtain and maintain, and ensure that each subcontractor obtains and maintains, each type of insurance coverage specified in Insurance Coverage, below.

(ii) All policies shall be primary over any insurance or self-insurance program carried by the Consultant or the State of Wyoming. All policies shall include clauses stating that each insurance carrier shall waive all rights of recovery under subrogation or otherwise against Consultant or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

(iii) The Consultant shall provide Certificates of Insurance to the Commission verifying each type of coverage required herein. If the policy is a “claims made” policy instead of an “occurrence” policy, the information provided shall include, but is not limited to, retroactive dates and extended reporting periods or tails.

(iv) All policies shall be endorsed to provide at least thirty (30) days advance written notice of cancellation to the Commission. A copy of the policy endorsement shall be provided with the Certificate of Insurance.

(v) In case of a breach of any provision relating to Insurance Requirements or Insurance Coverage, the Commission may, at the Commission’s option, obtain and maintain, at the expense of the Consultant, such insurance in the name of the Consultant, or subcontractor, as the Commission may deem proper and may deduct the cost of obtaining and maintaining such insurance from any sums which may be due or become due to the Consultant under this Contract.

(vi) All policies required by this Contract shall be issued by an insurance company with an A.M. Best rating of A- VIII or better.

(vii) The Commission reserves the right to reject any policy issued by an insurance company that does not meet these requirements.

V. Insurance Coverage. The Consultant shall not commence work under this Contract until it has obtained all the insurance required by the Commission and the State. The Consultant shall obtain and maintain the following insurance in accordance with the Insurance Requirements set forth above:

(i) Commercial General Liability Insurance. Commercial general liability insurance (CGL) coverage, occurrence form, covering liability claims for bodily injury and property damage arising out of premises, operations, products and completed operations, and personal and advertising injury, with minimum limits as follows:

(a) \$1,000,000.00 each occurrence;

(b) \$1,000,000.00 personal injury and advertising injury;

- (c) \$2,000,000.00 general aggregate; and
- (d) \$2,000,000.00 products and completed operations.

The CGL policy shall include coverage for Explosion, Collapse and Underground property damage. This coverage may not be excluded by endorsement.

(ii) Workers' Compensation and Employer's Liability Insurance. Employees hired in Wyoming to perform work under this Contract shall be covered by workers' compensation coverage obtained through the Wyoming Department of Workforce Services' workers' compensation program, if statutorily required. Employees brought into Wyoming from Consultant's home state to perform work under this Contract shall be covered by workers' compensation coverage obtained through the Wyoming Department of Workforce Services' workers' compensation program or other state or private workers' compensation insurance approved by the Wyoming Department of Workforce Services, if statutorily required.

The Consultant shall provide the Commission with a Certificate of Good Standing or other proof of workers' compensation coverage for all of its employees who are to perform work under this Contract, if such coverage is required by law. If workers' compensation coverage is obtained by Consultant through the Wyoming Department of Workforce Services' workers' compensation program, Consultant shall also obtain Employer's Liability "Stop Gap" coverage through an endorsement to the CGL policy required by this Contract, with minimum limits as follows:

- (a) Bodily Injury by Accident: \$1,000,000.00 each accident;
- (b) Bodily Injury by Disease: \$1,000,000.00 each employee; and
- (c) Bodily Injury by Disease: \$1,000,000.00 policy limit.

(iii) Unemployment Insurance. The Consultant shall be duly registered with the Department of Workforce Services and obtain such unemployment insurance coverage as required. The Consultant shall supply Commission with a Certificate of Good Standing or other proof of unemployment insurance coverage.

(iv) Automobile Liability Insurance. Automobile liability insurance covering any auto (including owned, hired, and non-owned) with minimum limits of \$1,000,000.00 each accident combined single limit.

(v) Professional Liability or Errors and Omissions Liability Insurance. Professional liability insurance or errors and omissions liability insurance protecting against any and all claims arising from the Consultant's alleged or real professional errors, omissions, or mistakes in the performance of professional duties under this Contract, with minimum limits as follows:

- (a) \$1,000,000.00 each occurrence; and
- (b) \$1,000,000.00 general aggregate.

The policy shall have an extended reporting period of two (2) years.

W. Severability. Should any portion of this Contract be judicially determined to be illegal or unenforceable, the remainder of the Contract shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

X. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and Commission expressly reserve sovereign immunity by entering into this Contract and specifically retain all immunities and defenses available to them as sovereigns. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Contract shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

Y. Taxes. The Consultant shall pay all taxes and other such amounts required by federal, state and local law, including, but not limited to, federal and social security taxes, workers' compensation, unemployment insurance, and sales taxes.

Z. Termination of Contract. This Contract may be terminated, without cause, by the Commission upon thirty (30) days written notice. This Contract may be terminated immediately for cause if the Consultant fails to perform in accordance with the terms of this Contract.

AA. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Contract shall not be construed so as to create such status. The rights, duties, and obligations contained in this Contract shall operate only between the parties to this Contract and shall inure solely to the benefit of the parties to this Contract. The provisions of this Contract are intended only to assist the parties in determining and performing their obligations under this Contract.

BB. Time is of the Essence. Time is of the essence in all provisions of the Contract.

CC. Titles Not Controlling. Titles of sections and subsections are for reference only and shall not be used to construe the language in this Contract.

DD. Waiver. The waiver of any breach of any term or condition in this Contract shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

EE. Counterparts. This Contract may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Contract. Delivery by the Consultant of an originally signed counterpart of this Contract by PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

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9. Signatures. The parties to this Contract, either personally or through their duly authorized representatives, have executed this Contract on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Contract.

The Effective Date of this Contract is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

| | |
|-------|------|
| | |
| Chair | Date |

| | |
|-----------|------|
| | |
| Secretary | Date |

WILLIAM H. SMITH AND ASSOCIATES INC.

| | |
|--|------|
| | |
| Shawn M. Arnoldi, P.E., Manager Employer ID #83-0241302 | Date |

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

| | |
|---|------|
| | |
| Tyler M. Renner Assistant Attorney General | Date |

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location. The City of Evanston resides in Uinta County within the Bear River Basin in south-west Wyoming.
2. Purpose. To perform a Level I water system master plan study.
3. History. Evanston receives its raw water from two sources: Sulphur Creek Reservoir and a direct flow intake on the Bear River. Both of these sources are located south of the city. The raw water is conveyed from the reservoir and intake through two separate 36-inch transmission lines to a diversion box. From the diversion box, a 30-inch line conveys the raw water about 10 miles north to the water treatment plant located in the city. The distribution system consists of eight buried cement storage tanks that range in capacity from 80,000 to 1,000,000 gallons. Within the city's system, pumping stations are in use that deliver water to customers at multiple pressure zones. The city's current SCADA system determines tank levels and pumping requirements. The city has a non-potable water system sourced from the Bear River used primarily for irrigation at the golf course and throughout town. The city does not have a current formal plan in place for its water system. This Level I master plan will inventory and evaluate the current condition of the water system, identify the parts of the existing system that are deficient, and provide a schedule for improvements. It will also identify system needs and a plan to accommodate future growth.

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) FORMATS and STANDARDS. Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) MAPS. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS**CONSTRUCTION COSTS**

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | | |
|---|----------|---------------|
| Itemized Costs of Ineligible Project Components | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Additional Cost for Construction Engineering | \$ _____ | |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ | |
| Total WWDC Ineligible Project Costs Total | \$ _____ | (subtotal #6) |

TOTAL PROJECT COST

| | |
|--|----------|
| Total Project Cost (subtotal #5 + subtotal #6) | \$ _____ |
|--|----------|

MATERIALS ONLY TOTAL

Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) \$ _____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

D. **SCOPE OF SERVICES**

Task 1. Scoping and Project Meetings

A scoping meeting shall be held early in the project schedule in the project area to familiarize the Sponsor with the scope of the project as well as obtain and provide input and information to and from all affected parties. The Consultant shall prepare all presentation material, including maps and other visual aids as necessary, to explain the project. The scoping meeting location and time shall be coordinated with the Sponsor and Office project manager and should be held after the Consultant has reviewed all background information as described in Task 2.

Additional public project meetings shall be conducted to facilitate project activity coordination and to keep the Sponsor's staff and all affected parties informed of progress. The Consultant should assume a minimum of two (2) public project meeting in the study area. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices, needed materials, and the meeting record. In addition to the public project meetings, several informal meetings with the Sponsor or Office project manager may be necessary during the course of the study. The Consultant shall notify the Office project manager in advance of any meetings with the Sponsor.

Task 2. Information Review

The Consultant will gather and review all existing information related to the Sponsor's water supply and distribution system. This includes information available through the Sponsor, WWDO, Water Resources Data System (WRDS), Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division (DEQ), and any other sources as appropriate. Coordinate with city staff to obtain all past relevant studies that need to be reviewed. Improvements recommended to the water system in any of these reports should be documented. In addition, the status of those recommended improvements should be identified (i.e.: disregarded, completed, in progress, pending, etc.). The

Consultant shall also review and summarize all local area development plans, zoning ordinances, annexation policies and other regulations that may affect this project. The Consultant shall provide a summary of existing information in the final report.

Task 3. Inventory, Evaluation, and GIS

The Consultant shall confer with the Sponsor to identify specific problem areas and concerns that should be focused on during this task and then propose the extent of inventory and evaluation to be performed in this task. Inventory and evaluations shall primarily focus on facilitating the objectives of this project that in part include addressing the Sponsor's areas of concern, identifying system deficiencies, and formulating improved GIS mapping. Updates to the city's existing GIS may include verification of the accuracy of the water system mapping in terms of piping connectivity, looping, location of system components, etc. During this task, the Consultant may coordinate with the Sponsor during field work so city staff may perform any required pot-holing to help verify and true-up the city's existing data. The Consultant shall coordinate with the Office project manager and Sponsor's staff regarding the expectations and limitations of this effort and shall be mindful of the following intentions of this task:

- a. Inventory and evaluate the existing infrastructure to determine its ability to meet current water demands and future water demands developed in Task 6. Identify those components that presently require repair or replacement and those components that will require repair or replacement within the next twenty (20) years. Provide a schedule for the needed improvements as described in Task 7.
- b. Assess the capacity and serviceability of existing water treatment facilities, transmission and distribution pipelines, storage tanks, pump stations, PRV stations, flow monitoring devices, SCADA, and other major components of the water supply system as applicable. Identify deficiencies and make recommendations for improvements needed to address these limitations. In conjunction with the hydraulic modeling task, pipe materials and pressure classes shall be examined in terms of suitability to provide adequate service.
- c. Evaluate the system for water losses, including leaks and other non-revenue water. Results of the hydraulic model can serve as an indicator for potential leakage locations along with observations and discussions with system operators. Identify locations that may warrant a future leak detection study. Identify factors and locations that may be the cause for leaks, such as corrosive soils.

The Consultant shall evaluate the management and operation of the public water system in the study area to determine if procedural changes would be beneficial. If so, the Consultant shall detail those changes. Results of the hydraulic model simulations can serve as a basis for this task along with observations and discussions with system operators. The Consultant shall evaluate the existing

water metering system to ensure water bills can be or are based on metered usage. The Consultant may offer suggestions relating to the existing billing and metering procedures.

All mapping and corresponding data sets, existing and updated, shall be consolidated into a comprehensive GIS. Mapping shall be extended as needed to facilitate objectives of this project that include the hydraulic model, addressing the Sponsor's areas of concern, identification of system deficiencies, and development of a modern and efficient GIS. Coordination shall take place with the Sponsor and Office project manager on field survey limitations and any mapping logistics.

Deliverables to the Sponsor shall include at least two sets of large size hard copy printouts of the service areas and associated features for the Sponsor's use. Two hard copy map books shall also be produced for use by the Sponsor. These items are in addition to the GIS deliverables described in Task 11. The Consultant shall coordinate with the Office project manager and Sponsor on final production of all hard copy mapping media and its delivery. GIS data deliverables shall be in accordance with the "WWDO GIS Framework Data Plan" and the accompanying "GIS Standards Technical Memorandum." (Refer to Section C.2.b. of Attachment A.)

Task 4. Hydraulic Model

In conjunction with the updated GIS and water system information obtained in Task 3 along with growth and demand projections from Task 6, the Consultant shall update the Sponsor's existing hydraulic model of its water system. The city is in possession of the current model and all corresponding GIS and CAD mapping files. This task shall include updating the city's current model to the latest software version. The Consultant shall model the current system and proposed system improvements. Acceptable software platforms include the following or an Office approved equal:

- Innovyze/MWH Soft: InfoWater (ArcGIS based); H2OMap Water (stand-alone); or H2ONet (AutoCAD based)
- Bentley/Haestad Methods: WaterGEMS (ArcGIS based); WaterCAD (AutoCAD based or stand-alone)

The model shall analyze the system using an extended period simulation and shall be properly calibrated to available data sets or known system behavior. The Consultant shall gather the necessary data to accomplish adequate calibration of the model. This may include coordinating with the city staff to conduct hydrant flow or pressure tests within the system.

The Consultant shall evaluate the adequacy of the water transmission and distribution lines, pumping stations, and storage capacities to meet current and future pressure and flow requirements based on maximum day demands. System

storage shall be modeled in terms of volume and water quality (i.e.: tank turnover, water age, etc.). System pressures shall be determined in the model and compared against the pressure classes of existing pipes to identify problem areas. The Consultant shall consider domestic, rural, commercial, municipal, and industrial demands as needed in the evaluation (i.e.: hospitals, colleges, golf courses, hotels, trailer park, schools, etc.) and incorporate planned development areas and all independent water systems that are supplied from the Sponsor's system. All pressure zones shall be properly accounted for and simulated in the model. All pump stations shall be simulated in the model, and the Consultant should assess the adequacy of the existing pumps in terms of capacity, hydraulic head, run-time, variable frequency drive (VFD) operation, etc. as deemed necessary. The Consultant shall use the model to size new pumps, transmission and distribution lines, storage, and other facilities as needed. In terms of fire flow, coordinate with city staff to ascertain the Sponsor's expectations in providing fire flow to its service areas and the subsequent extent of fire flow simulations required. The model shall incorporate the recommended system upgrades or modifications and shall be detailed enough to satisfy the needs of the project

The Consultant shall construct and execute the hydraulic model to determine system capacity limits in terms of maximum growth potential. Any inactive or planned water taps within the system shall be incorporated into the model. The Consultant shall investigate whether the system has the capacity to effectively serve these taps should they eventually become active.

Within the final report, the Consultant shall fully describe all modeling efforts particularly in terms of the model extents and acquisition of model input, including but not limited to the following:

- Nodal Elevations
- Demands
- Diurnal Curve(s)
- Pump Curves
- Valve Settings
- Pipe Diameters and Material
- Pipe Friction Factors
- Tank Geometry

Task 5. Water Sources

The Consultant shall gather and analyze data and information as needed to examine the Sponsor's water supply sources for its public water supply system. Capacities, diversion rates, pumping rates, pump capacities, and water treatment plant capacities shall be investigated as applicable. The Consultant shall determine if the water supply sources are limiting the ability to meet present and future water demands and if so, identify water supply alternatives to meet those demands. This may include a cursory consideration of groundwater as a source

supply as referenced within any previous studies. The Sponsor's existing main transmission lines shall be assessed in terms of sizing, condition, etc.

The Consultant shall review existing water quality reports to determine if water supply sources and distributed water complies with EPA drinking water standards. If the reports indicate that the standards are not being met or suggest potential water quality problems, recommendations will be presented to mitigate these problems. Where applicable, the Consultant shall collect data on the number of households using septic systems, enhanced septic systems, sewage lagoon systems, or wastewater treatment plants to handle wastewater treatment within the Sponsor's water service area. These data will be used to determine if wastewater treatment, or lack thereof, is presently impacting the water quality or could impact the water quality of the Sponsor's water supply.

The Consultant will review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The inventory shall include priority dates, quantities, permitted uses, permit conditions, and other pertinent data. Historic use of water under each permit will be estimated to determine if the water rights must be expanded or altered to accommodate the recommendations in this project. The Consultant will also review any water supply contracts held by the Sponsor and discuss their purpose and importance to the Sponsor.

Task 6. Growth and Demand Projections

The Consultant shall develop population growth projections for the Sponsor's water service area. Planning boundaries of the service area will be based on discussions with city staff as to where future growth may occur. For example, the growth may occur within the corporate limits, the existing service area, or outside of both. This may result in the consideration of an expanded water service area that could reasonably be served by the Sponsor considering the investments in infrastructure.

Historic population data obtained from the Economic Analysis Division of the Wyoming Department of Administration and Information (EAD/DA&I) will be used as the basis of the projections. (Refer to <http://eadiv.state.wy.us/>.) Alternate population projections will be developed considering recent growth trends, projections developed by the EAD/DA&I, and projections from other sources including, but not limited to those that may be available from the city and county planning agencies. Another information source may be population projections available in environmental impact statements generated for mineral resource development in the area. The Consultant shall provide graphic representations of each alternate population projection.

Water demands, both current and projected, will be developed based on historic water use records. Alternate demand projections may be developed that consider the effects of an increasing tiered water rate system. Demand projections should

include bulk water sales to rural or independent water districts or systems, industries, and others as applicable. The potential for any future high-impact water demand scenarios shall be examined. The Consultants shall also investigate any water service regionalization opportunities that may exist to satisfy future water demands.

Task 7. Recommendations and Cost Estimates

The Consultant shall develop a listing and descriptions of recommendations for system improvements identified during the study. The recommendations shall address needed infrastructure capital improvement projects along with suggestions for the funding, operation, maintenance, and replacement of the system. The Consultant will prioritize the recommendations in coordination with the Sponsor. A schedule shall be developed that identifies a phased approach for the implementation of the recommendations in accordance with their priority.

The Consultant shall prepare construction cost estimates in tabular form for each of the recommended system improvements and shall be of sufficient detail to accommodate a Level III application. The table will identify both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement shall be prepared as outlined in Attachment A, Section C.3. The Level III cost estimates will include costs of design, permitting, land acquisition, construction engineering, materials and equipment, construction, and construction contingencies. The cost estimates should be based on the year this study is completed. The Consultant shall then suggest an appropriate inflation factor that may be applied to the project's current year total cost and projected into the future per the schedule developed in this task.

Task 8. Water System Financing

The Consultant shall work with the Sponsor to acquire all necessary financial data required for this task to determine the current and anticipated future water system revenues and expenditures. To initiate this task, the Consultant shall determine if the Sponsor has a water enterprise fund in which existing water revenues allow the water system to be financially self-supporting or if the Sponsor must subsidize the water system from other budgets and revenues such as bonds, grants, etc. In order for the water system to be self-supporting, revenues should be sufficient to accomplish the following:

- Retire existing water related debt (principal and interest).
- Pay the costs for employees.
- Pay the costs of materials, supplies, utilities, and outside services necessary to operate and maintain the water system and provide normal improvements and replacement requirements for the system.
- Pay for administrative and overhead expenses.

- Provide an emergency fund that annually accrues at least an amount equal to 1.5% – 2.5% of the operating expenses.
- Provide a fund that accrues sufficient reserves to pay for major repairs and replacement that will be required during the life of any associated project.
- Pay other costs as may be identified by the Consultant.

The Consultant shall first use the above criteria to make recommendations on the Sponsor's current water revenue structure (rates, tap fees, and other) that would support the existing water system based on a revenue structure that encourages water conservation (tiered water rates) and result in the system becoming and staying financially self-supporting. The current water revenues shall be compared against current water expenditures based on the last five (5) years of data (if available). The Consultant shall prepare a suggested itemized annual budget for the existing water system that would maintain the system as financially self-supporting.

Next, the Consultant shall prepare two (2) funding scenarios for consideration by the Sponsor that demonstrate the adjustments in revenues that may be necessary to accommodate the prioritized recommendations, schedules, and cost estimates developed in Task 7. The Consultant shall present these amended water revenue structures that would support the identified system improvements while maintaining the system as financially self-supporting as defined by the above criteria and/or other financial requisites relevant to the Sponsor. Within these adjustment scenarios, the Consultant shall demonstrate the effects on the average monthly bill for residential water users. These estimated average monthly bills will be compared against American Water Works Association (AWWA) standard of 2.5% of the annual median household income divided by 12 months. These two (2) scenarios shall be presented in the draft and final reports in a tabular or other clear and concise format. The adjustment in revenues will be presented based on the following two (2) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e.: the Consultant shall demonstrate the necessary adjustments in water system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Assume that funding for WWDC **eligible** components will be in the form of a 67% grant from WWDC and a 33% loan from WWDC (4%, 30-year term), and funding for WWDC **non-eligible** components will only be in the form of Sponsor contribution from current or proposed water system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 2 above) and to fund WWDC **non-eligible** components that are necessary for the completion of a Level III construction project. The Wyoming Drinking Water State

Revolving Fund Program (DWSRF), the USDA Rural Utilities Service (RUS), the State Lands and Investments Board, the Wyoming Business Council, the DEQ Abandoned Mine Lands Program, and other eligible funding sources shall be considered for loans, grants, and combinations thereof. For more information on project funding assistance, see Section C.6 of Attachment A.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question. The Consultant shall contact these agencies early in the study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans in terms of the environmental review (ER) efforts specifically required for each agency. Throughout this task, the Consultant shall carefully distinguish and be mindful of the differences between DWSRF and RUS in terms of available funding packages and ER requirements. DWSRF and RUS guidance and contact information is as follows:

For DWSRF

Forms and Guidance: <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/>

Contact: Bill Tillman, SRF Principal Engineer

WDEQ/WQD, 200 W. 17th Street, Cheyenne, WY 82002

Tel 307-777-6941. Email: william.tillman@wyo.gov

For RUS

Forms and Guidance: <http://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs>

Contact: Lorraine Werner, Community Programs Director, USDA RUS

Wyoming State Office, 100 East B Street, Rm 1005, Casper, WY 82602

Tel 307-233-6710. Email: lorraine.werner@wy.usda.gov

Lastly, in order to demonstrate whether the water system has the technical, financial, and managerial capabilities to ensure current and ongoing successful operations, the Consultant shall complete the most recent Capacity Assessment and Financial Worksheets as provided by Wyoming DEQ. Water systems must meet these capacity development requirements before a construction permit can be issued, and it is also part of eligibility for Drinking Water State Revolving Fund (DWSRF) loans. These worksheets shall be completed by the Consultant whether the Sponsor is anticipating DWSRF funding or not. Completed worksheets shall

be submitted as an appendix within the final report to this project. Worksheets are available at <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/> or by contacting DEQ directly.

It should be noted that the Sponsor's ability to pay for the project in a timely manner is a key consideration in the WWDC's funding decisions. The annual requests for WWDC funding typically exceed the funding available. There are often uncertainties and delays in acquiring loans and, particularly, grants from other funding agencies. Therefore, the WWDC may give priority in its Level III funding deliberations to the projects in which the Sponsor has been advancing on a specific financing plan and there is documented evidence that the financing will be in place within the calendar year in which the Level III project funding is approved by the Legislature. If the WWDC finds it necessary to delay Level III funding requests due to the schedule for the financing plan, the WWDC may provide assurance to the Sponsor that it will recommend Level III funding the following year if the project financing is completed. This assurance can be used to assist the Sponsors in securing financing from other entities.

Task 9. Discretionary Task

The Consultant may elect to set aside available study funds not in excess of \$10,000 for discretionary purposes as this task may be included to accommodate changes in the scope of work as the project develops or as new issues are discovered. All other tasks should be considered before determining whether or not to include funds for this task. Should the Consultant set aside funds for discretionary purposes, no work will be initiated or funds spent for this task without authorization from the Office project manager.

Task 10. Draft Report and Presentations

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study no later than April 1, 2020. Four (4) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft ArcGIS coverages (if applicable). The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each electronic delivery device shall be clearly labeled with a table of contents included with or within each device.

After submittal of the draft report, the Consultant shall present the draft findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after coordination with the Office project manager. The Consultant is responsible for publishing notice of the meeting not less than once each week for two weeks prior to the meeting and should budget accordingly. The Consultant shall be

responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include the following: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a possible meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

Task 11. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments from both the draft report and presentation, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The executive summary shall outline the purpose, findings, recommendations, and configuration of the project, shall include cost estimates, and should not exceed ten (10) pages. Any final reports submitted in three-ring notebook format shall have spine labels that clearly identifying the project, Consultant, and date. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison shall be the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report, and the Consultant shall submit all final documents and materials to the Office on or before July 1, 2020. These final documents and deliverables shall consist of the following:

- Twelve (12) hard copies of the final report and twelve (12) hard copies of the executive summary. This count is inclusive of the copies previously submitted to the Office project manager.
- Four (4) CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format. This count is inclusive of the copy previously submitted to the Office project manager. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each

electronic delivery device shall be clearly labeled with a table of contents included with or within each device.

- Two (2) CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each electronic delivery device shall be clearly labeled with a table of contents included with or within each device.
- Three (3) CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook. Each electronic delivery device shall be clearly labeled with a table of contents included with or within each device.
- Three (3) CD, DVD, USB drive, or portable hard drive copies of the GIS data according to the "WWDO GIS Framework Data Plan" and the accompanying "GIS Standards Technical Memorandum." (Refer to Section C.2.b. of Attachment A) This is in addition to delivery of hard copy mapping media as described in Task 3. Each electronic delivery device shall be clearly labeled with a table of contents included with or within each device.
- One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, delivered on a CD, DVD, or USB drive, clearly labeled with a table of contents included with or within each device. Any project notebooks submitted in three-ring notebook format shall have spine labels that clearly identify the project, Consultant, and date.

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

William H. Smith and Associates Inc.

| Engineering/Surveying | Hourly Rate |
|--|--------------------|
| Clerical | \$ 45.00 |
| Laborer | \$ 45.00 |
| Administrative Assistant | \$ 50.00 |
| Assistant/Support Staff | \$ 65.00 |
| Construction Site Repair/ Inspector | \$ 75.00 |
| Materials Tech | \$ 75.00 |
| Engineer Tech I | \$ 75.00 |
| Engineer Tech II | \$ 85.00 |
| Professional Engineer I | \$ 100.00 |
| Professional Engineer III | \$ 110.00 |
| Cad Tech I | \$ 75.00 |
| Cad Tech II/Cad Manager | \$ 85.00 |
| Cad Tech III/Design Manager | \$ 95.00 |
| Survey Tech | \$ 65.00 |
| LSIT/Party Chief | \$ 75.00 |
| Senior Party Chief | \$ 85.00 |
| Photogrammetrist/Lidar Tech | \$ 90.00 |
| PLS I/Field Ops Manager | \$ 100.00 |
| PLS II/Project Manager | \$ 110.00 |
| *Equipment for Survey Crew | \$ 50.00 |

| Materials Testing | Rate |
|--------------------------------------|---------------------------------|
| Technical Manager | \$105/HOUR |
| Project Manager | \$90/HOUR |
| Senior Technician | \$60/HOUR |
| Lead Technician | \$60/HOUR |
| Materials Technician | \$55/HOUR |
| Nuclear Density Gauge | \$50/DAY |
| Field Moisture Density Test | \$35/TEST |
| Sieve Analysis 1 1/2" Minus | \$75/TEST |
| Compressive Strength of Cylinders | \$20/4X8 CYL. \$30/6x12 CYL. |
| Vehicle | \$65/DAY |

*Equipped W/ Vehicle Tools And 1 Set Of Survey Equipment.

| Miscellaneous/Specialty Items | Hourly Rate |
|-------------------------------|---------------|
| Metrotech | \$ 10.00 |
| Digital Level | \$ 15.00 |
| Truck | \$ 10.00 |
| ATV | \$ 12.50 |
| UTV | \$ 25.00 |
| Blue Sky Pipeline Software | \$ 25.00 |
| Additional GPS Unit | \$ 25.00 |
| Additional Vehicle | \$ 30.00 |
| Total Station | \$ 50.00 |
| Snow Cat | \$ 75.00 |
| Drone (Aerial Mapping) | \$300/FLIGHT |
| Food & Lodging Per Diem | Per GSA Rates |
| Related Outside Service | At Cost |
| Related Supplies | At Cost |
| Mileage | .58/Mile |

Field time will be calculated from the daily point of embarkation to the point of evening return.

Travel time involving overnight stay, will be charged out from the daily point of embarkation to the projects location and/or to the home office.

Associated costs due to mandatory safety meetings or stand downs beyond WHS' control will be charged out at one half the day rate or hourly rate with Per Diem if per Diem is involved.

**SALT CREEK-EDGERTON-MIDWEST WATER MASTER PLAN, LEVEL I STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and Morrison-Maierle Systems Corporation [Consultant], 1470 Sugarland Drive, Suite 1, Sheridan, WY, 82801.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed one hundred fifty-nine thousand, nine hundred dollars (\$159,900).

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|---------------------------------------|------------------------------|
| 1. Scoping and Project Meetings | \$ 6,400 |
| 2. Information Review | \$ 4,400 |
| 3. Growth and Demand Projections | \$ 3,600 |
| 4. Water Sources | \$ 3,400 |
| 5. Inventory, Evaluation, and GIS | \$ 16,000 |
| 6. Hydraulic Model | \$ 49,600 |
| 7. Recommendations and Cost Estimates | \$ 10,600 |
| 8. Water System Financing | \$ 10,900 |
| 9. Discretionary Task | \$ 10,000 |
| 10. Draft Report | \$ 28,900 |
| 11. Report Presentations | \$ 5,700 |
| 12. Final Report and Deliverables | <u>\$ 10,400</u> |
| TOTAL PROJECT COST | \$159,900 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: North Platte River Basin, Natrona County, Towns of Edgerton and Midwest, North of Casper, Wyoming.
2. Purpose: To perform a Level I Water Master Plan study for the Towns of Midwest and Edgerton, and to evaluate the 45-mile transmission line.
3. History: The Towns of Midwest and Edgerton are supplied by the Central Wyoming Regional Water System (CWRWS) through a 45-mile long pipeline that was originally constructed in 1996. The water is pumped from the CWRWS, in the Bar Nunn area, approximately 25 miles to a surge tank at 20-Mile Hill. From there the water is gravity fed to the storage tanks which supply the two Towns. A master plan has never been done for the area and the infrastructure is aging. This study will perform a Level I Water Master Plan for the Towns of Midwest and Edgerton and evaluate the 45-mile transmission line. The Master Plan will help evaluate the condition of their systems and provide recommendations for future planning, rehabilitation, upgrades, and managing/financing their systems.

Previous Reports

- Water Supply Project for the Towns of Edgerton and Midwest, Report of Investigation
- Edgerton/Midwest Water Supply Project Level II Conceptual Design Report
- Edgerton/Midwest Water Supply Project Level II Conceptual Report Task 15, Alternative Water Source Evaluation
- Pre-Design Report and Cost Estimates for the Edgerton-Midwest Reverse Osmosis Plant
- Level II Conceptual Design Report Task 10, Downsizing of the Edgerton/Midwest Water Supply Project

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior

to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) FORMATS and STANDARDS. Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) MAPS. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS

CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | | |
|---|----------|---------------|
| Itemized Costs of Ineligible Project Components | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Additional Cost for Construction Engineering | \$ _____ | |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ | |
| Total WWDC Ineligible Project Costs Total | \$ _____ | (subtotal #6) |

TOTAL PROJECT COST

Total Project Cost (subtotal #5 + subtotal #6) \$_____

MATERIALS ONLY TOTAL

Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) \$_____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and

Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Scoping and Project Meetings

A scoping meeting shall be held as early in the project schedule as possible in the project area to familiarize the Sponsor with the scope of the project as well as obtain and provide input and information to and from all affected parties. The Consultant shall prepare all presentation materials, including maps and other visual aids as necessary, to explain the project. The scoping meeting location and time shall be coordinated with the Sponsor and Office project manager and should be held after the Consultant has reviewed all background information as described in Task 2.

Additional public project meetings shall be conducted to facilitate project activity coordination and to keep the Sponsor and all affected parties informed of progress. The Consultant should assume a minimum of three (3) public project meetings in the study area. One (1) of these meetings will be held at the discretion of the Office project manager. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices, needed materials, and the meeting record. In addition to the public project meetings, several informal meetings with the Sponsor or Office project manager may be necessary during the course of the study. In the interest of economy, meetings will be scheduled to coincide with fieldwork. The Consultant shall notify the WWDO project manager in advance of any meetings with the project sponsor.

Task 2. Information Review

The Consultant shall gather and review all existing information related to the Sponsor's water supply and distribution systems. This includes information available through the Sponsor, WWDO, Water Resources Data System (WRDS), Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division (DEQ), the Central Wyoming Regional Water System (CWRWS) and any other sources as appropriate. The Consultant will coordinate with the Sponsor and Office project manager to obtain all past relevant studies that need to be reviewed. Improvements recommended to the water systems in any of these reports should be documented. In addition, the status of those recommended improvements should be identified (i.e.: disregarded, completed, in progress, pending, etc.). The Consultant shall also review and summarize all local area development plans, zoning ordinances, annexation policies and other regulations that may affect this project. The Consultant shall document and describe the history and nature of the relationship between the CWRWS, the Salt Creek Joint Powers Board, and the Towns of Edgerton and Midwest. The Consultant shall provide a summary of existing information in the final report.

Task 3. Growth and Demand Projections

The Consultant shall develop population growth projections for the Sponsor's water service area. Planning boundaries of the service area will be based on discussions with the Sponsor as to where future growth may occur. For example, the growth may occur within the corporate limits, the existing service area, or outside of both. This may result in the consideration of an expanded water service area that could reasonably be served by the Sponsor considering the investments in infrastructure.

Historic population data obtained from the Economic Analysis Division of the Wyoming Department of Administration and Information (EAD/DA&I) will be used

as the basis of the projections. (Refer to <http://eadiv.state.wy.us/>.) Alternate population projections will be developed considering recent growth trends, projections developed by the EAD/DA&I, and projections from other sources including, but not limited to those that may be available from the Sponsor, Towns, and county planning agencies. Another information source may be population projections available in environmental impact statements generated for mineral resource development in the area. The Consultant shall provide graphic representations of each alternate population projection.

Water demands, both current and projected, will be developed based on historic water use records. Alternate demand projections may be developed that consider the effects of an increasing tiered water rate system. Demand projections should include bulk water sales to rural or independent water districts or systems, industries, and others as applicable. The potential for any future high-impact water demand scenarios shall be examined. The Consultants shall also investigate any water service regionalization opportunities that may exist to satisfy future water demands.

Task 4. Water Sources

The Consultant shall gather and analyze data and information as needed to examine the Sponsor's water supply sources for its public water supply system. Capacities, diversion rates, pumping rates, and pump capacities shall be investigated as applicable. The Consultant shall determine if the water supply sources are limiting the ability to meet present and future water demands and if so, identify water supply alternatives to meet those demands; this will include a cursory consideration of ground water as a source supply as it has been studied previously.

The Consultant shall document and describe previous water quality issues in the system. The Consultant shall review existing water quality reports to determine if water supply sources and distributed water complies with EPA drinking water standards. If the reports indicate that the standards are not being met or suggest potential water quality problems, recommendations will be presented to mitigate these problems. Where applicable, the Consultant shall collect data on the number of households using septic systems, enhanced septic systems, sewage lagoon systems, or wastewater treatment plants to handle wastewater treatment within the Sponsor's water service area. These data will be used to determine if wastewater treatment, or lack thereof, is presently impacting the water quality or could impact the water quality of the Sponsor's water supply.

The Consultant will review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The inventory shall include priority dates, quantities, permitted uses, permit conditions, and other pertinent data. Historic

use of water under each permit will be estimated to determine if the water rights must be expanded or altered to accommodate the recommendations in this project where applicable. The Consultant will also review and document any water supply contracts held by the Sponsor and discuss their purpose and importance to the Sponsor.

Task 5. Inventory, Evaluation, and GIS

The Consultant shall confer with the Sponsor to identify specific problem areas and concerns that should be focused on during this task. Inventory and evaluations shall primarily focus on facilitating the objectives of this project that in part include documenting the water system's assets, addressing the Sponsor's areas of concern, identifying system deficiencies, and formulating GIS mapping. The Consultant shall be mindful of the following intentions of this task:

- a. Inventory and evaluate the existing infrastructure to determine its ability to meet current water demands and future demands developed in Task 3.
 - i. Identify those components that presently require repair or replacement.
 - ii. Identify those components that will require repair or replacement within the next twenty (20) years and provide a schedule for the needed improvements as described in Task 7.
- b. Assess the capacity and serviceability of existing transmission and distribution pipelines, storage tanks, pump stations, PRV stations, flow monitoring devices, SCADA, and other major components of the water supply system as applicable. Identify deficiencies and make recommendations for improvements needed to address these limitations. In conjunction with the hydraulic modeling task, pipe materials and pressure classes shall be examined in terms of suitability to provide adequate service.
- c. Evaluate the system for water losses, including leaks and other non-revenue water. Results of the hydraulic model can serve as an indicator for potential leakage locations along with observations and discussions with system operators. Identify locations that may warrant a future leak detection study. Identify factors, and locations, that may be the cause for leaks such as corrosive soils.

The Consultant shall record and evaluate the management and operation of the public water system in the study area to determine if procedural changes would be beneficial. If so, the Consultant shall detail those changes. Results of the hydraulic

model simulations can serve as a basis for this task along with observations and discussions with system operators. The Consultant shall evaluate the existing water metering system to ensure water bills can be or are based on metered usage. The Consultant may offer suggestions relating to the existing billing and metering procedures.

The Consultant shall update an existing, or develop a new, GIS of the existing system. All mapping and corresponding data sets, existing and updated, shall be consolidated into the comprehensive GIS. Mapping shall be extended as needed to facilitate objectives of this project that include the hydraulic model, addressing the Sponsor's areas of concern, identification of system deficiencies, and development of a modern and efficient GIS. Coordination shall take place with the Sponsor and Office project manager on field survey limitations and any mapping logistics. The Consultant shall adhere to the GIS requirements defined in Section C.2.b. of Attachment A. The Midwest Assistance Program has entered into a project with the Sponsor to develop an asset management plan and a GIS. It will be up to the Consultant to determine the usefulness of that GIS with regard to the requirements in this scope of work.

Deliverables to the Sponsor shall include two separate hard-copy, and one digital copy, of an operations manual; two large size hard copy printouts of the service areas and associated features; two hard copy, and one digital copy, mapping books for the field personnel and Sponsor's use. These items are in addition to the GIS deliverables described in Task 12. The Consultant shall coordinate with the Office project manager and Sponsor on final production of all hard copy mapping media and its delivery.

Task 6. Hydraulic Model

In conjunction with the GIS and water system information obtained in Task 5, the Consultant shall develop a hydraulic model of the water system. The Consultant shall model the current system and proposed system improvements. Acceptable software platforms include the following or an Office approved equal:

- Innovyze/MWH Soft: InfoWater (ArcGIS based); H2OMap Water (stand-alone); or H2ONet (AutoCAD based)
- Bentley/Haestad Methods: WaterGEMS (ArcGIS based); WaterCAD (AutoCAD based or stand-alone)

The model shall analyze the system using an extended period simulation and shall be properly calibrated to available data sets or known system behavior or the necessary data will be obtained to accomplish adequate calibration of the model. The Consultant shall evaluate the adequacy of the water transmission and distribution lines, pumping stations, and storage capacities to meet current and

future pressure and flow requirements based on maximum day demands. System storage shall be modeled in terms of volume and water quality (i.e.: tank turnover, water age, etc.). System pressures shall be determined in the model and compared against the pressure classes of existing pipes to identify problem areas.

The Consultant shall consider domestic, rural, commercial, municipal, and industrial demands as needed in the evaluation (i.e.: hospitals, colleges, golf courses, hotels, trailer park, schools, etc.) and incorporate planned development areas and all independent water systems that are supplied from the Sponsor's system. All pressure zones shall be properly accounted for and simulated in the model. All pump stations shall be simulated in the model, and the Consultant should assess the adequacy of the existing pumps in terms of capacity, hydraulic head, run-time, variable frequency drive (VFD) operation, etc. as deemed necessary.

The Consultant shall use the model to size new pumps, transmission and distribution lines, storage, and other facilities as needed. In terms of fire flow, coordinate with the Sponsor to ascertain the Sponsor's expectations in providing fire flow to its service areas and the subsequent extent of fire flow simulations required. The model shall incorporate the recommended system upgrades or modifications and shall be detailed enough to satisfy the needs of the project

The Consultant shall construct and execute the hydraulic model to determine system capacity limits in terms of maximum growth potential. Any inactive or planned water taps within the system shall be incorporated into the model. The Consultant shall investigate whether the system has the capacity to effectively serve these taps should they eventually become active.

Within the final report, the Consultant shall fully describe all modeling efforts particularly in terms of the model extents and acquisition of model input, including but not limited to the following:

- Nodal Elevations
- Demands
- Diurnal Curve(s)
- Pump Curves
- Valve Settings
- Pipe Diameters and Material
- Pipe Friction Factors
- Tank Geometry

The Consultant shall develop a transient hydraulic analysis. The analysis will include detailed analyses of numerous scenarios and options in order to determine the impacts of high and low pressures within the pipeline system due to surge

events. The analyses will aid in the determination of pipeline pressure classes as well as the type and size of surge mitigation devices required to meet the maximum pressures identified under either the hydraulic model's dynamic conditions or static conditions, or the transient hydraulic analyses' surge conditions.

The Consultant shall provide simulated distribution system (SDS) testing with disinfection boosting. The SDS testing will be used to understand the impact of chloramine addition to the water source with respect to disinfectant decay over time. Disinfectant decay information will help to determine the effect of water age within the distribution system and determine a "critical water age" where disinfectant residual has dropped to an unacceptable level. The age modeling of the proposed system will be used to identify areas in the distribution system of higher water age and determine potential locations for disinfectant booster stations. Nitrification indicators such as free ammonia measurements will also be included in the testing to identify if nitrification (loss of residual, release of free ammonia and potential growth of microbes) may be an issue in the system.

The SDS testing will also investigate the formation of regulated disinfection byproducts; namely Total Trihalomethanes (TTHM) and the Five Haloacetic Acids (HAA5). The Consultant shall define a sampling protocol for chloramine decay and TTHM/HAA5 formation testing. Samples will be taken to compare the chloramine decay over 5, 10, and 20 day periods. The results will be coupled with the age model to determine where disinfection boosting is needed to maintain adequate residual or other maintenance protocol. A detailed sampling and testing protocol will be developed prior to testing. The use of a certified water testing lab will be used for many of the parameters. A field or bench top instrument for immediate disinfection residual results may also be used.

Task 7. Recommendations and Cost Estimates

The Consultant shall develop a listing and descriptions of recommendations for system improvements identified during the study. The recommendations shall address needed infrastructure capital improvement projects along with suggestions for the funding, operation, maintenance, and replacement of the system. The Consultant will prioritize the recommendations in coordination with the Sponsor. A schedule shall be developed that identifies a phased approach for the implementation of the recommendations in accordance with their priority.

The Consultant shall prepare construction cost estimates in tabular form for each of the recommended system improvements. The cost estimates will be of sufficient detail to accommodate a Level III project application. The table will identify both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement shall be prepared as outlined in Section C.3, Attachment A. The Level III cost estimates will include costs of design, permitting, land acquisition,

construction engineering, materials and equipment, construction, and construction contingencies. The cost estimates should be based on the year this study is completed. The Consultant shall then suggest an appropriate inflation factor that may be applied to the project's current year total cost and projected into the future per the schedule developed in this task.

Task 8. Water System Financing

The Consultant shall work with the Sponsor to acquire all necessary financial data required for this task to determine the current and anticipated future water system revenues and expenditures. To initiate this task, the Consultant shall determine if the Sponsor has a water enterprise fund in which existing water revenues allow the water system to be financially self-supporting or if the Sponsor must subsidize the water system from other budgets and revenues such as bonds, grants, etc. In order for the water system to be self-supporting, revenues should be sufficient to accomplish the following:

- Retire existing water related debt (principal and interest).
- Pay the costs for employees.
- Pay the costs of materials, supplies, utilities, and outside services necessary to operate and maintain the water system and provide normal improvements and replacement requirements for the system.
- Pay for administrative and overhead expenses.
- Provide an emergency fund that annually accrues at least an amount equal to 1.5% – 2.5% of the operating expenses.
- Provide a fund that accrues sufficient reserves to pay for major repairs and replacement that will be required during the life of any associated project.
- Pay other costs as may be identified by the Consultant.

The Consultant shall first use the above criteria to make recommendations on the Sponsor's current water revenue structure (rates, tap fees, and other) that would support the existing water system based on a revenue structure that encourages water conservation (tiered water rates). The current water revenues shall be compared against current water expenditures based on the last five (5) years of data (if available). The Consultant shall prepare a suggested itemized annual budget for the existing water system that would result in the system becoming and staying financially self-supporting.

Next, the Consultant shall prepare two (2) funding scenarios for consideration by the Sponsor that demonstrate the adjustments in revenues that may be necessary to accommodate the prioritized recommendations, schedules, and cost estimates developed in Task 7. The Consultant shall present these amended water revenue structures that would support the identified system improvements while

maintaining the system as financially self-supporting as defined by the above criteria. Within these adjustment scenarios, the Consultant shall demonstrate the effects on the average monthly bill for residential water users. These estimated average monthly bills will be compared against American Water Works Association (AWWA) standard of 2.5% of the annual median household income divided by 12 months. These two (2) scenarios shall be presented in the draft and final reports in a tabular or other clear and concise format. The adjustment in revenues will be presented based on the following two (2) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e.: the Consultant shall demonstrate the necessary adjustments in water system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Assume that funding for WWDC **eligible** components will be in the form of a 67% grant from WWDC and a 33% loan from WWDC (4%, 30-year term), and funding for WWDC **non-eligible** components will only be in the form of Sponsor contribution from current or proposed water system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 2 above) and to fund WWDC **non-eligible** components that are necessary for the completion of a Level III construction project. The Wyoming Drinking Water State Revolving Fund Program (DWSRF), the USDA Rural Utilities Service (RUS), the State Lands and Investments Board, the Wyoming Business Council, the DEQ Abandoned Mine Lands Program, and other eligible funding sources shall be considered for loans, grants, and combinations thereof. For more information on project funding assistance see Section C.6 of Attachment A.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question. The Consultant shall contact these agencies early in the study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans in terms of the environmental review (ER) efforts specifically required for each agency. Throughout this task, the Consultant shall carefully distinguish and be mindful of the differences between DWSRF and RUS in terms of available funding packages

and ER requirements. DWSRF and RUS guidance and contact information is as follows:

For DWSRF

Forms and Guidance: <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/>

Contact: Bill Tillman, SRF Principal Engineer
WDEQ/WQD, 200 W. 17th Street, Cheyenne, WY 82002
Tel 307-777-6941. Email: william.tillman@wyo.gov

For RUS

Forms and Guidance: <http://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs>

Contact: Lorraine Werner, Community Programs Director, USDA RUS
Wyoming State Office, 100 East B Street, Rm 1005, Casper, WY 82602
Tel 307-233-6710. Email: lorraine.werner@wy.usda.gov

Lastly, in order to demonstrate whether the water system has the technical, financial, and managerial capabilities to ensure current and ongoing successful operations, the Consultant shall complete the most recent Capacity Assessment and Financial Worksheets as provided by Wyoming DEQ. Water systems must meet these capacity development requirements before a construction permit can be issued, and it is also part of eligibility for Drinking Water State Revolving Fund (DWSRF) loans. These worksheets shall be completed by the Consultant whether the Sponsor is anticipating DWSRF funding or not. Completed worksheets shall be submitted as an appendix within the final report to this project. Worksheets are available at <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/> or by contacting DEQ directly.

It should be noted that the Sponsor's ability to pay for the project in a timely manner is a key consideration in the WWDC's funding decisions. The annual requests for WWDC funding typically exceed the funding available. There are often uncertainties and delays in acquiring loans and, particularly, grants from other funding agencies. Therefore, the WWDC may give priority in its Level III funding deliberations to the projects in which the Sponsor has been advancing on a specific financing plan and there is documented evidence that the financing will be in place within the calendar year in which the Level III project funding is approved by the Legislature. If the WWDC finds it necessary to delay Level III funding requests due to the schedule for the financing plan, the WWDC may provide assurance to the Sponsor that it will recommend Level III funding the following year if the project financing is completed. This assurance can be used to assist the Sponsors in securing financing from other entities.

Task 9. Discretionary Task

The Consultant shall place \$10,000 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. The Consultant and Office project manager will agree on any work to be accomplished under this task and the cost of the work. No work will be initiated, or funds spent for this task, without direct approval from the Office project manager.

Task 10. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study, no later than May 1, 2020. Five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached. The project Sponsor shall be provided a copy of this draft report for their review.

Task 11. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines. The Consultant is responsible for publishing notice of the meeting not less than once each week for two weeks prior to the meeting and should budget accordingly.

Task 12. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report and the Consultant shall submit all final documents and materials, to the Office on or before August 21, 2020. These final documents and materials, shall include: 1) Twelve (12) hard copies of the final report, and 2) Twelve (12) hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Four (4) CD, DVD, or USB drive copies containing the final report, and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) CD, DVD, or USB drive copies containing the final report, and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. The

Consultant shall adhere to the GIS requirements defined in Section C.2.b. of Attachment A.

In reference to Task 5, the following shall be provided: two (2) hard-copies and (1) digital copy of an operations manual; two (2) large size hard-copy printouts of the service areas and associated features, two (2) hard-copies and one (1) digital copy of system mapping books.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

Morrison-Maierle Systems Corporation

PROFESSIONAL SERVICES

| | <u>Hourly Rate</u> |
|--|--------------------|
| Principal | \$210.00 |
| Supervising Engineer III | \$195.00 |
| Supervising Engineer II | \$185.00 |
| Supervising Engineer I | \$175.00 |
| Senior Engineer II | \$165.00 |
| Senior Engineer I | \$150.00 |
| Design Engineer II | \$140.00 |
| Design Engineer I | \$130.00 |
| Engineer Intern II | \$115.00 |
| Engineer Intern I | \$100.00 |
| Supervising Senior Planner | \$180.00 |
| Senior Planner | \$150.00 |
| Environmental Scientist II | \$115.00 |
| Environmental Scientist I | \$101.00 |
| Supervising Geologist | \$195.00 |
| Senior Geologist | \$185.00 |
| Geologist III | \$160.00 |
| Geologist I | \$115.00 |
| Senior Engineering Technician | \$145.00 |
| Engineering Technician | \$100.00 |
| Cad Designer III | \$125.00 |
| Cad Designer II | \$115.00 |
| Cad Designer I | \$107.00 |
| Cad Tech III | \$105.00 |
| Cad Tech II | \$ 94.00 |
| Cad Tech I | \$ 83.00 |
| Senior Resident Project Representative | \$140.00 |
| Resident Project Representative III | \$134.00 |
| Resident Project Representative II | \$117.00 |
| Resident Project Representative I | \$102.00 |
| Administrative Manager | \$102.00 |
| Administrative Coordinator III | \$ 94.00 |
| Administrative Coordinator II | \$ 88.00 |
| Administrative Coordinator I | \$ 73.00 |
| Project Coordinator III | \$ 95.00 |

PROFESSIONAL SERVICES (Cont.)

| | <u>Hourly Rate</u> |
|---------------------------------|--------------------|
| Project Coordinator II | \$ 83.00 |
| Project Coordinator I | \$ 73.00 |
| Technical Intern | \$ 70.00 |
| Senior Communication Specialist | \$100.00 |
| Graphic Designer | \$ 84.00 |
| Senior Survey Manager | \$170.00 |
| Land Surveyor IV | \$139.00 |
| Land Surveyor III | \$131.00 |
| Land Surveyor II | \$120.00 |
| Land Surveyor I | \$110.00 |
| Remote Sensing Specialist | \$105.00 |
| Survey Technician IV | \$100.00 |
| Survey Technician III | \$ 95.00 |
| Survey Technician II | \$ 80.00 |
| Survey Technician I | \$ 70.00 |

EQUIPMENT RATES

| | |
|-----------------------------------|-----------------------------|
| Mileage | \$ 0.58/mile |
| ATV/Snowmobile | \$ 50.00/day |
| UTV | \$100.00/day |
| GPS (2 Receivers) | \$ 30.00/hour, \$240.00/day |
| GEO GPS | \$ 65.00/day |
| Total Station | \$ 80.00/day |
| Robotic Total Station | \$ 30.00/hour, \$240.00/day |
| FARO Focus 3D X 130 Laser Scanner | \$ 50.00/hour, \$400.00/day |
| sUAS Survey Drone | \$400.00/day |
| Nuclear Density Meter | \$ 10.00/hour, \$ 35.00/day |
| Airflow Balancing Hood | \$ 75.00/day |
| Core Drill | \$ 10.00/hole |
| Digital Level | \$ 50.00/day |
| Trimble V10 Image Rover | \$ 50.00/day |

HYDROLOGICAL EQUIPMENT

| | |
|------------------------|---------------|
| Conductivity Meter | \$ 15.00/day |
| Disposable Bailers | \$ 10.00/each |
| Dissolved Oxygen Meter | \$ 20.00/day |

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| | |
|--------------------------------|---------------------------------|
| PH Meter | \$ 15.00/day |
| PH/Temp/Conductivity Meter | \$ 25.00/day |
| Water Sample Fee | \$ 10.00/each |
| In Situ Level Troll 700 | \$ 63.00/day, \$250.00/week |
| AquaCalc Pro | \$ 60.00/day, \$120.00/week |
| Marsh McBirney 2000 Flowmeter | \$ 60.00/day, \$120.00/week |
| Global Water FP 111 Flowmeter | \$ 25.00/day, \$ 75.00/week |
| Submersible Pump (Redi Flo 2) | \$155.00/day |
| Water Level Meter, 300 Ft. | \$ 25.00/day, \$ 50.00/week |
| Water Level Meter, 500 Ft. | \$ 35.00/day, \$ 75.00/week |
| Oil/Water Interface Well Probe | \$ 40.00/day, \$120.00/week |
| Hach Flo-Dar (logger & sensor) | \$400.00/week, \$1,000.00/month |
| Rain Gauge Sensor | \$ 15.00/week, \$ 60.00/month |

PRINTING EXPENSES

| | |
|---------------------------------------|----------------|
| Black & White Copies | \$ 0.10/8.5x11 |
| | \$ 0.20/11x17 |
| | \$ 0.13/8.5x14 |
| Color Copies | \$ 0.20/8.5x11 |
| | \$ 0.40/11x17 |
| | \$ 0.20/8.5x14 |
| Binding | \$ 0.25/each |
| Lamination | \$ 1.00/each |
| Oversize Print Black & White | \$ 5.00/each |
| Oversize Print Color | \$ 6.00/each |
| Print & Basic Mount | \$12.00/each |
| Print & Machine Mount | \$20.00/each |
| Print, Machine & Laminate White Board | \$32.00/each |

MISCELLANEOUS EXPENSES

| | |
|-------------------|---------|
| Meals and Lodging | At Cost |
|-------------------|---------|

Other expenses will be invoiced at cost including consultants, delivery services, testing and lab services.

A copy of receipts will be provided for all miscellaneous expenses.

**TORRINGTON WATER MASTER PLAN, LEVEL I STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. Parties. The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and AVI, PC [Consultant], 1103 Old Town Lane, Suite 101, Cheyenne, WY 82009.

2. Purpose of Contract. The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. Term of Contract. This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. Payment.

A. Reimbursement of Expenses. The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed one hundred seventy-three thousand, eight hundred thirty dollars (\$173,830).

B. Project Budget. The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| 1. Scoping and Project Meetings | \$ 13,135 |
| 2. Information Review | \$ 12,830 |
| 3. Inventory, Evaluation, Drone Map, & GIS | \$ 44,505 |
| 4. Hydraulic Model | \$ 17,720 |
| 5. Water Sources | \$ 19,620 |
| 6. Growth and Demand Projections | \$ 3,325 |
| 7. Recommendations and Cost Estimates | \$ 9,290 |
| 8. Water System Financing | \$ 8,000 |
| 9. Draft Report | \$ 24,600 |
| 10. Report Presentations | \$ 6,500 |
| 11. Final Report and Deliverables | \$ 14,305 |
| TOTAL PROJECT COST | \$ 173,830 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: The City of Torrington is located in Goshen County and resides within the North Platte River Basin. The City has a population of 7,248 people and they are served through 2,792 taps within the corporate limits and 172 taps outside of the corporate limits. The City is supplied with North Platte River alluvium groundwater from a well field located at the City Golf Course and the wells have a total average yield of 4,800 gpm. The supplied groundwater is treated at the Central Water Plant by reverse osmosis/blending/chlorination and stored in above-ground tanks with a total capacity of 3.03 million gallons.
2. Purpose: To perform a Torrington Water Master Plan, Level I Study. The City of Torrington requested a Level I study to identify the components of the existing water system that are deficient and to provide a schedule for improvements. The plan will help the City in evaluating the current condition of their system and to provide the tools and guidance necessary to assist in the planning, rehabilitation, upgrading, and managing of their system. The master plan would serve as a framework for the City to establish project priorities and to perform financial planning necessary to meet those priorities. The plan would also provide reconnaissance level information regarding costs and scheduling.
3. History: A WWDC Level I water master plan study was conducted for the City of Torrington from 1994 to 1995. Previously, the WWDC has funded two Level I studies from 1994 to 1997 and a Level III construction project from 1997 to 2007. The Commission has also completed a wellhead protection program study and two phases of a Level I study in the project area. The previous WWDC reports include the following:

Baker & Associates, Wellhead Protection Program, Torrington, Wyoming:
September 1994.

Banner Associates, Inc., Torrington, Wyoming Water Master Plan, Level I,
Final Report: November 1995.

Banner Associates, Inc., Torrington, Wyoming Water Master Plan, Level I, Phase II, Final Report: November 1997 (2 books).

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) **FORMATS and STANDARDS.** Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) **MAPS.** Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow

replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS

CONSTRUCTION COSTS

| | |
|---|------------------------|
| Itemized Cost of Each Project Component | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Cost of Project Components TOTAL | \$ _____ (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ |
| Components + Construction Engineering Costs | \$ _____ (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | |
|---|------------------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ |
| Permitting and Mitigation | \$ _____ |
| Legal Fees (Title of Opinion Only) | \$ _____ |
| Acquisition of Access and Rights of Way | \$ _____ |
| Pre-construction Costs Total | \$ _____ (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | |
|--|------------------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ (subtotal #5) |
|--|------------------------|

WWDC INELIGIBLE PROJECT COSTS

| | |
|---|------------------------|
| Itemized Costs of Ineligible Project Components | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Additional Cost for Construction Engineering | \$ _____ |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ |
| Total WWDC Ineligible Project Costs Total | \$ _____ (subtotal #6) |

TOTAL PROJECT COST

Total Project Cost (subtotal #5 + subtotal #6) \$_____

MATERIALS ONLY TOTAL

Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) \$_____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and

Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Scoping and Project Meetings

A scoping meeting shall be held early in the project schedule in the project area to familiarize the Sponsor with the scope of the project as well as obtain and provide input and information to and from all affected parties. The Consultant shall prepare all presentation material, including maps and other visual aids as necessary, to explain the project. The scoping meeting location and time shall be coordinated with the Sponsor and Office project manager and should be held after the Consultant has reviewed all background information as described in Task 2.

Additional public project meetings shall be conducted to facilitate project activity coordination and to keep the Sponsor and all affected parties informed of progress. The Consultant should assume a minimum of one (1) public project meeting in the study area. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices, needed materials, and the meeting record. In addition to the public project meetings, several informal meetings with the Sponsor or Office project manager may be necessary during the course of the study. The Consultant shall notify the WWDO project manager in advance of any meetings with the project sponsor.

Task 2. Information Review

The Consultant will gather and review all existing information related to the Sponsor's water supply and distribution system. This includes information available through the Sponsor, WWDO, Water Resources Data System (WRDS), Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division (DEQ), and any other sources as appropriate. The Consultant will coordinate with the Sponsor and Office project manager to obtain all past relevant studies that need to be reviewed. Improvements recommended to the water system in any of these reports should be documented. In addition, the status of those recommended improvements should be identified (i.e., disregarded, completed, in progress, pending, etc.). The Consultant shall also review and summarize all local area development plans, zoning ordinances, annexation policies and other regulations that may affect this project. The Consultant shall provide a summary of existing information in the final report.

Task 3. Inventory, Evaluation, Drone Map & GIS

The Consultant shall confer with the Sponsor to identify specific problem areas and concerns that should be focused on during this task. The Consultant shall then propose the extent of inventory and evaluation to be performed in this task. Inventory and evaluations shall primarily focus on facilitating the objectives of this project that in part include addressing the Sponsor's areas of concern, identifying system deficiencies, and formulating improved GIS mapping. The Consultant shall coordinate with the Office project manager and the Sponsor regarding the expectations and limitations of this effort and shall be mindful of the following intentions of this task:

- a. Inventory and evaluate the existing infrastructure to determine its ability to meet current water demands and future demands developed in Task 6.

- i. Identify those components that presently require repair or replacement.
 - ii. Identify those components that will require repair or replacement within the next twenty (20) years and provide a schedule for the needed improvements as described in Task 7.
- b. Assess the capacity and serviceability of existing water treatment facilities, transmission and distribution pipelines, storage tanks, pump stations, PRV stations, flow monitoring devices, and other major components of the water supply system as applicable. Identify deficiencies and make recommendations for improvements needed to address these limitations. In conjunction with the hydraulic modeling task, pipe materials and pressure classes shall be examined in terms of suitability to provide adequate service.
- c. Evaluate the system for water losses, including leaks and other non-revenue water. Results of the hydraulic model can serve as an indicator for potential leakage locations along with observations and discussions with system operators. Identify locations that may warrant a future leak detection study.

The Consultant shall evaluate the management and operation of the public water system in the study area to determine if procedural changes would be beneficial. If so, the Consultant shall detail those changes. Results of the hydraulic model simulations can serve as a basis for this task along with observations and discussions with system operators. The Consultant shall evaluate the existing water metering system to ensure water bills can be or are based on metered usage. The Consultant may offer suggestions relating to the existing billing and metering procedures.

The Consultant shall confer with the Sponsor to ascertain the Sponsor's existing GIS, determining where the files are housed (i.e., with a Consultant or with the Sponsor), the extent of the mapping, and required updates. The Consultant shall then propose the scope of further mapping to be completed in this task. Updates to the Sponsor's existing GIS are expected to include verification of the accuracy of the water system mapping in terms of piping connectivity, looping, location of system components, etc. The Consultant shall coordinate with the Sponsor during field work so the Sponsor may perform any required pot-holing to help verify and true-up the Sponsor's existing data.

All mapping and corresponding data sets, existing and updated, shall be consolidated into a comprehensive GIS. Mapping shall be extended as needed to facilitate objectives of this project that include the hydraulic model, addressing the Sponsor's areas of concern, identification of system deficiencies, and development of a modern and efficient GIS. Coordination shall take place with the Sponsor and Office project manager on field survey

limitations and any mapping logistics. The map features and attributes shall be recorded consistent with the Office GIS standards described in Section C (2.)(b) above. The Consultant is not expected to apply these standards to the Sponsor's existing GIS data but rather, ensure that any newly collected or developed datasets follow these standards.

Deliverables to the Sponsor shall include at least one set of large-size hard copy printouts of the service areas and associated features for the Sponsor's use. These items are in addition to the GIS deliverables described in Task 11. The Consultant shall coordinate with the Office project manager and the Sponsor on final production of all hard copy mapping media and its delivery.

In addition, Task 3 includes the scope alteration for conducting an aerial drone survey for mapping in the project area, which was part of the Consultant interview conducted in early October 2018, and accepted by the WWDC on October 5, 2018.

Task 4. Hydraulic Model

In conjunction with the updated GIS and water system information obtained in Task 3, the Consultant shall update the Sponsor's existing hydraulic model of its water system, if one is available. The Consultant shall model the current system and proposed system improvements. Acceptable software platforms include the following or an Office approved equal:

- Innovyze/MWH Soft: InfoWater (ArcGIS based); H2OMap Water (stand-alone); or H2ONet (AutoCAD based)
- Bentley/Haestad Methods: WaterGEMS (ArcGIS based); WaterCAD (AutoCAD based or stand-alone)

The model shall analyze the system using an extended period simulation and shall be properly calibrated to available data sets or known system behavior. The Consultant shall evaluate the adequacy of the water transmission and distribution lines, pumping stations, and storage capacities to meet current and future pressure and flow requirements based on maximum day demands. System storage shall be modeled in terms of volume and water quality (i.e., tank turnover, water age, etc.). System pressures shall be determined in the model and compared against the pressure classes of existing pipes to identify problem areas.

The Consultant shall consider domestic, rural, commercial, municipal, and industrial demands as needed in the evaluation (i.e., hospitals, colleges, golf courses, hotels, trailer park, schools, etc.) and incorporate planned development areas and all independent water systems that are supplied from the Sponsor's system. All pressure zones shall be properly accounted for and simulated in the model. All pump stations shall be simulated in the model, and the Consultant

should assess the adequacy of the existing pumps in terms of capacity, hydraulic head, run-time, variable frequency drive (VFD) operation, etc. as deemed necessary.

The Consultant shall use the model to size new pumps, transmission and distribution lines, storage, and other facilities as needed. In terms of fire flow, coordinate with the Sponsor to ascertain the Sponsor's expectations in providing fire flow to its service areas and the subsequent extent of fire flow simulations required. The model shall incorporate the recommended system upgrades or modifications and shall be detailed enough to satisfy the needs of the project.

The Consultant shall construct and execute the hydraulic model to determine system capacity limits in terms of maximum growth potential. Any inactive or planned water taps within the system shall be incorporated into the model. The Consultant shall investigate whether the system has the capacity to effectively serve these taps should they eventually become active.

Within the final report, the Consultant shall fully describe all modeling efforts particularly in terms of the model extents and acquisition of model input, including but not limited to the following:

- Nodal Elevations
- Demands
- Diurnal Curve(s)
- Pump Curves
- Valve Settings
- Pipe Diameters and Material
- Pipe Friction Factors
- Tank Geometry

Task 5. Water Sources

The Consultant shall gather and analyze data and information as needed to examine the Sponsor's water supply source(s) for their public water supply system. Capacities, diversion rates, pumping rates, pump capacities, and water treatment plant capacities shall be investigated as applicable. The Consultant shall determine if the water supply source(s) are limiting the ability to meet present and future water demands and if so, identify water supply alternatives to meet those demands. The Sponsor's existing main transmission lines shall be assessed in terms of sizing, condition, and possible redundancy use. Any future potential raw water storage projects that the Sponsor is considering shall be documented and discussed.

The Consultant shall review existing water quality reports to determine if water supply sources and distributed water complies with EPA drinking water standards. If the reports indicate that the standards are not being met or suggest potential water quality problems, recommendations will be presented to mitigate these problems. Where applicable, the Consultant shall collect data on the number of households using septic systems, enhanced septic systems, sewage lagoon systems, or wastewater treatment plants to handle wastewater treatment within the Sponsor's water service area. These data will be used to determine if wastewater treatment, or lack thereof, is presently impacting the water quality or could impact the water quality of the Sponsor's water supply.

The Consultant will review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The inventory shall include priority dates, quantities, permitted uses, permit conditions, and other pertinent data. Historic use of water under each permit will be estimated to determine if the water rights must be expanded or altered to accommodate the recommendations in this project. The Consultant will also review any water supply contracts held by the Sponsor and discuss their purpose and importance to the Sponsor.

Task 6. Growth and Demand Projections

The Consultant shall develop population growth projections for the Sponsor's water service area. Planning boundaries of the service area will be based on discussions with the Sponsor as to where future growth may occur. For example, the growth may occur within the corporate limits, the existing service area, or outside of both. This may result in the consideration of an expanded water service area that could reasonably be served by the Sponsor considering the investments in infrastructure.

Historic population data obtained from the Economic Analysis Division of the Wyoming Department of Administration and Information (EAD/DA&I) will be used as the basis of the projections. (Refer to <http://eadiv.state.wy.us/>.) Alternate population projections will be developed considering recent growth trends, projections developed by the EAD/DA&I, and projections from other sources including, but not limited to those that may be available from the Sponsor and county planning agencies. Another information source may be population projections available in environmental impact statements generated for mineral resource development in the area. The Consultant shall provide graphic representations of each alternate population projection.

Water demand projections will be developed based on historical water use records. Alternate demand projections may be developed that consider the effects of an increasing tiered water rate system. Demand projections should include bulk water sales to rural or independent water districts or systems, industries, and others as

applicable. The potential for any future high-impact water demand scenarios shall be examined. The Consultants shall also investigate any water service regionalization opportunities that may exist to satisfy future water demands.

Task 7. Recommendations and Cost Estimates

The Consultant shall develop a listing and descriptions of recommendations for system improvements identified during the study. The recommendations shall address needed infrastructure capital improvement projects along with non-structural improvements suggested for the funding, operation, maintenance, and replacement of the system. The Consultant will prioritize the recommendations in coordination with the Sponsor. A schedule shall be developed that identifies a phased approach for the implementation of the recommendations in accordance with their priority.

The Consultant shall prepare construction cost estimates in tabular form for each of the recommended system improvements. The cost estimates will be of sufficient detail to accommodate a Level III project application. The table will identify both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement shall be prepared as outlined in Attachment A, Section C.3. The Level III cost estimates will include costs of design, permitting, land acquisition, construction engineering, materials and equipment, construction, and construction contingencies. The cost estimates should be based on the year this study is completed. The Consultant shall then suggest an appropriate inflation factor that may be applied to the project's current year total cost and projected into the future per the schedule developed in this task.

Task 8. Water System Financing

The Consultant shall work with the Sponsor to acquire all necessary financial data required for this task to determine the current and anticipated future water system revenues and expenditures. To initiate this task, the Consultant shall determine if the Sponsor has a water enterprise fund in which existing water revenues allow the water system to be financially self-supporting or if the Sponsor must subsidize the water system from other budgets and revenues such as bonds, grants, etc. In order for the water system to be self-supporting, revenues should be sufficient to accomplish the following:

- Retire existing water related debt (principal and interest).
- Pay the costs for employees.
- Pay the costs of materials, supplies, utilities, and outside services necessary to operate and maintain the water system and provide normal improvements and replacement requirements for the system.
- Pay for administrative and overhead expenses.

- Provide an emergency fund that annually accrues at least an amount equal to 1.5% – 2.5% of the operating expenses.
- Provide a fund that accrues sufficient reserves to pay for major repairs and replacement that will be required during the life of any associated project.
- Pay other costs as may be identified by the Consultant.

The Consultant shall first use the above criteria to make recommendations on the Sponsor's current water revenue structure (rates, tap fees, and other) that would support the existing water system based on a revenue structure that encourages water conservation (tiered water rates). The current water revenues shall be compared against current water expenditures based on the last five (5) years of data (if available). The Consultant shall prepare a suggested itemized annual budget for the existing water system that would result in the system becoming and staying financially self-supporting.

Next, the Consultant shall prepare two (2) funding scenarios for consideration by the Sponsor that demonstrate the adjustments in revenues that may be necessary to accommodate the prioritized recommendations, schedules, and cost estimates developed in Task 7. The Consultant shall present these amended water revenue structures that would support the identified system improvements while maintaining the system as financially self-supporting as defined by the above criteria. Within these adjustment scenarios, the Consultant shall demonstrate the effects on the average monthly bill for residential water users. These estimated average monthly bills will be compared against American Water Works Association (AWWA) standard of 2.5% of the annual median household income divided by 12 months. These two (2) scenarios shall be presented in the draft and final reports in a tabular or other clear and concise format. The adjustment in revenues will be presented based on the following two (2) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e.: the Consultant shall demonstrate the necessary adjustments in water system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Assume that funding for WWDC **eligible** components will be in the form of a 67% grant from WWDC and a 33% loan from WWDC (4%, 30-year term), and funding for WWDC **non-eligible** components will only be in the form of Sponsor contribution from current or proposed water system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 2 above) and to fund WWDC **non-eligible** components that are necessary for the completion of a Level III construction project. The Wyoming Drinking Water State Revolving Fund Program (DWSRF), the USDA Rural Utilities Service (RUS), the

State Lands and Investments Board, the Wyoming Business Council, the DEQ Abandoned Mine Lands Program, and other eligible funding sources shall be considered for loans, grants, and combinations thereof.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question. The Consultant shall contact these agencies early in the study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans in terms of the environmental review (ER) efforts specifically required for each agency. Throughout this task, the Consultant shall carefully distinguish and be mindful of the differences between DWSRF and RUS in terms of available funding packages and ER requirements. DWSRF and RUS guidance and contact information is as follows:

For DWSRF

Forms and Guidance: <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/>

Contact: Bill Tillman, SRF Principal Engineer
WDEQ/WQD, 200 W. 17th Street, Cheyenne, WY 82002
Tel 307-777-6941. Email: william.tillman@wyo.gov

For RUS

Forms and Guidance: <http://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs>

Contact: Lorraine Werner, Community Programs Director, USDA RUS
Wyoming State Office, 100 East B Street, Rm 1005, Casper, WY 82602
Tel 307-233-6710. Email: lorraine.werner@wy.usda.gov

Lastly, in order to demonstrate whether the water system has the technical, financial, and managerial capabilities to ensure current and ongoing successful operations, the Consultant shall complete the most recent Capacity Assessment and Financial Worksheets as provided by Wyoming DEQ. Water systems must meet these capacity development requirements before a construction permit can be issued, and it is also part of eligibility for Drinking Water State Revolving Fund (DWSRF) loans. These worksheets shall be completed by the Consultant whether the Sponsor is anticipating DWSRF funding or not. Completed worksheets shall be submitted as an appendix within the final report to this project. Worksheets are

available at <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/> or by contacting DEQ directly.

It should be noted that the Sponsor's ability to pay for the project in a timely manner is a key consideration in the WWDC's funding decisions. The annual requests for WWDC funding typically exceed the funding available. There are often uncertainties and delays in acquiring loans and, particularly, grants from other funding agencies. Therefore, the WWDC may give priority in its Level III funding deliberations to the projects in which the Sponsor has been advancing on a specific financing plan and there is documented evidence that the financing will be in place within the calendar year in which the Level III project funding is approved by the Legislature. If the WWDC finds it necessary to delay Level III funding requests due to the schedule for the financing plan, the WWDC may provide assurance to the Sponsor that it will recommend Level III funding the following year if the project financing is completed. This assurance can be used to assist the Sponsors in securing financing from other entities.

Task 9. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study, no later than April 1, 2020. Five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one stand-alone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached. The project Sponsor shall be provided a copy of this draft report for their review.

Task 10. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines. The Consultant is responsible for publishing notice of the meeting not less than once each week for two weeks prior to the meeting and should budget accordingly.

Task 11. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report and the Consultant shall submit all final documents and materials, to the Office on or before July 1, 2020. These final documents and materials, shall include: 1) Twelve (12) hard copies of the final report, 2) Twelve (12) hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Four (4) CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one

(1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. The Consultant shall adhere to the GIS requirements defined in Section C.2.b. of Attachment A.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

AVI, PC

LABOR

| | |
|---------------------------|-------------------|
| Senior Principal | \$139.00 per hour |
| Principal | \$122.00 per hour |
| Sr Registered Engineer | \$111.00 per hour |
| Registered Engineer | \$ 96.00 per hour |
| Engineer (Non-Registered) | \$ 80.00 per hour |
| Senior Planner | \$111.00 per hour |
| Traffic Engineer | \$106.00 per hour |
| Construction Manager | \$ 86.00 per hour |
| Technician I | \$ 82.00 per hour |
| Technician II | \$ 78.00 per hour |
| Technician III | \$ 74.00 per hour |
| Inspector I | \$ 75.00 per hour |
| Inspector II | \$ 67.00 per hour |
| Bookkeeping | \$ 53.00 per hour |
| Clerical | \$ 53.00 per hour |
| Registered Surveyor | \$111.00 per hour |
| Party Chief | \$ 90.00 per hour |
| Crew Member | \$ 43.00 per hour |
| Party Chief/RLS | \$111.00 per hour |

* * Expert witness and/or legal assistance will bill at 1.5 times the above billing rates.

TRAVEL CHARGES

| | |
|------------------|------------------|
| Mileage | \$ 0.58 per mile |
| Rental Vehicles | At Cost |
| ATV/Boat Rentals | \$125.00 per day |

EQUIPMENT CHARGES

| | |
|---|-------------------------------------|
| Trimble R6 GPS Survey Equipment | \$320.00 per day |
| Additional Rover | \$20.00 per hour |
| Trimble R6 GPS Survey Equipment w/2 nd Rover | \$60.00 per hour / \$480.00 per day |
| Digital Level (Trimble/Leica) | \$100.00 per day |
| Field Consumables | At Cost |
| Robotic Total Station | \$20.00 per hour / \$160.00 per day |
| Trailer | \$ 25.00 per day |

LARGE FORMAT PRINTS & PLOTS

| | |
|-------------------------------|------------------------|
| Copies | \$0.25 per square foot |
| Mylars | \$2.50 per square foot |
| Color Graphics prints & plots | \$0.67 per square foot |

XEROX COPIES

| | |
|------------|-------------|
| 8 1/2 x 11 | \$0.15 each |
| 8 1/2 x 14 | \$0.20 each |
| 11 x 17 | \$0.25 each |

COLOR COPIES

| | |
|------------|-------------|
| 8 1/2 x 11 | \$0.45 each |
| 8 1/2 x 14 | \$0.45 each |
| 11 x 17 | \$1.00 each |

| | |
|--------------------------------------|-----------------|
| <u>PHONE / CELLULAR PHONE</u> | \$15/mo/project |
|--------------------------------------|-----------------|

PER DIEM Paid at the GSA rates for meals plus actual lodging cost per man day

OTHER MISC ITEMS ARE BILLED OUT AT COST

**LAKE DESMET/HEALY RESERVOIR UTILIZATION, LEVEL II STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and Entech, Inc. [Consultant] 1949 Sugarland Drive, Suite 205, Sheridan, WY 82801.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed two hundred sixty-eight thousand dollars and no cents (\$268,000.00)

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| Task 1. Background Information Collection and Review | \$ 19,000 |
| Task 2. Scoping and Project Meetings | \$ 16,000 |
| Task 3. Water Rights Analysis | \$ 8,000 |
| Task 4. Tongue River Basin Alternatives and Screening Analysis | \$ 37,000 |
| Task 5. Healy Reservoir Outlet Alternatives and Screening Analysis | \$ 39,000 |
| Task 6. Environmental Analysis and Permitting | \$ 9,000 |
| Task 7. Preliminary Designs and Cost Estimates | \$ 38,000 |
| Task 8. Economic Analysis | \$ 7,000 |
| Task 9. Conclusions and Recommendations | \$ 2,000 |
| Task 10. Discretionary Task | \$ 50,000 |
| Task 11. Draft Report | \$ 24,000 |
| Task 12. Report Presentations | \$ 2,000 |
| Task 13. Final Report and Deliverables | \$ 17,000 |
| TOTAL PROJECT COST | \$ 268,000 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location. Johnson County, near Buffalo, WY
2. Purpose. To perform a Level II study to investigate potential options to gravity release Healy Reservoir water to Clear Creek, as well as options for the delivery of Lake DeSmet water to the Tongue River Basin in the event Montana calls for regulation.
3. History. Lake DeSmet and the associated north and south dams are owned by Johnson County. Recently, the State of Wyoming purchased certain water assets from Sasol Synfuels. The assets are as listed:
 - Three storage water right permits in Lake DeSmet totaling 62,199 AF
 - Permit 7533R with a priority date of 8-16-39 and a volume of 11,640 AF
 - Permit 7289R with a priority date of 4-15-57 and a volume of 36,834 AF
 - Permit 7290R with a priority date of 10-14-57 and a volume of 13,725 AF
 - Reservoir supply permits to supply water to Lake DeSmet from Rock Creek, French Creek, and Clear Creek (Permits 22930, 22929, and 22928 respectively)
 - Clear Creek diversion dam (8729R - diverts water into Healy Reservoir)
 - Healy Reservoir with a storage volume of 5,140 AF (7289R)
 - Clear Creek water supply system consisting of 6.7 miles of 66" diameter pipeline and pumping facilities located at Healy Reservoir
 - Inlet/outlet structure located on the south dike of Lake DeSmet

Along with the water assets purchase came an obligation to deliver irrigation water from Healy Reservoir to users on Clear Creek via two 100 HP electric pumps. The study will examine alternatives and associated cost benefit

ratios to construct a gravity delivery system in lieu of the current electrical pumps.

Recently, Montana filed suit against the State of Wyoming for apparent violations to the Yellowstone River Compact. Although this case was resolved with a monetary sum, the Special Master's report on the case indicates that a water award from the State of Wyoming could have been an acceptable means of compensation for the injury claimed by Montana in the suit. Therefore, this study will also explore options to utilize Lake DeSmet storage water in the Tongue River Basin, to be used as replacement water in lieu of curtailment of Wyoming water users.

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) **FORMATS and STANDARDS.** Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) **MAPS.** Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS

CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | |
|---|------------------------|
| Itemized Costs of Ineligible Project Components | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Additional Cost for Construction Engineering | \$ _____ |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ |
| Total WWDC Ineligible Project Costs Total | \$ _____ (subtotal #6) |

TOTAL PROJECT COST

| | |
|--|----------|
| Total Project Cost (subtotal #5 + subtotal #6) | \$ _____ |
|--|----------|

MATERIALS ONLY TOTAL

| | |
|--|----------|
| Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) | \$ _____ |
|--|----------|

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to

commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Background Information Collection and Review

The Consultant will gather, review, and assemble all background information and references available from any previous work through the Office, Water Resources Data System, Johnson County, Lake DeSmet Counties Coalition Joint Powers Board, Sasol Synfuels and/or their predecessors, Wyoming State Engineer's

Office, Wyoming Attorney General's Office, Wyoming Game and Fish Department, Wyoming Department of Transportation, Water Resource Data System (WRDS), and other agencies, firms, and individuals as appropriate. Of particular importance is the review of the following literature available through the Wyoming Water Development Office:

(1) Texaco, Operation and Maintenance Manual, Feb 1977; (2) Texaco, Technical Record of Design and Construction, May 1977; (3) Texaco, Handout for Wyoming Water Development Commission Regarding the Lake DeSmet Project, Oct 1982; (4) Texaco, The Lake DeSmet Project for Presentation to the WWDC, Jul 1989; (5) M&M Ranch Lake DeSmet Water Rights; (6) HKM Engineering, Lake DeSmet Level II Master Plan and Reservoir Rehabilitation Plan, Final Report, Dec 2003; (7) Lake Engineering Consultants, Inc., Lake DeSmet Level II Master Plan and Reservoir Rehabilitation Plan Phase 2, Final Report, Nov 2004; (8) States West Water Resources Corporation, Healy Pump Station System Report, Feb 2006; (9) Brown and Caldwell, Estimated Water Yield of Lake DeSmet report, 2006; (10) HKM Engineering, City of Buffalo-Sheridan Area Water System-Lake DeSmet Level I Study, Final Report and Appendices, Jun 2008; (11) States West Water Resources Corporation, Lake DeSmet Operation, Maintenance and Rehabilitation Report, Jun 2010; (12) Memo from Edith Johnson-Lambers, LDCC, Modeling Assumptions and Runs, Dec 2011; (13) WWDC Overall Results Summary Table of Firm Yield Totals, Dec 2011; (14) Memo from WWC Engineering, Comments on Lake DeSmet Modeling Scenarios, February 27, 2012; (15) DOWL-HKM MODSIM model and report, 2012; and (16) Powder/Tongue and Northeast River Basin Plan Update, Draft Report August 1, 2018.

Also, general familiarity with the Yellowstone River Compact and *Montana v. Wyoming & North Dakota* court case will be beneficial. Information is available at: <https://web.stanford.edu/dept/law/mvn/>

The Consultant shall develop and present a “digital library” of documents reviewed that will be summarized and referenced in the draft and final reports.

Task 2. Scoping and Project Meetings

A public kickoff meeting shall be conducted early in the project schedule. The purpose is to familiarize interested parties with the scope of the project and to obtain input from affected parties. A second public/open-house update meeting shall be conducted when sufficient progress is made on the project such that there is new information to share and the potential to receive feedback from affected parties. The Consultant shall prepare a presentation including maps and other visual aids to explain the project. Other meetings shall be conducted as necessary for the coordination of project activities and for keeping the Office and other stakeholders informed of project progress. At a minimum, monthly project update meetings will be conducted via teleconference with the Office. The Consultant will be responsible for setting and conducting all meetings in coordination with the

Office project manager. Public meetings shall be advertised in advance. In the interest of economy, meetings shall be scheduled to coincide with fieldwork whenever possible.

In addition, as the project develops, the Consultant shall budget for a minimum of five (5) total meetings (combined or separate) with Johnson County, the Wyoming Game and Fish Department (WGFD), the U.S. Army Corps of Engineers (USACE), Wyoming State Engineer's Office (SEO), Wyoming Department of Transportation (WYDOT), Wyoming Attorney General's office and others, as necessary. The meetings will be used to corroborate analysis, assumptions, and permits with respect to ownership, operation, fisheries, water rights, previous litigation, safety of dams, and permitting concerns/considerations.

No meeting shall be conducted without approval in advance by the Office project manager. The Consultant will prepare all notices and needed materials for the meetings. The Consultant shall also prepare meeting minutes for all meetings.

Task 3. Water Rights Analysis

The overall intent of this task is to discover the opportunities for Tongue River Basin use of the State of Wyoming's newly acquired Lake DeSmet water assets, and to support the analyses of subsequent tasks. Information from previous studies and the SEO shall be utilized to avoid duplicating work efforts.

The Consultant shall review, compile, and analyze the water rights relevant to the Tongue River Basin in Wyoming, and Lake DeSmet. The Consultant shall prepare a narrative summarizing the work completed and describing the implications and relationship of the Yellowstone River Compact to the water rights. Any maps, charts, tables, GIS data, etc. shall be included to convey the information in an understandable manner.

The Consultant shall identify post 1950 water rights and become familiar with recent litigation information from the *Montana v. Wyoming & North Dakota* court case so as to make a determination of probable exposure Wyoming users could experience if a call for regulation by the State of Montana is made. The probability of different scenarios shall be discussed. Reasonable and prudent conclusions will be made to formulate the amount and flow rate of exchange water that could be needed, as a basis for further analysis.

The Consultant shall review available existing modeling, memos, and reports to provide an updated assessment of the firm yields available to the State of Wyoming's accounts/water rights in Lake DeSmet. Current limitations to maximum fill level shall be considered in this evaluation and discussed.

The Consultant shall evaluate the potential for readiness to serve contracts, from the Lake DeSmet Reservoir account, with direct flow and storage right holders in

the Tongue River Basin, and provide a discussion of probable scenarios and recommendations to implement.

In addition, the Consultant shall review the water rights and capacities in the Piney Creek, upper Prairie Dog Creek, and upper Little Goose Creek drainages and provide a discussion of the feasibility to utilize current transbasin irrigation infrastructure to meet the previously determined Tongue River curtailment amount. This could require potential modifications to the transbasin delivery infrastructure and exchanges between Lake DeSmet and downstream Piney Creek irrigators.

All analyses shall be conducted to the degree necessary to suit the nature of the topic and documented within the final report to fully support any conclusions, plans, or recommendations that are reached. At all times, the Consultant should remain cognizant of any previously analyzed topics and avoid duplicating work efforts.

Task 4. Tongue River Basin Alternatives and Screening Analysis

The Consultant shall determine the feasibility of utilizing water from Lake DeSmet to benefit the Tongue River drainage where calls for regulation by Montana place post 1950 water rights at risk of curtailment.

Utilizing information developed in Task 3, the Consultant shall develop alternatives for the transbasin delivery. The Consultant shall define and evaluate the proposed infrastructure of each transbasin delivery alternative from the reservoir, including modifications of existing transbasin irrigation infrastructure, and determine any channel improvements needed to reliably convey existing and additional water into the Tongue River Basin. Alternative evaluations shall be to the level of detail to capture project components, accurately assess the complexities, determine benefits and impacts, and compare levels of costs associated with each. The Consultant will then conduct a screening of the alternatives to identify potential fatal flaws. Screening criteria will be approved by the Office project manager and include, but not be limited to physical, legal, economic, social, and environmental issues. The screening shall be utilized to develop a top alternative to further analyze in subsequent tasks. The consultant shall work with the Office project manager on documenting alternative characteristics, scoring process and screening results. Information from previous studies and lessons learned shall be utilized to avoid duplicating work efforts.

Task 5. Healy Reservoir Outlet Alternatives and Screening Analysis

Currently, irrigation deliveries from Healy Reservoir must be pumped to Clear Creek. The Consultant shall develop alternatives to deliver water from Healy Reservoir to Clear Creek by gravity. The capacity of each alternative must consider the volume of active storage, potential for future increases in use, ability to release at a variable rate within the range of flows required for irrigation, and timing of water delivery needs. Once a reasonable estimate of capacity is

determined, it shall be discussed with the Office project manager and agreed upon before moving forward with analysis. Alternative evaluations shall be to the level of detail to capture project components, accurately assess the complexities, determine benefits and impacts, and compare levels of costs associated with each. The Consultant will then conduct a screening of these alternatives to identify potential fatal flaws. Screening criteria will be approved by the Office project manager and include, but not be limited to physical, legal, economic, and environmental issues. The screening shall be utilized to develop a top alternative for further analysis in subsequent tasks. The Consultant shall work with the Office project manager on documenting alternative characteristics, scoring process and screening results.

Task 6. Environmental Analysis and Permitting

The Consultant shall identify all permits, easements, and clearances necessary for implementation of each of the top alternatives developed in Tasks 4 and 5. Permits and clearances shall include, but not be limited to, those that fall within the jurisdiction of U.S. Army Corps of Engineers, Endangered Species Act, Historic Preservation Act, the Wyoming SEO, the Wyoming Department of Environmental Quality, WYDOT, the Bureau of Land Management, State Lands and Investments Board, Johnson County, and any other agency with jurisdiction that may affect the construction of a project. Work shall include providing timelines, next steps, and levels of effort. The Consultant shall have discussions with the relevant agencies, as needed, to corroborate analysis and assumptions, and accurately ascertain the information.

Task 7. Preliminary Designs and Cost Estimates

The Consultant shall prepare preliminary design drawings and cost estimates for each of the top alternatives developed in Tasks 4 and 5. The cost estimates shall be prepared according to the outline in Section C, Project Requirements, and must be of sufficient accuracy to support a potential legislative request for Level III Construction funding.

The preliminary design drawings shall include details of all anticipated project components including, but not limited to existing site conditions, a plan view, section and details for the main components, as well as construction details (e.g. – access, limits of construction, staging areas, equipment needed, etc.).

A draft set of preliminary design drawings will be provided to the Office project manager for review and comment prior to inclusion in the draft report. A final set of preliminary design drawings will be delivered with the final report.

The Consultant shall develop a draft of the construction sequencing, and activities necessary to complete each of the top alternatives (Gantt Chart) for the Office

project manager to review which will later be refined and delivered with the final report.

The Consultant shall prepare and develop life cycle cost analyses based on the preliminary design drawings for each of the top alternatives. The cost estimates shall include an itemized project budget that includes costs for, but not limited to, design engineering, permitting, mitigation, legal, access, right of ways, construction, construction engineering, contingencies, operation, maintenance and replacement. The estimate will include unit and lump sum prices for the required construction items based on local material supplier price data, data from R.S. Means' Heavy Construction Cost Data, other industry standard sources, and price data developed by the Consultant for previous final design/construction projects.

An Opinion of Probably Construction Cost (OPCC) shall be prepared for each of the top alternatives, in tabular form. The OPCC should be based on the year when this work is anticipated to be implemented. The Consultant will work with the Office project manager to select an appropriate inflation factor that will be applied to the project's current year total cost and projected into the future per the schedule of activities and time lines developed herein.

Task 8. Economic Analysis

Utilizing information developed in previous tasks, the Consultant shall estimate anticipated system revenues and expenses that will accrue once the project(s) are constructed. The Consultant shall prepare an economic analysis of the costs and benefits for each of the top alternatives. The analysis should include an estimate of direct and indirect benefits, if applicable.

Based on results of the economic analysis, the Consultant shall analyze and determine the most economical approach for providing replacement water in the Tongue River Basin, in the event of a Montana call for regulation, and for delivery of Healy Reservoir water to Clear Creek. The analysis of the Lake DeSmet trans-basin delivery alternative shall be compared to the potential to purchase replacement water from Tongue River Reservoir. The Healy Reservoir gravity outlet alternative shall be compared to the operation, maintenance, and replacement costs associated with the existing electrical pumping system.

Task 9. Conclusions and Recommendations

From information gathered in previous tasks, the Consultant shall provide a summary section in the report which details their conclusions, makes recommendations for project implementation, and provides justification for each.

Task 10. Discretionary Task

The Consultant will place \$50,000 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 11. Draft Report

The Consultant shall submit to the Office up to five (5) hard copies of a draft report describing the results of all work completed in this study, no later than July 1, 2020. Up to five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with up to two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached.

Task 12. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The report presentation for this Level II Study may also serve as a public hearing, with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper, once each week for three (3) weeks prior to the hearing; and in the local publication up to three (3) times prior to the hearing.

Task 13. Final Report and Deliverables

After incorporation of the Office's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office at least 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

The Consultant shall submit all final documents and materials to the Office on or before September 1, 2020. These final documents and materials, shall include: 1) Nine (9) [MIN] hard copies of the final report, 2) Nine (9) [MIN] hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date, as well as section tabs.

Four (4) [MIN] CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) [MIN] CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) [MIN] CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) [MIN] CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. See Attachment "A", Project Requirements for further details.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

ATTACHMENT B HOURLY RATE AND REIMBURSABLE EXPENSES PRICE SCHEDULE 2019

FEE SCHEDULE – EnTech, Inc.

| <u>Classification</u> | <u>Hourly Rate</u> |
|---------------------------------------|--------------------|
| Project Manager | \$ 140.00 |
| Project Engineer | \$ 130.00 |
| Design Engineer | \$ 120.00 |
| Staff Engineer | \$ 110.00 |
| Clerical | \$ 65.00 |
| S1 – One man survey crew – PLS | \$ 130.00 |
| S2 – Two man survey crew w/ PLS | \$ 185.00 |

| <u>Non-Labor Expenses</u> | <u>Amount</u> |
|---|-----------------|
| Printing / Copies | |
| A4 (8.5 x 11) | \$ 0.25 ea |
| A3 (11 x 17) | \$ 0.50 ea |
| A4 (8.5 x 11) color | \$ 2.00 ea |
| A3 (11 x 17) color | \$ 2.50 ea |
| A1 (24 x 36) blueline | \$ 8.00 ea |
| A1 (24 x 36) mylar | \$ 30.00 ea |
| A1 (24 x 36) bond | \$ 10.00 ea |
| A1 (24 x 36) presentation quality | \$ 17.00 ea |
| A1 (24 x 36) mylar | \$ 32.00 ea |
| Fax | \$ 1.50 ea |
| Mileage rate (all vehicles) | \$ 0.58 / mile |
| Survey vehicle (min trip charge) | \$ 35.00 ea |
| Survey equipment (RTK, GPS) | \$ 45.00 / hr |
| ATV | \$ 7.00 / hr |
| Drone | \$ 520.00 / day |
| Lodging | at cost |
| M&IE* | at cost |
| Shipping | at cost |

**M&IE can be billed when travel is more than 50 miles from the office for a period of three or more consecutive hours and/or involves an overnight stay.*

All third party billing will be invoiced at cost. This includes outside services such as, laboratory testing, subcontractors, equipment rental, materials not listed, installed equipment, special insurance etc.

**BLUFF/UPPER BLUFF IRRIGATION DISTRICTS MASTER PLAN, LEVEL I STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and WH, LLC d/b/a/ Western Heritage Consulting & Engineering [Consultant], PO Box 2117, Mills, WY 82644.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed one hundred twenty-two thousand, five hundred dollars (\$122,500).

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| 1. Scoping and Project Meetings | \$ 6,000 |
| 2. Information Collection and Literature Review | \$ 4,000 |
| 3. System Assessment and Inventory | \$ 30,000 |
| 4. Current Operations and Irrigation Efficiency Analysis | \$ 12,000 |
| 5. Review of Water Rights | \$ 5,000 |
| 6. Rehabilitation and Management Plan | \$ 8,000 |
| 7. Concept Level Designs and Cost Estimates | \$ 20,000 |
| 8. Economic Analysis and Project Financing | \$ 5,000 |
| 9. WWDO Discretionary Task | \$ 7,500 |
| 10. Draft Report | \$ 15,000 |
| 11. Report Presentations | \$ 6,000 |
| 12. Final Report and Deliverables | \$ 4,000 |
| TOTAL PROJECT COST | \$122,500 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: The Big Horn Basin in Washakie County, near Worland, Wyoming.
2. Purpose: To perform a Level I study for the Bluff/Upper Bluff Irrigation Districts in order to assess the existing system and prioritize system repairs and improvements. All structures are becoming aged and need to be assessed for replacement or rehabilitation. Siphons and spillways are in need of repair, a lack of flow measurement, and seepage are issues that need investigation. An assessment of pump stations is needed.
3. History: There are two Districts included in the study. One board manages both and meetings are typically held jointly. The Irrigation Districts utilize water from the Big Horn River and Boysen Reservoir to irrigate about 5,300 acres. The Bluff canal was built in 1904 and the Upper Bluff constructed in 1957 as part of the Bureau of Reclamation's Hanover-Bluff Unit of the Missouri Basin Program. The Districts have not completed a master plan of their system in thirty years. The previous studies have been completed for the Districts:
 - Level I, Worland Area Irrigated Lands GIS, 2007
 - Level III, Upper Bluff Rehabilitation Project, 1993
 - Level II, Upper Bluff Rehabilitation Study, 1988

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field

attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) FORMATS and STANDARDS. Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) MAPS. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS**CONSTRUCTION COSTS**

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | | |
|---|----------|---------------|
| Itemized Costs of Ineligible Project Components | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Additional Cost for Construction Engineering | \$ _____ | |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ | |
| Total WWDC Ineligible Project Costs Total | \$ _____ | (subtotal #6) |

TOTAL PROJECT COST

| | |
|--|----------|
| Total Project Cost (subtotal #5 + subtotal #6) | \$ _____ |
|--|----------|

MATERIALS ONLY TOTAL

| | |
|--|----------|
| Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) | \$ _____ |
|--|----------|

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Scoping and Project Meetings

One (1) scoping meeting shall be held early in the project schedule in the project area to familiarize the Sponsor with the scope of the project as well as obtain input from affected parties. The Consultant shall prepare a presentation including maps and other visual aids as necessary to explain the project. The Consultant will budget for a minimum of two (2) project meetings to be held in the project area. One of the project meetings may include the annual District meeting. Project and scoping meetings should include topics relevant to both Districts.

These meetings will be scheduled at the discretion of the WWDO project manager depending on developments during the study. The Consultant shall budget for project coordination meetings at the project site as necessary. In the interest of economy, meetings will be scheduled to coincide with fieldwork. The Consultant shall notify the WWDO project manager in advance of any meetings with the project sponsor.

Task 2. Information Collection and Literature Review

The Consultant shall collect and review all available background information regarding the Hanover Irrigation District system, to include existing reports, planning documents,

maps, surveys, plans/engineering drawings, and other sources of data relating to the system which would be pertinent to the scope of the study. This includes information available through the Sponsor, WWDO, Water Resources Data System, Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division, Bureau of Reclamation, and any other sources as appropriate. The Consultant shall also review and list all local area plans, zoning ordinances, annexation policies and other regulations that may affect the District.

The Consultant shall utilize the **Upper Bluff Rehabilitation Project Level II Feasibility Study (1988)**, and the **Worland Area GIS Project (2007)**, to inform and improve this master plan wherever possible.

Task 3. System Assessment and Inventory

The Consultant shall inventory and assess the existing conveyance system, evaluate all existing structures on the conveyance system, and determine rehabilitation and necessary improvements. The Consultant shall then produce a summary of existing system facilities, and a map book of the system. The map features and attributes shall be recorded consistent with the Office GIS standards described in Section C (2.)(b) above.

The system assessment provides the basis for the Rehabilitation and Management Plan and should include the items described below:

- a. The Consultant will conduct an engineering evaluation of each structure, noting any deficiencies. The consultant shall examine and identify structures requiring maintenance or redesign. Structure integrity, stability, and erosion issues shall be identified. The term 'structure' denotes any physical device built to convey, regulate, or measure discharge.
- b. The Consultant shall inventory and map the conveyance and lateral distribution systems and determine rehabilitation needs. As part of this task, the Consultant shall identify conveyance capacity, leaks, and seepage areas, canal profiles, and materials. Pipe and siphon locations, capacity, condition, and sizes shall be added to the GIS. Working with the Sponsor the consultant shall identify the location, timing, and the recurrence of water shortage in the system.
- c. The Consultant shall evaluate pumping stations. The assessment includes the pumps, pipes, footings, and electrical components. Existing pumping capacity and needed capacity shall be described. A full assessment of Pump Station No. 1 is needed, including evaluation of replacement pump types, replacement motors, check valves, electrical improvements (transformers, feeds, metering, etc), control center, and related structures shall be described. Needed repairs and

replacements shall be evaluated to a degree that projects can be taken to Level III construction.

d. The Consultant will conduct easement and right-of-way mapping of property owners adjacent to the Sponsor's canals and laterals within the irrigation system. This information will be compiled, mapped and provided in the final report with descriptions of easement type and if possible the last date the right-of-way was exercised. The Consultant shall assess the location of each canal, lateral, and structure with respect to the present and future encroachment of subdivisions, residential units and/or other structures or dwellings. The Consultant shall recommend appropriate solutions and prioritize improvements to preempt potential liability issues in terms of potential structure failure and subsequent flooding. Encroachment issues will be incorporated into the Rehabilitation and Management Plan (Task 6). General easement/right-of-way mapping will be included in GIS and on the map book.

Task 4. Current Operations and Irrigation Efficiency Analysis

The Consultant will evaluate the potential for delivery system and water conservation opportunities and review current maintenance operations and water use. This includes:

- a. Mapping of irrigated lands within the Districts. This shall be updated from Worland Area GIS Project, 2007 Anderson Associates Inc., based on the most recent aerial photos, and irrigation methods will be mapped.
- b. The Consultant shall determine and document farm delivery requirements by lateral or pipeline for the irrigated acreage within the served area.
- c. The Consultant shall review any flow/diversion records maintained by the Sponsor and work with the ditch riders to document typical water use.
- d. The Consultant will assess the need for, and optimal locations of measurement structures that will improve the effectiveness of water delivery in the system.
- e. The Consultant and the Sponsor shall review current maintenance schedules and procedures in order to recommend any needed operational changes.

Task 5. Review of Water Rights

The Consultant will review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The inventory shall include priority dates, quantities, permitted uses, permit conditions, and other pertinent data. As applicable, the Consultant will also review any water supply contracts held by the Sponsor and discuss their purpose and importance to the Sponsor.

Water rights mapping shall be included in the updates to the Sponsor's GIS. The Consultant shall search the State Engineer's Office (SEO) database for permits

associated with District and map those lands rights to the quarter-quarter or resurvey tract level. Supplemental supplies and groundwater rights on these lands will be mapped if applicable. If necessary, the Consultant shall also work with personnel from the SEO to verify the GIS mapping of the water rights and ensure that the most recent water rights are mapped onto the updated GIS. See the WWDO GIS Standards Technical Memorandum for more information on how to map water rights.

Task 6. Rehabilitation and Management Plan

Based on the work completed in Tasks 1 through 5, the Consultant will prepare a rehabilitation plan for the delivery system. The plan will include the most effective and feasible options for providing reliable conveyance of water through the project area including options and alternatives for mitigation of issues and concerns detailed in the above tasks. The Consultant, in conjunction with the Sponsor and the Office Project Manager, will prioritize the needs by their immediacy, i.e. those requiring immediate attention and/or action. Needed improvements should be prioritized for consideration by the sponsor. In addition, a schedule will be developed identifying a phased approach for the implementation of the recommendations in accordance with their priority. Non-structural improvements shall also be described with recommendations on how to make the changes. All proposed system improvements (structural and non-structural) shall be summarized and provided in the draft and final reports. Any permits necessary for the completion of such rehabilitation efforts shall be clearly identified.

Ultimately, the Consultant will recommend the best options for meeting the Districts water supply and operations/management needs. This task will be completed in sufficient detail to allow the project sponsor to determine which prioritized construction options are most economically feasible.

All project recommendations should be mapped in the report and recorded in the GIS with the following attributes: a project identifier, project type (New or Rehabilitation), WWDC program, water supply type, estimates of construction cost (Task 7), and potential volume to be supplied or saved through the development of the project, consistent with WWDC GIS standards referenced in Section C (2.)(b.).

Task 7. Concept Level Designs and Cost Estimates

The Consultant shall prepare detailed cost estimates for all projects included in the report. Costs for recommended changes in system maintenance, billing, operations, and outreach should also be well described and documented.

For prioritized projects (most likely to get funded within the next ten to fifteen years) that correlate with the sponsor's schedule as indicated in the rehabilitation plan, the following applies:

- a. Conceptual designs, including plan view and standard cross section drawings, will be of suitable detail and accuracy to allow the sponsor to move the project to WWDC Level III construction funding.
- b. Cost estimates shall be prepared according to the outline in Section C, Project Requirements, and must be of sufficient accuracy to move to funding partners. The construction cost estimates will include costs of design, permitting, land acquisition, construction engineering, materials and equipment, construction, and construction contingencies. Cost estimates should be based on the year this study is completed. The cost estimates shall also be of sufficient accuracy to support a legislative request for Level III Construction funding.

Task 8. Economic Analysis and Project Financing

The Consultant will provide an ability to pay analysis which shall, based on a financial planning model, determine conditions and level of funding necessary for implementation. The Consultant will generate recommendations based on annual financial commitments of the sponsor needed to cover construction costs and meet operation and maintenance obligations.

The Consultant shall work with the Sponsor to acquire all necessary financial data required for this task to determine the current and anticipated future water system revenues and expenditures. To initiate this task, the Consultant shall determine if the Sponsor has a water enterprise fund in which existing water revenues allow the water system to be financially self-supporting or if the Sponsor must subsidize the water system from other budgets and revenues such as bonds, grants, etc. In order for the water system to be self-supporting, revenues should be sufficient to accomplish the following:

- Retire existing water related debt (principal and interest).
- Pay the costs for employees.
- Pay the costs of materials, supplies, utilities, and outside services necessary to operate and maintain the water system and provide normal improvements and replacement requirements for the system.
- Pay for administrative and overhead expenses.
- Provide an emergency fund that annually accrues at least an amount equal to 1.5% – 2.5% of the operating expenses.
- Provide a fund that accrues sufficient reserves to pay for major repairs and replacement that will be required during the life of any associated project.
- Pay other costs as may be identified by the Consultant.

The Consultant shall first use the above criteria to make recommendations on the Sponsor's current water revenue structure (rates, tap fees, and other) that would support the existing water system based on a revenue structure that encourages water

conservation (tiered water rates). The current water revenues shall be compared against current water expenditures based on the last five (5) years of data (if available). The Consultant shall prepare a suggested itemized annual budget for the existing water system that would result in the system becoming and staying financially self-supporting.

Next, the Consultant shall prepare two (2) funding scenarios for consideration by the Sponsor that demonstrate the adjustments in revenues that may be necessary to accommodate the prioritized recommendations, schedules, and cost estimates developed in Task 6 and Task 7. The Consultant shall present these amended water revenue structures that would support the identified system improvements while maintaining the system as financially self-supporting as defined by the above criteria. Within these adjustment scenarios, the Consultant shall demonstrate the effects on the average bill for water users. These two (2) scenarios shall be presented in the draft and final reports in a tabular or other clear and concise format. The adjustment in revenues will be presented based on the following two (2) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e.: the Consultant shall demonstrate the necessary adjustments in water system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Assume that funding for WWDC eligible components will be in the form of a 67% grant from WWDC and a 33% loan from WWDC (4%, 30-year term), and funding for WWDC non-eligible components will only be in the form of Sponsor contribution from current or proposed water system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 2 above) and to fund WWDC non-eligible components that are necessary for the completion of a Level III construction project. Potential sources to be evaluated should include the U.S. Department of Agriculture, U.S. Bureau of Reclamation, Wyoming DEQ-WQD Clean Water Act Section 319 and other potential state and federal funding sources.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans in terms of the environmental review (ER) efforts specifically required for each agency.

Task 9. WWDO Discretionary Task

The Consultant shall place \$7,500 of the proposed project budget in this discretionary task. The task is included to allow changes in the scope as the project develops or as new issues are discovered. The consultant and WWDO will agree on any work to be accomplished under this task and the cost of the work. No work will be initiated or funds spent for this task without direct written instruction from the WWDO.

Task 10. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study, no later than April 1, 2020. Five (5) USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each USB drive, or portable hard drive shall be labeled accordingly. The project Sponsor shall be provided a copy of this draft report for their review. **Any improvements that are in need of a Level II feasibility study should be discussed with the Districts by February 1, 2020 in order to complete a WWDC application by the March 1, 2020 deadline.**

Task 11. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The Consultant is responsible for publishing notice of the meeting not less than once each week for two weeks prior to the meeting and should budget accordingly.

Task 12. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report and the Consultant shall submit all final documents and materials, to the Office on or before July 1, 2020. These final documents and materials, shall include: 1) Twelve (12) hard copies of the final report, 2) Twelve (12) hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Four (4) USB drive copies containing the final report, and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each USB drive shall have a hard copy table of contents attached.

Two (2) USB drive copies containing the final report, and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each USB drive shall have a hard copy table of contents attached.

Three (3) USB drive copies of the hydraulic model project file and all associated files shall be provided (if applicable). The files shall create a working model that is fully functional and can be modified. Each drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. See Project Requirements (Section C (2.)(b)) for further details.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

If any wells are drilled, chip trays or vials of all washed well drilling cuttings shall be submitted along with their documentation (if applicable).

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

Western Heritage Consulting & Engineering

Standard Rates:

| | |
|--|-------------------|
| Administrative/Clerical | \$ 70/hour |
| Staff Design | \$100/hour |
| Staff Field Technician/ Survey Tech | \$100/hour |
| Construction Management/ Coordination/Inspect | \$110/hour |
| Project Engineer | \$125/hour |
| Senior Project Engineer/Field Engineer/ | \$140/hour |
| Project Manager/ PLS Land Surveyor | \$135/hour |
| Principal Engineering | \$150/hour |
| One Person Survey Crew | \$160/hour |
| Two Person Survey Crew | \$220/hour |
| Expert Witness/Court/Legal | \$300/hour |
| | |
| 4x4 Pickup/SUV (1/2 Ton) Mileage | \$ 0.58/Mile |
| Travel Meals & Incidentals, subject to GSA | \$55/Day |
| Lodging | \$140/Night |
| RTK-GPS Equipment | \$35/hour |
| ATV/Survey Vehicle | \$300/Day |
| Printing 8.5x11 B&W / Color per sheet per side | \$0.12/\$0.28/ pg |
| Printing 11x17 B&W / Color per sheet per side | \$1/ \$2 / pg |
| Digital Media - CD/DVD/USB | \$1/ GB |
| Report Comb Binding | \$2/ Each |
| Other Reproduction & Printing | \$ Cost |
| Other Miscellaneous Items | \$ Cost |

Terms are Net 45 Days.

**BOULDER IRRIGATION DISTRICT REHABILITATION, LEVEL II STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and Sunrise Engineering, Inc. [Consultant], PO Box 609, 47 E 4th Avenue, Afton, WY 83110.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed one hundred seventy-one thousand dollars and no cents (\$171,000.00).

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| Task 1. Background Information Collection and Review | \$ 6,880 |
| Task 2. Project Management and Project Meetings | \$ 7,806 |
| Task 3. Canal Assessment | \$ 19,682 |
| Task 4. Spillway and Diversion Structure Assessment | \$ 29,230 |
| Task 5. Siphon Assessment | \$ 6,875 |
| Task 6. Rehabilitation Plan | \$ 13,848 |
| Task 7. Environmental Analysis and Permitting | \$ 4,590 |
| Task 8. Preliminary Designs and Cost Estimates | \$ 15,376 |
| Task 9. Economic Analysis and Project Financing | \$ 8,160 |
| Task 10. Discretionary Task | \$ 25,578 |
| Task 11. Draft Report | \$ 18,804 |
| Task 12. Report Presentation | \$ 2,751 |
| Task 13. Final Report and Deliverables | \$ 11,420 |
| TOTAL PROJECT COST | \$ 171,000 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: Green River Basin, Sublette County, near Boulder, WY
2. Purpose: To perform a Level II Rehabilitation study for the Boulder Irrigation District
3. History: The Boulder Irrigation District (District) is sponsoring a Level II Rehabilitation study to investigate the feasibility of alternatives to reduce seepage on their main canal (Boulder Canal) and assess the current condition of the Boulder Lake Dam spillway and the downstream Boulder Canal diversion structure. Water is conveyed through Boulder Lake Dam, down Boulder Creek, and diverted into the Boulder Canal to irrigate approximately 10,000 acres of hay and pasture east of Pinedale, WY.

The Boulder Canal, approximately 14 miles in length, serves as the primary conveyance system for all of the irrigated acreage within the District. The District has estimated seepage losses along the canal at approximately 60%.

Boulder Lake Dam is an on-channel, zoned earth embankment, with a crest length of approximately 375 feet that stands approximately 25 feet above Boulder Creek. The spillway is a concrete ogee weir located on the right abutment that is approximately 60 feet wide. Some of the concrete on the spillway has cracked and displaced and is in need of a thorough assessment to develop potential solutions for the concrete degradation. Similarly, the Boulder Canal Headgate structure degradation will be assessed to determine the physical condition and functionality.

The project, in close coordination with the Office and District, will identify rehabilitation alternatives for the District and will also investigate permitting,

water measurement, and economics based on conceptual designs and cost estimates developed during the project.

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) **FORMATS and STANDARDS.** Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) **MAPS.** Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow

replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS

CONSTRUCTION COSTS

| | |
|---|------------------------|
| Itemized Cost of Each Project Component | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Cost of Project Components TOTAL | \$ _____ (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ |
| Components + Construction Engineering Costs | \$ _____ (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | |
|---|------------------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ |
| Permitting and Mitigation | \$ _____ |
| Legal Fees (Title of Opinion Only) | \$ _____ |
| Acquisition of Access and Rights of Way | \$ _____ |
| Pre-construction Costs Total | \$ _____ (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | |
|--|------------------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ (subtotal #5) |
|--|------------------------|

WWDC INELIGIBLE PROJECT COSTS

| | |
|---|------------------------|
| Itemized Costs of Ineligible Project Components | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Additional Cost for Construction Engineering | \$ _____ |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ |
| Total WWDC Ineligible Project Costs Total | \$ _____ (subtotal #6) |

TOTAL PROJECT COST

Total Project Cost (subtotal #5 + subtotal #6) \$_____

MATERIALS ONLY TOTAL

Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) \$_____

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and

Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Background Information Collection and Review

The Consultant shall gather and review all existing information related to this project. This includes information available through the Sponsor, Office, Water Resources Data System (WRDS), Wyoming State Engineer's Office (SEO), Wyoming Department of Environmental Quality (DEQ), Natural Resources Conservation Service (NRCS), and any other sources as appropriate. The Consultant shall review and document existing agreements, easements, ownership, permits with other entities, and any other policies and/or regulations that may affect this project and future projects that may be identified in this study.

The Consultant shall review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The recently completed New Fork River Watershed Level I Study, Tetra Tech, Apr. 2013 should be consulted in this effort. The inventory shall include priority dates, quantities, permitted uses, permit conditions, and other pertinent data. If applicable, historic use of water under each permit will be estimated to determine if the water rights must be expanded or altered to accommodate the recommendations in this project. If applicable, the Consultant shall also review any water supply contracts, or agreements, held by the Sponsor and discuss their purpose and importance to the Sponsor.

The Consultant shall review any flow records maintained by the Sponsor, and / or SEO, and work with District personnel to document typical seasonal flows. It may be necessary for the Consultant to gather flow data to aid in the proper design of alternatives. The Consultant shall work with the Sponsor for gathering necessary flow data.

The Consultant shall provide a summary of the existing information, identified in this task, and present a digital library in the final report.

Task 2. Project Management and Project Meetings

One formal project kick-off meeting, open to the public, shall be conducted early in the project schedule. The purpose is to familiarize interested parties with the scope of the project and to obtain input from those parties. The Consultant shall prepare a presentation including maps and other visual aids to explain the project.

In addition, monthly project update meetings will be conducted via teleconference with the Office and Sponsor. The Consultant shall, after coordinating with both the Office and Sponsor, set a monthly recurring teleconference meeting and supply call-in/login information.

Face-to-face project meetings will be conducted as necessary for the coordination of project activities and for keeping the Sponsor informed of project progress. The Consultant shall assume that they will conduct a minimum of two (2) informal, face-to-face, project meetings with the Office and Sponsor. The Consultant shall also assume a minimum of two (2) formal meetings. Formal meetings shall be open to the public and are in addition to other meetings listed within this scope of services. The Consultant will be responsible for setting and conducting the informal and formal meetings in coordination with the Office project manager and Sponsor. No meeting shall be conducted without approval in advance by the Office project manager.

For any formal meeting listed in this Scope, unless otherwise specifically stated, the Consultant is responsible for publishing notice of the meeting(s) in a local

publication at least two (2) times prior to the meeting. In the interest of economy, all meetings shall be scheduled to coincide with fieldwork whenever possible. The Consultant will prepare all notices, needed materials, and minutes for the meetings.

Task 3. Canal Assessment

Through the efforts of Tasks 1 and 2, review of the study area and District boundaries / infrastructure, water delivery needs, existing data record, site investigation, and conversation with the Office and Sponsor, the Consultant will make recommendations regarding locations and data collection methods along and throughout the Boulder Canal that would benefit from the installation of pressure transducer / data loggers with the goal of quantifying seepage losses along the Canal. Up to ten (10) transducer / logger units will be provided by the Office to the Consultant. Protocol will be developed outlining siting criteria, installation, maintenance, data collection, and removal.

Loggers / transducers, or other approved means of data acquisition, will be deployed and operated throughout the 2019 irrigation season. The Consultant will be responsible for landowner clearance, permitting, equipment maintenance, protocol, installation, operation, development of rating curves, data collection, removal, and all appurtenances associated with the operation of the gauges during the life of the Contract. In addition, periodic spot measurements at additional locations along the Canal or turnouts / laterals may be necessary to aid and support in this evaluation.

The Goal of this assessment is to identify, quantify, and prioritize specific canal reaches where seepage loss is most prevalent.

Task 4. Spillway and Diversion Structure Assessment

A site investigation of the Boulder Lake Dam Spillway and Boulder Canal Diversion / Headgate structure will be conducted to assess the current physical condition and functionality of the structures. Plans for this effort shall be coordinated with the Sponsor, Office, and any other agency / entity as deemed necessary. The assessment will be developed to determine current capacities, structural integrity, operability, and expected longevity to meet, and safely convey, water demands.

The Consultant shall conduct all necessary hydrologic, hydraulic, and stability analyses, and other related engineering assessments associated with the structures. The Consultant shall ascertain design capacities in terms of water rights and demands. Geomorphology and debris mitigation shall be considered and addressed as well during the assessments.

During this site visit, an investigation of the Boulder Lake inlet will also be performed. The Intent of this investigation is to gather information needed to make recommendations for the installation of a permanent stream gauging station that would monitor inflow to Boulder Lake such that the District can better manage releases from the facility.

Task 5. Siphon Assessment

The Consultant shall investigate the current condition of, and make any subsequent recommendations for, the siphon located approximately two-thirds of the way down the Boulder Canal. The assessment shall, at a minimum, include the following:

- Visual Inspection: The Consultant shall perform a visual inspection of the concrete siphon and document any concrete degradation findings.
- Video Inspection: The Consultant shall conduct a video inspection of the siphon. The purpose of the video inspection is to create a digital recording of the entire length of the siphon. This will ultimately serve as a baseline data point that can be compared to future inspections. The Sponsor would have the opportunity to compare the video to future visual inspections to continue to monitor any additional concrete degradation or maintenance.
- Radar Scan: The Consultant shall conduct a radar scan of the concrete pipe. The scan will reveal the existing thickness of the concrete pipe which can be compared to the manufactured thickness, if available. A significant difference between the manufactured thickness and existing thickness could demonstrate substantial wear and could identify a cause for concern.

The goal of this task is for the Consultant to evaluate the findings of the assessment in order to document the physical condition and functionality of the siphon, and if necessary, make subsequent recommendations for rehabilitation.

Task 6. Rehabilitation Plan

The Consultant shall prepare a rehabilitation plan based on the findings and results of the previous tasks presented herein. The recommendations should be designed with the needs of the Sponsor, existing deficiencies of the current structures, hydrologic, hydraulic, safety, debris mitigation, and the fluvial geomorphic characteristics of the river in mind.

Alternatives to rehabilitation plans shall be presented as needed. The Consultant shall consider all options and perform a conceptual comparison analysis. Topics including, but not limited to, cost, environmental permitting, operation and

maintenance, capacity, sediment deposition, and by-pass requirements will be compared to determine a preferred alternative.

In addition, the Consultant shall, in close coordination with the Office, Sponsor, and the SEO, evaluate alternatives available to measure stream flow in to Boulder Lake and diverted flow in to the Canal that are suitable for the options considered. A conceptual comparison analysis shall be performed to determine a preferred flow measurement alternative.

Task 7. Environmental Analysis and Permitting

The Consultant shall identify all permits, easements, and clearances necessary for implementation of the preferred rehabilitation plan(s) and associated construction activities. Permits and clearances shall include, but not be limited to, those that fall within the jurisdiction of the U.S. Army Corps of Engineers, Endangered Species Act, Historic Preservation Act, the Wyoming SEO, the Wyoming Department of Environmental Quality, the Bureau of Land Management, State Lands and Investments Board, and any other agency with jurisdiction that may affect the construction of a project. Work shall include providing timelines, next steps, and levels of effort. The Consultant shall have discussions with the relevant agencies, as needed, to corroborate analysis and assumptions, and accurately ascertain the information.

Task 8. Preliminary Designs and Cost Estimates

The Consultant will prepare preliminary design drawings and cost estimates for the preferred alternative(s). The cost estimates shall be prepared according to the outline in Section C, Project Requirements, and must be of sufficient accuracy to support a legislative request for Level III Construction funding.

The Consultant shall also develop preliminary design and cost estimates for the preferred flow measurement alternatives identified in task 6.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 9. Economic Analysis and Project Financing

a. Benefits Analysis

The Consultant will perform a benefit-cost analysis on the top alternative(s) utilizing data generated herein and from various state and federal agencies. The analysis should include an estimate of direct and indirect benefits. The Consultant shall then use this data, together with information developed from previous tasks, to

determine a prioritization of alternatives analyzed. The Consultant shall work with the Office project manager to then estimate a potential level of State funding assistance based on Program Criteria.

b. Ability to Pay and System Financing

The purpose of this task is to determine the amount that the Sponsor could pay for the prioritized alternative(s) along with all of the operation, maintenance, and replacement costs and to provide information that can be used to develop a financing plan.

For the prioritized alternative(s), the Consultant shall work with the Sponsor to acquire all necessary financial data required to determine the current and anticipated future system revenues and expenditures. Information developed in previous tasks should be utilized and expanded upon as necessary for the analysis.

The Consultant shall prepare a funding scenario for consideration by the Sponsor that demonstrates the adjustments in revenues that may be necessary to accommodate the prioritized alternative(s) developed herein. The Consultant shall present the amended revenue structures that would support the identified project(s) while maintaining the system as financially self-supporting. The Consultant shall demonstrate the effects on the water users. The funding scenario shall be presented in the draft and final reports in a tabular, or other clear and concise, format. The adjustment in revenues will be presented based on the type of project(s) represented by the prioritized alternative(s) and the associated eligible components and funding levels/terms allowed for under the WWDC Program Criteria. Funding for WWDC non-eligible components will only be in the form of Sponsor contribution from current or proposed system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor may pursue in lieu of WWDC funds, to obtain the loan component, and/or to fund WWDC non-eligible components that are necessary for the completion of a Level III construction project. The NRCS, Bureau of Reclamation, USDA Rural Utilities Service (RUS), the State Lands and Investments Board, the Wyoming Business Council, the DEQ Abandoned Mine Lands Program, and other eligible funding sources shall be considered for loans, grants, and combinations thereof.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question. The Consultant shall contact these agencies early in the

study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans.

c. Public Interest

The Consultant shall evaluate whether the preferred alternative is in the public interest stipulating if the proposed project functions and services can be served by any person, association, or corporation engaged in private enterprise or if private enterprise has refused to provide the functions and services identified as being required by the proposed project. This information shall be included in the draft and final reports for the project.

Prior authorization is required from the Office project manager before any work is performed under this task.

Task 10. Discretionary Task

The Consultant will place \$25,578 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered.

No work will be initiated or funds spent for this task without prior written authorization from the Office project manager.

Task 11. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study no later than June 1, 2020. Five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached. The project Sponsor shall be provided a copy of this draft report for their review.

Task 12. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be

presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The report presentation for this Level II Study shall also serve as a public hearing, with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager and shall include the question as to whether there is a private entity interested in providing the proposed project functions and services in lieu of the sponsor. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper, once each week for three (3) weeks prior to the hearing; and in the local publication up to three (3) times prior to the hearing.

Task 13. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office at least 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

The Consultant shall submit all final documents and materials to the Office on or before August 1, 2020. These final documents and materials shall include: 1) Twelve (12) [MIN] hard copies of the final report, 2) Twelve (12) [MIN] hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any

final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant, and date, as well as section tabs.

Four (4) [MIN] CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) [MIN] CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) [MIN] CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) [MIN] CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. See Attachment "A", Project Requirements for further details.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

**SUNRISE ENGINEERING
FEE SCHEDULE**

| Work Code | Work Classification | Hourly Rate | Work Code | Work Classification | Hourly Rate |
|-----------|----------------------------------|-------------|-----------|-----------------------------|-------------|
| 101 | Engineer Intern (E.I.T.) I | \$ 96 | 451 | Training Specialist I | \$ 77 |
| 102 | Engineer Intern (E.I.T.) II | 112 | 452 | Training Specialist II | 91 |
| 103 | Engineer III | 128 | 455 | Training Supervisor | 110 |
| 104 | Engineer IV | 145 | 456 | Training Manager | 123 |
| 105 | Engineer V | 160 | 460 | Training Director | 154 |
| 110 | Principal Engineer | 175 | 500 | Funding Specialist | 115 |
| 121 | Electrical Eng. Int. (E.I.T.) I | 99 | 510 | Plan Reviewer | 107 |
| 122 | Electrical Eng. Int. (E.I.T.) II | 109 | 511 | Building Inspector I | 59 |
| 123 | Electrical Engineer III | 134 | 512 | Building Inspector II | 82 |
| 124 | Electrical Engineer IV | 155 | 513 | Building Inspector III | 102 |
| 125 | Electrical Engineer V | 170 | 525 | Building Official | 118 |
| 126 | Principal Electrical Engineer | 185 | 604 | GIS Tech IV | 83 |
| 301 | Engineering Tech I | 75 | 611 | GIS Analyst | 105 |
| 302 | Engineering Tech II | 79 | 51 | Administrative I | 42 |
| 303 | Engineering Tech III | 95 | 52 | Administrative II | 58 |
| 304 | Engineering Tech IV | 120 | 53 | Administrative III | 62 |
| 311 | Electrical Tech I | 81 | 721 | Water Rights Specialist I | 91 |
| 312 | Electrical Tech II | 89 | 722 | Water Rights Specialist II | 102 |
| 313 | Electrical Tech III | 102 | 723 | Water Rights Specialist III | 116 |
| 314 | Electrical Tech IV | 112 | 711 | Project Manager I | 96 |
| 315 | Electrical Tech V | 125 | 712 | Project Manager II | 120 |
| 351 | Construction Observer I | 70 | 930 | Survey CAD Tech | 100 |
| 352 | Construction Observer II | 80 | 935 | One Man Survey Crew | 140 |
| 353 | Construction Observer III | 95 | 940 | Survey Manager | 150 |
| 354 | Construction Observer IV | 100 | 945 | Registered Surveyor | 158 |
| 401 | CAD Drafter I | 62 | 950 | Principal Surveyor | 175 |
| 402 | CAD Drafter II | 72 | | | |
| 403 | CAD Drafter III | 92 | | | |
| 404 | CAD Drafter IV | 98 | | | |

REIMBURSABLE EXPENSE SCHEDULE

| Expense | Rate | Mark-Up |
|--|-----------------|----------------|
| Mileage | \$0.58 per mile | N/A |
| Field Vehicle (on site) | \$50 per day | N/A |
| Per Diem Meals | \$35 per day | N/A |
| Snowmobile/ATV & Trailer | \$250 per day | N/A |
| Troxler Nuclear Density Gauge | \$40 per day | N/A |
| High Density Scanner | \$150 per hour | N/A |
| Material Testing Lab Work | Actual Cost | N/A |
| Outside Consultants, Aerial Photography, etc. | Actual Cost | N/A |
| Lodging | Actual Cost | N/A |
| Other Expenses incurred | Actual Cost | N/A |

**LAPRELE IRRIGATION DISTRICT REHABILITATION, LEVEL II STUDY
CONSULTANT CONTRACT FOR SERVICES NO. _____**

1. **Parties.** The parties to this Contract are the Wyoming Water Development Commission [Commission], 6920 Yellowtail Road, Cheyenne, Wyoming 82002 and Re/Spec Inc. [Consultant], 3824 Jet Drive, P.O. Box 725, Rapid City, SD, 57709.

2. **Purpose of Contract.** The purpose of this Contract is for the Commission to retain the services of the Consultant to render certain technical or professional services hereinafter described in connection with an undertaking to be financed by the Commission, and administered by the Wyoming Water Development Office [Office] through its Director or his designee.

3. **Term of Contract.** This Contract is effective when all parties have executed it (Effective Date). The term of the Contract is from the Effective Date through June 30, 2021. All services shall be completed during this term.

This Contract may be extended by agreement of both parties in writing and subject to the required approvals. There is no right or expectation of extension and any extension will be determined at the discretion of the Commission.

4. **Payment.**

A. **Reimbursement of Expenses.** The Commission agrees to pay the Consultant an amount based on the approved hourly rate and reimbursable expenses price schedules depicted in Attachment B, attached to this Contract and incorporated by reference as part of this Contract, for the services described in Attachment A, attached to this Contract and incorporated by reference as part of this Contract. Total payment under this Contract shall not exceed two hundred ninety thousand dollars (\$290,000).

B. **Project Budget.** The project budget for each task included in Attachment A is as follows:

| <u>Task</u> | <u>Estimated Cost</u> |
|--|------------------------------|
| 1. Project Meetings | \$ 28,100 |
| 2. Information Review | \$ 10,300 |
| 3. Rockfall Hazard Analysis, GIS, Cost Estimates | \$ 194,800 |
| 4. Economic Analysis and Project Financing | \$ 8,400 |
| 5. Discretionary Task | \$ 10,000 |
| 6. Draft Report | \$ 16,000 |
| 7. Report Presentations | \$ 15,600 |
| 8. Final Report and Deliverables | <u>\$ 6,800</u> |
| TOTAL PROJECT COST | \$ 290,000 |

The amounts for each task are estimates only, but are not to be exceeded unless authorized in writing by the Commission. The Contract total amount is controlling. Payment shall be made directly to the Consultant. The Consultant shall maintain hourly records of time worked by its personnel to support any audits the state or the Commission may require. Billing reports shall be submitted no more often than monthly for activities and costs accrued since the last billing report and shall be made on forms approved in advance by the Office project manager. A brief project progress report summarizing project activities in the billing period must be submitted with each billing.

C. Billing Procedures. The Consultant shall submit billing reports as the services are performed for the various tasks outlined in Attachment A. The Office shall initiate the payment process within forty-five (45) days after submission of a verified statement of services pursuant to Wyo. Stat. § 16-6-602.

D. Money Withheld. No payment shall be made for work performed before the Effective Date of this Contract. Should the Consultant fail to perform in a manner consistent with the terms and conditions of this Contract or the Commission has reasonable grounds to believe that the Consultant will be unable to perform this Contract fully and satisfactorily within the time fixed for performance, then the Commission may withhold payment of such portion of any amount otherwise due and payable to the Consultant reasonably deemed appropriate to protect the Commission against such loss. These amounts may be withheld until the cause for the withholding is cured to the Commission's satisfaction or this Contract is terminated. Any amount so withheld may be retained by the Commission for such period as it may deem advisable to protect the Commission against any loss. This provision is intended solely for the benefit of the Commission and no person shall have any right against the Commission by reason of the Commission's failure or refusal to withhold monies. No interest shall be payable by the Commission on any amounts withheld under this provision. This provision is not intended to limit or in any way prejudice any other right of the Commission.

ATTACHMENT A SCOPE OF SERVICES

A. AUTHORIZATION

The Wyoming Legislature has authorized the Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in Section D. Scope of Services in this Attachment. The Commission, at its sole discretion and through duly authorized contract amendments, may request the Consultant to complete additional work phases beyond the following scope of services.

B. PROJECT DESCRIPTION

1. Location: The LaPrele Irrigation District is located west and south of Douglas, Wyoming, along Interstate 25 in Converse County, and lies within the North Platte River Basin.
2. Purpose: To perform a Level II rehabilitation study for the LaPrele Irrigation District.
3. History: The LaPrele Irrigation District supply system is made up of 3 reservoirs, siphons, tunnels, and open ditch canals. The District is requesting a Level II study to analyze the potential for rock falling from the canyon and striking the dam. The study will identify possible hazard mitigation opportunities with associated costs. Active monitoring and maintenance plans shall also be considered. This potential rock fall issue was identified in the recent Level I Master Plan.

Previous Reports:

- LaPrele Irrigation Project: Section I, Soils and Drainage, Section II, Seepage and Water Loss Study, Section III, Hydrologic study
- LaPrele Level III Development Plan, Interim Report
- Priority Improvements of the LaPrele Irrigation Project: Estimates of Increased Returns to Irrigators
- LaPrele Irrigation District Master Plan, Level I Study

Additional information may be found at the Water Resources Data System, located at the University of Wyoming.

C. PROJECT REQUIREMENTS

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. A webinar on GIS project standards, hosted by WWDC and WRDS, will be available following consultant selection and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field

attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) FORMATS and STANDARDS. Simplified metadata shall be completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) MAPS. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

WWDC ELIGIBLE PROJECT COSTS**CONSTRUCTION COSTS**

| | | |
|---|----------|---------------|
| Itemized Cost of Each Project Component | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Cost of Project Components TOTAL | \$ _____ | (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%) | \$ _____ | |
| Components + Construction Engineering Costs | \$ _____ | (subtotal #2) |
| Contingency (subtotal #2 x 15%) | \$ _____ | |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ | (subtotal #3) |

PRE-CONSTRUCTION COSTS

| | | |
|---|----------|---------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____ | |
| Permitting and Mitigation | \$ _____ | |
| Legal Fees (Title of Opinion Only) | \$ _____ | |
| Acquisition of Access and Rights of Way | \$ _____ | |
| Pre-construction Costs Total | \$ _____ | (subtotal #4) |

TOTAL WWDC Eligible PROJECT COST

| | | |
|--|----------|---------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ | (subtotal #5) |
|--|----------|---------------|

WWDC INELIGIBLE PROJECT COSTS

| | | |
|---|----------|---------------|
| Itemized Costs of Ineligible Project Components | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| | \$ _____ | |
| Additional Cost for Construction Engineering | \$ _____ | |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____ | |
| Total WWDC Ineligible Project Costs Total | \$ _____ | (subtotal #6) |

TOTAL PROJECT COST

| | |
|--|----------|
| Total Project Cost (subtotal #5 + subtotal #6) | \$ _____ |
|--|----------|

MATERIALS ONLY TOTAL

| | |
|--|----------|
| Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) | \$ _____ |
|--|----------|

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Office may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES

Task 1. Project Meetings

A scoping meeting shall be held as early in the project schedule as possible in the project area to familiarize the Sponsor with the scope of the project as well as obtain and provide input and information to and from all affected parties. The Consultant shall prepare all presentation material, including maps and other visual aids as necessary, to explain the project. The scoping meeting location and time shall be coordinated with the Sponsor and Office project manager and should be held after the Consultant has reviewed all background information as described in Task 2.

Additional public project meetings shall be conducted to facilitate project activity coordination and to keep the Sponsor and all affected parties informed of progress. The Consultant should assume a minimum of three (3) public project meetings in the study area. One (1) of these meetings will be held at the discretion of the Office project manager. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices, needed materials, and the meeting record. In addition to the public project meetings, several informal meetings with the Sponsor or Office project manager may be necessary during the course of the study. In the interest of economy, meetings

will be scheduled to coincide with fieldwork. The Consultant shall notify the WWDO project manager in advance of meetings with the project sponsor.

Task 2. Information Review

The Consultant shall gather and review all existing information related to the project. This includes information available through the Sponsor, WWDO, Water Resources Data System (WRDS), Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division (DEQ), and any other sources as appropriate. The Consultant will coordinate with the Sponsor and Office project manager to obtain all past relevant studies that need to be reviewed. The Consultant shall provide a summary of existing information in the final report.

Task 3. Rockfall Hazard Analysis, GIS, Cost Estimates

The Consultant will perform a rockfall hazard analysis and shall perform the following bulleted task list:

- Study Area Establishment

Based on cursory review, the study area shall include the dam, spillway, and tunnel and have the following extents: approximately 500 feet upstream and approximately 500 feet downstream from the dam crest along the reservoir bottom / canyon floor centerline; horizontally from this centerline perpendicular to slope direction to the canyon ridgeline on either side; vertically from observed reservoir water surface elevation to canyon ridgeline upstream from the dam; and vertically from canyon floor to canyon ridgeline downstream from the dam. Establishment of the final study area extents shall include close coordination with the Office project manager and the LaPrele Irrigation District.

- 3D Survey of the Study Area

Data collected with this survey shall be of sufficient resolution to aid in identifying rockblocks of significant size and fall potential, and to aid identification of rockblock movement over time when compared to future surveys. Appropriate survey technologies could include ground-based LiDAR, unmanned drone with LiDAR, or other technologies that produce a 3D point cloud such as photogrammetry. The survey shall include sufficient data for estimating volume of the debris pile below the emergency spillway discharge zone as a potential borrow source for mitigation or remediation projects. This data shall be post-processed into a format compatible with typical GIS software.

- Hazard Inspection of the Study Area

Assisted by data from the 3D survey, a visual inspection of the study area shall be performed to identify and characterize rockfall hazards. The objective of this inspection is to prioritize rockblocks of significant size and fall potential with reasonable probability of impacting the dam. The inspection shall define the location, size, and profile of priority rockblocks and shall be performed by an experienced rock mechanics engineer.

- Rockfall Energy Estimate and Risk of Impact to the Dam

For each priority rockblock identified within the 3D survey and hazard inspection, a probabilistic analysis shall be performed to estimate the impact energy from rockfall and likelihood of impacting the dam. This analysis shall provide quantification of dam impact risk and a range of impact energy for each priority rockblock using rockfall analysis software such as Rocscience RocFall.

- Structural Analysis of the Dam

A structural analysis of the dam shall be performed to understand overall integrity of the dam, and to understand the potential consequence of each predicted rockfall impact. The analysis shall consider as-built dam drawings, structural updates, and concrete integrity (e.g., possibly including core strength or similar test results as applicable). Structural calculations will be used to find the potential impact of rock fall loading on the buttresses closest to the abutments. Estimated rock fall loads will be compared to the capacities calculated using American Concrete Institute code as a measure against performance. The objective is to identify the potential consequence to the dam from each predicted rockfall impact.

- Rockfall Hazard Prioritization

The pairing of potential consequences with probable impact risk for each priority rockblock shall be weighed against an acceptable risk level as determined in close coordination with the Office project manager and LaPrele Irrigation District. Determination of relative risk will then be used to identify high-risk rockblocks and inform the necessity, extent, and type of mitigation recommended.

- Conceptual Hazard Mitigation Designs and Cost Estimates

Conceptual hazard mitigation design alternatives and cost estimates shall be prepared for those rockblocks identified as high-risk using the results from the previous tasks. Hazard mitigation alternatives may include both active and

passive techniques (e.g., blasting; installing ground support such as bolts, cable systems and mesh; and grading such as the debris pile). Costs estimates shall be provided for each mitigation option with respect to mitigated and remaining risk to determine preferred alternatives consistent with the cost estimate language provided below. Active monitoring and maintenance plans shall be considered where necessary including cost estimates.

- **Environmental Analysis and Permitting**

All necessary permits and clearances shall be identified for hazard mitigation alternatives, monitoring alternatives, and access to the site.

The Consultant shall prepare cost estimates for the phased costs of project alternatives identified above. Estimates shall include operation and maintenance costs, life cycle costs, administrative costs, debt retirement, Commission "Repair and Maintenance Account" funding, permitting costs, easements, clearances necessary for the recommendations, monitoring, etc. The cost estimates will be in tabular form for each of the alternatives. The table will be broken down into both Commission eligible and non-eligible costs. These cost estimates will be prepared according to the outline in Attachment A, Section C.3., and must be of sufficient accuracy to allow alternatives to be compared. The cost estimates will also be of sufficient accuracy to support a legislative request for Level III Construction funding.

The Consultant shall update the existing GIS developed in the Level I study with the information collected in this task. All mapping and corresponding data sets, existing and updated, shall be consolidated into the comprehensive GIS. Coordination shall take place with the Sponsor and Office project manager on field survey limitations and any mapping logistics. The Consultant shall adhere to the GIS requirements defined in Section C.2.b. of Attachment A.

The Consultant shall also evaluate whether the project is in the public interest, stipulating if the proposed project functions and services can be served by any person, association or corporation engaged in private enterprise, or if private enterprise has refused to provide the functions and services identified as being required by the proposed project. This information shall be included in the draft and final reports for the project.

Task 4. Economic Analysis and Project Financing

The Consultant shall provide an ability to pay analysis and, if necessary, recommend adjustments to the District's revenues/rates. This analysis will be used to determine if the Sponsor has the ability to pay for recommended rehabilitation projects based on their current revenue structure or if the Sponsor will need to raise their rates. The Consultant shall generate recommendations for rate structures based on annual financial commitments of the sponsor needed to cover construction costs, operation and

maintenance obligations, and a repair and replacement account. The Consultant shall consider all of the District's income and expenditures. The analysis will be based on the following two (3) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e.: the Consultant shall demonstrate the necessary adjustments in the District's system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Excluding the WWDC, assume there will be state, federal, or outside funding assistance utilized, i.e.: the Consultant shall identify additional funding sources, excluding the WWDC, that the Sponsor can pursue to help fund the prioritized recommendations and demonstrate the necessary adjustments in the District's system revenues under the assumption that the Sponsor independently finances the costs for completion of the prioritized recommendations that are not funded by state, federal, or other sources.

Scenario 3: Assume that funding for WWDC **eligible** components will be in the form of a 67% grant from WWDC and a 33% loan (4% interest / 30-year term) from the WWDC, and funding for WWDC **non-eligible** components will only be in the form of Sponsor contribution from current or proposed revenues.

The Consultant shall then identify additional funding sources outside of the WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 3 above) and to fund potential WWDC **non-eligible** components that are necessary for the completion of a Level III construction project. The U.S. Department of Agriculture, U.S. Bureau of Reclamation, and other eligible state and federal funding sources shall be considered for loans, grants, and combinations thereof. For more information on project funding assistance see Section C.6, of Attachment A.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, document the amount of grant or loan funds that may be available through the additional funding sources, and analyze the probability of the Sponsor securing a grant or loan from one or more of the additional funding sources for the project(s) in question. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency, and contact these agencies early in the study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall document all of this information in the final report including conversations held.

It should be noted that the Sponsor's ability to pay for the project in a timely manner is a key consideration in the WWDC's funding decisions. The annual requests for WWDC funding typically exceed the available funding. There are often uncertainties and delays

in acquiring loans and, particularly, grants from other funding agencies. Therefore, the WWDC may give priority in its Level III funding deliberations to the projects in which the Sponsor has been advancing on a specific financing plan and there is documented evidence that the financing will be in place within the calendar year in which the Level III project funding is approved by the Legislature. If the WWDC finds it necessary to delay Level III funding requests due to the schedule for the financing plan, the WWDC may provide assurance to the Sponsor that it will recommend Level III funding the following year if the project financing is completed. This assurance can be used to assist the Sponsors in securing financing from other entities.

Task 5. Discretionary Task

The Consultant shall place \$10,000 of the proposed project budget in this discretionary task. The task is to allow changes in the scope as the project develops or as new issues are discovered. The Consultant and Office project manager will agree on any work to be accomplished under this task and the cost of the work. No work will be initiated, or funds spent for this task, without direct approval from the Office project manager.

Task 6. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study, no later than May 1, 2020. Five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached. The project Sponsor shall be provided a copy of this draft report for their review.

Task 7. Report Presentations

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

The report presentation for this Level II Study shall also serve as a public hearing, with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager and shall include the question as to whether there is a private entity interested in providing the proposed project functions and services in lieu of the sponsor. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper, once each week for three (3) weeks prior to the hearing; and in the local publication up to three (3) times prior to the hearing.

Task 8. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report and the Consultant shall submit all final documents and materials, to the Office on or before August 21, 2020. These final documents and materials, shall include: 1) Twelve (12) hard copies of the final report, 2) Twelve (12) hard copies of the executive summary. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Four (4) CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. See Attachment "A", Project Requirements for further details.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

**ATTACHMENT B
HOURLY RATE AND REIMBURSABLE EXPENSES
PRICE SCHEDULE 2019**

Re/Spec Inc.

| Labor Category | Hourly Labor Billing Rate | | | | | |
|--------------------------|----------------------------------|-----------|------------|-----------|----------|-----------|
| | I | II | III | IV | V | VI |
| Principal Consultant | \$205.00 | \$215.00 | \$225.00 | \$235.00 | \$245.00 | \$255.00 |
| Resident Consultant | \$195.00 | \$205.00 | \$215.00 | \$220.00 | \$225.00 | \$230.00 |
| Senior Staff Scientist | \$175.00 | \$180.00 | \$185.00 | \$190.00 | \$195.00 | \$200.00 |
| Senior Staff Engineer | \$170.00 | \$175.00 | \$180.00 | \$185.00 | \$195.00 | \$205.00 |
| Senior Staff Geologist | \$170.00 | \$175.00 | \$180.00 | \$185.00 | \$195.00 | \$205.00 |
| Staff Consultant | \$155.00 | \$160.00 | \$165.00 | \$175.00 | \$180.00 | \$185.00 |
| Water Resource Scientist | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 | \$160.00 |
| Project Engineer | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 | \$160.00 |
| Project Analyst | \$130.00 | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 |
| Project GIS Analyst | \$130.00 | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 |
| Project Ecologist | \$130.00 | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 |
| Project Biologist | \$130.00 | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 |
| Project Geologist | \$130.00 | \$135.00 | \$140.00 | \$145.00 | \$150.00 | \$155.00 |
| Staff Engineer | \$115.00 | \$120.00 | \$125.00 | \$130.00 | \$135.00 | \$140.00 |
| GIS Developer | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 | \$130.00 |
| Staff Analyst | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 | \$130.00 |
| Staff Scientist | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 | \$130.00 |
| Staff Geologist | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 | \$130.00 |
| Watershed Scientist | \$100.00 | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 |
| GIS Analyst | \$100.00 | \$105.00 | \$110.00 | \$115.00 | \$120.00 | \$125.00 |
| Engineer | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 | \$120.00 |
| Ecologist | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Biologist | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Botanist | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Analyst | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Geologist | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Rangeland Scientist | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 | \$110.00 | \$115.00 |
| Scientist | \$ 80.00 | \$ 85.00 | \$ 90.00 | \$ 95.00 | \$100.00 | \$105.00 |
| Engineering Technician | \$ 75.00 | \$ 80.00 | \$ 90.00 | \$100.00 | \$105.00 | \$110.00 |
| AutoCAD Technician | \$ 80.00 | \$ 85.00 | \$ 90.00 | \$ 95.00 | \$105.00 | \$115.00 |
| GIS Technician | \$ 70.00 | \$ 75.00 | \$ 80.00 | \$ 85.00 | \$ 95.00 | \$105.00 |
| Support Staff | \$ 60.00 | \$ 65.00 | \$ 75.00 | \$ 80.00 | \$ 85.00 | \$ 95.00 |
| Technical Editor | \$ 60.00 | \$ 65.00 | \$ 75.00 | \$ 80.00 | \$ 85.00 | \$ 90.00 |
| Seasonal Technician | \$ 50.00 | \$ 55.00 | \$ 60.00 | \$ 65.00 | \$ 70.00 | \$ 75.00 |
| Engineering Intern | \$ 45.00 | \$ 50.00 | \$ 55.00 | \$ 60.00 | \$ 65.00 | \$ 70.00 |
| Accounting Assistant | \$ 60.00 | \$ 65.00 | \$ 75.00 | \$ 80.00 | \$ 85.00 | \$ 90.00 |

ATTACHMENT B TO LAPRELE IRRIGATION DISTRICT REHABILITATION, LEVEL II STUDY
BETWEEN WWDC AND RE/SPEC INC.

Reimbursable Expenses

| | | |
|-------------------------|------------------------|--------------|
| Airfare.....@ cost | In-house B&W Copies | \$0.10/copy |
| Mileage.....\$0.58/mile | In-house Color Copies | \$1.00/copy |
| Meals/Lodging...@ cost | In-house B&W Plotter | \$5.00/plot |
| | In-house Color Plotter | \$10.00/plot |

All other direct costs such as subconsultants, communications, equipment rental, materials, laboratory services, shipping, and reproduction will be charged at cost. A copy of receipts will be provided for all expenses billed "at cost".

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE WYOMING WATER DEVELOPMENT COMMISSION AND
THE UNIVERSITY OF WYOMING
for the Water Research Program**

1. Parties. The parties to this Memorandum of Understanding are the Wyoming Water Development Commission (WWDC), whose address is 6920 Yellowtail Road, Cheyenne, Wyoming 82002, and the University of Wyoming (University), acting by and through the University Office of Research, whose address is Dept. 3355, 1000 E. University Avenue, Laramie, Wyoming 82071.

2. Purpose. The purpose of this MOU is to further the water resource research objectives of the University, the WWDC, and other agencies by providing WWDC support for research regarding Wyoming's water resources. The water resource research needs will be defined by the WWDC and Legislative Select Water Committee (SWC) following consideration of input received from the Water Research Program (WRP) Advisory Committee.

3. Term of MOU. This MOU is effective when all parties have executed it and all required approvals have been granted. The term of the MOU is from March 15, 2019, and shall remain in full force and effect until June 30, 2022.

4. Payment. The total payment provided by the WWDC to the University shall not exceed three hundred fifty thousand, five hundred eleven dollars (\$350,511.00). Payment shall be made to the University of Wyoming Office of Sponsored Programs within forty-five (45) days after submission of invoice pursuant to Wyoming Statute §16-6-602 in the form of one payment of three hundred fifty thousand, five hundred eleven dollars (\$350,511.00).

5. Responsibilities of University. The University of Wyoming shall:

A. Conduct the following new research projects (FY2019 WRP solicitation) as approved by the WWDC and SWC on December 13 and 14, 2018 respectively:

“Understanding the Contribution of Different Microbial Sources to Surface Water for Informed Management of Waterborne Pathogens in Wyoming”, Collins, Bisha, 2 year duration. UW match: \$144,298. WWDC amount: \$210,435.

“Sediment and Fisheries: An Assessment to Inform Sediment Management Practices at Wyoming Dams”, Walters, Rahel, Patterson, 3 year duration. UW match: \$113,121. WWDC amount: \$140,076.

B. Provide the WWDC with copies of all reports produced as a result of WRP activities.

6. General Provisions

A. Amendments. Either party may request changes in the MOU. Any changes, modifications, revisions or amendments to this MOU which are mutually agreed upon by the parties to this MOU shall be incorporated by written instrument, executed and signed by all parties to this MOU.

B. Applicable Law. The construction, interpretation and enforcement of this MOU shall be governed by the laws of the State of Wyoming. The Courts of the State of Wyoming shall have jurisdiction over any action arising out of this MOU and over the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Availability of Funds. Each payment obligation of either party is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation. If funds are not allocated and available for the continuance of the services performed by either party, the MOU may be terminated by either party at the end of the period for which the funds are available. Each party shall notify the other party at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to either party in the event this provision is exercised, and neither party shall be obligated or liable for any future payments due or for any damages as a result of termination under this section. This provision shall not be construed to permit either party to terminate this MOU to acquire similar services from another party.

D. Entirety of Agreement. This MOU, consisting of four (4) pages represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

E. Prior Approval. This MOU shall not be binding upon either party unless this MOU has been reduced to writing before performance begins as described under the terms of this MOU, and unless this MOU is approved as to form by the Attorney General or his representative.

F. Severability. Should any portion of this MOU be judicially determined to be illegal or unenforceable, the remainder of the MOU shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

G. Sovereign Immunity. The State of Wyoming, the WWDC and University do not waive sovereign or governmental immunity by entering into this MOU, and each fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this MOU.

H. Third Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this MOU shall not be construed so as to create such status. The rights, duties and obligations contained in this MOU shall operate only between the parties to this MOU and shall inure solely to the benefit of the parties to this MOU. The provisions of this MOU are intended only to assist the parties in determining and performing their obligations under this MOU.

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7. Signatures. The parties to this MOU, through their duly authorized representatives, have executed this MOU on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this MOU as set forth herein.

The effective date of this MOU is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

UNIVERSITY OF WYOMING

Edmund Synakowski
Vice President for Research & Economic Development

Date






ATTORNEY GENERAL'S OFFICE APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date



2019 Small Water Program Summary for Account I

| | Project Name | Watershed Study | Priority | Total Project Cost | WWDC Grant | Project Type | Sponsor Summary |
|--------------------------------|---|------------------------------|----------|--------------------|-------------|-------------------------|--------------------------------|
| Cottonwood Grass Creek WID | | | | | | | |
| | 21 Creek Pipeline Extension - Phase I | Cottonwood Grass Creek | 3 | \$121,515.00 | \$35,000.00 | Pipeline and Conveyance | 2 projects totaling \$52,700 |
| | Haynes Irrigation Diversion & Pipeline | Cottonwood Grass Creek | 1 | \$35,400.00 | \$17,700.00 | Irrigation | |
| Hot Springs CD | | | | | | | |
| | Meyer Well | Owl Creek | 1 | \$48,000.00 | \$24,000.00 | Well | 1 project \$24,000 |
| Laramie County CD | | | | | | | |
| | Clark Solar Stock Well | Horse Creek | 1 | \$42,000.00 | \$21,000.00 | Well | 11 projects totaling \$271,892 |
| | Drake Stock Water Project | Not Identified in a WS Study | 1 | \$81,345.00 | \$35,000.00 | Well | |
| | First Enlargement Dereemer 906 Stock Pump | Horse Creek | 3 | \$46,400.00 | \$23,200.00 | Pipeline and Conveyance | |
| | Grace Valley Stock Water Project | South Platte | 3 | \$48,000.00 | \$24,000.00 | Pipeline and Conveyance | |
| | Kimzey Stock Water Pipeline | South Platte | 3 | \$111,263.00 | \$35,000.00 | Pipeline and Conveyance | |
| | LF Enterprises Stock Water Pipeline Extension | South Platte | 3 | \$23,244.00 | \$11,622.00 | Pipeline and Conveyance | |
| | Paul Life Trust Project | South Platte | 1 | \$58,740.00 | \$29,370.00 | Well | |
| | Shiverdecker Solar Pump & Stock Water | South Platte | 1 | \$33,200.00 | \$16,600.00 | Solar Platform | |
| | Smith Stock Diversion | Not Identified in a WS Study | 1 | \$40,200.00 | \$20,100.00 | Infiltration Gallery | |
| | Vercelli Stock Water Project 1 | South Platte | 1 | \$81,535.00 | \$35,000.00 | Well | |
| | Vercelli Stock Water Project 2 | South Platte | 3 | \$42,000.00 | \$21,000.00 | Pipeline and Conveyance | |
| Little Snake River CD | | | | | | | |
| | CR Irrigation Pipeline | Not Identified in a WS Study | 4 | \$30,000.00 | \$15,000.00 | Irrigation | 14 projects totaling \$403,500 |
| | HBL Irrigation Pipeline | Not Identified in a WS Study | 4 | \$88,000.00 | \$35,000.00 | Irrigation | |
| | JS Irrigation Pipeline | Not Identified in a WS Study | 4 | \$60,000.00 | \$30,000.00 | Irrigation | |
| | McCary Little Savery Irrigation Syphon & Pipeline | Not Identified in a WS Study | 4 | \$60,000.00 | \$30,000.00 | Irrigation | |
| | Muddy Creek Pipeline | Not Identified in a WS Study | 3 | \$55,000.00 | \$27,500.00 | Pipeline and Conveyance | |
| | Orchard Irrigation Pipeline | Not Identified in a WS Study | 4 | \$88,000.00 | \$35,000.00 | Irrigation | |
| | Pasture B Water Well | Not Identified in a WS Study | 1 | \$70,000.00 | \$35,000.00 | Well | |
| | PK Pipeline | Not Identified in a WS Study | 3 | \$70,000.00 | \$35,000.00 | Pipeline and Conveyance | |
| | Salisbury State Land Well | Not Identified in a WS Study | 1 | \$70,000.00 | \$35,000.00 | Well | |
| | Savery Creek Oxbows 1 & 2 | Not Identified in a WS Study | 2 | \$70,000.00 | \$35,000.00 | Wetland Development | |
| | Short Allotment Water Well | Not Identified in a WS Study | 1 | \$70,000.00 | \$35,000.00 | Well | |
| | SM Solar Tank & Pipeline | Not Identified in a WS Study | 3 | \$30,000.00 | \$15,000.00 | Solar Platform | |
| | WA Irrigation Pipeline | Not Identified in a WS Study | 4 | \$12,000.00 | \$6,000.00 | Irrigation | |
| | Wild Horse Pipeline | Not Identified in a WS Study | 3 | \$70,000.00 | \$35,000.00 | Pipeline and Conveyance | |
| Medicine Bow CD | | | | | | | |
| | Bailey - Red Springs 1 Flat Top Stock Well | Medicine Bow River | 3 | \$133,620.00 | \$35,000.00 | Pipeline and Conveyance | 6 projects totaling \$208,600 |
| | Bailey Taylor 1 & 3 | Medicine Bow River | 3 | \$67,200.00 | \$33,600.00 | Pipeline and Conveyance | |
| | Calvert Pipeline | Medicine Bow River | 3 | \$78,650.00 | \$35,000.00 | Pipeline and Conveyance | |
| | Gillham Stock Water Project | Medicine Bow River | 1 | \$106,439.00 | \$35,000.00 | Well | |
| | Rock River Ranches - North Pipeline | Medicine Bow River | 1 | \$122,256.00 | \$35,000.00 | Well | |
| | Rock River Ranches - South Pipeline | Medicine Bow River | 1 | \$100,463.00 | \$35,000.00 | Well | |
| Saratoga Encampment Rawlins CD | | | | | | | |
| | Fox Pipeline Extension | Not Identified in a WS Study | 3 | \$8,000.00 | \$4,000.00 | Pipeline and Conveyance | 2 projects totaling \$15,050 |
| | Herring Water Development | Not Identified in a WS Study | 1 | \$22,100.00 | \$11,050.00 | Well | |

| Sheridan County CD | | | | | | | |
|---|---|------------------------------|-------|--------------|-------------|----------------------------------|----------------------------------|
| | Kuhn Ranch Stock Water Development | Not Identified in a WS Study | 1 | \$72,500.00 | \$35,000.00 | Well | 1 project \$35,000 |
| Sublette County CD | | | | | | | |
| | Anselmi Stock Water Development | New Fork | 1 | \$25,000.00 | \$12,500.00 | Well | 7 projects totaling \$131,250 |
| | Beard Solar & Tanks | Upper Green River | 3 | \$20,500.00 | \$10,250.00 | Solar Platform | |
| | Blue Rim Desert Allotment Stock Water Development | Not Identified in a WS Study | 3 | \$60,000.00 | \$30,000.00 | Pipeline and Conveyance | |
| | Hedrick Stock Water Development | New Fork | 1 | \$45,000.00 | \$22,500.00 | Well | |
| | Persinger Stock Water Development | Not Identified in a WS Study | 1 | \$45,000.00 | \$22,500.00 | Well | |
|  | Welborn 1 Trough | New Fork | 1/(3) | \$27,000.00 | \$13,500.00 | Pipeline and Conveyance | |
|  | Welborn 1 Trough & Pipeline 2 | New Fork | 1/(3) | \$40,000.00 | \$20,000.00 | Pipeline and Conveyance | |
| Sweetwater County CD | | | | | | | |
| | Ramsay Ranch Pipeline | Bitter Creek | 4 | \$99,054.00 | \$35,000.00 | Irrigation | 1 project \$35,000 |
| Teton CD | | | | | | | |
| | 7 Mile Ranch - Rural Community Fire Suppression | Not Identified in a WS Study | 2 | \$96,470.00 | \$35,000.00 | Rural Community Fire Suppression | 4 projects totaling \$113,950 |
| | Fall Creek Ranch Water Supply Improvement | Not Identified in a WS Study | 1 | \$41,500.00 | \$20,750.00 | Rural Community Fire Suppression | |
| | Game Creek Irrigation System Improvement | Upper Snake River | 4 | \$46,400.00 | \$23,200.00 | Irrigation | |
| | South Flat Creek Fish Passage & Channel Restoration | Not Identified in a WS Study | 5 | \$606,625.00 | \$35,000.00 | Environmental | |
| Uinta County CD | | | | | | | |
|  | Bad Spring Stock Water Development | Blacks Fork | 1/(1) | \$66,600.00 | \$33,300.00 | Spring | 5 projects totaling \$157,675 |
| | Bridger Well 18 Stock Water Development | Not Identified in a WS Study | 3 | \$67,000.00 | \$33,500.00 | Solar Platform | |
| | Hansen Enlargement of Coy Reservoir | Bear River | 2 | \$133,400.00 | \$35,000.00 | Small Reservoir | |
|  | Wildcat 5 Spring Development | Blacks Fork | 1/(1) | \$64,500.00 | \$32,250.00 | Spring | |
|  | Wildcat Butte Well Solar | Blacks Fork | 1/(3) | \$47,250.00 | \$23,625.00 | Solar Platform | |
| Wild Rose ISD | | | | | | | |
| | Wild Rose-Sheridan Raw Water Connection | Goose Creek | 4 | \$70,000.00 | \$35,000.00 | Irrigation | 1 project \$35,000 |

| | |
|--|----------------|
| Small Water | |
| Available in the New Development Account as of 1/27/19 | \$270,311.67 |
| 2019 Omnibus Construction Bill Request | \$2,000,000.00 |
| Subtotal 1 | \$2,270,311.67 |
| | |
| New 2019 Requests | \$1,483,617.00 |
| Remaining (Subtotal 1 - 2019 Requests) | \$786,694.67 |

2019 Small Water Program Application Summary for Account II

| | Primary Project Name | Watershed Study | Project Priority | Total Project Cost | WWDC Grant | Project Type | Sponsor Summary |
|---|---|------------------------------|------------------|--------------------|-------------|-----------------|--------------------------------|
| Hot Springs CD | | | | | | | |
| | Big Horn River Stabilization Project | Not Identified in a WS Study | 5 | \$132,186.00 | \$35,000.00 | Environmental | 2 projects totaling \$48,560 |
| | Thorton Place Project | Owl Creek | 3 | \$27,120.00 | \$13,560.00 | Irrigation | |
| Laramie County CD | | | | | | | |
| | Farthing Check Dam Reconstruction | Lower Laramie | 1 | \$46,200.00 | \$23,100.00 | Irrigation | 1 project \$23,100 |
| Little Snake River CD | | | | | | | |
| | CCC LSR Bank Stabilization 1 & 2 | Not Identified in a WS Study | 5 | \$450,000.00 | \$35,000.00 | Environmental | 10 projects totaling \$295,000 |
| | CCC LSR Bank Stabilization 3 | Not Identified in a WS Study | 5 | \$100,000.00 | \$35,000.00 | Environmental | |
| | DC Irrigation Pipeline | Not Identified in a WS Study | 1 | \$65,000.00 | \$32,500.00 | Irrigation | |
| | JH Reach of Savery Creek | Not Identified in a WS Study | 5 | \$85,000.00 | \$35,000.00 | Environmental | |
| | Johnson Ranch Check-Diversion Structure | Not Identified in a WS Study | 5 | \$70,000.00 | \$35,000.00 | Environmental | |
| | Lambert & Irwin Diversion | Not Identified in a WS Study | 1 | \$151,000.00 | \$35,000.00 | Irrigation | |
| | Reed Ditch Head Gate-Headwall-Sluice Box | Not Identified in a WS Study | 1 | \$45,000.00 | \$22,500.00 | Irrigation | |
| | South Flat Top Grazing Allotment Pond Rehabilitation | Not Identified in a WS Study | 2 | \$35,000.00 | \$17,500.00 | Small Reservoir | |
| | Wren Bridge Streambank Project | Not Identified in a WS Study | 5 | \$85,000.00 | \$35,000.00 | Environmental | |
| | WSC Irrigation Water Bypass Structure | Not Identified in a WS Study | 4 | \$25,000.00 | \$12,500.00 | Irrigation | |
| Owl Creek ID | | | | | | | |
| | Lucerne Valley Canal Restoration | Not Identified in a WS Study | 4 | \$57,000.00 | \$0.00 | Irrigation | 1 project \$0 |
| Saratoga Encampment Rawlins CD | | | | | | | |
| | Nichols Diversion Rehabilitation | Not Identified in a WS Study | 1 | \$175,000.00 | \$35,000.00 | Irrigation | 1 project \$35,000 |
| Sheridan County CD | | | | | | | |
| | Reed Ditch Irrigation Diversion Rehabilitation | Goose Creek | 1 | \$53,500.00 | \$26,750.00 | Irrigation | 1 project \$26,750 |
| South Big Horn CD | | | | | | | |
| | Shell Canal Wastegate 8 & Check Structures | Shell Creek | 4 | \$88,536.00 | \$35,000.00 | Irrigation | 1 project \$35,000 |
| Star Valley CD | | | | | | | |
| | Lower Swift Creek Stream Restoration | Not Identified in a WS Study | 5 | \$1,284,927.00 | \$35,000.00 | Environmental | 1 project \$35,000 |
| Sublette County CD | | | | | | | |
| | Converse Ditch Headgate | New Fork | 1 | \$60,000.00 | \$30,000.00 | Irrigation | 4 projects Totaling \$87,500 |
|  | EC Walker Diversion | New Fork | 1/(1) | \$60,000.00 | \$30,000.00 | Irrigation | |
| | Kaylou Stock Water Reservoir Rehabilitation | New Fork | 2 | \$15,000.00 | \$7,500.00 | Small Reservoir | |
|  | Wright Diversion | New Fork | 1/(1) | \$40,000.00 | \$20,000.00 | Irrigation | |
| Sweetwater County CD | | | | | | | |
| | Green River Urban Habitat Improvement Project | Not Identified in a WS Study | 6 | \$413,000.00 | \$35,000.00 | Recreational | 1 project \$35,000 |
| Teton CD | | | | | | | |
| | Jensen Canyon Headgate Rehabilitation | Upper Snake River | 1 | \$108,045.00 | \$35,000.00 | Irrigation | 2 projects \$70,000 |
| | Spread Creek Irrigation Rehabilitation & Fish Passage | Not Identified in a WS Study | 1 | \$1,200,000.00 | \$35,000.00 | Irrigation | |

| | |
|---|--------------|
| Small Water | Total |
| Available in the Rehabilitation Account as of 1/27/19 | \$156,832.99 |
| 2019 Omnibus Construction Bill Request | \$700,000.00 |
| Subtotal 1 | \$856,832.99 |
| | |
| New 2019 Requests | \$690,910.00 |
| Remaining (Subtotal 1 - 2019 Requests) | \$165,922.99 |

PROJECT AGREEMENT
MSC No. _____
(PROJECT) PROJECT

1. **Parties.** The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION, [Commission], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002. and the SPONSOR NAME, Sponsor's County County, Wyoming, a duly organized water and sewer district / water district / improvement and service district / watershed improvement district / conservation district / conservancy district / joint powers board / other existing under the laws of that state [Sponsor], whose address is: Address, City, WY Zip Code.

2. **Purpose of Agreement.** The purpose of this Agreement is to authorize the design and construction of small water development projects and specifying terms for the project. The following project is hereby authorized and financed according to the terms of that legislation and this Agreement:

(a) Project [Project]; and

(b) Appurtenances necessary to make the Project complete and function in the manner intended.

3. **Term of Agreement.** This Agreement is effective when all parties have executed it (Effective Date). The term of this Agreement is from the Effective Date until all provisions and conditions set forth herein have been satisfied.

4. **Special Provisions.**

A. The Commission approved a grant to the Sponsor of not more than XXXX THOUSAND DOLLARS (\$XXXX.00) or fifty percent (50%) of the actual development costs, whichever is less, which shall be disbursed to the Sponsor according to the terms of this Agreement. The Sponsor is responsible for acquiring the remaining fifty percent (50%) of the Project funds from other sources.

B. The Sponsor is responsible for acquiring, and shall submit to the Commission, all necessary public access agreements, permits, plans, specifications, operation and maintenance plans, funding participation and construction budgets, and any other document deemed necessary by the Commission. The Commission shall have a reasonable time to examine the documents and submit comments. If the plans and specifications require modifications, or if the proposed Project cannot be constructed with the funds available, the Sponsor shall be informed in writing and the Sponsor shall have a reasonable time to provide such information as may be required by the Commission, make authorized alterations to the proposed Project that are necessary to provide the Commission with a reasonable expectation that the Project may be constructed with the funds available, or terminate the Project.

C. If the Commission determines that the Sponsor has met all necessary requirements described in Section 4(B) of this Agreement and the conditions of the Small Water Project Program Operating Criteria, the Commission shall notify the Sponsor that construction may commence. The Commission shall not reimburse the Sponsor for construction costs incurred prior to the receipt of the notice to proceed with construction from the Commission.

D. The Sponsor shall complete the Project and shall be responsible for operation and maintenance of the Project in accordance with accepted engineering practices. The Sponsor shall be responsible for all operation, maintenance, and repair expenses, including labor. The Sponsor shall complete the Project no later than December 31, 20XX, and shall have settled all claims and paid all Project expenses by said date. No funds shall be paid by the Commission after said date specified, and the Sponsor shall be solely responsible for payment of any expenses incurred or claims received after said date.

E. Funds disbursed under this Agreement may only be used as approved by the Commission to defray costs identified in the final plans and specifications or authorized by approved change orders to pay for permit procurement, Project land procurement, or design or construction engineering services essential to construction of the Project. Necessary and reasonable Project expenses or costs not directly identified above require prior written approval by the Commission.

F. Prior to the disbursement of any funds, the Sponsor shall submit to the Commission a certified pay request, signed contractor invoices, before and after photos of the individual component, latitude and longitude coordinates, as built drawings, and any applicable finalized State Engineer's Office paperwork. Prior to the final payment, the Sponsor shall submit to the Commission an operation and maintenance plan, signed contractor invoices, certified payment request to the Commission, including a Notice of Final Payment, affidavit of publication documenting final settlement, before, during and after photographs of the Project, certified as-constructed Project plans or a letter from the engineer certifying the Project is functioning in the manner intended, latitude/longitude coordinates, and finalized State Engineer's Office paperwork for any wells constructed. Requests for payment shall be certified by the Sponsor or its designated representative and accompanied by material invoices. Upon approval of the payment requests by the Commission, requests will be processed and disbursements will be delivered to a representative of the Sponsor. The Sponsor shall use funds disbursed by the Commission immediately upon receipt and in strict accordance with the requests for payment submitted by the Sponsor and approved by the Commission.

Payments made by the Commission shall be coordinated with all other Sponsor funding sources, including in-kind contributions, so that the total amount provided to the Sponsor from all funding sources shall not exceed ONE-HUNDRED PERCENT (100%) of total Project costs. Total Project costs may include the value of any in-kind contributions for the installation of Project materials purchased specifically for the Project, as documented by invoice and determined by the Commission. For the purposes of calculating total Project costs, in-kind contributions shall not exceed FIFTY-PERCENT (50%) of total Project costs. The total amount provided to the Sponsor shall not exceed FIFTY PERCENT (50%) of total Project costs.

G. Representatives of the Commission shall have the right of ingress and egress to enter upon the premises at any time, for the purpose of inspection during construction of the Project. If the Sponsor does not own the premises upon which the Project is located, or does not own access to the Project, the Sponsor shall obtain written permission from the landowner(s) of the premises on which the Project is located, and any land needed for access to the Project, for representatives of the Commission to have access to the Project for inspection purposes, and the ability to collect necessary resource data, as defined by Wyo. Stat. Ann § 6-3-414(e)(iv).

H. If through any cause, either party shall fail to fulfill in a timely and proper manner its obligations under this Agreement, or if either party shall violate any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If the Commission determines that the Sponsor has, without good cause, abandoned completion of the Project, the Sponsor shall be obligated to immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the water development account from the date of expenditure.

Notwithstanding the above, the Sponsor shall not be relieved of liability to the Commission for damages sustained by the Commission by virtue of any breach of this Agreement by the Sponsor, and the Commission may withhold any payments to the Sponsor for the purposes of offset until such time as the exact amount of damages due the Commission from the Sponsor is determined. In the event of default or the Sponsor's negligent or intentional failure to complete the Project, the Commission shall have the right of offset against any State of Wyoming accounts or sources of funding designated

for use by, or on behalf of the Sponsor for the full amount owed to the Commission pursuant to this Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the Sponsor, the Commission requests an audit of funds disbursed, the Sponsor agrees to submit to and cooperate with the audit conducted by duly authorized representatives of the Commission. The Commission and its representatives shall have access to any books, documents, papers, electronic data, and records of the Sponsor which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the Commission is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for the continued performance of the Agreement, the Agreement may be terminated by the Commission at the end of the period for which the funds are available. The Commission shall notify the Sponsor at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the Commission in the event this provision is exercised, and the Commission shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The Sponsor shall keep informed of and comply with all applicable federal, state and local laws and regulations, and all federal grant requirements and executive orders in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, and public works. The Sponsor shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of six (6) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The Sponsor shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms and conditions of this Agreement, the Sponsor shall be free from control or direction over the details of the performance of services under this Agreement. The Sponsor shall assume sole responsibility for any debts or liabilities that may be incurred by the Sponsor in fulfilling the terms of this Agreement and shall be solely responsible for the payment of

all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the Sponsor or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the Commission or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The Sponsor agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the Sponsor or the Sponsor's agents or employees as a result of this Agreement.

I. Notices. All notices arising out of, or from, the provisions of this Agreement shall be in writing and given to the parties either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Nondiscrimination. The Sponsor shall comply with the Civil Rights Act of 1964, the Wyoming Fair Employment Practices Act (Wyo. Stat. § 27-9-105, *et seq.*), the Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, *et seq.*, and the Age Discrimination Act of 1975 and any properly promulgated rules and regulations thereto and shall not discriminate against any individual on the grounds of age, sex, color, race, religion, national origin or disability in connection with the performance under this Agreement.

K. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, approved as to form by the Office of the Attorney General, filed with and approved by A & I Procurement, and approved by the Governor of the State of Wyoming, or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

L. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

M. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the Commission expressly reserve sovereign immunity by entering into this Agreement and the Sponsor expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

P. Waiver. The waiver of any breach of any term or condition in this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

Q. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the Sponsor of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

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6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chairman

Date

Secretary

Date

DISTRICT (Sponsor)

, Chairman

Date

, Secretary

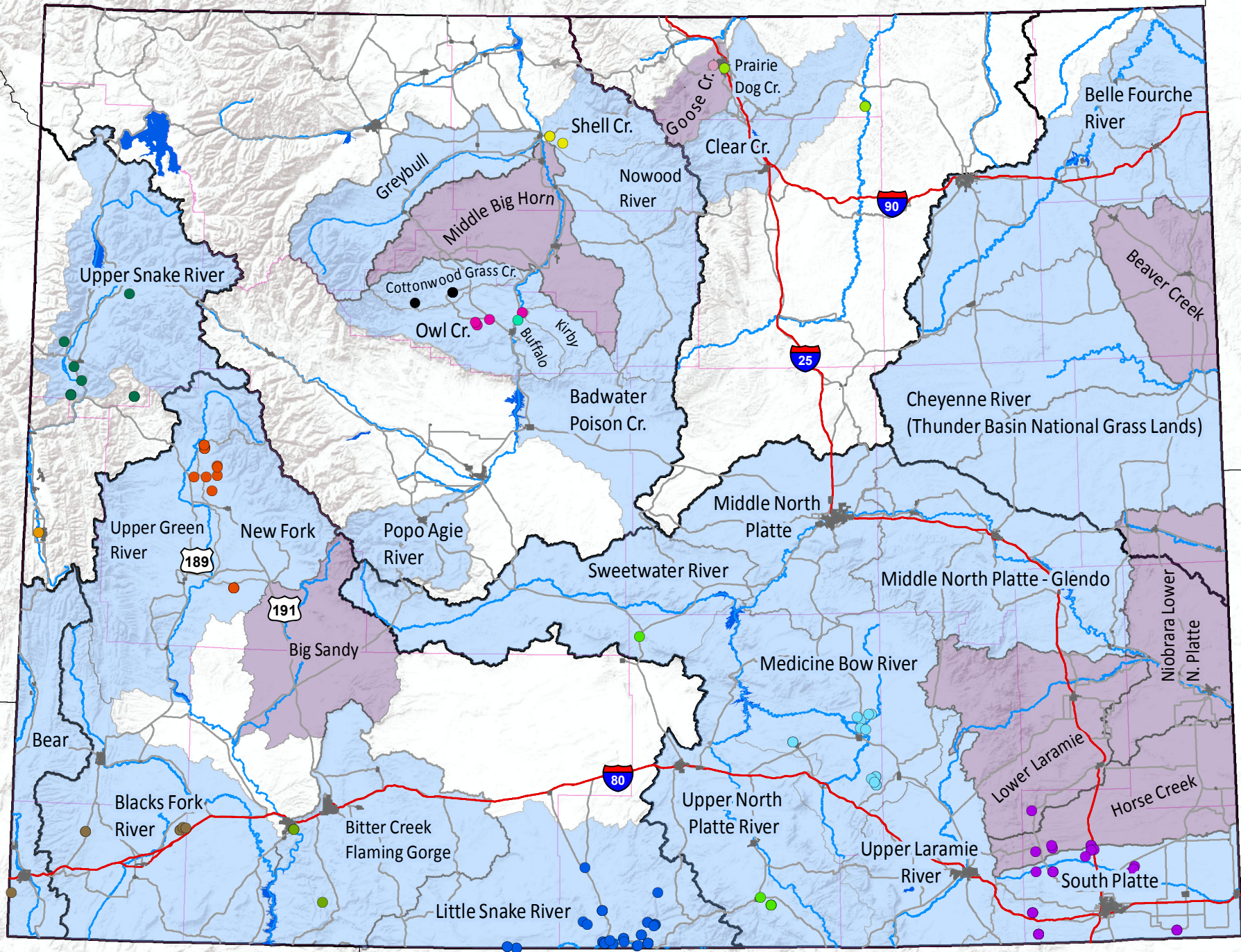
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
ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

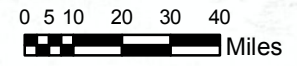
Tyler M. Renner
Assistant Attorney General

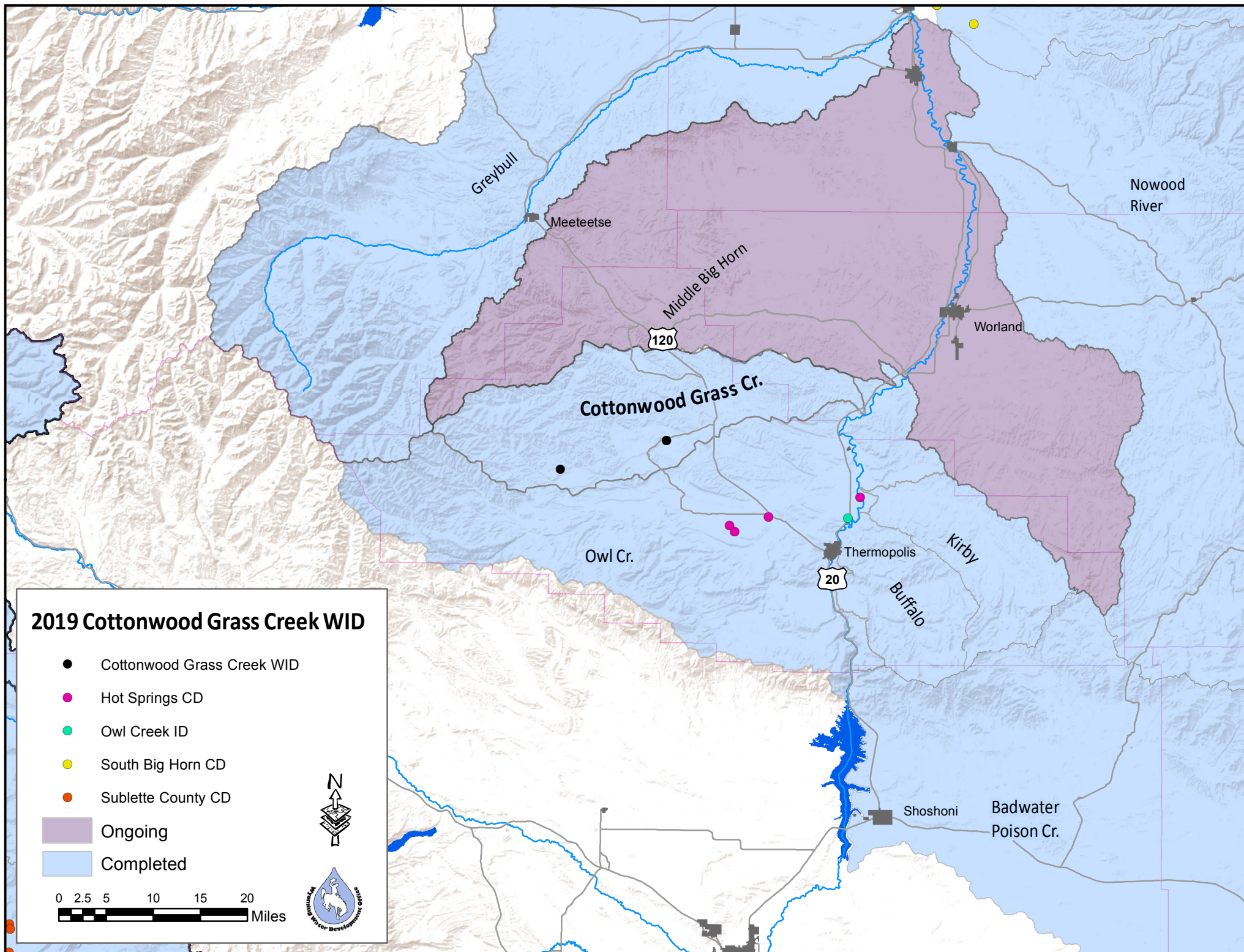
Date

2019 Small Water Applications



 Ongoing  Completed







THE STATE OF WYOMING
Water Development Office

6920 YELLOWTAIL ROAD TELEPHONE: (307) 777-7626 CHEYENNE, WY 82002
FAX: (307) 777-6819



2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: 21 Creek Pipeline Extension – Phase I

Program: New Development

Project Type: Pipeline

County: Hot Springs

Sponsor and Status: Cottonwood Grass Creek Watershed Improvement District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$121,515

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Cottonwood Grass Creek

1. Project Description:

The purpose of this project is to install an extension to the 21 Creek Stock Water Pipeline. This is Phase I of a larger planned expansion, it will convey water to upland pastures adjacent to 21 Creek and Cottonwood Creek. The pipeline will be approximately 37,750 feet long and will have 9 stock tanks in strategic upland locations serving over 5500 acres. The project is receiving assistance from the local Watershed Improvement District and the NRCS.

2. Sponsor Defined Public Benefit:

"The pipeline is designed to enhance water distribution for livestock and wildlife in three (3) pastures that currently have no upland water available. Providing upland water sources will allow for improved pasture management and increased flexibility of grazing use. Improved grazing distribution for both wildlife and livestock will allow for the enhancement of upland and riparian zoned plant communities."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



THE STATE OF WYOMING
Water Development Office

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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Haynes Irrigation Diversion & Pipeline

Program: New Development

Project Type: Irrigation

County: Hot Springs

Sponsor and Status: Cottonwood Grass Creek Watershed Improvement District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$35,400

Requested Grant: \$17,700

Identified in a Watershed Study: Yes **Watershed Study:** Cottonwood Grass Creek

1. Project Description:

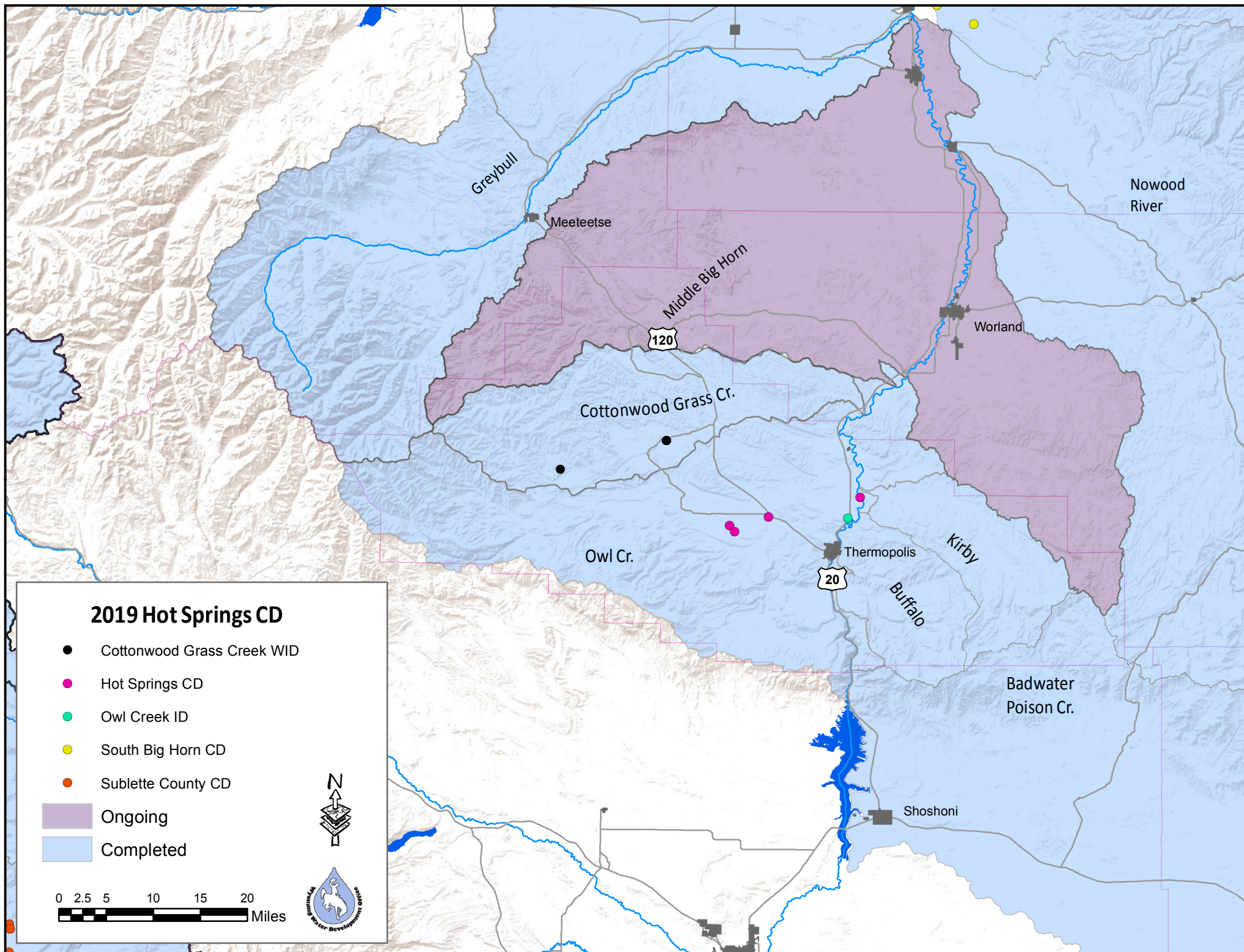
This project will install a new diversion, settling pond, and pipeline off of the Caledonian Ditch. The pipeline will be replacing high maintenance dirt ditches that are used to flood irrigate 130 acres with very poor results due to terrain and water supply issues.

2. Sponsor Defined Public Benefit:

"The more efficient use of available water in Cottonwood Creek. Cottonwood Creek has traditionally experienced a shortage of water. This project will allow for more efficient use of the water, leaving more water available for other irrigators and to benefit fish and wildlife."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Big Horn River Stabilization

Program: Rehabilitation

Project Type: Environmental

County: Hot Springs

Sponsor and Status: Hot Springs Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$132,186

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The purpose of this project is to stabilize the banks of the Big Horn River to stop the erosion that is damaging existing irrigated lands and to reduce the sediment that is being contributed to the river system. Several high water years have resulted in erosion at this section of river is endangering irrigation and transportation infrastructure.

2. Sponsor Defined Public Benefit:

"The public benefit of this project is to keep the Big Horn River in its present channel and eliminate excessive stream bank erosion. It will contribute to continued production in maintaining an important fishery. Without the completion of this project Hwy 172 & Black Mountain Bridge will be endangered."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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Water Development Office

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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Meyer Well

Program: New Development

Project Type: Well

County: Hot Springs

Sponsor and Status: Hot Springs Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$48,000

Requested Grant: \$24,000

Identified in a Watershed Study: Yes **Watershed Study:** Owl Creek

1. Project Description:

The purpose of this project is to drill two wells, install two solar platforms, and install two tanks. Water from these tanks will be used for livestock on a year round basis. One of the systems will be installed on the north side of Mission Flat Road, and the other will be installed on the south side of Mission Flat Road.

2. Sponsor Defined Public Benefit:

"Year round availability of livestock will increase use of the land and allow a larger herd and economics for the county. Installation of these units will employ all who install and maintain them. Purchase of necessary equipment will help local businesses also.

Also cattle will not use the creek bed and surrounding areas as much causing erosion and waste materials to enter the creek system, if water is available at other sources/locations from wells."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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Water Development Office

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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Thorton Place Project

Program: Rehabilitation

Project Type: Irrigation

County: Hot Springs

Sponsor and Status: Hot Springs Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$27,120

Requested Grant: \$13,560

Identified in a Watershed Study: Yes **Watershed Study:** Owl Creek

1. Project Description:

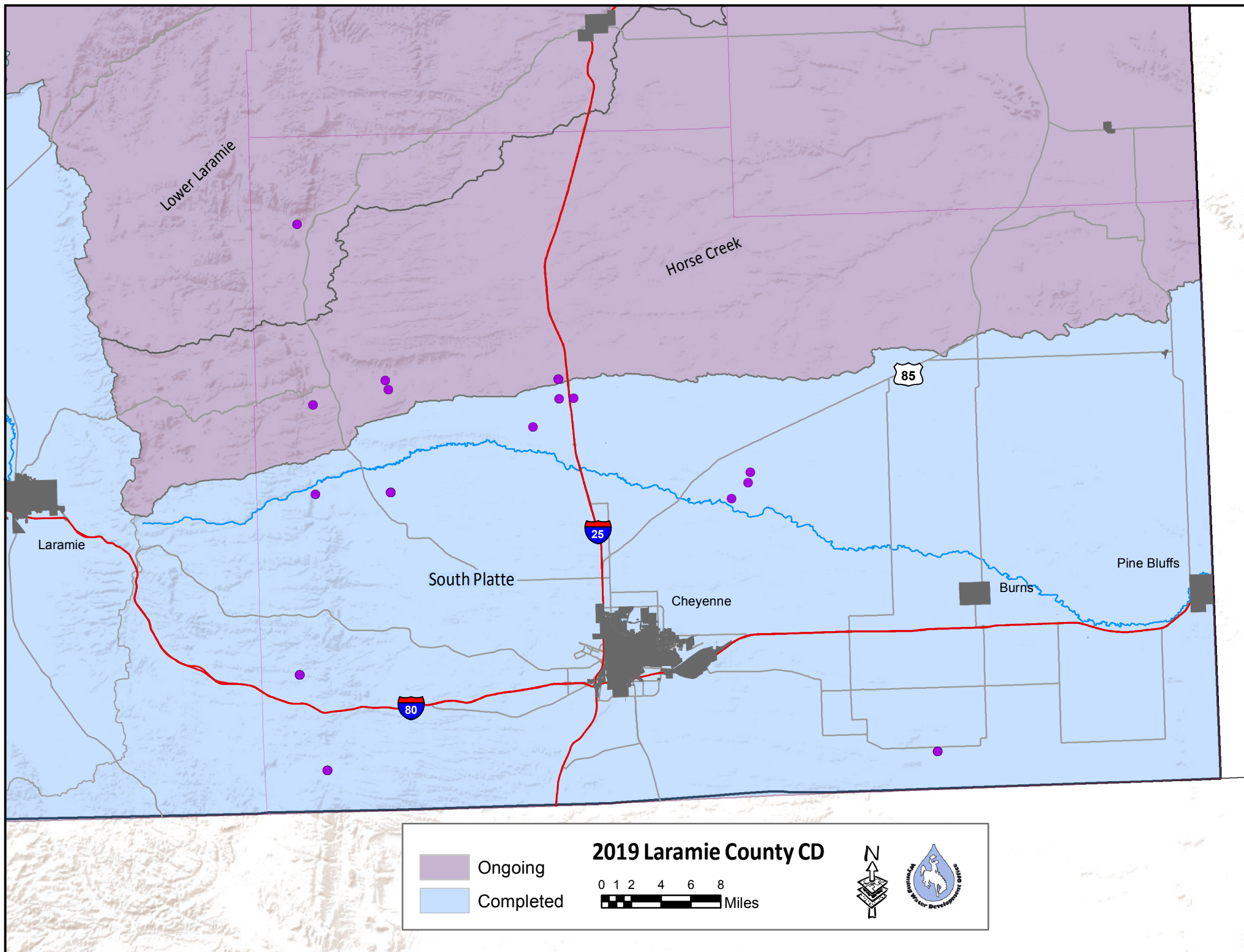
The purpose of this project is to put approximately 1700 feet of irrigation ditch into pipe. The new pipeline will be supplied water from an existing irrigation pipeline. The landowner plans to install gated pipe to further improve irrigation efficiency. Gated pipe is not an eligible expense and is not a part of this project.

2. Sponsor Defined Public Benefit:

"The benefits of this project include increased irrigation efficiency and production of 100+ acres and reclamation of current irrigation ditches. It will also decrease the amount of water waste, keeping more water in the creek as well as prevent the spread of noxious weeds. The irrigation efficiency that this project will provide will be especially important due to the limited water available during the summer months."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Clark Solar Stock Well

Program: New Development

Project Type: Well

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$42,000

Requested Grant: \$21,000

Identified in a Watershed Study: Yes **Watershed Study:** Horse Creek

1. Project Description:

The purpose of this project is to drill a new well and install a solar system.

2. Sponsor Defined Public Benefit:

"This project will provide a new source of water for this summer pasture which will serve to better disperse cattle on this pasture. Wildlife, such as the resident pronghorn herds, will also benefit from this facility."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Drake Stock Water Project

Program: New Development

Project Type: Well

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$81,345

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This stock watering project will develop a new source of water for better utilization of a currently dry CRP pasture (204 acres) while also providing water to a 322-acre pasture that had previously been serviced by a windmill well. This project incorporates a new 360-foot well with electric pump, 8850-feet of 1 ½" pipe, and three 8-foot tire tanks for more consistent watering.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle over the two pastures totaling 526-acres. These pastures provide newly established CRP forbs and grasses for the resident pronghorn populations that frequent the ranch along with other species of wildlife. With this development the well will provide wildlife water too."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Farthing Check Dam Reconstruction

Program: Rehabilitation

Project Type: Irrigation

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$46,200

Requested Grant: \$23,100

Identified in a Watershed Study: Yes **Watershed Study:** Lower Laramie

1. Project Description:

This irrigation project will consist of converting a non-stable and highly erodible check dam structure into more stable and less erosive stone-constructed structures. Currently this facility is quite temporary, washing out almost every year. The constructed stone weir will provide a solid structure for flows greater than bank full.

2. Sponsor Defined Public Benefit:

"The manner in which the current temporary check dam structure is built only hampers the natural system with heavy silt deposition upstream of the structures leading to failure around the ends of the weir during higher flows. These structures do not provide adequate velocities to move the sediment load and are not properly secured to the banks resulting in erosion forming wider channels, shallower depths and decreased velocities - thereby reducing stream function. This project will provide the correct structure sizing and design to prevent all of the aforementioned issues."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Dereemer 906 Stock Pump First Enlargement

Program: New Development

Project Type: Pipeline

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$46,400

Requested Grant: \$23,200

Identified in a Watershed Study: Yes **Watershed Study:** Horse Creek

1. Project Description:

This stock watering project will extend an existing stock diversion for better utilization of three existing pastures, one currently without water. Three 8-foot tanks will be placed at the end of a 3800-ft 1 ½" pipeline and fenced in a way that allows access from both pastures.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle over the three pastures totaling over 2400 acres. This development will help reduce trailing within the highly erosive soils which leads to extensive gullying during large precipitation events. It will also allow a longer duration of grazing in the higher foothills section of the pasture, reducing the time cattle will spend down on Horse Creek. Finally, the ranch and especially these pastures maintain abundant populations of mule deer, antelope and other non-game wildlife."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Grace Valley Stock Water Project

Program: New Development

Project Type: Pipeline

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$48,000

Requested Grant: \$24,000

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This project involves developing an abandoned irrigation well for stock watering purposes. There will be three new 8-foot stock tanks and the pipeline will be extended to an existing tank. This will better disperse cattle across the property. The abandoned well will be outfitted with a new electric pump.

2. Sponsor Defined Public Benefit:

"This project will provide better utilization and distribution over an 1160-acre cropland pasture. Wildlife including deer, waterfowl, and sharp tail grouse frequent this area. These stock tanks will provide further benefits."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Kimzey Stock Water Pipeline

Program: New Development

Project Type: Pipeline

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$111,263

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This stock watering project will employ an existing electric stock well to deliver water across a 3.5 mile pipeline for better utilization of numerous existing pastures currently without water. Five 8-foot tanks will be placed at the end of a 21,000-ft 2" pipeline and fenced in a way that allows access from both sides of all pastures. Currently, these winter pastures contain up to 1500 head of cattle.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle within five pastures totaling over 2720 acres. This development will help reduce trailing and trampling of the riparian areas. Currently cattle are camping on the riparian areas which increases sediment loads and bank erosion leading to an overall decrease in aquatic and riparian function and health. The added benefit of a large distribution system like the Kimzey Pipeline is that the project will provide water for large populations of wintering mule deer, antelope and elk herds that use the ranch as critical winter range."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: LF Enterprises Stock Water Pipeline Extension

Program: New Development

Project Type: Pipeline

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$23,244

Requested Grant: \$11,622

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This stock watering project will extend an existing stock water pipeline to improve the utilization of a 120 acre pasture. The pipeline will extend to a "T", from there, two lines will go out feeding two separate 8 foot stock tanks.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle over the pasture. The development will help reduce trailing within the highly erosive soils which leads to extensive gulying during large precipitation events. Improved distribution will help improve the range health thus reducing invasive weed issues and decrease soil erosion. This area is used by sharp tail grouse, antelope, and mule deer which will also benefit from this project."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Paul Life Trust Project

Program: New Development

Project Type: Well

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$58,740

Requested Grant: \$29,370

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This stock watering project includes three parts. The first is a new well, solar pump, and a tire tank. The second includes replacing a tank with a tire tank on an existing solar well. The third includes replacing a tank with a tire tank on an existing well. All tanks will be installed within 100 feet of wells.

2. Sponsor Defined Public Benefit:

"This project will provide better distribution of cattle over the two pastures totaling over 960 acres. This development will help reduce trailing within the highly erosive soils which leads to extensive gulying during large precipitation events. It will also improve the grazing management and help decrease invasive weed issues. This area is used by sharp tail grouse, antelope, and mule deer which will also benefit from this project."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Shiverdecker Solar Pump & Stock Water Project

Program: New Development

Project Type: Well

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$33,200

Requested Grant: \$16,600

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This stock watering project will include installation of a shallow well and solar pump to feed two 8-foot tanks. Tank 1 will be at the end of a 600 foot pipeline and fenced in a way that allows access from both pastures. Tank 2 will be at the end of a 1200 foot pipeline to the top of a hill.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle over the three pastures totaling over 585 acres. This development will help reduce trailing within the highly erosive soils which leads to extensive gullying during large precipitation events. It will also allow a longer duration of grazing in the higher foothills section of the pasture, reducing the time cattle will spend down on the stream. Finally, the ranch and especially these pastures are winter range for elk, mule deer, antelope and other non-game wildlife."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Smith Stock Diversion

Program: New Development

Project Type: Infiltration Gallery

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$40,200

Requested Grant: \$20,100

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This new stock watering diversion will provide the only water for this nearly 320-acre pasture outside of the area at the point of diversion on South Crow Creek. The project involves creating a solar based infiltration gallery and pump within South Crow Creek and running roughly 2100 ft. of 2" buried HDPE to an 8 ft. tire tank or earthen stock tank which exists.

2. Sponsor Defined Public Benefit:

"This project will provide an excellent distribution of cattle as the landowner is planning to incorporate grazing on this property. This development will help reduce trailing and damage to the one and only riparian area on the property. Without this development, the fear would be that the cattle would not stray from the creek. Finally, this pasture maintains abundant populations of mule deer, elk, pronghorn, and other non-game wildlife."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Vercelli Stock Water Project 1

Program: New Development

Project Type: Well

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$81,535

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

This stock watering project will include a solar stock well and three 10 foot tire tanks for better utilization of this often dry pasture. Two separate pipelines, totaling 2700 feet will run both North and South of the proposed well. This spring and summer pasture will hold roughly 240 head of cattle.

2. Sponsor Defined Public Benefit:

"This project will provide a much better distribution of cattle within the pasture totaling over 1280 acres. Currently, the riparian areas are being impacted if water is present in South Lodgepole Creek because the cattle will not depart from the riparian. If there is no flow in South Lodgepole, the owner cannot even use the pasture and is forced to graze a different pasture for a longer duration. This development will help protect the riparian areas and better utilize the entire ranch for proper grazing management. Riparian health and function should return to South Lodgepole Creek with the addition of off-channel water. This project will also provide water for large populations of pronghorn that use the ranch year-round."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Vercelli Stock Water Project 2

Program: New Development

Project Type: Pipeline

County: Laramie

Sponsor and Status: Laramie County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$42,000

Requested Grant: \$21,000

Identified in a Watershed Study: Yes **Watershed Study:** South Platte

1. Project Description:

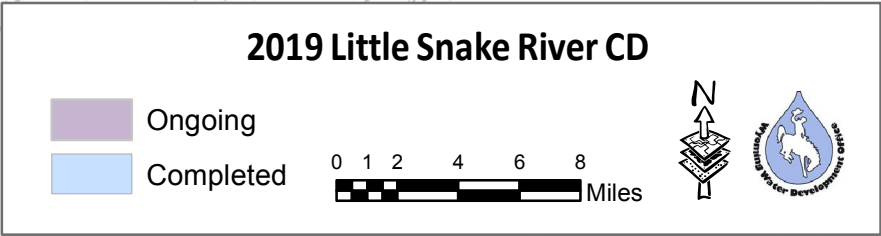
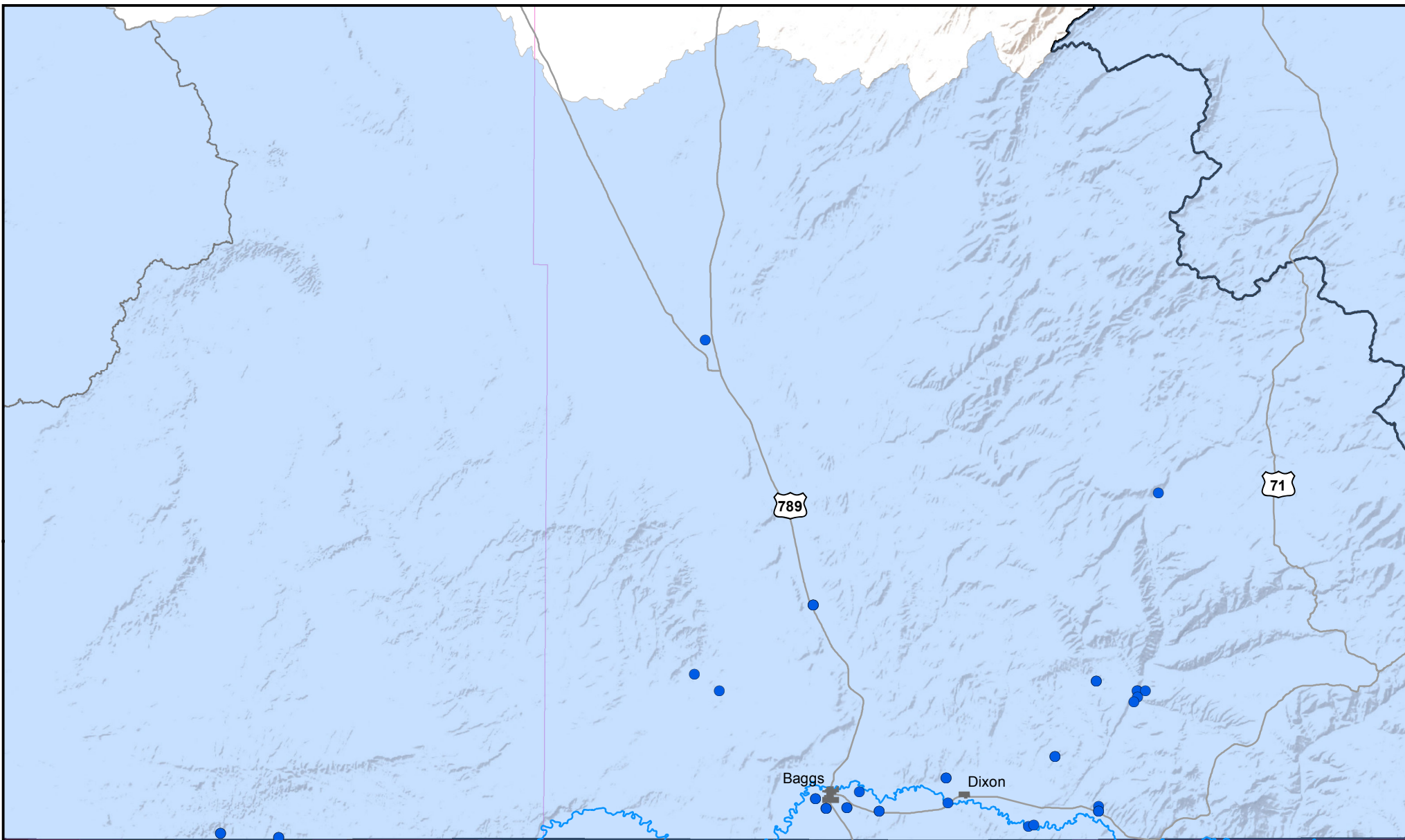
This stock watering project will tie into an existing stock pipeline, install 7600 feet of new 2" waterline, and a 10-ft tire tank for better utilization of this pasture.

2. Sponsor Defined Public Benefit:

"Currently this section of ground does not get utilized by cattle because there is no available water. Therefore cattle utilize a much smaller area around the limited stock tanks in that large pasture influencing grass/forb species diversity. Better utilization leads to better diversity and more flexible grazing management and better overall range health."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: CCC LSR Bank Stabilization 1 & 2

Program: Rehabilitation

Project Type: Environmental

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$450,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will slope and stabilize eroding river banks on the Little Snake River. Estimates include the installation of 12 rock veins in two sections of river. Stabilized banks will protect irrigated pasture lands and high value cottonwood/willow riparian, wetland and aquatic habitat.

2. Sponsor Defined Public Benefit:

"This project will reduce excessive bank erosion and sedimentation in the Little Snake River thereby improving water quality. This will also improve fisheries and spawning habitat for fish by reducing sedimentation of spawning habitat for fish. This project will also protect high value cottonwood gallery forest which is used by more wildlife species than any other habitat in Wyoming."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: CCC LSR Bank Stabilization 3

Program: Rehabilitation

Project Type: Environmental

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$100,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will slope and stabilize eroding banks on the Little Snake River. Estimates include the installation of 6 rock veins in two sections of river. Stabilized river banks will protect irrigated land, pasture, high value cottonwood/willow riparian areas, wetlands and aquatic habitat.

2. Sponsor Defined Public Benefit:

"This project will reduce excessive bank erosion and sedimentation in the Little Snake River thereby improving water quality. This will also improve fisheries and spawning habitat for fish by reducing sedimentation of spawning habitat for fish. This project will also protect high value cottonwood gallery forest which is used by more wildlife species than any other habitat in Wyoming."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: CR Irrigation Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$30,000

Requested Grant: \$15,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will install a new water control structure and 2300 feet of 12 inch buried pipe. The pipeline will have irrigation risers and outlets to feed the current ditches. The ditch in its current form has a substantial head cut and is causing erosion.

2. Sponsor Defined Public Benefit:

"Project public benefit is approximately 2300' of dirt ditch will be eliminated which will eliminate seepage. It will improve water use efficiency by allowing the producer to irrigate his pastures more efficiently and increase water for fisheries."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: DC Irrigation Pipeline

Program: Rehabilitation

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$65,000

Requested Grant: \$32,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project replaces the current head gate and head wall structure and installs 2100 feet of buried pipeline in an existing ditch. The current ditch is head cut and causing irrigation issues.

2. Sponsor Defined Public Benefit:

"Project public benefit is it will improve water use efficiency by substantially reducing seepage loss in the ditch and allow the producer to irrigate his pastures more efficiently."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: HBL Irrigation Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$88,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will add a new drop inlet structure to the existing head gate. The new inlet will be attached to a pipeline that will be buried across the field where an existing open ditch is. The buried pipe will then be attached to existing gated pipe.

2. Sponsor Defined Public Benefit:

"Project public benefit is approximately 2450' of dirt ditch will be eliminated which will eliminate seepage loss. It will improve water use efficiency by allowing the producer to irrigate his pastures more efficiently."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: JH Reach of Savery Creek

Program: Rehabilitation

Project Type: Environmental

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$85,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will stabilize stream banks on Savery Creek. Rock veins will be installed throughout approximately 1000 feet of the stream channel.

2. Sponsor Defined Public Benefit:

"This project will reduce excessive bank erosion and sedimentation in the Little Snake River thereby improving water quality. This will also improve fisheries and spawning habitat for fish by reducing sedimentation of spawning habitat for fish. This project will also protect high value cottonwood gallery forest which is used by more wildlife species than any other habitat in Wyoming. This section of creek is right before a section of stream that is listed on DEQ's 319 list of impaired streams. This work will increase habitat and decrease sediment into that listed section."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Johnson Ranch Check – Diversion Structure

Program: Rehabilitation

Project Type: Environmental

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

Project consists of installing a 30 feet wide sheet pile diversion/check structure on Muddy Creek. The structure will have approximately 180 cubic yards of rock rip rap placed upstream and downstream of the sheet piling to eliminate scour around the structure. Approximately 600 feet of high flow retention dike will be reconstructed to maintain flood flows through the structure. Dike construction will consist of stripping the old dike and reconstructing it with approximately 2,000 cubic yards of compacted earth fill. The dike will be reseeded and sod mats placed along the toe of the upstream edge.

2. Sponsor Defined Public Benefit:

"Project will result in the restoration of approximately 8 acres of shrub scrub and IBA (Important Bird Area) by Wyoming Audubon. Project will also result in the restoration of irrigation to wetland habitat within the Muddy Creek Wetland complex which is designated by the WGFD as a priority wetland area in WY and is also listed as several acres of flood irrigated pasture that have high frequency of use by several sensitive species of wading and shore birds including marbled godwits and white-faced ibis. The structure will raise the elevation of the creek channel resulting in the trapping of sediment and reduction in stream bank erosion thereby improving water quality."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: JS Irrigation Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$60,000

Requested Grant: \$30,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will add a new water control structure and 3400 feet of 12 inch pipeline. This pipeline will get water to existing irrigated ground that is hard to get water to and feed 3 strings of gated pipe that are not a part of this project.

2. Sponsor Defined Public Benefit:

"Project public benefit is approximately 4000' of dirt ditch will be eliminated which will eliminate seepage loss. It will improve water use efficiency by allowing the producer to irrigate his pastures more efficiently."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Lambert & Irwin Diversion

Program: Rehabilitation

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$151,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will rehabilitate the diversion structure for the Irwin and Lambert ditch off of Savery Creek. Included will be rock vein structures placed upstream and 750 feet through the reach, in addition to the headwall and pipe.

2. Sponsor Defined Public Benefit:

"This project will restore operation of the ditch and delivery of water for irrigated lands. Reduce the potential for failure and damage to the fisheries if the head gate should fail and the creek is captured by the ditch. Create approximately 1-2 acres of wetlands and decrease the amount of sediment in Savery Creek."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: McCary Little Savery Irrigation Syphon & Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$60,000

Requested Grant: \$30,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will extend an existing ditch with the construction of a buried pipeline and also construct a syphon under Little Savery Creek in order to provide a supplemental supply to irrigated lands that currently have insufficient supply of direct flow irrigation water.

2. Sponsor Defined Public Benefit:

"Buried ditches reduce conveyance losses over an open ditch. Supplemental supply to irrigated lands will also provide water for adjacent wetlands and riparian habitat to irrigated lands providing for enhanced habitat along 2.5 miles of Savery Creek. This project will improve water use efficiency by substantially reducing seepage loss in the ditch. The syphon will increase water use by less evaporation and transportation of the water. Consequently, the project will result in water saving that will reduce diversion leaving more water in the stream for fisheries."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Muddy Creek Pipeline

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$55,000

Requested Grant: \$27,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

Construct 1.5 miles of new buried stock water pipeline from an existing water well. Install 3 tire tanks and 1 storage tanks to provide additional supply to areas where water doesn't meet the existing demand.

2. Sponsor Defined Public Benefit:

"Project public benefit is these pipelines will improve distribution of livestock which results in more uniform utilization of rangelands. This results in improved range condition and wildlife habitat, reduces upland soil erosion and increases water infiltration, decreases use and pressure on riparian areas and perennial water bodies thereby improving riparian condition and habitat and improves water quality."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Orchard Irrigation Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$88,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will add a new water control structure and 1300 feet of 24 inch buried pipe will be installed. The pipeline will have irrigation risers and outlets to feed the current ditches.

2. Sponsor Defined Public Benefit:

"Project public benefit is approximately 1300' of dirt ditch will be eliminated which will eliminate seepage. It will improve water use efficiency by allowing the producer to irrigate his pastures more efficiently and increase water for fisheries."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Pasture B Water Well

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This proposed project would include drilling of a water well, the installation of 1 trough, 1 storage tank, plumbing equipment, a solar platform, and pump. The well will supply water sources for wildlife and livestock.

2. Sponsor Defined Public Benefit:

"Water well developments improve distribution of livestock which results in more uniform utilization of rangeland. This results in improved range condition and wildlife habitat, reduces upland soil erosions and increases water infiltration, decreases use and grazing impacts on riparian areas and perennial water bodies, thereby, improving riparian habitat condition and water quality. There is increased economic benefit to the local and state economy due to increased profitability of the agriculture industry."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: PK Pipeline

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will construct 13,390 feet of new 2 inch HDPE buried stock water pipeline from existing water wells. Additionally, 4 stock tanks and a storage tank will also be installed.

2. Sponsor Defined Public Benefit:

"Stock water pipeline developments improve distribution of livestock which results in a more uniform utilization of rangelands. This results in improved range condition and wildlife habitat reduces upland soil erosion and increases water infiltration, decreases use and grazing impacts on riparian areas and perennial water bodies, thereby improving riparian habitat condition and water quality."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Reed Ditch Head Gate – Head Wall – Sluice Box

Program: Rehabilitation

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$45,000

Requested Grant: \$22,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will replace an existing head gate and headwall diversion structure for the Reed ditch. Additionally, this project will also grout an existing sluice box.

2. Sponsor Defined Public Benefit:

"The Project will support improved operation of the ditch and water deliveries to irrigated lands. Reduce the potential for failure and damage to the fisheries if the head-gate should fail and the fish are captured in the ditch."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Salisbury State Land Well

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This proposed project would include drilling a water well, installation of 1 trough, 1 storage tank, a solar platform, and pump. The well will supply water sources for wildlife and livestock.

2. Sponsor Defined Public Benefit:

"Water well developments improve distribution of livestock which results in more uniform utilization of rangeland. This results in improved range condition and wildlife habitat, reduces upland soil erosions and increases water infiltration, decreases use and grazing impacts on riparian areas and perennial water bodies, thereby, improving riparian habitat condition and water quality. There is increased economic benefit to the local and state economy due to increased profitability of the agriculture industry."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Savery Creek Oxbows 1 & 2

Program: New Development

Project Type: Wetland

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 2. Storage

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

Two oxbows wetlands will be created, which will help to stabilize the channel. Both wetlands will be hydrologically connected to Savery Creek. This project will utilize water in the oxbows for beneficial use for wildlife; and water rights will be filed for this purpose.

2. Sponsor Defined Public Benefit:

"This project will create approximately 2-3 acres of wetlands and decrease the amount of sediment in Savery Creek. It will increase the number of acres of both terrestrial and aquatic habitat fish, amphibians, water fowl and wading birds. In addition, it will help protect agricultural lands and high value cottonwood gallery riparian areas from being lost due to lateral migration of the stream channel. The area is also popular for archery pronghorn antelope hunters who utilize the pond for hunting out of blinds around the perimeter of the ponds."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Short Allotment Water Well

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This proposed project will drill a water well, install 1210 feet of pipeline, and install a trough. The well will be connected to an available electrical supply.

2. Sponsor Defined Public Benefit:

"Water well developments improve distribution of livestock which results in more uniform utilization of rangeland. This results in improved range condition and wildlife habitat, reduces upland soil erosions and increases water infiltration, decreases use and grazing impacts on riparian areas and perennial water bodies, thereby, improving riparian habitat condition and water quality. There is increased economic benefit to the local and state economy due to increased profitability of the agriculture industry."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: SM Solar Tank & Pipeline

Program: New Development

Project Type: Solar Platforms

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$30,000

Requested Grant: \$15,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This proposed project would include installation of 2 troughs, plumbing equipment, solar array, pump, and 500ft pipeline using water from an existing well. The well will supply water sources for wildlife and livestock.

2. Sponsor Defined Public Benefit:

"Water well developments improve distribution of livestock which results in more uniform utilization of rangeland. This results in improved range condition and wildlife habitat, reduces upland soil erosions and increases water infiltration, decreases use and grazing impacts on riparian areas and perennial water bodies, thereby, improving riparian habitat condition and water quality. There is increased economic benefit to the local and state economy due to increased profitability of the agriculture industry."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: South Flat Top Grazing Allotment Stock Pond Rehabilitation

Program: Rehabilitation

Project Type: Small Reservoir

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 2. Storage

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$35,000

Requested Grant: \$17,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

Project consists of repairing and raising the elevation of the dams on two ponds to account for the lost capacity due to sedimentation. Additionally, a new outlet pipe on the CCC detention dam will be added and the outlet pipe on Little Jack Reservoir will be modified. Estimated quantities of earth fill to conduct rehab work on both ponds is approximately 7,000 cubic yards and 120 feet of pipe and fittings.

2. Sponsor Defined Public Benefit:

"Project will result in improved range condition that will benefit both livestock and wildlife. The area is utilized extensively by pronghorn antelope which will have more reliable water resource especially during drought period. The area is also popular for archery pronghorn antelope hunters who utilize the pond for hunting out of blinds around the perimeter of the ponds."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: WA Irrigation Pipeline

Program: New Development

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$12,000

Requested Grant: \$6,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will install 950 feet of 10 inch buried pipeline through an existing ditch. A pump will be installed to operate a center pivot, there is an existing power pole for the pump. The pump and center pivot are not part of this application.

2. Sponsor Defined Public Benefit:

"Project public benefit is it will improve water use efficiency by substantially reducing seepage loss in the ditch, and allow the producer to irrigate his pastures more efficiently."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Wild Horse Pipeline

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will construct 3 miles of new buried stock water pipeline from an existing well. Additionally, a solar booster pump will be installed that ties into the existing and the proposed new pipeline systems which will provide additional supply to areas where water doesn't meet the existing demand.

2. Sponsor Defined Public Benefit:

"Project public benefit is these pipelines will improve distribution of livestock which results in more uniform utilization of rangelands. This results in improved range condition and wildlife habitat, reduces upland soil erosion and increases water infiltration, decreases use and pressure on riparian areas and perennial water bodies thereby improving riparian condition and habitat and improves water quality."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Wren Bridge Streambank

Program: Rehabilitation

Project Type: Environmental

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$85,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will stabilize eroding banks on Savery Creek. Four to five rock veins will be installed and 700 feet of banks stabilized on Savery Creek. Additionally, this project runs under a county bridge and will therefore help stabilize bridge abutments.

2. Sponsor Defined Public Benefit:

"This project will reduce excessive bank erosion and sedimentation in the Little Snake River thereby improving water quality. This will also improve fisheries and spawning habitat for fish by reducing sedimentation of spawning habitat for fish. This project will also protect high value cottonwood gallery which are used by more wildlife species than any other habitat in Wyoming. This section of creek is listed on DEQ's 319 list of impaired streams. This work will increase habitat and decrease sediment in that listed stream and protect county bridge infrastructure."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: WSC Irrigation Water Bypass Structure

Program: Rehabilitation

Project Type: Irrigation

County: Carbon

Sponsor and Status: Little Snake River Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$25,000

Requested Grant: \$12,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project will replace the current culvert that is under the roadway in the canal with a new culvert and wing walls on both sides of the roadway. This structure serves as the emergency bypass during high intensity rainstorm events and also is used to convey irrigation water to downstream users for administration of irrigation water. As part of this project Willow Creek will be stabilized on both ends of the culvert. The upstream abutment will be designed to have a check board structure and divert water from the channel. The new culvert that runs under the road has already been purchased by the landowner.

2. Sponsor Defined Public Benefit:

"Project benefits include maintaining infrastructure to administer appropriated irrigation water to 5,000 acres under West Side Canal. A diversion will be rehabilitated to help better control the water for other users. Stabilization of the stream will help mitigate any erosion and sediment contribution to the stream."

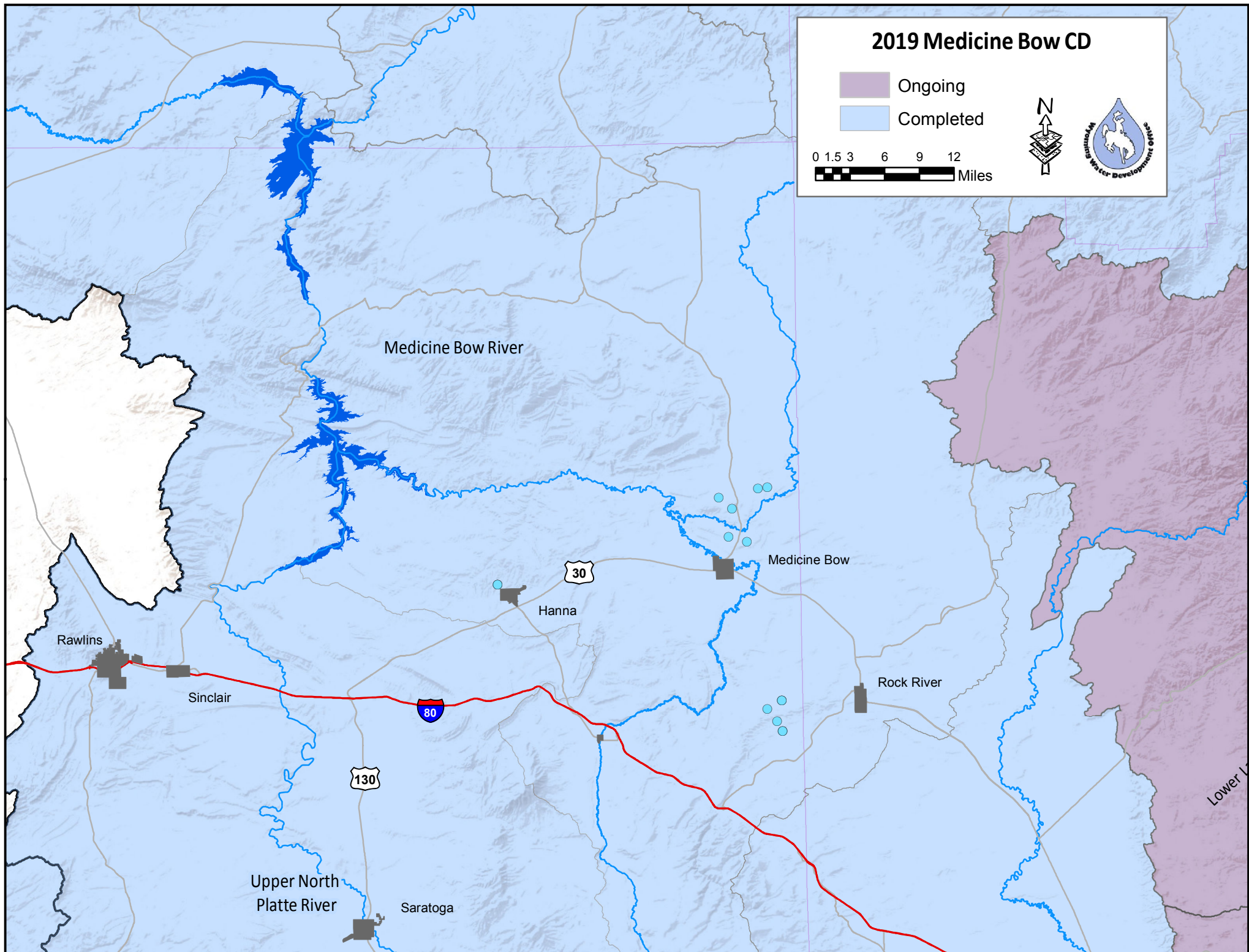
3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

2019 Medicine Bow CD

- Ongoing
- Completed

0 1.5 3 6 9 12 Miles





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Baily – Red Springs 1 Flat Top Stock Well

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$133,620

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

The purpose of this project is to provide a livestock water system that will enhance the ability of the landowner to better implement prescribed grazing plans. Currently, the inadequate water supply has caused poor livestock distribution and has limited the grazing flexibility. Properly managed grazing can lead to improved rangeland health in critical habitats such as the sagebrush steppe. The current system includes three wells powered by gas generators with a water trough. The enlargement will provide additional water to supply underutilized rangelands where water is limited by adding approximately 23,760 feet of buried pipeline, 12 water troughs, and 3 storage tanks. This will require additional solar power to supply the demand of the enlarged system.

2. Sponsor Defined Public Benefit:

"Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and big game. This project is supportive of sage-grouse efforts. The landscape scale planning associated with this project would be impossible without collaboration with partners and builds confidence and trust amongst the landowner and various agencies and organizations involved. The project will help distribute livestock on 15,683 acres, allowing the landowner to establish a grazing plan based on the additional water sources and reduce negative impacts associated with livestock watering on natural water sources confined within the pasture boundaries. Maintaining agricultural production is also a benefit at the community, region, and state level. The improved riparian habitat and wildlife values will benefit hunting and fishing opportunities on federal, State, and Private Lands."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Bailey Taylor 1 & 3

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$67,200

Requested Grant: \$33,600

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

The proposed project is to provide a livestock water system that will greatly enhance the ability of the landowner to better implement prescribed grazing plans. Currently, the inadequate water supply has caused poor livestock distribution and has limited the grazing flexibility. Properly managed grazing can lead to improved rangeland health in critical habitats such as the sagebrush steppe. The current system includes three wells powered by gas generators with a water trough. This project will provide additional water to supply underutilized rangelands where water is limited by adding approximately 500 feet of buried pipeline, 4 water troughs, and 2 storage tanks. This will also require additional solar power to supply the demand of the enlarged system.

2. Sponsor Defined Public Benefit:

"Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and big game. This project is supportive of sage-grouse efforts. The landscape scale planning associated with this project would be impossible without collaboration with partners and builds confidence and trust amongst the landowner and various agencies organizations involved. The project will help distribute livestock on 5,120 acres, allowing the landowner to establish a grazing plan based on the additional water sources and reduce impacts associated with livestock watering on natural water sources confined within the pasture boundaries. Maintaining agricultural production is also a benefit at the community, region, state level. The improved riparian habitat and wildlife values will benefit hunting and fishing opportunities on federal, state and private lands."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Calvert Pipeline

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$78,650

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

This project involves installing a solar platform and constructing two pipelines and tank systems to supply water to a portion of the watershed lacking adequate livestock and wildlife water sources. An existing well would be equipped with a solar platform consisting of solar panels, a solar-powered pump, regulators, connections and appurtenances. From this water source, approximately 2,671 feet of buried 2-inch HDPE low-pressure pipeline will be installed to supply two stock tanks. A second pipeline from another existing well will also be installed with approximately 742 feet of buried 2-inch HDPE low-pressure pipeline, one stock tank, and required appurtenances. Wildlife escape ramps or devices would be incorporated in the proposed stock tanks. The proposed project is located entirely on private land.

2. Sponsor Defined Public Benefit:

"This project was identified through the watershed study as an area in need of livestock and wildlife water-development. This proposed project will be developed to provide reliable water sources for livestock and wildlife in an area lacking sufficient sources within the watershed. This project will help distribute livestock allowing the landowner to establish better grazing practices and help reduce negative impacts associated with livestock water sources confined within the pasture boundaries. Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and elk, pronghorn and mule deer."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Gillham Stock Water Project

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$106,439

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

The proposed project is near TB Flats north of Medicine Bow Wyoming, and is part of an overall initiative to enhance riparian quality along the Little Medicine Bow River. Though it is out of the reach of the initial impaired portions of the Little Medicine Bow River, the landowner is seeking to be proactive in initiating conservation practices to help repair watershed functions and riparian health. The landowner is seeking to install a one well, livestock pipeline (200 feet or less), storage tank (6,000 gal.) and watering facility (12' tire tank) on their property for the utilization of livestock and wildlife.

2. Sponsor Defined Public Benefit:

"Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and big game. This project is supportive of sage-grouse efforts. The project will help distribute livestock allowing the landowner to establish a grazing plan based on the additional water sources and reduce negative impacts associated with livestock watering on natural water sources confined within the pasture boundaries. Maintaining agricultural production is also a benefit at the community, region, and state level. The improved riparian habitat and wildlife values will benefit hunting and fishing opportunities on federal state and private lands."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Rock River Ranches – North Pipeline

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$122,256

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

The proposed project is to provide a livestock water system that will greatly enhance the ability of the landowner to better implement prescribed grazing plans. Currently, the inadequate water supply has caused poor livestock distribution and has limited the grazing flexibility. This project will install one well, a solar platform, an extensive pipeline system, one storage tank, and three stock tanks.

2. Sponsor Defined Public Benefit:

"Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and big game. This project is supportive of sage-grouse efforts. The landscape scale planning associated with this project would be impossible without collaboration with partners and builds confidence and trust amongst the landowner and various agencies and organizations involved. The project will help distribute livestock on 12,111 acres, allowing the landowner to establish a grazing plan based on the water. Maintaining agricultural production is also a benefit at the community, region, and state level. The reliable water sources would improve habitat and wildlife values and will benefit hunting and fishing opportunities on federal, state and private lands."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Rock River Ranches – South Pipeline

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Medicine Bow Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$100,463

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Medicine Bow River

1. Project Description:

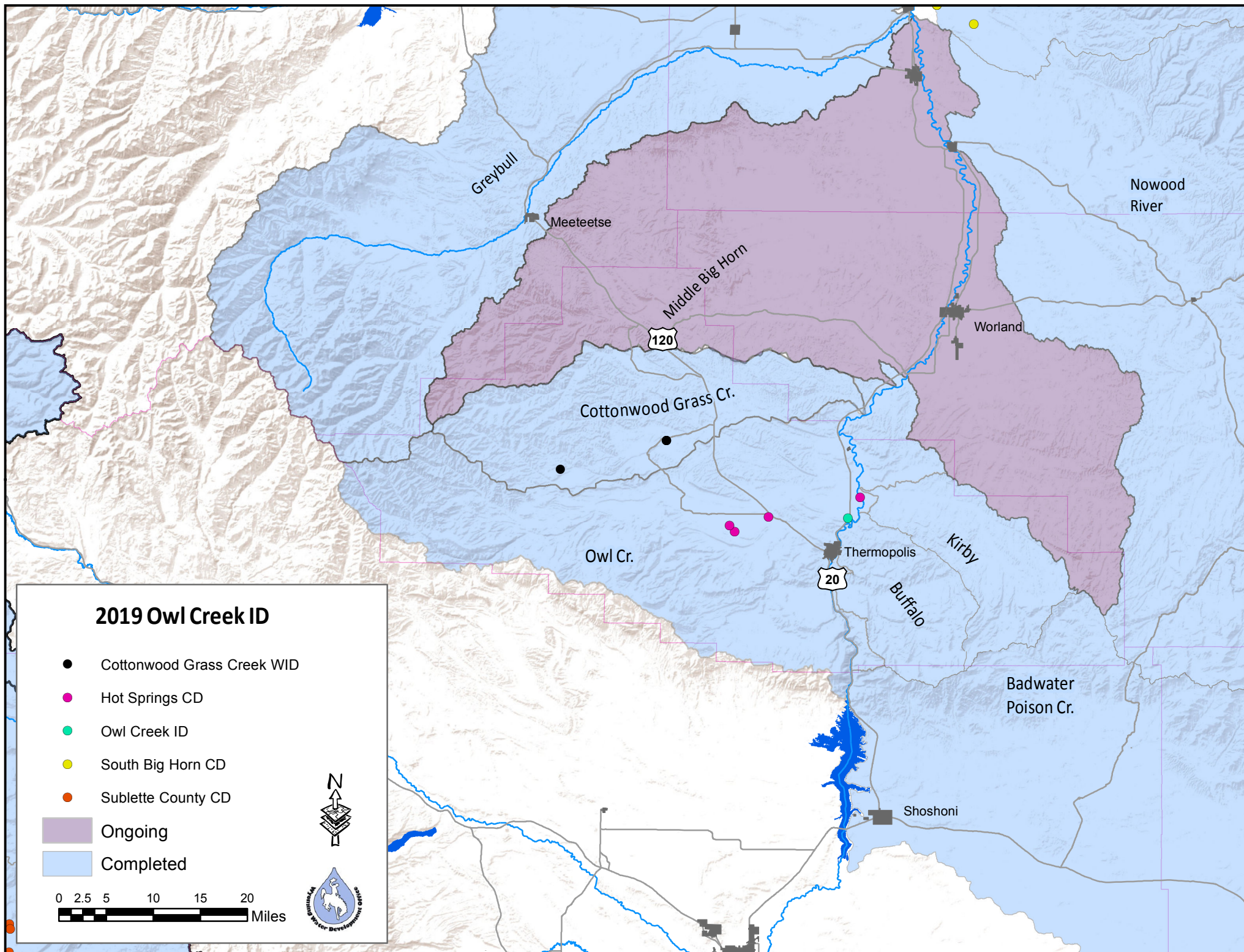
The proposed project is to provide a livestock water system that will greatly enhance the ability of the landowner to better implement prescribed grazing plans. Currently, the inadequate water supply has caused poor livestock distribution and has limited the grazing flexibility. This project will install one well, a solar platform, an extensive pipeline system, one storage tank, and three stock tanks.

2. Sponsor Defined Public Benefit:

"Improving these habitats through grazing management can increase the survivability and productivity of a wide variety of sagebrush obligate and sagebrush dependent wildlife species, including sage-grouse and big game. This project is supportive of sage-grouse efforts. The landscape scale planning associated with this project would be impossible without collaboration with partners and builds confidence and trust amongst the landowner and various agencies and organizations involved. The project will help distribute livestock on 1,077 acres, allowing the landowner to establish a grazing plan based on the water. Maintaining agricultural production is also a benefit at the community, region, and state level. The reliable water sources would improve habitat and wildlife values and will benefit hunting and fishing opportunities on federal, state and private lands."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".





THE STATE OF WYOMING

Water Development Office

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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Lucerne Valley Canal Restoration

Program: Rehabilitation

Project Type: Irrigation

County: Hot Springs

Sponsor and Status: Owl Creek Irrigation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Not Fund

Estimated Total Project Cost: \$57,000

Requested Grant: \$28,500
Recommended Grant: \$0

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The Lucerne Valley Canal Restoration Project is proposed to include the restoration of the three canals in the system by restoring the original canal banks, repairing the profile of the canal, maintaining the proper alignment and eradicating the problematic vegetation.

2. Sponsor Defined Public Benefit:

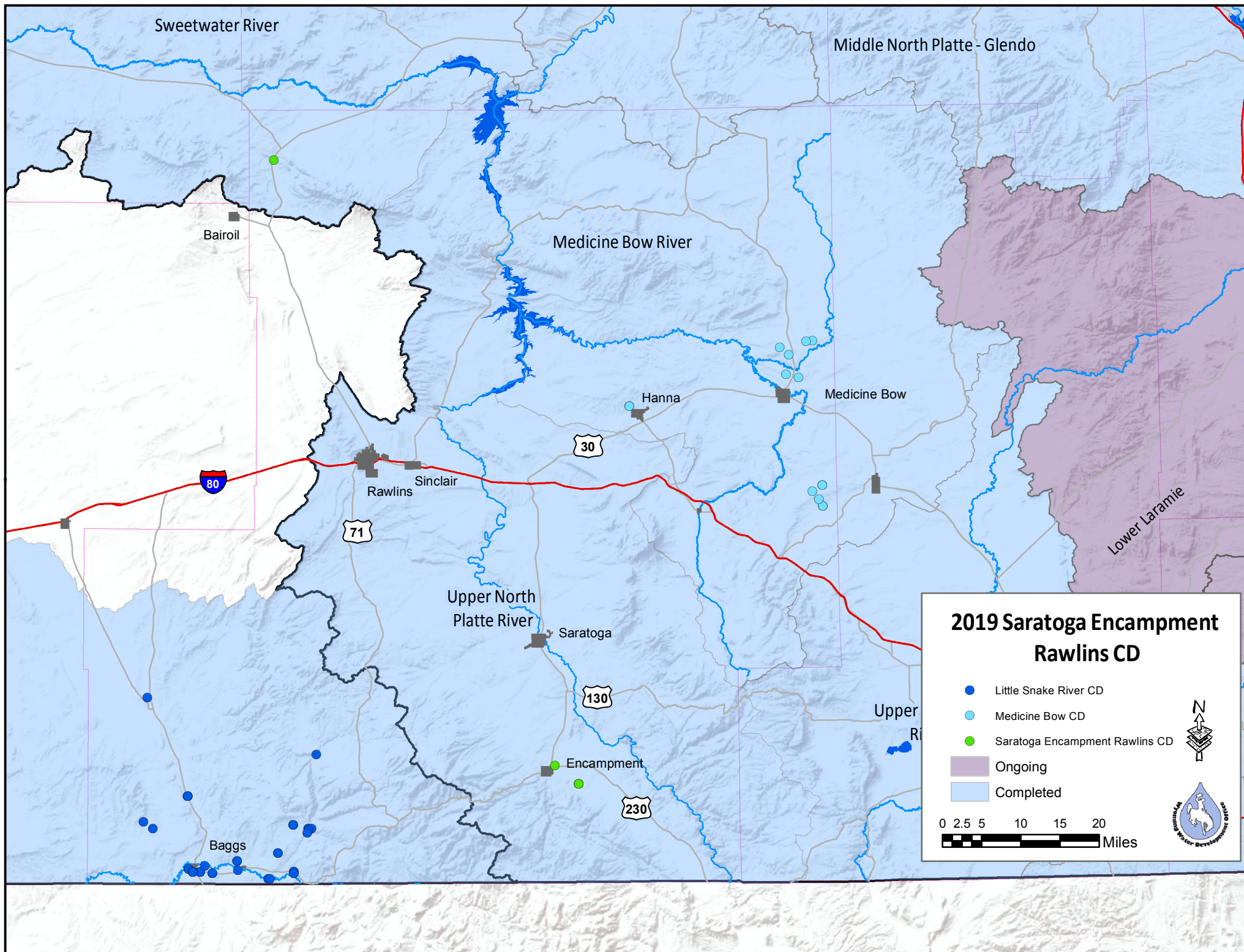
"Restoring the canal banks and the integrity of the system of the Lucerne Valley irrigation will increase water efficiency, decrease water loss, increase water conservation and increase water availability to over 100 users on over 4409 acres. These acres are used for row crop production, grain production, hay production (both alfalfa and grass) and rangeland to feed livestock. The farmers and ranchers of the Lucerne Valley are an integral part of the economy of Hot Springs County and their cost for irrigation continues to increase. Increasing the efficiency of the flow of water through these canals and the amount of water available will not only make a difference economically for all users and the community of Hot Springs County, but also improve the environment, and conserve water.

Additionally, more water will be available downstream as the increase in the efficiency of these canals means less water loss in the system as a whole. The water will move faster and will reduce the need for as much moss control chemical in the system, benefitting both the system and the environment.

In the 2017 assessment, the Lucerne users of the canal paid a total of \$37.56 per acre (both the assessment for Owl Creek Irrigation District and the Lucerne Pumping Plant Canal Co). Restoring the canal profile, reducing the problematic vegetation, and increasing the speed of the flow of water is expected to decrease the per acre charge for the Lucerne Valley farmers and ranchers by 13.4% in the first year and in following years by approximately 10% in reduction of operation and maintenance costs."

3. Staff Evaluation:

Section F6 of the Small Water Program Criteria states, "Maintenance costs as determined by the WWDO, are not eligible expenditures under the SWPP." It is the opinion of the WWDO that reshaping canal banks and eradicating problematic vegetation is a maintenance item that should be the responsibility of the District and this project is therefore not recommended for funding at this time.





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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Fox Pipeline Extension

Program: New Development

Project Type: Pipeline

County: Carbon

Sponsor and Status: Saratoga Encampment Rawlins Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$8,000

Requested Grant: \$4,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project is an extension of a previous spring development project. The previous spring development is providing sufficient water to supply multiple tanks. To increase the benefit of the spring we will be extending the previous pipeline an additional 1500 feet to the next pasture. A tire tank will be installed at the end of the pipeline and fitted with a float and wildlife egress ramp.

2. Sponsor Defined Public Benefit:

"This water project is an extension of a previous spring development project funded by WWDC. The previous spring development was extremely successful and is providing sufficient water to supply multiple tanks. To increase the benefit of the project we will be extending the previous pipeline an additional 1500 feet to the next pasture. The only water source in the next pasture is an old stock pond that is heavily utilized. The addition of this new tire tank will provide improved water quality and quantity to the pasture. The reduced stress on the riparian area will lead to improved riparian health and water quality downstream. To ensure benefit to wildlife, the spring will be left on from spring to fall and wildlife egress ramps will be installed in the tire tank."

The majority of the Cherokee Allotment is state and federal land easily accessible by the general public. This area is often used by hunters and outdoor enthusiasts throughout the year."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Herring Water Development

Program: New Development

Project Type: Well

County: Carbon

Sponsor and Status: Saratoga Encampment Rawlins Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$22,100

Requested Grant: \$11,050

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This water development will consist of drilling a well, and installing a solar array that will pump water to a tire tank. This will provide reliable water to a 525 acre pasture allowing for the installation of a cross fence and improved rotational grazing system. Wildlife egress ramps will be installed in the proposed stock tanks. A contractor(s) will bid, drill and equip this particular project. The SERCD will be responsible for contracting and inspecting. The landowner will be responsible for any required project maintenance.

This project will supply water to a portion of the Cherokee Creek allotment lacking adequate livestock and wildlife water sources.

2. Sponsor Defined Public Benefit:

"This water well project is one of several developments going on within the Upper North Platte Valley. Wildlife projects (i.e. water/spring developments, fence construction/maintenance, habitat treatment projects, and grazing management) are being implemented as a collaborative effort to improve overall habitat.

Improved water availability will allow for more uniform and dispersed utilization within the Cherokee Creek Allotment. Dispersed grazing by livestock and wildlife will reduce stress on riparian areas and lead to improved water quality and riparian health.

The Cherokee Allotment is publicly accessible and frequented by hunters and recreationist. The well will be turned on in early spring and run through the fall each year regardless of livestock presence. Tanks will be equipped with wildlife egress ramps."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Nichols Diversion Rehabilitation

Program: Rehabilitation

Project Type: Irrigation

County: Carbon

Sponsor and Status: Saratoga Encampment Rawlins Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$175,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The Nichols Diversion Rehabilitation project will adjust the point of diversion (POD) to provide reliable irrigation water. The existing head gate is on the outside of a major meander bend which collects large amounts of woody debris, limiting irrigation water delivery. Moving the POD upstream within the same quarter-quarter section to a straighter reach of river will accomplish two goals: 1) create more head within the ditch; and 2) greatly diminish woody debris. This project also addresses streambank and riverbed stability, enhanced habitat for wild and native fish, improved boater safety, and riparian vegetation.

Sections of the lower Encampment River are highly unstable with long stretches of accelerated bank erosion, extensive mid-channel and transverse bar development, channel degradation and aggradation. The instability is a result of historic tie drives, mining, and channel dredging. Presently, the river channel at the Nichols Diversion cannot efficiently move its sediment load and is aggrading. The river will likely soon re-route itself away from the present diversion location. The project will proactively move the point of diversion while incorporating sediment transport needs for river stability. Approximately 700 linear feet of the Encampment River will be directly impacted. The project is immediately downstream of recent (2017 and 2018) restoration projects that focused on streambank and riverbed stability.

2. Sponsor Defined Public Benefit:

"The project is located within two habitat priority areas, Encampment River Watershed and Upper North Platte Watershed, identified in the Wyoming Game and Fish Department's Strategic Habitat Plan. The realized public benefits will be:

- Increase in water efficiency
- Increase water quality by reducing sediment
- Improve aquatic and terrestrial habitats
- Provide a more predictable/safer rafting experience"

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file:

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2019 Sheridan County CD

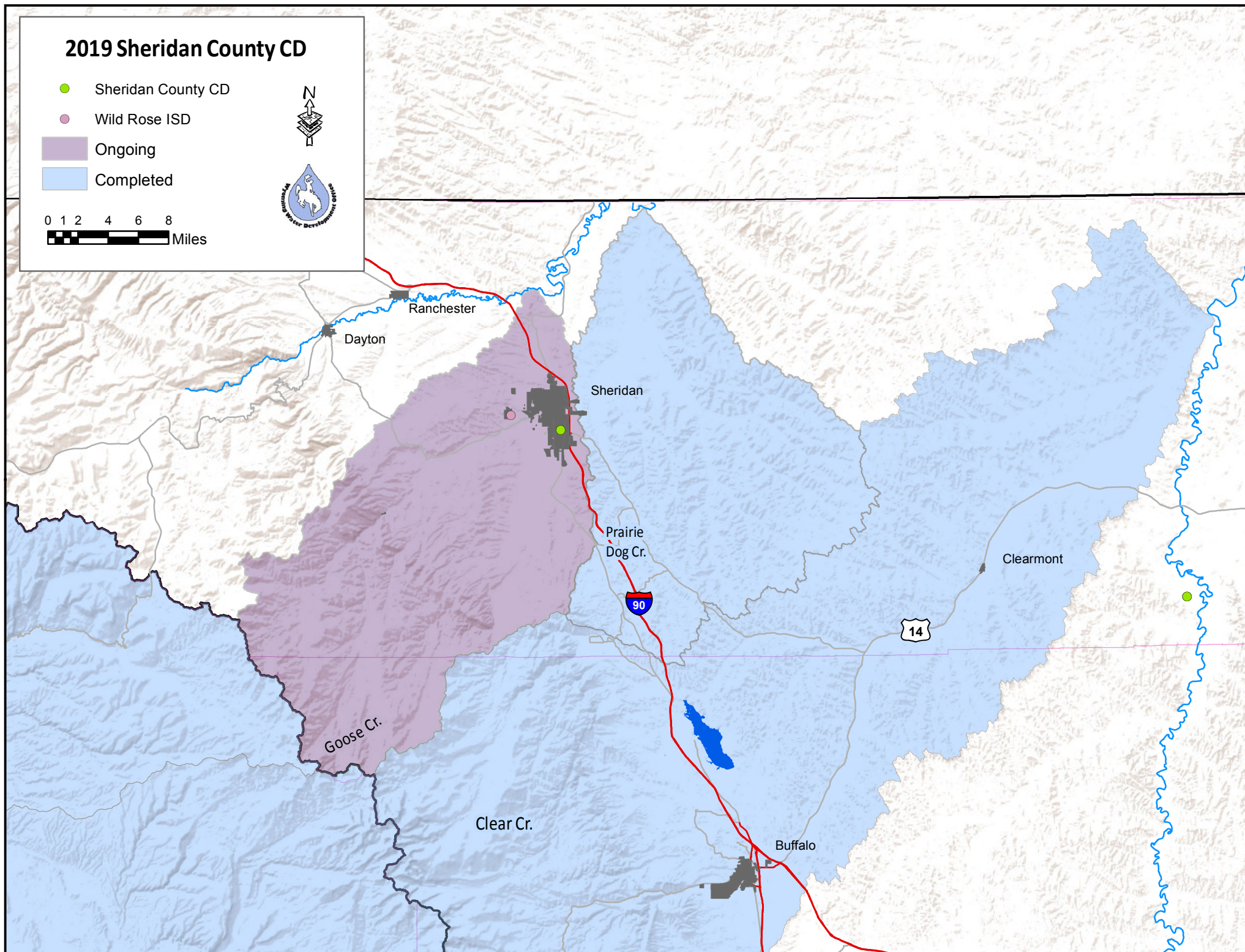
● Sheridan County CD

● Wild Rose ISD

■ Ongoing

■ Completed

0 1 2 4 6 8
Miles





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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Kuhn Ranch Stock Water Development

Program: New Development

Project Type: Well

County: Sheridan

Sponsor and Status: Sheridan County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$72,500

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The purpose of this project is to improve water availability in a ~735-acre pasture adjacent to the Lower Powder River through drilling a well and installing a water tank. Power is already available at the proposed well site.

2. Sponsor Defined Public Benefit:

"While the project certainly provides a direct benefit to the landowner, the project also benefits the entire Powder River watershed and the public. Completion of this project will maintain open space and healthy ecosystems and reduce impacts to water quality in the Powder River watershed:

- A permanent source of reliable water in the summer and fall months will benefit antelope and other wildlife that reside in the area.*
- Improved grazing management will result in healthier vegetation and cover within the unit, which will not only provide additional forage for wildlife, but could reduce and/or filter runoff to eliminate the transport of manure, sediment, and other pollutants into the Powder River.*
- Off-channel water source will deter livestock access to Powder River, which will reduce livestock impacts to water quality."*

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Reed Ditch Irrigation Diversion Rehabilitation

Program: Rehabilitation

Project Type: Irrigation

County: Sheridan

Sponsor and Status: Sheridan County Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$53,500

Requested Grant: \$26,750

Identified in a Watershed Study: Yes **Watershed Study:** Goose Creek

1. Project Description:

The purpose of this project is to improve water delivery to irrigators on the Reed Ditch in Sheridan County. The Reed Ditch diverts water from Little Goose Creek within the Sheridan city limits. The ditch currently services approximately 45 homes and businesses and is primarily used for irrigating lawns and gardens, including local community gardens. A 4.15 cfs direct flow right dates back to 1881 with an additional 0.21 cfs direct flow right from 1938.

The Reed Ditch was one of several irrigation systems discussed in the recently completed Goose Creek Watershed Level I Study. The main diversion on Little Goose Creek consists of a cross-vane drop structure installed as part of the City of Sheridan's stream improvement efforts in 2011. The structure does not allow for sufficient water delivery, especially in low-flow conditions, and the aging head gate no longer seals and is prone to leak. Proposed practices include removal and installation of a new head gate structure, trash rack, fabric, rock, and channel work for modifications to the existing diversion structure. To minimize potential compatibility issues, replacement of a small section of pipe is also included.



2. Sponsor Defined Public Benefit:

"In addition to increasing and extending irrigation water availability, completion of this project will improve fish passage and habitat and reduce impacts to water quality in the Goose Creek watershed. Modifications to the existing structure will include a ramp/constructed riffle, which is more compatible to fish passage objectives than the previously used step-vane pools. This has the additional potential to improve aquatic migration corridors above and below the structure, which is within the City of Sheridan South Park public recreation area."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

2019 South Big Horn CD

 Ongoing
 Completed



0 1 2 4 6 8 Miles

310

14

Greybull

Shell Cr.

16

Basin



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Shell Canal Wastegate 8 & Check Structures

Program: Rehabilitation

Project Type: Irrigation

County: Big Horn

Sponsor and Status: South Big Horn Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$88,536

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Shell Creek

1. Project Description:

This project will replace Wastegate #8 on the Shell Canal to provide flooding protection from high runoff events. Heavy snowpack on rangelands in the drainage area above the canal has caused the canal to be breached twice in the last few years to prevent flooding serious canal damage. Wastegate #8 is currently not functioning and needs to be replaced to protect the canal and area homes from future damage. In addition to the wastegate there are three canal check structures that will be replaced with wider structures to prevent canal and property damage during high run off events.

2. Sponsor Defined Public Benefit:

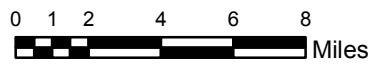
"Replacement of the wastegate and drop structures will prevent flood damage to homes, cropland, and other facilities, including a 13 acre foot reservoir. Damage to Shell Canal and associated structures can cause significant economic damage to Shell Valley water users."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

2019 Star Valley CD

- Ongoing
- Completed



Star Valley Ranch



Thayne



Afton



89

Upper Green River



THE STATE OF WYOMING

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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Lower Swift Creek Stream Restoration

Program: Rehabilitation

Project Type: Environmental

County: Lincoln

Sponsor and Status: Star Valley Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$1,284,927

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

Restoration of lower Swift Creek will improve approximately one mile of Swift Creek, a tributary to the Salt River near Afton. WY that experiences significant impairments including bank erosion, unstable patterns of deposition and scour, land loss, and habitat degradation. Restoring the stream by implementing stream restoration and riparian fencing treatments is estimated to reduce local bank erosion (and sediment contributions to the Salt River) by 64% and will improve stream function, floodplain connectivity, riparian vegetation, and fish habitat.

Proposed restoration activities include channel realignment, grade control, and bank and channel stabilization using toe wood, rock, and transplanted vegetation to reduce erosion and sedimentation and improve fish habitat on approximately 1 mile of lower Swift Creek. The overall restoration strategy in the conceptual design plans is to restore the channel in-place in the upstream, constrained reach: realign the channel through existing riparian vegetation (cottonwoods) where possible; create a new, non-incised channel in the downstream reach: and fence sensitive riparian areas. This approach represents a good balance between cost-savings and long-term sustainability of treatments and habitat features that together will reduce annual sediment load in the system. The riparian fencing is not an eligible expense and is therefore not a part of the funding request.

2. Sponsor Defined Public Benefit:

"This project has many important public benefits including improved water quality, riparian habitat, habitat for fish and wildlife, and natural resource conditions. It is highly aligned with the WWDC SWPP's Environmental category of projects that provide for stream bank stability, water quality improvements, or erosion protection - it addresses all three of these issues. The project's goals are to reduce sediment contributions to the Salt River: reduce landowner pasture loss, flood risk and maintenance requirements: and protect, improve, and increase spawning cutthroat trout habitat.

The project's objectives are to:

- Restore stable geometry, pattern, profile including pool:riffle spacing
- Increase bank and channel stability
- Reduce bank erosion by 64%
- Improve sediment transport
- Restore floodplain connectivity
- Establish a thriving, native riparian community with multiple age classes of woody shrubs through planting, transplants and exclusion fencing.
- Protect mainstem Salt River connectivity to lower Swift Creek spawning habitat

In addition to the primary water quality benefit of reducing sediment loading by 64%, E. coli (a pollutant identified by WYDEQ as a source of impairment in certain areas of the Salt River watershed) inputs from livestock to Swift Creek and the Salt River downstream of the project area may also be reduced through riparian exclusion fencing and other grazing management BMPs.

An additional benefit of the project is that the situation on Swift Creek is a smaller-scale, less complicated version of what is currently happening on the upper Salt River in terms of extreme bank and channel instability and habitat degradation. Erosion and sediment transport issues are occurring on upstream properties owned by multiple landowners, with deposition occurring on a property just upstream from the project area. Downstream of the Swift Creek confluence on the Salt River, extreme sediment deposition also occurs. Successful treatments on Swift Creek can be used in the future as a showcase to recruit the multiple landowners needed to solve the bank stability, water quality, and erosion problem on the upper Salt River. This project is therefore considered a high priority by project partners.”

3. Staff Evaluation:

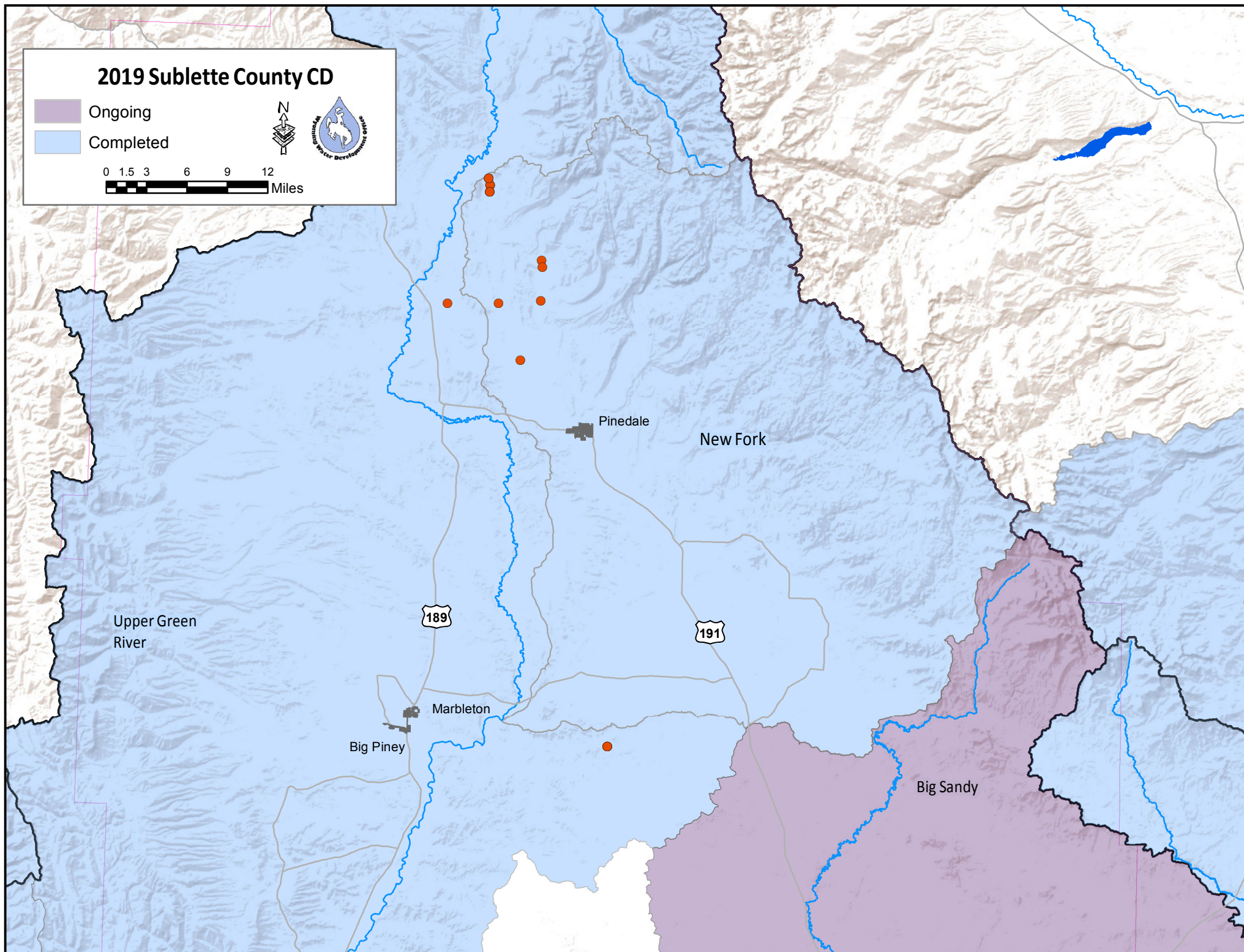
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2019 Sublette County CD

- Ongoing
- Completed



0 1.5 3 6 9 12
Miles





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Anselmi Stock Water Development

Program: New Development

Project Type: Well

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$25,000

Requested Grant: \$12,500

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

The purpose of this project is to excavate a shallow well, then equip the well with a solar platform and a stock tank. The water table is high in this location and several neighboring landowners have been successful in developing wells when they excavated 15-20 feet, cased the hole, and then placed a pump in the shallow well. This has provided ample water for a fairly economic price.

2. Sponsor Defined Public Benefit:

"This property is located in seasonal range for Mule Deer and elk. It is also summer range for Antelope and Sage Grouse. By provide water to this pasture it will provide dependable water to the wildlife that utilize this area for parts of the year."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Beard Solar & Tanks

Program: New Development

Project Type: Solar Platforms

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$20,500

Requested Grant: \$10,250

Identified in a Watershed Study: Yes **Watershed Study:** Upper Green River

1. Project Description:

The purpose of this project is to place a solar platform and a stock tank on a well that is already drilled. These changes will provide a more reliable source of water to 2 pastures.

2. Sponsor Defined Public Benefit:

"This property is smack in the middle of both mule deer and pronghorn migration corridor. In the winter this project area also sees use from elk depending on the year. The ability to provide water to big game as well as the overflow into a pond that currently is on the property will provide habitat to waterfowl and birds in the area."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Blue Rim Desert Allotment Stock Water Development **Program:** New Development
Project Type: Pipeline **County:** Sublette
Sponsor and Status: Sublette County Conservation District
Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills
Director's Recommendation: Do Fund
Estimated Total Project Cost: \$60,000 **Requested Grant:** \$30,000
Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

There is an old, shallow well at the "Arnold Olson Cow Camp" site. The well was historically used for domestic and livestock water, but has since fallen into disrepair. However, the site is still an "oasis" in the desert with young cottonwoods growing at the site. The Blue Rim Desert Allotment lacks livestock water in this part of the allotment, which makes it more difficult to manage livestock grazing pressure and season. There is currently little to no surface water at the site during many times of the year. This project proposes to redevelop this shallow well into a permanent stock watering system with a solar pump, a potential storage tank, and 2 livestock watering tanks. This well is in the center of the Blue River Desert Allotment, an allotment that lacks many permanent livestock water sources. The development of this stock watering system will help the grazing lessees and private landowner to manage grazing timing in the various parts of the allotment.

2. Sponsor Defined Public Benefit:

"The grazing permittee has cooperated with USDA-Natural Resources Conservation Service to implement a grazing management plan that is not only good for livestock, but also benefits resources such as plant health and wildlife habitat. A lack of reliable water is the biggest barrier to full implementation of the grazing plan which results in the areas that have reliable water getting grazed more heavily than other areas. Better grazing distribution benefits wildlife habitat, improves plant health, and will also reduce grazing pressure on riparian areas and reduce soil erosion and improve water quality. The area is habitat for pronghorn antelope, mule deer and greater sage-grouse, all of which are likely to directly use the water made available by this project."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Converse Ditch Headgate

Program: Rehabilitation

Project Type: Irrigation

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$60,000

Requested Grant: \$30,000

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

This project will replace a degraded headgate on the New Fork River and replace it with a more dependable structure.

2. Sponsor Defined Public Benefit:

"This project is located on the New Fork River and by replacing the degraded structure we will improve fisheries by having the ability to completely close the headgate allowing late flow to stay in the River. It will also improve water quality as the landowner will not have to get in the river with shovels and heavy equipment to damn off the headgate. This area is also frequented by deer, moose, and waterfowl that use the river corridor for habitat."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: EC Walker Diversion

Program: Rehabilitation

Project Type: Irrigation

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$60,000

Requested Grant: \$30,000

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

The purpose of this project is to replace an aging structure in Willow Creek. The new structure will be a more fish friendly rock cross vein design.

2. Sponsor Defined Public Benefit:

"This project will remove a fish barrier in Willow Creek and replace it with a rock cross vein that will allow fish to move up and down Willow Creek freely. This will potentially improve the fishery which has several public access spots for fishing."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Hedrick Stock Water Development

Program: New Development

Project Type: Well

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$45,000

Requested Grant: \$22,500

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

The purpose of this project is to drill a well and equip it with a solar platform and stock tank. This pasture has a seasonal water supply that is inadequate in the late summer.

2. Sponsor Defined Public Benefit:

"This property is located in seasonal range for Mule Deer and elk. It is also summer range for Antelope and Sage Grouse. By providing water to this pasture it will provide dependable water to the wildlife that utilize this area for parts of the year."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Kaylou Stock Water Reservoir Rehabilitation

Program: Rehabilitation

Project Type: Small Reservoir

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 2. Storage

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$15,000

Requested Grant: \$7,500

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

The purpose of this project is to repair a breached dam that lowered the water level by 3-4 feet and then install a sliding headgate to let water out and back into the creek.

2. Sponsor Defined Public Benefit:

"This property is located in seasonal range for Mule Deer, moose and elk. It is also summer range for Antelope and Sage Grouse. This pond also provides habitat for waterfowl throughout the summer as well as a good brook trout fishery. There is also a wetland that the overflow water supplies that provides great wildlife habitat."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Persinger Stock Water Development

Program: New Development

Project Type: Well

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$45,000

Requested Grant: \$22,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The purpose of this project is to drill and equip a well with a solar platform and pipe it to a stock tank. The pasture this project is located in has water seasonally; in the late summer a more dependable water source is needed.

2. Sponsor Defined Public Benefit:

"This property is located in seasonal range for Mule Deer and elk. It is also summer range for Antelope and Sage Grouse. By providing water to this pasture it will provide dependable water to the wildlife that utilize this area for parts of the year in which they occupy."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Welborn 1 Trough & Pipeline 2

Program: New Development

Project Type: Pipeline

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$40,000

Requested Grant: \$20,000

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

This project extends the Welborn 1 Trough project and places a trough in the next pasture to aid in the distribution of livestock. The Welborn No. 1 well is artesian; at the completion of this project, water from this well will be used for two livestock troughs with the overflow then being used to help irrigate adjacent lands that the landowner has a hard time getting water to because of infiltration losses.

2. Sponsor Defined Public Benefit:

"This project will help improve water quality by placing water into a tank that then will provide an offsite water source for both wildlife and livestock. This area sees summer use by antelope and sage grouse and seasonal use by elk and deer. The ability to increase irrigation on the land will provide great sage grouse and antelope habitat, and also provide good forage for seasonal use by Mule Deer and Elk. The property is State Trust Land and is publically accessible via a County road."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Welborn 1 Trough

Program: New Development

Project Type: Pipeline

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$27,000

Requested Grant: \$13,500

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

This project will take an existing artesian well that currently flows water onto the ground and pipe the water to a stock tank.

2. Sponsor Defined Public Benefit:

"This project will help improve water quality by placing water into a tank that then will provide an offsite water source for both wildlife and livestock. This area sees summer use by antelope and sage grouse and seasonal use by elk and deer. The property is State Trust Land and is publically accessible via a County road."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Wright Diversion

Program: Rehabilitation

Project Type: Irrigation

County: Sublette

Sponsor and Status: Sublette County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$40,000

Requested Grant: \$20,000

Identified in a Watershed Study: Yes **Watershed Study:** New Fork

1. Project Description:

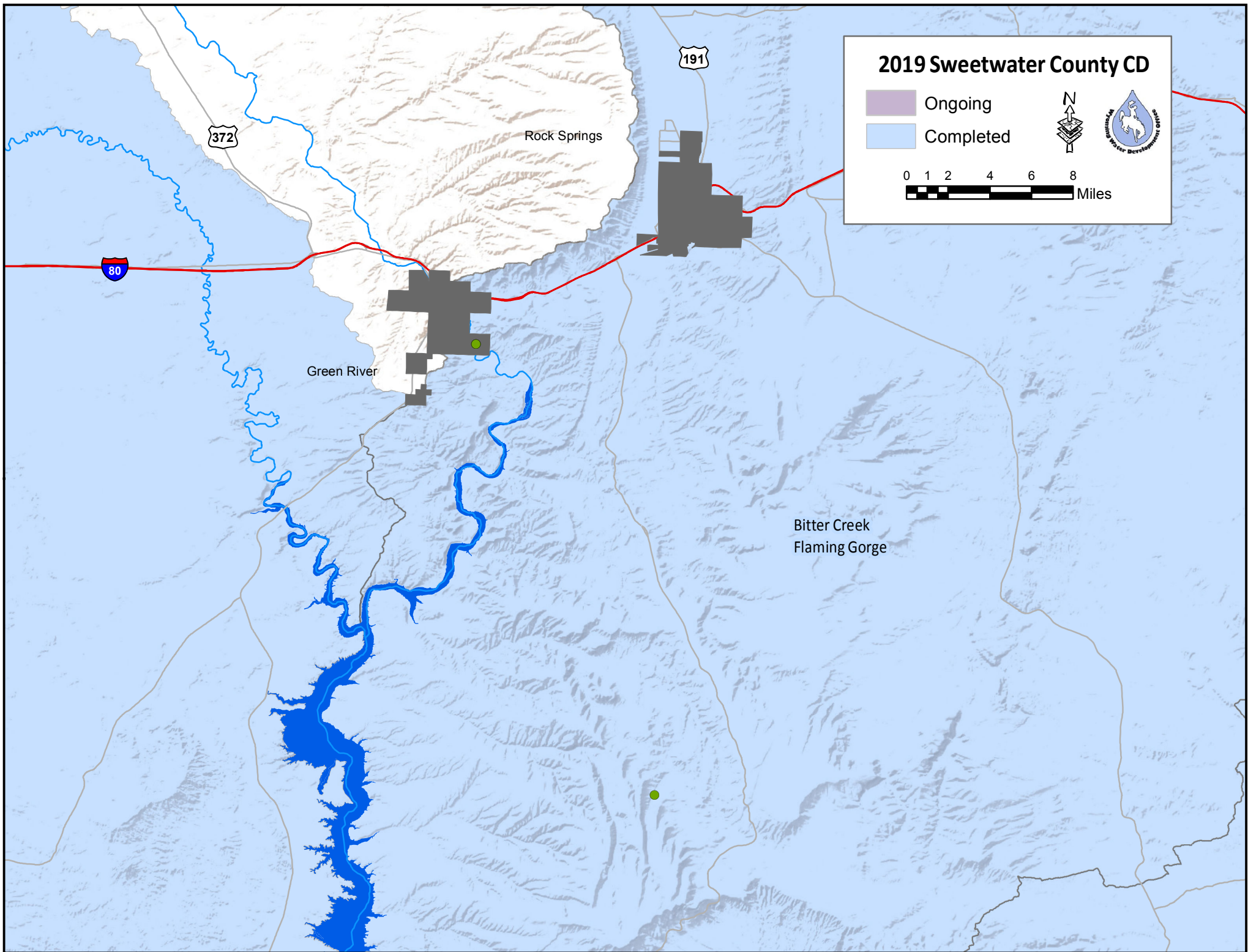
The purpose of this project is to replace an aging diversion structure in the New Fork River.

2. Sponsor Defined Public Benefit:

"This project will replace an aging structure that doesn't function properly any longer. The landowner struggles to shut water off to the ditch and with the new structure this will allow more water in the New Fork during low flow for the fishery. The associated river corridor is great habitat for moose, deer, elk, and waterfowl in the area."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Green River Urban Habitat Improvement

Program: Rehabilitation

Project Type: Recreational

County: Sweetwater

Sponsor and Status: Sweetwater County Conservation District

Project Priority: 6. Recreational

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$413,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The Green River Urban Habitat Improvement Project will improve the river geomorphology of 2,000 feet of the Green River in the town of Green River and improve stream access via a parking area and boat ramp. The project site is located alongside FMC Park and a bridge both owned by the City of Green River. This project will narrow, deepen, and stabilize the river via the installation of toe wood on a constructed bankful bench to eliminate 2,000 feet of vertically incised eroding outside meander bank.

These actions will enhance trout habitat and improve public angling opportunities. The river stabilization will reduce sediment entering the river annually, improve water quality, save a popular greenbelt hiking trail, save a utility power pole and ensure the public bridge is safe. The project straddles a popular river access location and this has been taken into consideration in the design with an improved parking area and river access at the existing location. To ensure that the project is accessible to the public and its potential is maximized, the City has agreed to work with the Wyoming Game and Fish to install a new boat ramp downstream of the project.

2. Sponsor Defined Public Benefit:

"This project will benefit the public in 5 ways:

1. Safety - *This project will address erosion issues around the city owned bridge. Yes, rock riprap could be placed in the locations that are causing problems. This would not address the problem long term, will not provide any other extra public benefits, and may create more hydrologic problems than it will correct.*

2. Trails System/ River Access - *This project will save the current public trails system infrastructure. There are 2 major trails at risk to being lost to the river via mass erosion events. The first is an asphalt trail, the second is a popular hiking trail and parking lot. This project will install toe wood structures at these locations and ensure there is a stable river bank. This project will also improve the parking lot and river access location near the bridge. Included in the actions of this project is the road improvement and boat ramp construction 1 mile downstream from the project.*

3. Utilities - *There is a utility pole next to the river bank in question. This pole supports a power line that spans the river, and has already needed to be moved within the last 5 years because of mass erosion events. This project will stabilize this bank and ensure the pole doesn't need to be moved again.*

4. Water Quality - This project will improve water quality of the Green River and Flaming Gorge by reducing sediment entering the Green River from mass erosion events originating on this bank. By reducing sediment entering the Green River and Flaming Gorge the amount of Phosphates entering the system are reduced. Phosphates are the main cause of algae blooms, like the one in Fire Hole summer of 2018. Survey estimates using Bank Erosion Hazard index (BEHI) and Near-bank Stress (NBS) suggest the 2,000 feet vertically incised river bank is contributing approximately 1,654 tons of sediment into the river annually. This is the equivalent to about 165 dump truck loads of sediment into the river each year. The stream bank stabilization and habitat improvement effort along this bank is expected to reduce sediment input into the river by 80-95%.

5. Fish Habitat - This project will narrow and deepen the river and add large woody debris all things fish look for. By improving fish habitat on city owned land ensures the public will have improved angling opportunity at this location.”

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, “If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action”.



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Ramsay Ranch Pipeline

Program: New Development

Project Type: Irrigation

County: Sweetwater

Sponsor and Status: Sweetwater County Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$99,054

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Bitter Creek

1. Project Description:

Project involves replacing an existing open-soil irrigation ditch with a 12-inch diameter PVC pipeline, to transfer water from a diversion on Trout Creek to two existing Ramsay Ranch flood-irrigated hayfields. Substantial water losses along the ditch due to soil infiltration and evaporation have made irrigating the hayfields inefficient. Only a fraction of the water that is put through the head gate is able to reach its destination. The pipeline would be buried 36" deep along the current corridor of the ditch, which is approximately 6,864 feet in length. A "T" junction about 1,778 feet from the start of the pipeline would divert water to the first field, the pipeline would then continue on to deliver water to the second field.

2. Sponsor Defined Public Benefit:

"The substantial loss of water due to soil infiltration, evaporation, and the slow speed of the water requires a large amount of water to be put down the ditch, in order for any to reach the hayfields. This creates the need to divert a significant amount of water out of Trout Creek, which lowers the water levels in the creek. By installing a pipeline, irrigation efficiency would be drastically increased, and much more water would be able to be left in Trout Creek. This would improve habitat for the fish in trout Creek (a Colorado cutthroat/rainbow trout stream), wildlife in the Greater Little Mountain area, potentially stimulate increased beaver activity on the down cut watershed, and also supply more water to downstream users on the Green River."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

2019 Teton CD



Ongoing



Completed



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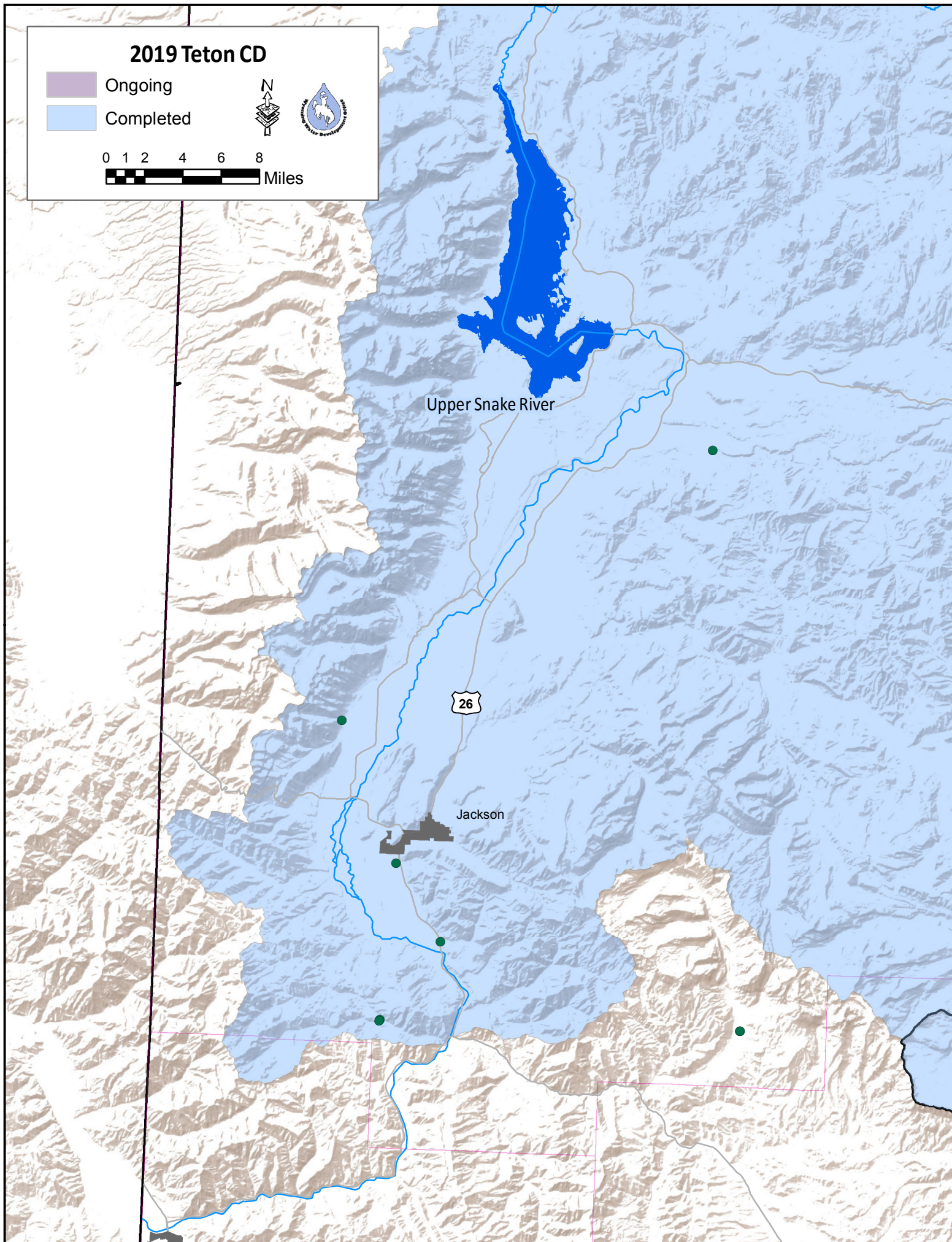


Miles

Upper Snake River

26

Jackson





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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: 7 Mile Ranch – Rural Community Fire Suppression

Program: New Development

Project Type: Rural Community Fire Suppression

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 2. Storage

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$96,470

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This project serves to increase reliable fire suppression water storage and supply for a rurally located residential property, and to also serve the adjacent public lands (Bridger-Teton National Forest), surrounding private lands, and private infrastructure. The project involves the development of a new pond and water delivery infrastructure, including an insulated shed housing a variable frequency drive pump leading to two hydrants with attachments designed to be compatible with local fire suppression agency apparatus.

2. Sponsor Defined Public Benefit:

"The project is located in a rural area; seven miles up a dirt road in the remote Hoback Canyon (Figure 5). Fire suppression apparatus response time is approximately one hour by vehicle. The subject parcel is ten acres in size, which is part of a quarter section (160 acres) of private land, surrounded by Bridger-Teton National Forest lands. The other private lands in the quarter section include three other residential parcels and the Safari Club International facility, which includes a main lodge and seven small residential cabins. In addition, there are 23 summer homes present in the Jack Pine Summer Home area, on Bridger-Teton National Forest land, proximate to the subject area. The proposed water development would be made available to fire suppression agencies for use in all of these areas. The subject private parcel is located within Teton County's Wildland Urban Interface mapped zone. This zone has the potential to support a wildland fire posing a direct threat to values including capital improvements, homes, utilities, transportation corridors, communication sites, and similar values.

The private landowners in this area have recently made efforts on other fronts to address wildfire risk reduction. The subject landowner had a Wildfire Risk Overview completed by a Certified Wildfire Mitigation Specialist in 2018 to better understand the condition of their structure and vegetation. The specialist advised them of voluntary recommendations to reduce risk. The landowner has subsequently completed structural improvements and vegetation management to meet voluntary recommendations from that overview. Two adjacent landowners had similar overviews completed in 2013, and have subsequently implemented vegetation management projects.

At the above-mentioned Jack Pine Summer Homes, wildfire risk reduction planning and implementation has taken place in the recent past. The summer homes operate under a Special Use Permit (SUP), which requires the homeowners conduct vegetation management immediately around the homes to reduce fire risk. This includes thinning, limbing trees, spacing smaller trees, and cleaning up heavy concentrations of dead and down timber. In 2002, the Forest Service conducted a thinning treatment on the nearby public lands (uphill and behind structures). The treatment was a several hundred-foot wide strip of thinning, uphill and behind the summer homes. In addition,

the Cliff Creek Fire burned in this immediate area in 2016, and fire crews conducted thinning in the area during the fire.”

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Fall Creek Ranch Water Supply Improvement

Program: New Development

Project Type: Rural Community Fire Suppression

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 1. Source Water Development

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$41,500

Requested Grant: \$20,750

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The Teton County Conservation District has requested funding to develop a fire suppression system for the Fall Creek Ranch subdivision in Teton County. A surface water right from Fall Creek for this purpose has already been approved by the State Engineers Office. This project will install a vfd pump, small 8 foot by 8 foot building to protect the pump, and other appurtenances necessary to make the system function as it was intended. The subdivision will also be using this water system for irrigation, however those components are not a part of this project.

2. Sponsor Defined Public Benefit:

"Fall Creek Ranch Subdivision consists of 165 acres broken into approximately 30 lots, five (5) of which currently have structures in place. The location of this subdivision is remote and surrounded by Bridger-Teton National Forest. Redtop Meadows is the next closest private land area, approximately 2.5 miles to the north, and is approximately 322 acres of private lands, nine subdivisions, and several dozen residential structures. This project would provide a source of water not only for Fall Creek Ranch, but Redtop Meadows as well. Bridger-Teton National Forest and any other agencies involved with firefighting in the vicinity would have access to this water supply station.

The project will also serve to provide a reliable source of irrigation to a pasture area where no irrigation previously existed. The irrigated area will provide pasture potentially for a combination of horses and cattle."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



THE STATE OF WYOMING

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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Game Creek Irrigation System Improvement

Program: New Development

Project Type: Irrigation

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$46,400

Requested Grant: \$23,200

Identified in a Watershed Study: Yes **Watershed Study:** Upper Snake River

1. Project Description:

Game Creek is a second order tributary to the Snake River. The creek joins Flat Creek approximately 0.6 miles upstream from its confluence with the Snake River approximately 5.5 miles south of the Town of Jackson. The Wyoming Game and Fish Department (WGFD) Commission owns a property immediately upstream of South Highway 89 that is used to pasture horses critical to the job duties of the South Jackson Game Warden. Pasture irrigation water takes off from an upstream point of diversion located on adjacent USFS lands. This project's goal is to improve irrigation efficiency, stream function, and fish passage at this site by constructing a permanent irrigation structure and headgate where none currently exist. Specific project details are listed below.

- Permanent rock cross vane diversion structure and 24-inch diameter headgate designed to divert 1-4 CFS
- Off-channel, passive fish screen (corrugated water screen) and bypass channel to reduce fish entrainment in the ditch network. Bypass channel requires 5% of diverted flows to function.
- 150 feet of 18-inch diameter pipe installed downstream from the headgate to reduce water losses and maintenance, with capability for future expansions.

The WGFD and Trout Unlimited have funded the design of this structure in tandem with the replacement of an irrigation structure on the Horse Creek feed ground. Thus far, WGFD has contributed \$20,000 to these design efforts and will contribute additional funds towards implementation. To maximize cost efficiency, construction will be completed by WGFD Habitat and Access personnel for an estimated cost savings of \$10,500. Thirty percent designs are in-hand with 60% designs anticipated in January 2019. Sixty percent designs are customary for permit submittal. Permitting will take place in spring of 2019 with construction to commence following the summer/fall 2019 irrigation season.

2. Sponsor Defined Public Benefit:

"In 2015, Governor Mead released a Wyoming Water Strategy to protect, manage, plan, and utilize water in Wyoming. One of the strategy's initiatives (#10 – Collaborative Fish Passage Restoration) calls for collaboration when replacing and rehabilitating irrigation infrastructure to include considerations for fish passage and protection. The Game Creek Irrigation System Improvement Project is a prime example of collaborative fish passage restoration for the benefit of the native Snake River cutthroat trout fishery in the Upper Snake River watershed. The project's proposed irrigation system improvements would restore fish passage for migrating cutthroat trout within the project area by removing a diversion that is a seasonal barrier and by allowing better control of water withdrawals for irrigation relative to streamflow."

In addition, there is a proximate ongoing project related to the proposal. The Wyoming Department of Transportation (WYDOT) is redeveloping South Highway 89, and has included development of structures that improve fish and wildlife passage at numerous highway crossings. A box culvert, which will allow fish passage, is partially constructed approximately 2,000 feet downstream of the proposed project. WYDOT's large financial investment will now allow fish movement upstream as far as the subject project area. Current irrigation practices, which divert all flow, mean that no fish passage further upstream can occur when irrigation is taking place.

The project is also an opportunity for the Wyoming Game and Fish Department to showcase best practices for land management, alternatives to flood irrigation, and considerations for fish passage and stream function on a Department-owned property. Having a near-by and easily-accessible fish-friendly irrigation structure to show case will be helpful for inspiring future collaborative fish restoration projects."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Jensen Canyon Headgate Rehabilitation

Program: Rehabilitation

Project Type: Irrigation

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$108,045

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Upper Snake River

1. Project Description:

This small water project was described in the Upper Snake River Level I Watershed Study and includes the rehabilitation of a preexisting headgate/diversion structure that was destroyed by a debris flow event in the spring of 2007. The proposed structure will divert the water from Jensen Creek into three separate waterways known as 1) the Canon Ditch, 2) the Loretta No. 2 Ditch, and 3) the Stone Pipeline. These three channels supply water to fifteen separate residential and agricultural uses downstream. The Jensen headgate is located on an alluvial fan, hence there is potential for the creek to jump from one channel to the next. The headgate will be designed to prevent that jumping and safeguard downstream residences from flooding.

2. Sponsor Defined Public Benefit:

"This water project benefits the public by supporting the preservation and stewardship of open space and agricultural heritage. By improving the reliability of delivering adjudicated water rights to their corresponding agricultural lands, this project benefits those lands in a way that is best for the environment and agricultural operation. The public receives the benefit of continued agriculture and the preserved views, in the case of this project, are highly visible from the Fish Creek Road in Teton County. This project also benefits the public by safeguarding against downstream flooding. The diversion structure will ensure that at high flows the water goes into its natural channel and does not spill over into the smaller channel that would likely flood the properties and the road downstream. Property and infrastructure at risk includes: seven residential buildings, an estimated 1,700 ft. of residential road, and up to around 2,500 feet of county road susceptible to spill over flooding."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: South Flat Creek Fish Passage & Channel Restoration

Program: New Development

Project Type: Environmental

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 5. Environmental

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$606,625

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

The South Flat Creek Fish Passage and Channel Restoration project seeks to show the intersection of functioning aquatic ecosystems and working ranch lands by restoring ecological function to a degraded section of Flat Creek while maintaining ranch activities. Project goals focus on improving instream habitat and water quality to a degraded section of Flat Creek. Wetland function will be improved through the restoration of a multi age class woody shrub community and off-channel wetlands or swales. Increased wetlands function will benefit water quality and instream habitat conditions. Additional environmental benefits will derive from restored reference channel conditions and pool-riffle sequences, and reduced bank erosion. Implementation of BMPs (ex. pasture rotation) will ensure project longevity.

Restoration activities planned for the 1.4 miles of stream are extensive, costly, and must therefore be phased. This application focuses on the first of two construction phases. Construction phase one involves channel realignment of Flat Creek from the ranch bridge to the downstream property boundary (Station 31+73-63+63, plan sheets 6-8 of 22, see attachment). Channel realignment includes the construction of a properly-sized channel (based upon reference conditions) that is connected to its floodplain, exhibits stable sediment transport dynamics (stable stream bed and banks) with abundant and diverse instream habitats. Construction of the new channel will restore riparian function, increase bank stability and reduce erosion, and improve the availability and quality of habitat for Snake River Cutthroat Trout and riparian obligate species.

2. Sponsor Defined Public Benefit:

"This project will benefit the public through improved water quality and fisheries habitat. Flat Creek is listed as "impaired" by the Wyoming Department of Environmental Quality for high suspended sediment loading and degraded instream habitat. This project will improve water quality through the construction of wetlands which provide bio-filtration, the restoration of riparian communities and channel dimensions which will reduce bank erosion and promote sediment continuity. Instream habitat will be improved by restoring reference channel dimension, pattern and profile. Increased function of spawning and rearing habitats on public lands promote greater recruitment of Snake River Cutthroat Trout to the public fishery. In addition to improving the quality of spawning habitat within the project reach, providing access to upstream spawning habitats will ensure the persistence of Snake River Cutthroat Trout."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Spread Creek Irrigation Rehabilitation & Fish Passage

Program: Rehabilitation

Project Type: Irrigation

County: Teton

Sponsor and Status: Teton Conservation District

Project Priority: 1. Diversion Structures and Spring Developments

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$1,200,000

Requested Grant: \$35,000

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

In 2010, the Spread Creek dam, a crumbling diversion dam for irrigation located just outside of Grand Teton National Park on Bridger-Teton National Forest lands was removed. It was replaced through a partnership effort led by TU's Wyoming Water Project, opening up over 50 miles of Spread Creek to migratory Snake River cutthroat trout for the first time in over 50 years.

Since the dam was removed and replaced with a fish passage-friendly diversion structure and new water delivery system (Phase 1 of the project), project partners have documented successful fish movement through the new diversion. They have also documented fish entrained in the Spread Creek irrigation system. This project is phase 2 of the Spread Creek Fish Passage project which will prevent future losses of migratory cutthroat trout to the Spread Creek system by installing a fish screen that will return entrained fish to Spread Creek and by stabilizing and improving the diversion structure (which was damaged by flooding in 2011) for more reliable water delivery for irrigators.

Spread Creek is located along the east margin of Grand Teton National Park, near Jackson Hole, Wyoming. Lower Spread Creek traverses through relatively pristine National Park lands before joining the Upper Snake River approximately 15 miles below Jackson Dam. This diversion site irrigates the Elk Ranch to the north and a part of Grand Teton National Park that is leased to a private lessee, the Pinto Ranch. As part of an agreement between the Park, Pinto Ranch, and Bridger-Teton National Forest, a cattle grazing allotment in the Bridger-Teton Wilderness was exchanged for the Elk Ranch pasture lands to reduce grizzly bear conflicts. The diversion also irrigates the Antler Ditch to the south, providing water for pasture and stock for the Triangle X and Moosehead Ranches through a splitter box and siphon under Spread Creek.

This project will, 1) install a fish screen in the diversion that is designed to prevent fish entrainment in ditches while continuing to deliver water even if clogged; 2) rehabilitate the diversion structure and changing it from a series of rock weirs to a rock ramp, to provide better long-term stability and a more favorable elevation for water delivery; 3) add instream structures such as rock barbs, root wads, and engineered log jams to protect banks and irrigation infrastructure within the project area; and 4) expand the sediment basin to reduce siltation in the ditches.

2. Sponsor Defined Public Benefit:

"This project has significant public benefit, as evidenced by the ongoing partnership between multiple agencies including Grand Teton National Park, the Bridger-Teton National Forest, Wyoming Game and Fish Department, and the US Geological Survey, as well as nonprofit organizations including Trout Unlimited and the Snake River Fund."

The project will benefit the Snake River cutthroat trout population as well as other native fish species including bluehead suckers (a Wyoming identified Species of Greatest Conservation Need), mountain whitefish, longnose and speckled dace, and sculpin, by preventing their entrainment and loss into the Elk Ranch and Antler ditches as well as providing continued and improved fish passage through the diversion structure. In addition, fish habitat and water quality downstream of the project area will be improved through the instream structures that will provide bank protection and therefore reduce erosion and sedimentation. These bank protection measures will also protect the publicly-owned irrigation infrastructure currently in place. Annual disturbance from heavy equipment needed to maintain the current rock weir structures and create the seasonal intake channel will be reduced. Private irrigators will also benefit from the project through improved water delivery. Without the diversion and bank and channel stabilization work to improve and maintain water delivery, the irrigation infrastructure and agricultural uses of pasture and stock water for cattle and horses will be placed at risk. Although not specifically mentioned in the Upper Snake River Level 1 Watershed Study, this project is a prime example of 4.5.7. Collaborative Fish Passage Restoration and Strategy 10 of Governor Mead's Wyoming Water Strategy, which calls for collaboration when replacing and rehabilitating irrigation infrastructure to include considerations for fish passage and protection. While not pertaining specifically to this project's goals, 4.1.4. Elk Ranch and 4.1.5. Antler Ditch (i.e., the north and south ditches served by the Spread Creek diversion), are discussed in the Upper Snake River Level I Watershed Study."

3. Staff Evaluation:

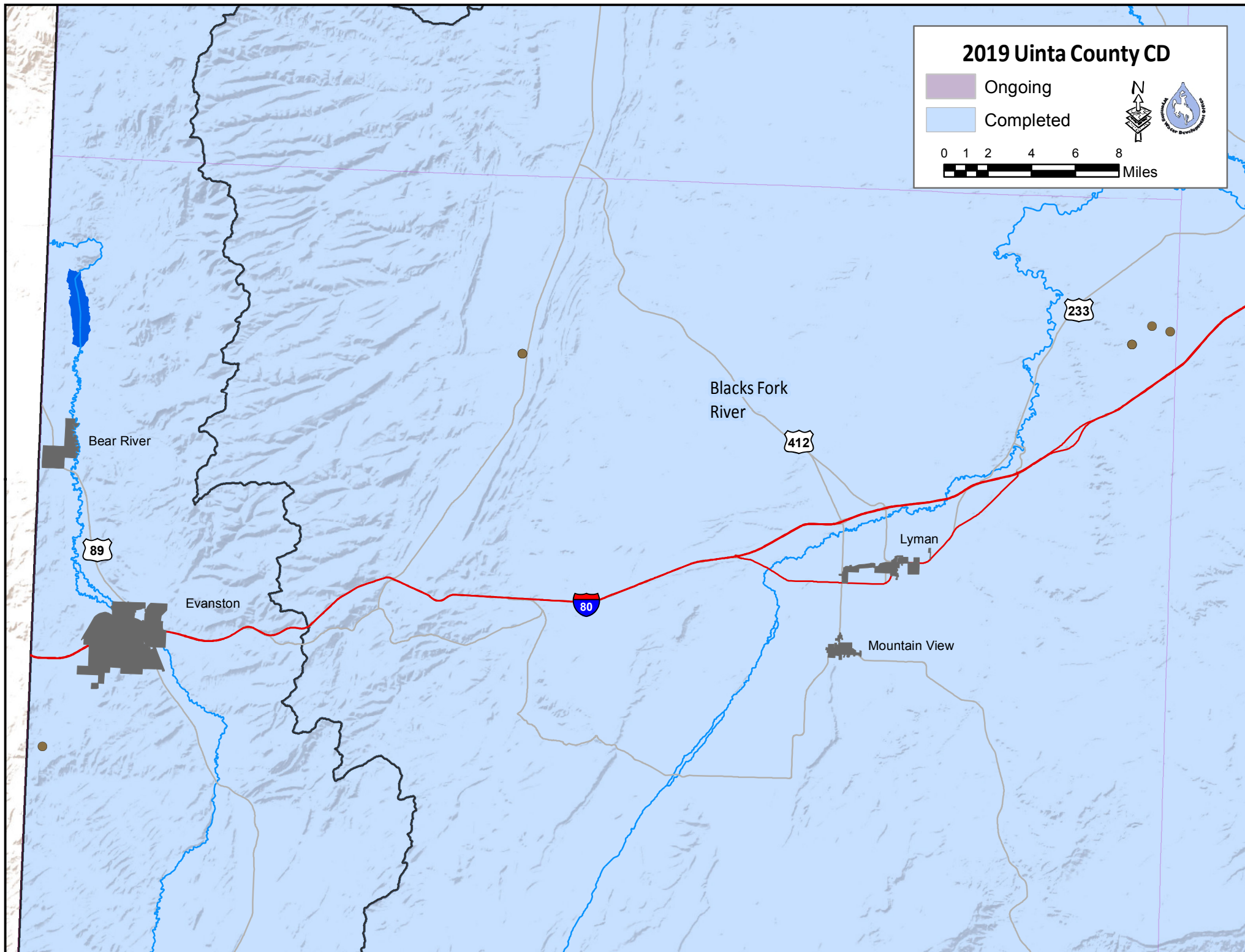
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2019 Uinta County CD

- Ongoing
- Completed



0 1 2 4 6 8 Miles





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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Bad Spring Stock Water Development

Program: New Development

Project Type: Spring Development

County: Uinta

Sponsor and Status: Uinta County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$66,600

Requested Grant: \$33,300

Identified in a Watershed Study: Yes **Watershed Study:** Blacks Fork

1. Project Description:

The project will include a spring development, 3 tanks, a 4" overflow and discharge piping. Rock will be used around the tanks to prevent erosion and a mud hole from forming where animals water. The project is located on private land in the checker-board area north of Interstate-80. The landowner is the Uinta Development Company, and they hold the permit for water rights on this spring.

2. Sponsor Defined Public Benefit:

"This project is located within a large BLM allotment that has very few water sources. By developing the spring and piping water to 3 large tire tank water troughs, this project will provide an extra water source that will accommodate more animals. The new system will allow livestock and wildlife access to water without having to wade through mud and water, which will prevent further erosion and resource damage. The new water source will help distribute the animals to areas that are underutilized resulting in an improved grazing pattern. Antelope and other wildlife will use this water source year around. Wildlife escape ramps will be installed in all water tanks. The BLM is aware of the project and would like to see the increased watering areas for all livestock and wildlife that utilize the range throughout the Granger Lease allotment."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Bridger Well 18 Stock Water Development

Program: New Development

Project Type: Solar Platforms

County: Uinta

Sponsor and Status: Uinta County Conservation District

Project Priority: 3. Pipelines, Conveyance Facilities, Solar Platforms, Windmills

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$67,000

Requested Grant: \$33,500

Identified in a Watershed Study: No **Watershed Study:** NA

1. Project Description:

This is an existing coal bed methane well that produces water. The well was originally permitted by the Wyoming Oil and Gas Conservation Commission and is now permitted to Anadarko Land Corp by the Wyoming State Engineer's Office as a stock water well (Permit 204482W). This project will convert this well to a permanent stock watering system with a solar pump and 4 livestock watering tanks. This well is in the Southwest Pasture of the Albert Creek Allotment, a pasture that lacks many permanent livestock water sources.

2. Sponsor Defined Public Benefit:

"The grazing permittee has cooperated with USDA-Natural Resources Conservation Service to implement a grazing management plan that is not only good for livestock, but also benefits resources such as plant health and wildlife habitat. A lack of reliable water is the biggest barrier to full implementation of the grazing plan, which results in the areas that have reliable water getting grazed more heavily than other areas. Better grazing distribution benefits wildlife habitat, improves plant health, and will also reduce grazing pressure on Clear Creek and Albert Creek and reduce soil erosion and improve water quality.

The area is also year-round range for pronghorn antelope and greater sage-grouse, both of which are likely to directly use the water made available by this project."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Hansen Enlargement of Coy Reservoir

Program: New Development

Project Type: Small Reservoir

County: Uinta

Sponsor and Status: Uinta County Conservation District

Project Priority: 2. Storage

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$133,400

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Bear River

1. Project Description:

The project will raise a dam and install a toe drain to increase the active water storage of an off-channel reservoir by 36.8 acre-feet (AF) to a total of 113.7 AF. Coy Reservoir is located 5 miles south of Evanston, WY. Water supply is from Yellow Creek, a tributary to the Bear River.

The original dam was designed and permitted in early 2008 with construction completed October 2009. The size of original construction was reduced from 100 AF to 76.9 AF due to loss of a 50 AF of the Original Bear River Compact Storage (OCS) water right. In July 2017, the State Engineer, provided policy for 1100 AF of the OCS to become available for small water projects. A 3.3-foot dam raise will be accomplished by combining a geomembrane liner with a concrete wave wall on the dam crest. Potential foundation issues will be mitigated with an engineered drain at the downstream toe of the dam.

2. Sponsor Defined Public Benefit:

"The primary public benefit of the off-channel reservoir is to capture and store spring runoff from the Bear River Watershed that would otherwise leave Wyoming. Storing spring runoff would increase the total available water supply to the region and change the timing of water deliveries to later summer and fall which is a benefit to both agriculture and the ecology in the Yellow Creek watershed. Increasing irrigation reliability would better secure a family owned and operated agricultural property that buffers the progression from development in the upper valley. Increasing agricultural viability will help keep the land in agricultural production which maintains habitat for wildlife, open spaces, scenic vistas, and family ranches. Another secondary benefit to the public is providing a local source of alfalfa hay to the rural area that may otherwise have to go to neighboring states. In addition, the conservation pool for wild life will be raised over 1-foot which will double the volume for waterfowl, aquatic species, and other animals that utilize the reservoir."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also

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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Wildcat 5 Spring Development

Program: New Development

Project Type: Spring Development

County: Uinta

Sponsor and Status: Uinta County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$64,500

Requested Grant: \$32,250

Identified in a Watershed Study: Yes **Watershed Study:** Blacks Fork

1. Project Description:

This project will develop a spring, install 3 giant rubber tire tanks, piping from the spring to each trough, and overflow piping. Rock will be placed around tanks to prevent mud holes from forming. Providing more water sources also results in reduced erosion.

2. Sponsor Defined Public Benefit:

"The development of this spring will provide an upland source of water for both livestock and wildlife that will greatly improve range conditions by distributing grazing to areas that are currently underutilized. Providing more water sources also results in reduced erosion and sediment loading to available surface waters. This project is a more efficient use of water and provides more opportunities to enhance the area for the general public as it is used for hunting and other types of recreation.

The developed spring area is already fenced to protect it from livestock and wildlife damage. Wildlife escape ramps will be installed in the tanks that will be used to collect the water.

This project will greatly enhance the area not only for the landowner, but the public as well by providing a crucial water source for many different species of wildlife."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".



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2019 RECOMMENDATION

SMALL WATER PROJECT PROGRAM

Project Name: Wildcat Butte Well Solar

Program: New Development

Project Type: Solar Platforms

County: Uinta

Sponsor and Status: Uinta County Conservation District

Project Priority: 1. Other (Shovel Ready)

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$47,250

Requested Grant: \$23,625

Identified in a Watershed Study: Yes **Watershed Study:** Blacks Fork

1. Project Description:

The proposed project will install a solar pump system on an existing well and direct water into three new rubber tire water tanks. The well is artesian, the solar system will increase the reliability of the water supply for livestock and wildlife. An overflow will also be installed to deliver the extra water into a nearby drainage. There are deteriorated troughs at the site that will need to be removed before the new tanks can be installed. The project is located on private property and is part of the Granger Lease Allotment. This site receives heavy livestock use during the summer grazing period and is also used by wildlife in the area.

2. Sponsor Defined Public Benefit:

"This project is located in a large BLM allotment where there are very few water sources. This project will provide much needed water for livestock in an area that is underutilized because of the lack of water. Having another water source will distribute the livestock and create a better grazing pattern that will benefit the range. Many antelope and other wildlife that are in the area will also benefit from the additional water source throughout the year. Wildlife escape ramps will be installed in each tire tank. Removing the deteriorated troughs that are there now and replacing with tire water tanks will also improve the aesthetics and safety of the area which is used for hunting and other types of recreation. The BLM is aware of the project and would like to see an increase in water for all livestock and wildlife that utilize this range on the Granger Lease Allotment."

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

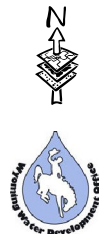
2019 Wild Rose ISD

Sheridan County CD

Wild Rose ISD

Ongoing

Completed

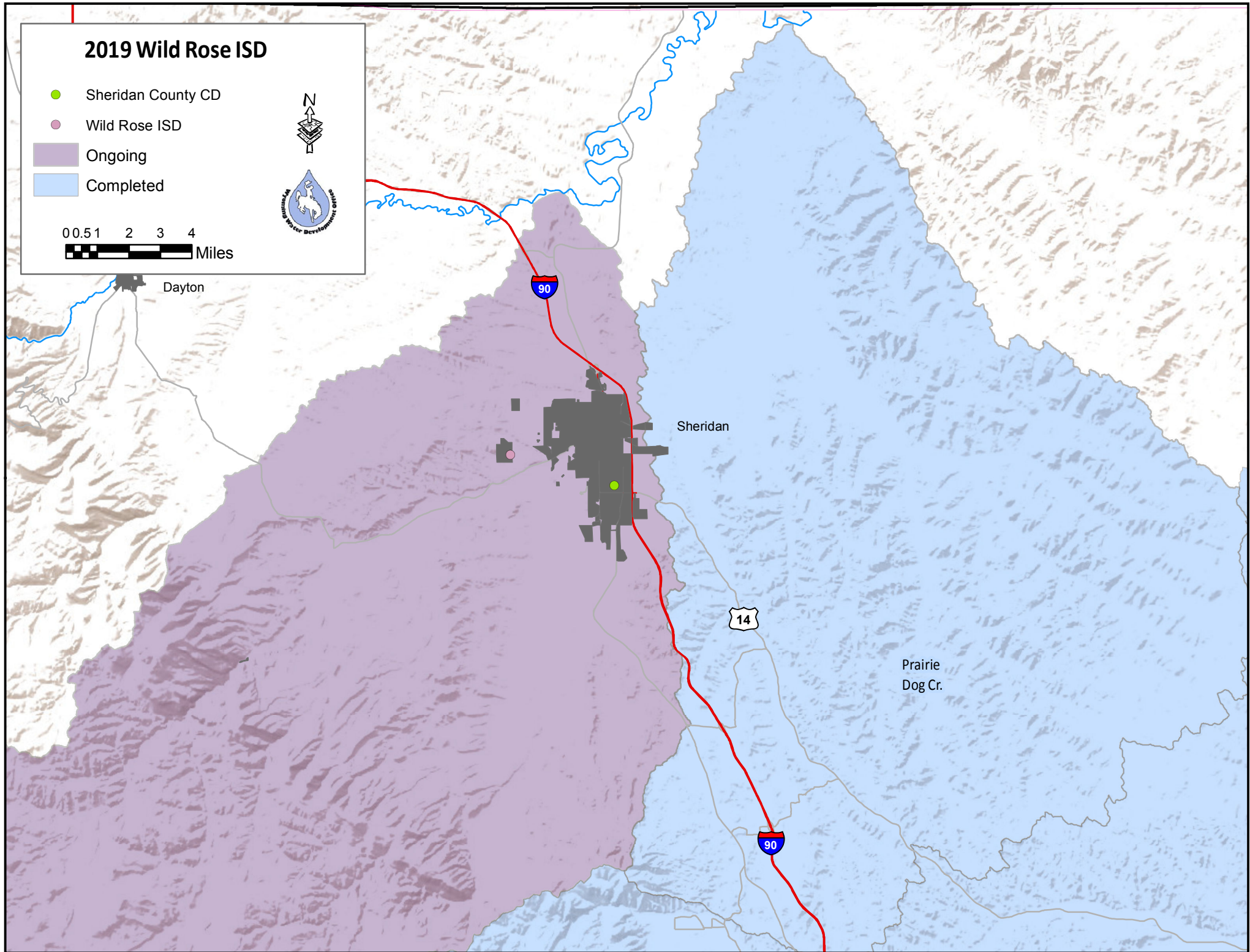


0 0.5 1 2 3 4 Miles

Dayton

Sheridan

Prairie
Dog Cr.





THE STATE OF WYOMING
Water Development Office

6920 YELLOWTAIL ROAD TELEPHONE: (307) 777-7626 CHEYENNE, WY 82002
FAX: (307) 777-6819



2019 RECOMMENDATION
SMALL WATER PROJECT PROGRAM

Project Name: Wild Rose – Sheridan Raw Water Connection

Program: New Development

Project Type: Irrigation

County: Sheridan

Sponsor and Status: Wild Rose Improvement and Service District

Project Priority: 4. Irrigation

Director's Recommendation: Do Fund

Estimated Total Project Cost: \$70,000

Requested Grant: \$35,000

Identified in a Watershed Study: Yes **Watershed Study:** Goose Creek

1. Project Description:

This project would connect Wild Rose ISD's raw water irrigation system to the City of Sheridan's 30 inch raw water transmission main. This connection would replace the existing irrigation delivery system that obtains its water source from the Alliance Lateral Ditch.

2. Sponsor Defined Public Benefit:

"The following benefits would accrue if this project was implemented:

- 1. The District would no longer have to operate and maintain its current irrigation delivery system from the point that it receives water from the Alliance Lateral Ditch. This current irrigation delivery system is comprised of a diversion dam, 6,800 feet of 3", 6" and 8" pipe, a 9.7 acre-feet storage reservoir, and associated valves and appurtenances.*
- 2. The District would receive raw water supply for irrigation purposes that is considerably cleaner than its current supply. As a result, the maintenance costs associated with the delivery of water to its customers would be greatly reduced.*
- 3. The City would incur revenues from the District to convey the District's water supply down the Big Goose Creek valley via the 30" raw water transmission main, which has excess capacity available that would provide for this conveyance.*
- 4. The City has recently installed a DWSRF-funded hydroturbine on its 30" raw water transmission main. This hydroturbine reduces the need for pressure-reducing valves on the transmission main and also generates power as it reduces pipeline pressure, which it then sells to Montana-Dakota Utilities. By conveying the District's irrigation water, the City will incur additional power-related revenues by having additional flow through the hydroturbine.*
- 5. Additional capacity would become available for the irrigation delivery systems of the Alliance Ditch Company and the Alliance Lateral Ditch Company, and these two ditch companies would no longer be responsible for delivering water to the District."*

3. Staff Evaluation:

The practices applied for in this project are eligible practices in the SWPP. The public benefits of this project as defined by the project sponsor include those that have been approved for funding in the past. Before the sponsor can proceed to construction, in accordance with the SWPP operating criteria and the Project Agreement, the following items (at a minimum) need to be addressed, qualified, and, as necessary, included in the application file: design and specifications, WWDO staff evaluation; operation and maintenance plan; rights-of-way; easements; agency commitment; pertinent notifications; any and all government requirements including designs, permitting and wetlands delineation; and a State Engineer's Office permit to construct and points of use. The sponsor is also advised that according to the Project Agreement between the WWDC and the sponsor, "If the SPONSOR initiates the construction process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action".

CONSTRUCTION**LEVEL III - ACCOUNT I NEW DEVELOPMENT (GRANT ONLY)**

| Project Name | Sponsor | Appropriation | Description |
|--|--------------------------------|-----------------|--|
| Buffalo Wells & Transmission 2019 | City of Buffalo | \$ 1,238,160.00 | 67G - 10 Alluvial Wells and Wellfield Infrastructure |
| Clearmont Well Connection 2019 | Town of Clearmont | \$ 328,970.00 | 67G - Well Purchase and Well Connection |
| Etna Storage Tank 2019 | Etna Water and Sewer District | \$ 1,001,650.00 | 67G - 500K Gallon Storage Tank |
| GR/RS/SC JPWB Pump Station 2019 | GR/RS/SWC JPWB | \$ 7,497,300.00 | 67G - Pump Station and Transmission Pipeline |
| Lander Storage Tanks and Pump Station 2019 | City of Lander | \$ 227,800.00 | 67G - 4MG Storage Tank & Pump Station Upgrades - Design Only |
| Northwest Rural Water System Improvements 2019 | Northwest Rural Water District | \$ 1,055,250.00 | 67G - Transmission Pipeline and Pump Station |
| Rolling Hills Well No. 7 Connection 2019 | Town of Rolling Hills | \$ 273,360.00 | 67G - Well Purchase and Well Connection |

LEVEL III - ACCOUNT II REHABILITATION (GRANT ONLY)

| Project Name | Sponsor | Appropriation | Description |
|--|--|---------------|--|
| Eden Valley Irrigation District System Improvements 2019 | Eden Valley Irrigation and Drainage District | \$ 351,000.00 | 54G - Canal Lining and Sand Trap Replacement |
| Wind River Inter-Tribal Council Rehab 2019 | Business Councils of the Eastern Shoshone and Northern Arapaho Indian Tribes | \$ 929,000.00 | 50G - Irrigation Structure Repair |

LEVEL III - ACCOUNT II REHABILITATION (GRANT & LOAN)

| Project Name | Sponsor | Appropriation | Description |
|--|---|---------------|--|
| Austin-Wall Reservoir Rehabilitation 2019 | Austin-Wall Irrigation District | \$ 374,000.00 | 67G/33L - Outlet Works Replacement |
| Big Horn Canal Wasteway Rehabilitation 2019 | Big Horn Canal Irrigation District | \$ 960,000 | 67G/33L - Elk Creek Wasteway / Check Structure Replacement |
| Bluff / Upper Bluff System Improvements 2019 | Bluff/Upper Bluff Irrigation District | \$ 291,000 | 67G/12.51L - Pump Station Improvements |
| Dry Creek Irrigation District Rehabilitation 2019 | Dry Creek Irrigation District | \$ 1,628,000 | 67G/33L - Replacement of Lateral Steel Pipelines with HDPE and PVC Pipe |
| Heart Mountain ID Rattlesnake Liner Replacement 2018 | Heart Mountain Irrigation District | \$ 2,700,000 | 67G/33L - Replacement of Canal Liner (Change from CMAR to DBB construction delivery) |
| Interstate Diversion Structure Rehabilitation 2019 | Interstate Irrigation and Reservoir Irrigation District | \$ 420,000 | 67G/33L - Burnt Creek Diversion Structure Replacement |
| Lakeview Carter Creek Siphon/Spillway 2019 | Lakeview Irrigation District | \$ 351,000 | 67G/33L - Replacement of Carter Creek Syphon Structure |
| Wheatland Irrigation District Tunnel Dam Rehabilitation 2019 | Wheatland Irrigation District | \$ 388,000 | 67G/33L - Rehabilitation of Tunnel Dam |

LEVEL III - ACCOUNT II REHABILITATION (100% MATERIALS GRANT)

| Project Name | Sponsor | Appropriation | Description |
|--|--------------------------------|-----------------|---|
| Cody Canal Rehabilitation 2019 | Cody Canal Irrigation District | \$ 344,000.00 | Replace Open Ditch with Pipelines on Two Laterals |
| Deaver Irrigation District Rehabilitation 2019 | Deaver Irrigation District | \$ 424,000.00 | Replace Open Ditch with Pipelines on Lateral 129F |
| Lovell Moncur Lateral Rehabilitation 2019 | Lovell Irrigation District | \$ 1,670,000.00 | Replace Open Ditch with Pipelines on Moncur Lateral |
| Midvale Irrigation District Rehabilitation 2019 | Midvale Irrigation District | \$ 559,000.00 | Replace Open Ditch with Pipelines on Wyoming 5-Mile and Wyoming 5-Mile A Laterals |
| Shoshone Irrigation District Rehabilitation 2019 | Shoshone Irrigation District | \$ 181,000.00 | Garland Canal Drop Structure Replacement / Replace Open Ditch w/ Pipelines on Laterals 16U and BOV1 |

LEVEL III - AMENDMENTS TO PRIOR APPROPRIATIONS

| Project Name | Sponsor | Appropriation | Description |
|--|---|-----------------|---|
| Eden Valley Farson Lateral Rehabilitation | Eden Valley Irrigation and Drainage District | \$ 910,000.00 | 58G/4L w/ 1 Year Time Extension - Lateral Pipelines |
| Casper Zone 3 Improvements | City of Casper | \$ - | 1 Year Time Extension |
| Piney & Cruse Canal Piping | Piney & Cruse Creek Ditch Company Irrigation District | \$ - | 3 Year Time Extension |
| Cokeville Tri-Diversion Structure | Cokeville Watershed Improvement District | \$ 120,935.00 | Diversion Structure w/ 1 Year Time Extension |
| Gillette Regional Extensions 2017 | City of Gillette | \$ - | 67G - Regional Transmission Pipelines |
| Gillette Regional Extensions Phase IV 2018 | City of Gillette | \$ (296,810.00) | 67G - Regional Transmission Pipelines |

LEVEL III - ACCOUNT III (GRANT AND LOAN)

| Project Name | Sponsor | Appropriation | Description |
|-------------------------------------|---|------------------|--|
| Leavitt Reservoir Expansion Project | Shell Valley Watershed Improvement District | \$ 41,000,000.00 | 95.1%G/4.1%L - Construction of Off Channel Dam |

USBR BASIN STATES SALINITY CONTROL PROGRAM

| Project Name | Sponsor | Appropriation | Description |
|---|--|---------------|---|
| Eden Valley Irrigation and Drainage District F2, F3 & F5 Laterals | Eden Valley Irrigation and Drainage District | | Time Extension to 8/31/2020 - Replace Open Ditch with Pipelines |

**PROJECT AGREEMENT
BUFFALO WELLS AND TRANSMISSION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the CITY OF BUFFALO, JOHNSON COUNTY, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: City of Buffalo, 46 North Main St., Buffalo, WY 82834.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Buffalo Wells and Transmission 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of water supply wells, transmission pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed ONE MILLION TWO HUNDRED THIRTY-EIGHT THOUSAND ONE HUNDRED SIXTY DOLLARS (\$1,238,160.00) which will be a grant of not more than ONE MILLION TWO HUNDRED THIRTY-EIGHT THOUSAND ONE HUNDRED SIXTY DOLLARS (\$1,238,160.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the town council authorizing participation in this PROJECT and accepting the financing package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

E. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR will have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT.

F. Once the plans and specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

G. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

H. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

- (1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and
- (2) The SPONSOR'S proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101, *et seq.*, and to determine the lowest responsible bid.

I. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

J. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

K. Sixty-seven percent (67%) of each eligible billing request received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed sixty-seven percent (67%) of total eligible PROJECT costs. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

L. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

M. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

N. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

O. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the economic life of the project. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

P. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2024, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

Q. The grant is subject to the following conditions regarding management of the completed PROJECT, restrictions on the sale of water, and restrictions on the sale of the PROJECT:

(1) Without prior written approval of the COMMISSION and either the State Engineer or Board of Control, there shall be no lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than municipal and rural domestic water supply use as determined by the COMMISSION in its sole and absolute discretion. If such a transaction is approved, the SPONSOR shall receive thirty-three percent (33%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than municipal and rural domestic water supply use and the State of Wyoming shall receive sixty-seven percent (67%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT. If the SPONSOR has any pre-existing contracts or commitments for the sale of water which might apply to these conditions, the SPONSOR shall submit evidence of such commitments to the COMMISSION within ten (10) days of the execution of this Agreement for review and declaration of exemption.

(2) There shall be no lease, sale, assignment or transfer of ownership of the PROJECT without prior written approval of the COMMISSION. If this condition is

met, the SPONSOR shall receive thirty-three percent (33%) and the State of Wyoming shall receive sixty-seven percent (67%) of the revenues generated by the lease, sale, assignment or transfer of ownership of the PROJECT. Before the SPONSOR may lease, sell, assign or transfer ownership of the PROJECT, the State of Wyoming shall be given a one (1) year first right of refusal option to purchase the SPONSOR's interest in the PROJECT for an amount equal to the principal, interest, maintenance and replacement costs incurred by the SPONSOR at the date the option is exercised.

(3) The SPONSOR may purchase the position of the State of Wyoming, as described in subsections (1) and (2) of this Section, for the amount of the grant described in Section 4.A. of this Agreement plus the interest that would have accrued on the grant amount in the Water Development Account from the date the PROJECT was substantially completed as defined by the COMMISSION. The State Auditor shall determine the interest that would have accrued on the grant amount.

R. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

S. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision in part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for

any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of eight (8) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the parties may renegotiate the terms affected by the severance.

L. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of

Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

CITY OF BUFFALO

Michael Johnson, Mayor

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler Renner,
Assistant Attorney General

Date

**PROJECT AGREEMENT
CLEARMONT WELL CONNECTION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the TOWN OF CLEARMONT, SHERIDAN COUNTY, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: P.O. BOX 127, Clearmont, WY 82835.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Clearmont Well Connection 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of well improvements, transmission pipeline; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED TWENTY-EIGHT THOUSAND NINE HUNDRED SEVENTY DOLLARS (\$328,970.00) which will be a grant of not more than THREE HUNDRED TWENTY-EIGHT THOUSAND NINE HUNDRED SEVENTY DOLLARS (\$328,970.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the town council authorizing participation in this PROJECT and accepting the financing package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

**WELL PURCHASE AGREEMENT
BETWEEN THE WYOMING WATER DEVELOPMENT COMMISSION
AND TOWN OF CLEARMONT**

1. Parties. This Well Purchase Agreement (Agreement) is made and entered into by and between the State of Wyoming, by and through the Wyoming Water Development Commission (Commission), whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the TOWN OF CLEARMONT, a duly organized municipality existing under the laws of the state (Sponsor), whose address is: P.O. Box 127, Clearmont, WY 82835.

2. Purpose. The purpose of this Agreement is for the Commission to assign its interest in the Clearmont Well No. 3 (Well), which was constructed by the Commission pursuant to a Level II feasibility study, to the Sponsor so that the Well can be converted to a production well and used as a domestic water supply source for the Sponsor.

3. Term of Agreement. This Agreement is effective when all parties have executed it. (Effective Date). The terms of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Payment. The Sponsor shall pay the Commission SEVENTY THOUSAND TWO HUNDRED FIFTY-FIVE DOLLARS AND THIRTY-FIVE CENTS (\$70,255.35) or thirty-three percent (33%) of the actual construction costs of constructing the Well, whichever is less. The Sponsor shall purchase the Well with a lump sum payment.

5. Responsibilities of Commission. The Commission does hereby transfer and assign all its right, title, and interest of whatsoever nature in and to the well and all works pertaining thereto to the Sponsor for use as a domestic water supply source for the TOWN OF CLEARMONT. The Well is located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 21, Township 54 North, Range 79 West, of the 6th Principal Meridian, Sheridan County, Wyoming.

6. Responsibilities of the Sponsor.

A. Well Permits and Operations. The Sponsor, prior to operation of the Well, shall obtain all necessary permits, licenses, or other authorizations necessary for operation of the Well, including, but not limited to, submission of a statement of Completion of Construction of the Well to the Office of the State Engineer. The Sponsor shall become solely responsible for future operation, maintenance, or abandonment of the Well, including properly plugging and abandoning the Well if the Sponsor decides or is required to do so, and Commission shall have no further responsibility for operating or plugging and abandoning the Well.

7. General Provisions.

A. Amendments. Any changes, modifications, revisions, or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms “hereof,” “hereunder,” “herein,” and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Entirety of Agreement. This Agreement, consisting of four (4) pages, represents the entire and integrated agreement between the parties and supersedes all prior and contemporaneous negotiations, representations and agreement, whether written or oral.

D. Prior Approval. This Agreement shall not be binding upon either party until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

E. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

F. Sovereign Immunity. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and Commission expressly reserve sovereign immunity by entering into this Agreement and the Sponsor expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereign or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for any party, except that any ambiguity as to immunity shall be construed in favor of immunity.

G. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

H. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the Sponsor of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

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8. Signatures. The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

| | |
|-------|------|
| | |
| Chair | Date |

| | |
|-----------|------|
| | |
| Secretary | Date |

TOWN OF CLEARMONT

| | |
|--------------------|------|
| | |
| Greg Rohrer, Mayor | Date |

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

| | |
|--|------|
| | |
| Tyler M. Renner, Assistant Attorney General | Date |

**PROJECT AGREEMENT
ETNA STORAGE TANK 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the ETNA WATER AND SEWER DISTRICT, LINCOLN COUNTY, Wyoming, a duly organized water and sewer district existing under the laws of that state [SPONSOR], whose address is: P.O. BOX 5031, Etna, WY 83118.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Etna Storage Tank 2019 [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of a new storage tank; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed ONE MILLION ONE THOUSAND SIX HUNDRED FIFTY DOLLARS (\$1,001,650.00) which will be a grant of not more than ONE MILLION ONE THOUSAND SIX HUNDRED FIFTY DOLLARS (\$1,001,650.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION evidence of the SPONSOR's authorization to participate in the PROJECT and approval of the funding package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

**PROJECT AGREEMENT
GR/RS/SC JPWB PUMP STATION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the GREEN RIVER-ROCK SPRINGS-SWEETWATER CO. JOINT POWERS WATER BOARD (GR/RS/SC JPWB), SWEETWATER COUNTY, Wyoming, a duly organized joint powers water board existing under the laws of that state [SPONSOR], whose address is: GR-RS-SC JPWB, 2 Telephone Canyon, Green River, WY 82935.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the GR/RS/SC JPWB Pump Station 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of pumping facilities, transmission pipeline; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed SEVEN MILLION FOUR HUNDRED NINETY-SEVEN THOUSAND THREE HUNDRED DOLLARS (\$7,497,300.00) which will be a grant of not more than SEVEN MILLION FOUR HUNDRED NINETY-SEVEN THOUSAND THREE HUNDRED DOLLARS (\$7,497,300.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION evidence of the SPONSOR's authorization to participate in the PROJECT and approval of the funding package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

**PROJECT AGREEMENT
LANDER STORAGE TANKS AND PUMP STATION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the CITY OF LANDER, FREMONT COUNTY, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: 240 Lincoln Street, Lander WY 82520.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Lander Storage Tanks and Pump Station 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design of storage tanks, transmission pipelines, pumping facilities; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed TWO HUNDRED TWENTY-SEVEN THOUSAND EIGHT HUNDRED DOLLARS (\$227,800.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the town council authorizing participation in this PROJECT and accepting the financing package.

C. The sponsor shall provide to the commission an adequate feasibility study of the proposed project prior to commencing the design phase.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

E. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

PROJECT AGREEMENT
NORTHWEST RURAL WATER SYSTEM IMPROVEMENTS 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the NORTHWEST RURAL WATER DISTRICT, PARK COUNTY, Wyoming, a duly organized water district existing under the laws of that state [SPONSOR], whose address is: P.O. Box 2347, Cody, WY 82414.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Northwest Rural Water System Improvements 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of transmission pipelines, pumping facilities; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed ONE MILLION FIFTY-FIVE THOUSAND TWO HUNDRED FIFTY DOLLARS (\$1,055,250.00) which will be a grant of not more than ONE MILLION FIFTY-FIVE THOUSAND TWO HUNDRED FIFTY DOLLARS (\$1,055,250.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION evidence of the SPONSOR's authorization to participate in the PROJECT and approval of the funding package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

PROJECT AGREEMENT
ROLLING HILLS WELL NO. 7 CONNECTION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the TOWN OF ROLLING HILLS, CONVERSE COUNTY, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: 38 South Badger Road, Rolling Hills, WY 82637.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Rolling Hills Well No. 7 Connection 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of well improvements, transmission pipeline; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed TWO HUNDRED SEVENTY-THREE THOUSAND THREE HUNDRED SIXTY DOLLARS (\$273,360.00) which will be a grant of not more than TWO HUNDRED SEVENTY-THREE THOUSAND THREE HUNDRED SIXTY DOLLARS (\$273,360.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the town council authorizing participation in this PROJECT and accepting the financing package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

**WELL PURCHASE AGREEMENT
BETWEEN THE WYOMING WATER DEVELOPMENT COMMISSION
AND TOWN OF ROLLING HILLS**

1. **Parties.** This Well Purchase Agreement (Agreement) is made and entered into by and between the State of Wyoming, by and through the Wyoming Water Development Commission (Commission), whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the TOWN OF ROLLING HILLS, a duly organized municipality existing under the laws of the state (Sponsor), whose address is: 38 South Badger Road, Rolling Hills, WY 82637.

2. **Purpose.** The purpose of this Agreement is for the Commission to assign its interest in the Well No. 7 (Well), which was constructed by the Commission pursuant to a Level II feasibility study, to the Sponsor so that the Well can be converted to a production well and used as a domestic water supply source for the Sponsor.

3. **Term of Agreement.** This Agreement is effective when all parties have executed it. (Effective Date). The terms of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. **Payment.** The Sponsor shall pay the Commission NINETY-TWO THOUSAND SEVEN HUNDRED SEVENTY-FIVE DOLLARS AND FIFTY-SEVEN CENTS (\$92,775.57) or thirty-three percent (33%) of the actual construction costs of constructing the Well, whichever is less. The Sponsor shall purchase the Well with a lump sum payment.

5. **Responsibilities of Commission.** The Commission does hereby transfer and assign all its right, title, and interest of whatsoever nature in and to the well and all works pertaining thereto to the Sponsor for use as a domestic water supply source for the TOWN OF ROLLING HILLS. The Well is located in the SE ¼ SW ¼ of Section 22, Township 34 North, Range 75 West, of the 6th Principal Meridian, Converse County, Wyoming.

6. **Responsibilities of the Sponsor.**

A. **Well Permits and Operations.** The Sponsor, prior to operation of the Well, shall obtain all necessary permits, licenses, or other authorizations necessary for operation of the Well, including, but not limited to, submission of a statement of Completion of Construction of the Well to the Office of the State Engineer. The Sponsor shall become solely responsible for future operation, maintenance, or abandonment of the Well, including properly plugging and abandoning the Well if the Sponsor decides or

is required to do so, and Commission shall have no further responsibility for operating or plugging and abandoning the Well.

7. General Provisions.

A. Amendments. Any changes, modifications, revisions, or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms “hereof,” “hereunder,” “herein,” and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Entirety of Agreement. This Agreement, consisting of four (4) pages, represents the entire and integrated agreement between the parties and supersedes all prior and contemporaneous negotiations, representations and agreement, whether written or oral.

D. Prior Approval. This Agreement shall not be binding upon either party until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

E. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

F. Sovereign Immunity. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and Commission expressly reserve sovereign immunity by entering into this Agreement and the Sponsor expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereign or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for any party, except that any ambiguity as to immunity shall be construed in favor of immunity.

G. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

H. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the Sponsor of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the Commission.

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8. Signatures. The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

TOWN OF ROLLING HILLS

Jon Maines, Mayor

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner,
Assistant Attorney General

Date

PROJECT AGREEMENT
EDEN VALLEY IRRIGATION DISTRICT SYSTEM IMPROVEMENTS 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT, SWEETWATER COUNTY, Wyoming, a duly organized irrigation and drainage district existing under the laws of that state [SPONSOR], whose address is: Eden Valley Irrigation and Drainage District, P.O. Box 174, Farson, WY 82932.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Eden Valley Irrigation District System Improvements 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of canal lining, sandtrap structure; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED FIFTY-ONE THOUSAND DOLLARS (\$351,000.00) which will be a grant of not more than THREE HUNDRED FIFTY-ONE THOUSAND DOLLARS (\$351,000.00) or fifty-four percent (54%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring forty-six percent (46%) of the PROJECT funds from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall submit to the COMMISSION evidence of the SPONSOR's authorization to participate in the PROJECT and approval of the funding package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

E. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR will have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT.

F. Once the plans and specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

G. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its

advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

H. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

- (1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and
- (2) The SPONSOR'S proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101, *et seq.*, and to determine the lowest responsible bid.

I. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

J. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

K. Fifty-four percent (54%) of each eligible billing request received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed fifty-four percent (54%) of total eligible PROJECT costs. The SPONSOR

is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

L. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

M. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

N. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

O. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the economic life of the project. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

P. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2024, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

Q. The grant is subject to the following conditions regarding management of the completed PROJECT, restrictions on the sale of water, and restrictions on the sale of the PROJECT:

(1) Without prior written approval of the COMMISSION and either the State Engineer or Board of Control, there shall be no lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than agricultural water supply use as determined by the COMMISSION in its sole and absolute discretion. If such a transaction is approved, the SPONSOR shall receive forty-six percent (46%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than agricultural water supply use and the State of Wyoming shall receive fifty-four percent (54%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT. If the SPONSOR has any pre-existing contracts or commitments for the sale of water which might apply to these conditions, the SPONSOR shall submit evidence of such commitments to the COMMISSION within ten (10) days of the execution of this Agreement for review and declaration of exemption.

(2) There shall be no lease, sale, assignment or transfer of ownership of the PROJECT without prior written approval of the COMMISSION. If this condition is met, the SPONSOR shall receive forty-six percent (46%) and the State of Wyoming shall receive fifty-four percent (54%) of the revenues generated by the lease, sale, assignment or transfer of ownership of the PROJECT. Before the SPONSOR may lease, sell, assign or transfer ownership of the PROJECT, the State of Wyoming shall be given a one (1) year first right of refusal option to purchase the SPONSOR's interest in the PROJECT for an amount equal to the principal, interest, maintenance and replacement costs incurred by the SPONSOR at the date the option is exercised.

(3) The SPONSOR may purchase the position of the State of Wyoming, as described in subsections (1) and (2) of this Section, for the amount of the grant described in Section 4.A. of this Agreement plus the interest that would have accrued on the grant amount in the Water Development Account from the date the PROJECT was substantially completed as defined by the COMMISSION. The State Auditor shall determine the interest that would have accrued on the grant amount.

R. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

S. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision in part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of eight (8) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the parties may renegotiate the terms affected by the severance.

L. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves

governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT

Ed Burton, President

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler Renner,
Assistant Attorney General

Date

PROJECT AGREEMENT
WIND RIVER INTER-TRIBAL COUNCIL REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the BUSINESS COUNCIL OF THE EASTERN SHOSHONE INDIAN TRIBE AND BUSINESS COUNCIL OF THE NORTHERN ARAPAHO INDIAN TRIBE, FREMONT COUNTY, Wyoming, duly organized tribes existing under the laws of that state [SPONSOR], whose addresses are: Business Council of the Eastern Shoshone Indian Tribe, P.O. Box 538, Fort Washakie, WY 82514, and Business Council of the Northern Arapaho, P.O. Box 396, Fort Washakie, WY 82514.

2. Delegation of Authority. The Eastern Shoshone Tribe and the Northern Arapaho Tribe, by their signatures on this Agreement, delegate the authority and responsibility to manage the performance of this Agreement to the WATER RESOURCES CONTROL BOARD OF THE WIND RIVER RESERVATION, created pursuant to the authority of the WIND RIVER WATER CODE, and authorize the COMMISSION to deal with that single joint tribal entity for the ongoing management of this Agreement, without the necessity of consulting with the two Business Councils. The two Business Councils agree that they shall be bound by the decisions and actions of the WATER RESOURCES CONTROL BOARD, and that the COMMISSION shall have no obligation to question any decision or action of the BOARD to determine whether or not it is authorized by the Business Councils, the Water Code or other Tribal law.

3. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Wind River Inter-Tribal Council Rehabilitation 2019 [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of canal laterals, control structures; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

4. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

5. Special Provisions.

A. A sum not to exceed NINE HUNDRED TWENTY-NINE THOUSAND DOLLARS (\$929,000.00) which will be a grant of not more than NINE HUNDRED TWENTY-NINE THOUSAND DOLLARS (\$929,000.00) or fifty percent (50%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring fifty percent (50%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the Eastern Shoshone Business Council, and the Northern Arapaho Business Council approving

participation in this project, accepting the terms of this Agreement, and authorizing the Chairmen or Co-Chairs to execute this Agreement.

C. The SPONSOR shall make arrangements and enter into an agreement with the Bureau of Indian Affairs (BIA) to collect an adequate assessment from users of the irrigation PROJECT, or other funding sources, for the repair and maintenance of the PROJECT facilities.

D. In the event of a dispute between the contract parties, unexpended funds may be withheld until the dispute is resolved.

E. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

F. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The

SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

G. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the plans and specifications require modifications or it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR will have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT.

H. Once the plans and specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

I. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Acquisition from the BIA, allotment holders, or any other entity where SPONSOR does not have legal jurisdiction, or in any other circumstance where necessary, all access rights, licenses, permits or other authority as may be required to complete this PROJECT;
- (2) Environmental assessments;
- (3) Section 401, Clean Water Act, Certification;
- (4) Section 404, Clean Water Act, Permit;
- (5) Incidental work required to prepare the PROJECT for construction; and
- (6) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (6) above.

J. Prior to advertising for bids, the SPONSOR shall:

- (1) Provide to the COMMISSION with certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured; and
- (2) The SPONSOR'S proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101, *et seq.*, and to determine the lowest responsible bid.

K. The SPONSOR shall not issue its advertisement for bids unless and until the COMMISSION has received the submissions required under Sections 4.I and 4.J. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

L. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be delivered to a representative of the SPONSOR who is designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

M. Fifty percent (50%) of each eligible billing request received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed fifty percent (50%) of total eligible PROJECT costs. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

N. The SPONSOR shall use funds disbursed by the COMMISSION within thirty (30) days of receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

O. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment.

P. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

Q. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established routes, only for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the economic life of the project. COMMISSION agrees to give the SPONSOR twenty-four (24) hours advance notice of any such inspection, and shall give the SPONSOR the opportunity to send a representative to accompany any such inspection at the discretion of the SPONSOR. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

R. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the

PROJECT no later than the reversion date of July 1, 2024, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

S. The grant is subject to the following conditions regarding management of the completed PROJECT, restrictions on the sale of water, and restrictions on the sale of the PROJECT:

(1) Without prior written approval of the COMMISSION and either the State Engineer or Board of Control, there shall be no lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than agricultural water supply use as determined by the COMMISSION in its sole and absolute discretion. If such a transaction is approved, the SPONSOR shall receive fifty percent (50%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than agricultural water supply use and the State of Wyoming shall receive fifty percent (50%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT. If the SPONSOR has any pre-existing contracts or commitments for the sale of water which might apply to these conditions, the SPONSOR shall submit evidence of such commitments to the COMMISSION within ten (10) days of the execution of this Agreement for review and declaration of exemption.

(2) There shall be no lease, sale, assignment or transfer of ownership of the PROJECT without prior written approval of the COMMISSION. If this condition is met, the SPONSOR shall receive fifty percent (50%) and the State of Wyoming shall receive fifty percent (50%) of the revenues generated by the lease, sale, assignment or transfer of ownership of the PROJECT. Before the SPONSOR may lease, sell, assign or transfer ownership of the PROJECT, the State of Wyoming shall be given a one (1) year first right of refusal option to purchase the SPONSOR's interest in the PROJECT for an amount equal to the principal, interest, maintenance and replacement costs incurred by the SPONSOR at the date the option is exercised.

(3) The SPONSOR may purchase the position of the State of Wyoming, as described in subsections (1) and (2) of this Section, for the amount of the grant described in Section 4.A. of this Agreement plus the interest that would have accrued on the grant amount in the Water Development Account from the date the PROJECT was substantially completed as defined by the COMMISSION. The State Auditor shall determine the interest that would have accrued on the grant amount.

T. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within ninety (90) days after submitting written notice to the defaulting party. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

U. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact

amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

6. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law/Venue. The parties agree that this Agreement shall be governed and interpreted according to federal laws and regulations, and any other applicable laws and regulations. In the event a dispute arises under this Agreement, jurisdiction will be in a court of competent jurisdiction.

C. Alternative Dispute Resolution. If the parties are unable to negotiate an amicable resolution of any dispute within a reasonable period of time, deemed to be not more than sixty (60) days unless otherwise agreed by the parties, either party may refer the matter in dispute to non-binding mediation by providing written notice to the other party. Within thirty (30) days of the receipt of such notice, the parties shall by mutual agreement select a mediator to conduct mediation proceedings. If the parties can agree within such period upon the nomination of a single mediator for the dispute, such person shall serve as sole mediator of the dispute. If the parties do not agree upon the nomination of a single mediator within such thirty (30) day period, each party shall nominate a mediator by serving on the other party a notice identifying its mediator within seven (7) days after the 30th day, and those two mediators shall nominate the third to serve with them within fourteen (14) days after the date the latter of them is nominated. The mediator(s) shall be qualified by training and experience to mediate such a dispute.

If the parties are able to agree upon a single mediator, they shall each be responsible for payment of one-half (1/2) of the required fees and costs for the mediator's services. If they cannot agree, and three mediators are required, each party shall pay the costs of the mediator selected by each of them, and shall also pay one-half (1/2) of the fees and costs of the third mediator who is nominated by the other two mediators.

The mediator(s) shall, unless otherwise agreed to by the parties, have sixty (60) days after their appointment to mediate the dispute between the parties, providing each party a fair opportunity to present its side of the dispute, together with any documents or other evidence relevant to resolution of the dispute. If the dispute is not successfully mediated within the sixty (60) day period, the mediator(s) shall prepare a written recommendation for resolution of the dispute. The parties shall have ten (10) days to accept the mediator(s) recommendation. Completion of these mediation procedures shall be a condition precedent to filing suit for any dispute arising under this Agreement.

D. Audit and Access to Records. Upon reasonable notice and request, the COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement, but were not already provided to the COMMISSION pursuant to this Agreement.

E. Availability of Funds. Each payment obligation of the parties is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance by either party, the Agreement may be terminated by either party at the end of the period for which the funds are

available. The parties shall notify each other at the earliest possible time of the services which will or may be affected by a shortage of funds on the part of either party. No penalty shall accrue to either party in the event this provision is exercised, and neither party shall be obligated or liable for any future payments due or for any damages as a result of termination under this section. This provision shall not be construed to permit either party to terminate this Agreement in order to acquire similar services from another party.

F. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and tribal laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage.

G. Entirety of Agreement. This Agreement, consisting of nine (9) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

H. Indemnification. Each party to this Agreement shall be responsible for any liability arising from its own conduct. Neither party agrees to insure, defend or indemnify the other.

I. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

J. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

K. Nondiscrimination. The SPONSOR shall comply with the Civil Rights Act of 1964, the Wyoming Fair Employment Practices Act (Wyo. Stat. § 27-9-105, *et seq.*), the Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, *et seq.*, and the Age Discrimination Act of 1975 and/or any properly promulgated rules and regulations thereto and shall not discriminate against any individual on the grounds of age, sex, color, race, religion, national origin, or disability in connection with the performance under this Agreement. Nothing in this paragraph will obligate the Tribe to comply with any law which by its terms does not apply to Indian tribes or has been held by a court of competent jurisdiction not to apply to Indian tribes nor will it prevent SPONSOR from providing Native American hiring preference.

L. Prior Approval. Except as specifically provided herein, this Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

M. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the parties may renegotiate the terms affected by the severance.

N. Sovereign Immunity. Except as noted herein, the State of Wyoming, the COMMISSION, the SPONSOR, the Tribe and its agency expressly reserve sovereign immunity by entering into this Agreement and specifically retain immunity and all defenses available to them as sovereigns pursuant to Wyo. Stat. § 1-39-104(a) and all applicable law. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

O. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

P. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

Q. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

R. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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7. Signatures. The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

| | |
|-------|-------|
| _____ | _____ |
| Chair | Date |

| | |
|-----------|-------|
| _____ | _____ |
| Secretary | Date |

**BUSINESS COUNCIL OF THE EASTERN SHOSHONE INDIAN TRIBE AND
BUSINESS COUNCIL OF THE NORTHERN ARAPAHO INDIAN TRIBE**

| | |
|--|-------|
| _____ | _____ |
| Chairman Eastern Shoshone Tribe Business Council | Date |

| | |
|--|-------|
| _____ | _____ |
| Chairman Northern Arapaho Tribe Business Council | Date |

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

| | |
|--|-------|
| _____ | _____ |
| Tyler M. Renner, Assistant Attorney General | Date |

PROJECT AGREEMENT
AUSTIN-WALL RESERVOIR REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the AUSTIN-WALL IRRIGATION DISTRICT, UINTA COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: AUSTIN-WALL IRRIGATION DISTRICT, 353 Eagle Lane, Lyman, WY 82937.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Austin-Wall Reservoir Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of the replacement of reservoir outlet works; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED SEVENTY-FOUR THOUSAND DOLLARS (\$374,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than TWO HUNDRED FIFTY THOUSAND FIVE HUNDRED EIGHTY DOLLARS (\$250,580.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.

(2) A loan to the SPONSOR of not more than ONE HUNDRED TWENTY THREE THOUSAND FOUR HUNDRED TWENTY DOLLARS (\$123,420.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of thirty (30) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR's jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR's annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues received or due under the assessment roll of the SPONSOR created as required by

Wyoming statutes together with all the SPONSOR'S right, title, and interest the SPONSOR now has or may hereafter acquire in and to any of those revenues together with all proceeds of it, in an amount sufficient to meet the SPONSOR's obligations as outlined in Section 4 of this Agreement. Such promissory note, dated _____, and security agreement, dated _____, are attached to and incorporated into this Agreement by this reference.

D. When the COMMISSION determines that PROJECT related benefits accrue to the SPONSOR, the term of the loan shall commence. The SPONSOR understands that the COMMISSION's determination of when benefits accrue may not coincide with the determination of substantial completion. As soon as possible thereafter the total amount of the loan shall be determined. The first loan payment will be due on December first immediately following the one year anniversary of the date benefits accrue. All subsequent payments will also be due on December first, except the final (thirtieth) payment, which will be due on the thirtieth anniversary of the date benefits accrue. Interest will be charged beginning with the date benefits accrue to the SPONSOR. Therefore the first loan payment will include an interest accrual period which is greater than one (1) year which will make this first payment larger than any of the subsequent payments.

E. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

F. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and

monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.

(8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

G. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR shall have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT. If the SPONSOR elects to terminate the PROJECT, the COMMISSION shall determine the total amount of loan funds disbursed prior to termination and the term of the loan will commence.

H. Once the plans and the specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

I. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

J. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

(1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and

(2) The SPONSOR's proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101 *et seq.*, and to determine the lowest responsible bid.

K. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

L. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

M. Sixty-seven percent (67%) of each eligible billing request received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds and thirty-three percent (33%) shall be from loan funds. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

N. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

O. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

P. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

Q. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the security agreement contemplated by this Agreement, for as long as there remains any balance thereof unpaid. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

R. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2024, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

S. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If this Agreement is terminated, the principal amount of the loan is set, and the SPONSOR shall begin repayment on the first anniversary of the date of termination or continue as scheduled if repayment has already begun. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR, in addition to being required to repay the loan, shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

T. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by

a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of eight (8) pages; the Promissory Note dated _____, consisting of two (2) pages; and the Security Agreement, dated _____, consisting of four (4) pages, represent the entire and integrated Agreement between the parties and supersede all prior negotiations, representations, and agreements, whether written or oral. In the event of a conflict or inconsistency between the language of this Agreement and the language of any attachment or document incorporated by reference, the language of this Agreement shall control.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the COMMISSION. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance, or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and either party may renegotiate the terms affected by the severance.

L. Sovereign Immunity. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign

immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Contract shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition in this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart when executed and delivered shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. Signatures. The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

AUSTIN-WALL IRRIGATION DISTRICT

Richard Isom, President

Date

Jim Eyre, Board Member

Date

ATTORNEY GENERAL'S OFFICE APPROVAL AS TO FORM

Tyler M. Renner,
Assistant Attorney General

Date

PROJECT AGREEMENT
BIG HORN CANAL WASTEWAY REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the BIG HORN CANAL IRRIGATION DISTRICT, BIG HORN COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: BIG HORN CANAL IRRIGATION DISTRICT, P.O. Box 238, Basin, WY 82410.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Big Horn Canal Wasteway Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of replacement wasteway/check structure; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed NINE HUNDRED SIXTY THOUSAND DOLLARS (\$960,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than SIX HUNDRED FORTY-THREE THOUSAND TWO HUNDRED DOLLARS (\$643,200.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.

(2) A loan to the SPONSOR of not more than THREE HUNDRED SIXTEEN THOUSAND EIGHT HUNDRED DOLLARS (\$316,800.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of thirty (30) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues received or due under the assessment roll of the SPONSOR created as required by

PROJECT AGREEMENT
BLUFF/UPPER BLUFF SYSTEM IMPROVEMENTS 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the BLUFF/UPPER BLUFF IRRIGATION DISTRICT, WASHAKIE COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: BLUFF/UPPER BLUFF IRRIGATION DISTRICT, P.O. Box 923, Worland, WY 82401.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Bluff/Upper Bluff System Improvements 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of replacement pumps, structure repairs; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED SIXTY-SIX THOUSAND DOLLARS (\$366,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than TWO HUNDRED FORTY-FIVE THOUSAND TWO HUNDRED TWENTY DOLLARS (\$245,220.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.

(2) A loan to the SPONSOR of not more than FORTY-FIVE THOUSAND SEVEN HUNDRED EIGHTY DOLLARS (\$45,780.00) or twelve and fifty-one hundredths percent (12.51%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues received or due under the assessment roll of the SPONSOR created as required by

PROJECT AGREEMENT
DRY CREEK IRRIGATION DISTRICT REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the DRY CREEK IRRIGATION DISTRICT, LINCOLN COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: DRY CREEK IRRIGATION DISTRICT, 862 State Highway 236, Afton, WY 83110.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Dry Creek Irrigation District Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of replacement lateral pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed ONE MILLION SIX HUNDRED TWENTY-EIGHT THOUSAND DOLLARS (\$1,628,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than ONE MILLION NINETY THOUSAND SEVEN HUNDRED SIXTY DOLLARS (\$1,090,760.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than FIVE HUNDRED THIRTY-SEVEN THOUSAND TWO HUNDRED FORTY DOLLARS (\$537,240.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR's jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR's annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues

**PROJECT AGREEMENT
HEART MOUNTAIN IRRIGATION DISTRICT RATTLESNAKE LINER
REPLACEMENT PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the HEART MOUNTAIN IRRIGATION DISTRICT, PARK COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: HEART MOUNTAIN IRRIGATION DISTRICT, 1206 Rd 18, Powell, WY 82435.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Heart Mountain Irrigation District Rattlesnake Liner Replacement Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of a replacement canal liner; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed TWO MILLION SEVEN HUNDRED THOUSAND DOLLARS (\$2,700,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than ONE MILLION EIGHT HUNDRED NINE THOUSAND DOLLARS (\$1,809,000.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than EIGHT HUNDRED NINETY-ONE THOUSAND DOLLARS (\$891,000.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of forty (40) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues

PROJECT AGREEMENT
INTERSTATE DIVERSION STRUCTURE REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the INTERSTATE IRRIGATION AND RESERVOIR IRRIGATION DISTRICT, SWEETWATER COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: INTERSTATE IRRIGATION AND RESERVOIR IRRIGATION DISTRICT, HCR 65 BOX 767, 2919 COUNTY RD 1, MCKINNON, WY 82938.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Interstate Diversion Structure Rehabilitation 2019 PROJECT [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of a replacement diversion structure; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed FOUR HUNDRED TWENTY THOUSAND DOLLARS (\$420,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than TWO HUNDRED EIGHTY-ONE THOUSAND FOUR HUNDRED DOLLARS (\$281,400.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than ONE HUNDRED THIRTY-EIGHT THOUSAND SIX HUNDRED DOLLARS (\$138,600.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

PROJECT AGREEMENT
LAKEVIEW CARTER CREEK SIPHON/SPILLWAY 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the LAKEVIEW IRRIGATION DISTRICT, PARK COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: LAKEVIEW IRRIGATION DISTRICT, P.O. Box 1418, Cody, WY 82414.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Lakeview Carter Creek Siphon/Spillway 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of a siphon/spillway structure; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED FIFTY-ONE THOUSAND DOLLARS (\$351,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than TWO HUNDRED THIRTY-FIVE THOUSAND ONE HUNDRED SEVENTY DOLLARS (\$235,170.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.

(2) A loan to the SPONSOR of not more than ONE HUNDRED FIFTEEN THOUSAND EIGHT HUNDRED THIRTY DOLLARS (\$115,830.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues received or due under the assessment roll of the SPONSOR created as required by

**PROJECT AGREEMENT
WHEATLAND IRRIGATION DISTRICT TUNNEL DAM
REHABILITATION 2019 PROJECT**

MSC No._____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the WHEATLAND IRRIGATION DISTRICT, PLATTE COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: WHEATLAND IRRIGATION DISTRICT, P.O. BOX 727, Wheatland, WY 82201.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Wheatland Irrigation District Tunnel Dam Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design for rehabilitation of a diversion dam structure; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed THREE HUNDRED EIGHTY-EIGHT THOUSAND DOLLARS (\$388,000.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than TWO HUNDRED FIFTY-NINE THOUSAND NINE HUNDRED SIXTY DOLLARS (\$259,960.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than ONE HUNDRED TWENTY-EIGHT THOUSAND FORTY DOLLARS (\$128,040.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of fifty (50) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR's jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR's annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

**PROJECT AGREEMENT
CODY CANAL REHABILITATION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the CODY CANAL IRRIGATION DISTRICT, PARK COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: P.O. Box 1418, Cody, WY 82414.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Cody Canal Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of lateral pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A grant not to exceed THREE HUNDRED FORTY-FOUR THOUSAND DOLLARS (\$344,000.00) or one hundred percent (100%) of the materials cost for the purchase of PROJECT materials as supported by vendor invoices and approved by the COMMISSION, whichever is less, shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The SPONSOR is responsible for securing the balance of the PROJECT budget from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide to the COMMISSION evidence of its ability to provide services, labor and equipment, or financing for its share of PROJECT development costs. The SPONSOR shall also provide a resolution demonstrating its intent to construct the PROJECT.

C. The SPONSOR is responsible for hiring a professional engineering consultant, registered in Wyoming to design the improvements, to compile materials bid documents, to monitor construction activities, to provide construction management services, and to maintain an inventory of materials. The SPONSOR is responsible for the design, permit procurement, PROJECT land procurement, construction engineering, and construction of the PROJECT.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to pay materials costs supported by vendor invoices. The SPONSOR shall be responsible to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above.

Requests for prior approval of necessary and reasonable materials costs shall be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

E. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect, and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.

F. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR shall have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT.

G. Once the plans and specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall so inform the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

H. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

I. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

- (1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and
- (2) The SPONSOR's proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101 *et. seq.*, and to determine the lowest responsible bid.

J. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

K. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

L. Disbursements from the COMMISSION authorized under the terms of this Agreement shall be for the purchase of PROJECT materials supported by vendor invoices as approved by the COMMISSION. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION from other sources.

M. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to

and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

N. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

O. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

P. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the economic life of the PROJECT. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

Q. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2024, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

R. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

S. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms “hereof,” “hereunder,” “herein,” and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state, and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of seven (7) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The SPONSOR agrees that no health or hospitalization benefits, workers’ compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR’s agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

L. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Contract shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition in this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

CODY CANAL IRRIGATION DISTRICT

Dennis Reed, President

Date

Mary Helen Reed, Secretary

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner,
Assistant Attorney General

Date

**PROJECT AGREEMENT
DEAVER IRRIGATION DISTRICT REHABILITATION 2019 PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the DEAVER IRRIGATION DISTRICT, BIG HORN COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: PO Box 205, Deaver, WY 82421.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Deaver Irrigation District Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of lateral pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A grant not to exceed FOUR HUNDRED TWENTY-FOUR THOUSAND DOLLARS (\$424,000.00) or one hundred percent (100%) of the materials cost for the purchase of PROJECT materials as supported by vendor invoices and approved by the COMMISSION, whichever is less, shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The SPONSOR is responsible for securing the balance of the PROJECT budget from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide to the COMMISSION evidence of its ability to provide services, labor and equipment, or financing for its share of PROJECT development costs. The SPONSOR shall also provide a resolution demonstrating its intent to construct the PROJECT.

C. The SPONSOR is responsible for hiring a professional engineering consultant, registered in Wyoming to design the improvements, to compile materials bid documents, to monitor construction activities, to provide construction management services, and to maintain an inventory of materials. The SPONSOR is responsible for the design, permit procurement, PROJECT land procurement, construction engineering, and construction of the PROJECT.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to pay materials costs supported by vendor invoices. The SPONSOR shall be responsible to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above.

PROJECT AGREEMENT
LOVELL MONCUR LATERAL REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the LOVELL IRRIGATION DISTRICT, BIG HORN COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: 1148 Road 18, Lovell, WY 82431.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Lovell Moncur Lateral Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of lateral pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A grant not to exceed ONE MILLION SIX HUNDRED SEVENTY THOUSAND DOLLARS (\$1,670,000.00) or one hundred percent (100%) of the materials cost for the purchase of PROJECT materials as supported by vendor invoices and approved by the COMMISSION, whichever is less, shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The SPONSOR is responsible for securing the balance of the PROJECT budget from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide to the COMMISSION evidence of its ability to provide services, labor and equipment, or financing for its share of PROJECT development costs. The SPONSOR shall also provide a resolution demonstrating its intent to construct the PROJECT.

C. The SPONSOR is responsible for hiring a professional engineering consultant, registered in Wyoming to design the improvements, to compile materials bid documents, to monitor construction activities, to provide construction management services, and to maintain an inventory of materials. The SPONSOR is responsible for the design, permit procurement, PROJECT land procurement, construction engineering, and construction of the PROJECT.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to pay materials costs supported by vendor invoices. The SPONSOR shall be responsible to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above.

PROJECT AGREEMENT
MIDVALE IRRIGATION DISTRICT REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the MIDVALE IRRIGATION DISTRICT, FREMONT COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: 305 Third Street, Pavillion, WY 82523.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Midvale Irrigation District Rehabilitation 2019 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of lateral pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A grant not to exceed FIVE HUNDRED FIFTY-NINE THOUSAND DOLLARS (\$559,000.00) or one hundred percent (100%) of the materials cost for the purchase of PROJECT materials as supported by vendor invoices and approved by the COMMISSION, whichever is less, shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The SPONSOR is responsible for securing the balance of the PROJECT budget from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide to the COMMISSION evidence of its ability to provide services, labor and equipment, or financing for its share of PROJECT development costs. The SPONSOR shall also provide a resolution demonstrating its intent to construct the PROJECT.

C. The SPONSOR is responsible for hiring a professional engineering consultant, registered in Wyoming to design the improvements, to compile materials bid documents, to monitor construction activities, to provide construction management services, and to maintain an inventory of materials. The SPONSOR is responsible for the design, permit procurement, PROJECT land procurement, construction engineering, and construction of the PROJECT.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to pay materials costs supported by vendor invoices. The SPONSOR shall be responsible to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above.

PROJECT AGREEMENT
SHOSHONE IRRIGATION DISTRICT REHABILITATION 2019 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the SHOSHONE IRRIGATION DISTRICT, PARK COUNTY, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: SHOSHONE IRRIGATION DISTRICT, 337 East 1st Street, Powell, WY 82435.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Shoshone Irrigation District Rehabilitation 2019 [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of lateral pipelines, structures; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A grant not to exceed ONE HUNDRED EIGHTY-ONE THOUSAND DOLLARS (\$181,000.00) or one hundred percent (100%) of the materials cost for the purchase of PROJECT materials as supported by vendor invoices and approved by the COMMISSION, whichever is less, shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The SPONSOR is responsible for securing the balance of the PROJECT budget from other sources.

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide to the COMMISSION evidence of its ability to provide services, labor and equipment, or financing for its share of PROJECT development costs. The SPONSOR shall also provide a resolution demonstrating its intent to construct the PROJECT.

C. The SPONSOR is responsible for hiring a professional engineering consultant, registered in Wyoming to design the improvements, to compile materials bid documents, to monitor construction activities, to provide construction management services, and to maintain an inventory of materials. The SPONSOR is responsible for the design, permit procurement, PROJECT land procurement, construction engineering, and construction of the PROJECT.

D. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to pay materials costs supported by vendor invoices. The SPONSOR shall be responsible to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above.

**AMENDMENT ONE TO PROJECT AGREEMENT
EDEN VALLEY FARSON LATERAL REHABILITATION PROJECT**

1. Parties. This Amendment is made and entered into by and between the State of Wyoming, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT, Sweetwater County, Wyoming, a duly organized irrigation and drainage district existing under the laws of that state [SPONSOR], whose address is: EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT, P.O. Box 174, Farson, WY 82932.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Project Agreement between the COMMISSION and the SPONSOR. The purpose of this Amendment is to effectuate 2019 Wyo. Sess. Laws, modifying the PROJECT budget by increasing the grant appropriation, adding a loan appropriation, modifying engineering contract changes, modifying eligible payments, extending the reversion date and adding loan requirements.

The original Project Agreement, dated August 11, 2016, was for the design, permit procurement, project land procurement, construction engineering and construction of water canal system improvements; and appurtenances necessary to make the PROJECT function in the manner intended.

3. Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto [Effective Date], and shall remain in full force and effect through the term of this Project Agreement, as amended, unless terminated at an earlier date pursuant to the provisions of the Project Agreement, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. **PROJECT Loan and Grant.** The PROJECT funding as set forth in Section 4.A. of the original Project Agreement is hereby amended to read as follows:

4.A. The STATE OF WYOMING has appropriated from the Water Development Account created by Wyo. Stat. § 41-2-124 (a)(ii), to the COMMISSION, a sum not to exceed THREE MILLION TWO HUNDRED SEVENTY-SIX THOUSAND DOLLARS (\$3,276,000.00) which will be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than THREE MILLION SEVENTY-SIX THOUSAND DOLLARS (\$3,076,000.00) or fifty-eight and four hundredths percent (58.04%) of the actual development costs, whichever is less;

(2) A loan to the SPONSOR of not more than TWO HUNDRED THOUSAND DOLLARS (\$200,000.00) or three and seventy-seven hundredths percent (3.77%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4.0%).

B. **Engineering Contract Changes.** The list of conditions as described in Section 4.E. of the original Project Agreement is hereby amended to read as follows:

4.E. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

(1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.

- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Cause the SPONSOR'S ENGINEER to provide to the COMMISSION a summary of bids received.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and require that the SPONSOR'S ENGINEER submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said examination shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, the SPONSOR shall submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer's or contractor's contract.

C. Eligible Payments. Section 4.L. of the original Project Agreement is hereby amended to read as follows:

4.L. Fifty-eight and four hundredths percent (58.04%) of each eligible billing requests received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds and three and seventy-seven hundredths percent (3.77%) shall be from loan funds. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed fifty-eight and four hundredths percent (58.04%) of eligible PROJECT costs and the final loan amount provided by the COMMISSION will not exceed three and seventy-seven hundredths percent (3.77%) of eligible PROJECT costs. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

D. Reversion of Unexpended Funds. The reversion date for unexpended funds as set forth in Section 4.Q. of the original Project Agreement is hereby amended to read as follows:

4.Q. The SPONSOR agrees that it will complete the PROJECT and that it shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2021 and shall have settled all claims and paid all PROJECT expenses by that date. No funds will be paid by the COMMISSION after the reversion date specified and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

E. PROJECT Loan Requirements. Sections 4.T, 4.U and 4.V below are added to the original Project Agreement, following Section 4.S., as follows:

4.T. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR's jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR's annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

4.U. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues received or due under the assessment roll of the SPONSOR created as required by Wyoming statutes together with all the SPONSOR'S right, title, and interest the SPONSOR now has or may hereafter acquire in and to any of those revenues together with all proceeds of it, in an amount sufficient to meet the SPONSOR's obligations as outlined in Section 4 of this Agreement. Such promissory note, dated _____, and security agreement, dated _____, are attached to and incorporated into this Agreement by this reference.

4.V. When the COMMISSION determines that PROJECT related benefits accrue to the SPONSOR, the term of the loan shall commence. The SPONSOR understands that the COMMISSION's determination of when benefits accrue may not coincide with the determination of substantial completion. As soon as possible thereafter the total amount of the loan shall be determined. The first loan payment will be due on December first immediately following the one (1) year anniversary of the date benefits accrue. All subsequent payments will also be due on December first, except the final (twentieth) payment, which will be due on the twentieth anniversary of the date benefits accrue. Interest will be charged beginning with the date benefits accrue to the SPONSOR. Therefore the first loan payment will include an interest accrual period which is greater than one (1) year which will make this first payment larger than any of the subsequent payments.

5. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Project Agreement between the COMMISSION and the SPONSOR, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the SPONSOR of an originally signed counterpart of this Amendment by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. General Provisions.

A. Entirety of Agreement. The original Project Agreement, consisting of seven (7) pages; this Amendment One consisting of four (4) pages; the Promissory Note dated _____, consisting of two (2) pages; and the Security Agreement, dated _____, consisting of four (4) pages, represent the entire and integrated agreement between the parties and supersede all prior and contemporaneous negotiations, representations and agreements, whether written or oral.

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7. **Signatures.** The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT

Ed Burton, President

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

**AMENDMENT ONE TO BASIN STATES PROGRAM PROJECT AGREEMENT
EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT
F2, F3 and F5 LATERALS**

1. Parties. This Amendment is made and entered into by and between the State of Wyoming, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT [EVIDD], Sweetwater County, Wyoming, a duly organized irrigation and drainage district existing under the laws of that state [SPONSOR], whose address is: Eden Valley Irrigation and Drainage District, P.O. Box 174, Farson, WY 82932.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Project Agreement between the COMMISSION and the SPONSOR. The purpose of this Amendment is to effectuate the original Project Agreement, dated August 26, 2016. On March 4, 2016, the COMMISSION authorized a Wyoming Basin States Construction Project Grant to the SPONSOR for the design, construction and operation of the EVIDD F2, F3 and F5 Laterals [PROJECT], a Wyoming Basin States Program construction project funded through Title II, Colorado River Basin Salinity Control Program, CFDA No. 15.509. The purpose of this Amendment is to extend the reversion date from April 30, 2020 to August 31, 2020.

The original Project Agreement, dated August 26, 2016, consists of the following components:

- (a) Design, permit procurement, project land procurement, construction engineering and construction water canal systems improvements; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

3. Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto [Effective Date], and shall remain in full force and effect through the term of this Project Agreement, as amended, unless terminated at an earlier date pursuant to the provisions of the Project Agreement, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. Reversion of Unexpended Funds. The reversion date for unexpended funds as set forth in Section 4.Q. of the original Project Agreement is hereby amended to read as follows:

4.Q. The SPONSOR agrees that it will complete the PROJECT and that it shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of August 31, 2020 and shall have settled all claims and paid all PROJECT expenses by that date. No funds will be paid by the COMMISSION after the reversion date specified and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

5. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Project Agreement between the COMMISSION and the SPONSOR, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the SPONSOR of an originally signed counterpart of this Amendment by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. General Provisions.

A. Entirety of Agreement. The original Project Agreement, consisting of ten (10) pages; and this Amendment One, consisting of three (3) pages, represent the entire and integrated agreement between the parties and supersede all prior and contemporaneous negotiations, representations and agreements, whether written or oral.

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7. **Signatures.** The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

EDEN VALLEY IRRIGATION AND DRAINAGE DISTRICT

Ed Burton, President

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

**AMENDMENT ONE TO PROJECT AGREEMENT
CASPER ZONE 3 IMPROVEMENTS PROJECT**

1. Parties. This Amendment is made and entered into by and between the State of Wyoming, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and CITY OF CASPER, Natrona County, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: CITY OF CASPER, 200 N. David, Casper, 82601.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Project Agreement between the COMMISSION and the SPONSOR. The purpose of this Amendment is to effectuate 2014 Wyo. Sess. Laws, Ch. 100, modifying the PROJECT to the extend reversion date.

The original Project Agreement, dated July 2, 2014, for the design and construction of a transmission pipeline, pumping facilities, storage tank; and appurtenances necessary to make the PROJECT function in the manner intended.

3. Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto [Effective Date], and shall remain in full force and effect through the term of this Project Agreement, as amended, unless terminated at an earlier date pursuant to the provisions of the Project Agreement, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. Reversion of Unexpended Funds. The reversion date for unexpended funds as set forth in Section 4.R. of the original Project Agreement is hereby amended to read as follows:

4.R. The SPONSOR agrees that it will complete the PROJECT and that it shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2020 and shall have settled all claims and paid all PROJECT expenses by that date. No funds will be paid by the COMMISSION after the reversion date specified and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

B. Engineering Contract Changes. The list of conditions as described in Section 4.D. of the original Project Agreement is hereby amended to read as follows:

4.D. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

(1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.

(2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.

(3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.

- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Cause the SPONSOR'S ENGINEER to provide to the COMMISSION a summary of bids received.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and require that the SPONSOR'S ENGINEER submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said examination shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, the SPONSOR shall submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer's or contractor's contract.

5. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Project Agreement between the COMMISSION and the SPONSOR, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the SPONSOR of an originally signed counterpart of this Amendment by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. General Provisions.

A. Entirety of Agreement. The original Project Agreement, consisting of eight (8) pages; and this Amendment One, consisting of three (3) pages, represent the entire and integrated agreement between the parties and supersede all prior and contemporaneous negotiations, representations and agreements, whether written or oral.

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7. **Signatures.** The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

CITY OF CASPER

Charles Powell, Mayor

Date

J. Carter Napier, City Manager

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

**AMENDMENT ONE TO PROJECT AGREEMENT
PINEY & CRUSE CANAL PIPING PROJECT**

1. Parties. This Amendment is made and entered into by and between the State of Wyoming, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and PINEY & CRUSE CREEK DITCH COMPANY IRRIGATION DISTRICT, Sheridan County, Wyoming, a duly organized irrigation district existing under the laws of that state [SPONSOR], whose address is: PINEY & CRUSE CREEK DITCH COMPANY IRRIGATION DISTRICT, 3320 US HWY 87, Sheridan, WY 82801.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Project Agreement between the COMMISSION and the SPONSOR. The purpose of this Amendment is to effectuate 2019 Wyo. Sess. Laws, modifying the PROJECT to extend the reversion date of unexpended Project funds.

The original Project Agreement, dated June 19, 2014, was to implement the provisions of 2014 Wyo. Sess. Laws, Ch. 100, authorizing the design and construction of water canal improvements to the Piney & Cruse Creek Ditch Company irrigation system.

3. Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto [Effective Date], and shall remain in full force and effect through the term of this Project Agreement, as amended, unless terminated at an earlier date pursuant to the provisions of the Project Agreement, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. Reversion of Unexpended Funds. The reversion date for unexpended funds as set forth in Section 4.U. of the original Project Agreement is hereby amended to read as follows:

4.U. The SPONSOR agrees that it will complete the PROJECT and that it shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2022 and shall have settled all claims and paid all PROJECT expenses by that date. No funds will be paid by the COMMISSION after the reversion date specified and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

B. Engineering Contract Changes. The list of conditions as described in Section 4.H. of the original Project Agreement is hereby amended to read as follows:

4.H. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

(1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.

(2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.

(3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.

- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Cause the SPONSOR'S ENGINEER to provide to the COMMISSION a summary of bids received.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and require that the SPONSOR'S ENGINEER submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said examination shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, the SPONSOR shall submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer's or contractor's contract.

5. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Project Agreement between the COMMISSION and the SPONSOR, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the SPONSOR of an originally signed counterpart of this Amendment by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. General Provisions.

A. Entirety of Agreement. The original Project Agreement, consisting of nine (9) pages; and this Amendment One, consisting of three (3) pages, represent the entire and integrated agreement between the parties and supersede all prior and contemporaneous negotiations, representations and agreements, whether written or oral.

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7. **Signatures.** The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

PINEY & CRUSE CREEK DITCH COMPANY IRRIGATION DISTRICT

John Kane, President

Date

Tom Harper, Vice President

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

**PROJECT AGREEMENT
COKEVILLE TRI-DIVERSION STRUCTURE PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the COKEVILLE WATERSHED IMPROVEMENT DISTRICT, Lincoln County, Wyoming, a duly organized watershed improvement district existing under the laws of that state [SPONSOR], whose address is: PO Box 98 Cokeville, WY 83114.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Cokeville Tri-Diversion Structure Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of diversion structure improvements; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The term of the Agreement is from the Effective Date until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed FIVE HUNDRED TWENTY THOUSAND NINE HUNDRED THIRTY-FIVE DOLLARS (\$520,935.00) shall be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than THREE HUNDRED EIGHTY-EIGHT THOUSAND NINE HUNDRED THIRTY-FIVE DOLLARS (\$388,935.00) or sixty-seven percent (67%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than ONE HUNDRED THIRTY-TWO THOUSAND DOLLARS (\$132,000.00) or thirty-three percent (33%) of the actual development costs, whichever is less, for a term of twenty (20) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall petition the District Court and receive an order confirming its report and authorizing the SPONSOR to enter into this Agreement and assess the property within the SPONSOR'S jurisdiction for the costs of the PROJECT, and to assess, as a separate fund, a sum to meet future repair and maintenance costs. The SPONSOR shall deliver to the COMMISSION certified copies of any petitions to the court and orders of the District Court approving the assessment. In addition, the SPONSOR shall provide the COMMISSION copies of the SPONSOR'S annual assessment roll for the PROJECT when it has been prepared, certified and delivered to the County Assessor in compliance with Wyoming law.

C. The SPONSOR shall execute a promissory note, secured by a security agreement that encumbers, pledges and assigns to the COMMISSION revenues

received or due under the assessment roll of the SPONSOR created as required by Wyoming statutes together with all the SPONSOR'S right, title, and interest the SPONSOR now has or may hereafter acquire in and to any of those revenues together with all proceeds of it, in an amount sufficient to meet the SPONSOR's obligations as outlined in Section 4 of this Agreement. Such promissory note, dated _____, and security agreement, dated _____, are attached to and incorporated into this Agreement by this reference.

D. When the COMMISSION determines that PROJECT related benefits accrue to the SPONSOR, the term of the loan shall commence. The SPONSOR understands that the COMMISSION's determination of when benefits accrue may not coincide with the determination of substantial completion. As soon as possible thereafter the total amount of the loan shall be determined. The first loan payment will be due on December first immediately following the one year anniversary of the date benefits accrue. All subsequent payments will also be due on December first, except the final (twentieth) payment, which will be due on the twentieth anniversary of the date benefits accrue. Interest will be charged beginning with the date benefits accrue to the SPONSOR. Therefore the first loan payment will include an interest accrual period which is greater than one (1) year which will make this first payment larger than any of the subsequent payments.

E. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

F. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.

(7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.

(8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

G. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR shall have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT. If the SPONSOR elects to terminate the PROJECT, the COMMISSION shall determine the total amount of loan funds disbursed prior to termination and the term of the loan will commence.

H. Once the plans and the specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

I. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

J. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

- (1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and
- (2) The SPONSOR's proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101 *et seq.*, and to determine the lowest responsible bid.

K. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

L. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

M. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed sixty-seven percent (67%) of eligible PROJECT costs, and the final loan amount provided by the COMMISSION shall not exceed thirty-three percent (33%) of eligible PROJECT costs. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

N. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

O. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

P. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

Q. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the

purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the security agreement contemplated by this Agreement, for as long as there remains any balance thereof unpaid. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

R. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2022, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

S. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If this Agreement is terminated, the principal amount of the loan is set, and the SPONSOR shall begin repayment on the first anniversary of the date of termination or continue as scheduled if repayment has already begun. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR, in addition to being required to repay the loan, shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

T. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are

appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of eight (8) pages; the Promissory Note dated _____, consisting of two (2) pages; and the Security Agreement, dated _____, consisting of four (4) pages, represent the entire and integrated Agreement between the parties and supersede all prior negotiations, representations, and agreements, whether written or oral. In the event of a conflict or inconsistency between the language of this Agreement and the language of any attachment or document incorporated by reference, the language of this Agreement shall control.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the COMMISSION. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance, or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and either party may renegotiate the terms affected by the severance.

L. Sovereign Immunity. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Contract shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition in this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart when executed and delivered shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

COKEVILLE WATERSHED IMPROVEMENT DISTRICT

John Reed III, Chairman

Date

Matthew Teichert, Vice Chairman

Date

Stan Thompson, Treasurer

Date

ATTORNEY GENERAL'S OFFICE APPROVAL AS TO FORM

Tyler M. Renner,
Assistant Attorney General

Date

**AMENDMENT ONE TO PROJECT AGREEMENT
GILLETTE REGIONAL EXTENSIONS 2017 PROJECT**

1. Parties. This Amendment is made and entered into by and between the State of Wyoming, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and CITY OF GILLETTE, Campbell County, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: CITY OF GILLETTE, P.O. Box 3003, Gillette, WY 82717.

2. Purpose of Amendment. This Amendment shall constitute the first amendment to the Project Agreement between the COMMISSION and the SPONSOR. The purpose of this Amendment is to effectuate 2018 and 2019 Wyo. Sess. Laws, modifying the PROJECT description, increase the amount of grant, change the conditions for commencing construction, and provide for an appropriation.

The original Project Agreement, dated August 3, 2017, was to implement the provisions of 2017 Wyo. Sess. Laws, Ch. 75, authorizing the design of transmission pipelines.

3. Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto [Effective Date], and shall remain in full force and effect through the term of this Project Agreement, as amended, unless terminated at an earlier date pursuant to the provisions of the Project Agreement, or pursuant to federal or state statute, rule or regulation.

4. Amendments.

A. **PROJECT Description.** The PROJECT description as set forth in the second and third sentences of Section 2 of the original Project Agreement is hereby amended to read as follows:

The PROJECT consists of the following components:

- (a) Design and construction of pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications when prepared by an engineering or consulting firm selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

B. **PROJECT Loan and Grant.** The PROJECT funding as set forth in Section 4.A. of the original Project Agreement is hereby amended to read as follows:

4.A. The STATE OF WYOMING has appropriated from the Water Development Account created by Wyo. Stat. § 41-2-124 (a)(i), to the COMMISSION, a sum not to exceed TWO MILLION SEVEN HUNDRED FIFTY-THREE THOUSAND SEVEN HUNDRED DOLLARS (\$2,753,700.00) which will be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

(1) A grant to the SPONSOR of not more than THREE HUNDRED SIXTY-ONE THOUSAND EIGHT HUNDRED DOLLARS (\$361,800.00) or sixty-seven percent (67%) of the actual development costs, whichever is less until it is entirely disbursed, followed by:

(2) A grant to the SPONSOR of not more than TWO MILLION THREE HUNDRED NINETY-ONE THOUSAND NINE HUNDRED DOLLARS

(\$2,391,900.00) or sixty-seven percent (67%) of the additional funds needed to complete the PROJECT, whichever is less.

C. Engineering Contract Changes. The list of conditions as described in Section 4.E. of the original Project Agreement is hereby amended to read as follows:

4.E. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Cause the SPONSOR'S ENGINEER to provide to the COMMISSION a summary of bids received.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and require that the SPONSOR'S ENGINEER submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and monitor construction of the PROJECT. Said examination shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.
- (8) Prior to incurring any cost increases to the PROJECT, the SPONSOR shall submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer's or contractor's contract.

D. Special Provisions. This Amendment creates new Sections 4.U., 4.V., 4.W., 4.X., 4.Y., 4.Z. and 4.A.A. in the Project Agreement which reads as follows:

4.U. A total of five (5) municipal use, include stock use, taps will be provided from the existing eight (8) inch and twelve (12) inch diameter treated water pipelines located generally in the vicinity of the City of Gillette's Madison Well Field in Crook County on a first come, first served basis.

4.V. Any additional or existing taps in Crook County located on the eight (8) and twelve (12) inch diameter treated water pipelines shall be used solely for rural domestic use.

4.W. Existing water service agreements in Crook County shall remain in full force and effect.

4.X. Any new water service agreement entered into under this subparagraph shall be similar in form to existing individual and wholesale water

service agreements previously executed prior to 2018 in Crook and Campbell counties.

4.Y. The water rates, connection charges and fees associated with the taps provided under this subparagraph shall be identical to similar rates, charges and fees assessed to city of Gillette water customers, in accordance with city ordinances.

4.Z. Any additional or future water districts formed in the immediate vicinity of the City of Gillette's Madison Well Field shall be able to connect to the eight (8) and twelve (12) inch diameter treated water pipelines. The water districts shall be served as a regional, wholesale water customer. Any new district shall own, operate and maintain their system downstream of a master meter. The city shall own the water pipelines and infrastructure from the eight (8) and twelve (12) inch diameter treated water pipelines up to and including the master meter within the control building. The city has no obligation to plan, finance, develop or construct an additional or future regional extension project in Crook County.

4.A.A. New water customers from the existing eight (8) and twelve (12) inch diameter treated water pipelines shall be limited to forty thousand (40,000) gallons per month for rural domestic use and eighty thousand (80,000) gallons per month for municipal use, including stock used, during the city's high demand months of June, July, August and September.

5. Special Provisions.

A. Same Terms and Conditions. With the exception of items explicitly delineated in this Amendment, all terms and conditions of the original Project Agreement between the COMMISSION and the SPONSOR, including but not limited to sovereign immunity, shall remain unchanged and in full force and effect.

B. Counterparts. This Amendment may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Amendment. Delivery by the SPONSOR of an originally signed counterpart of this Amendment by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. General Provisions.

A. Entirety of Agreement. The original Project Agreement, consisting of eight (8) pages and Amendment One consisting of four (4) pages, represent the entire and integrated agreement between the parties and supersede all prior and contemporaneous negotiations, representations and agreements, whether written or oral.

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7. **Signatures.** The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

WYOMING WATER DEVELOPMENT COMMISSION

| | |
|-----------|-------|
| _____ | _____ |
| Chair | Date |
| _____ | _____ |
| Secretary | Date |

CITY OF GILLETTE

| | |
|---------------------------|-------|
| _____ | _____ |
| Louise Carter-King, Mayor | Date |
| _____ | _____ |
| Karlene Abelseth, Clerk | Date |

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

| | |
|---|-------|
| _____ | _____ |
| Tyler M. Renner, Assistant Attorney General | Date |

PROJECT AGREEMENT
GILLETTE REGIONAL EXTENSIONS PHASE IV – 2018 PROJECT
MSC No. _____

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the CITY OF GILLETTE, CAMPBELL COUNTY, Wyoming, a duly organized municipality existing under the laws of that state [SPONSOR], whose address is: CITY OF GILLETTE, P.O. Box 3003, Gillette, WY 82717.

2. Purpose of Agreement. The purpose of this Agreement is to authorize the design, construction, and operation of the Gillette Regional Extensions Phase IV – 2018 Project [PROJECT]; describe the PROJECT; specify terms for funding the PROJECT; and provide for financing through the COMMISSION from the Wyoming Water Development Account. The PROJECT consists of the following components:

- (a) Design and construction of transmission pipelines; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications as prepared by a registered professional engineer selected by the SPONSOR [SPONSOR'S ENGINEER] will further define the PROJECT components.

3. Term of Agreement. This Agreement is effective when all parties have executed it [Effective Date]. The Term of the Agreement is from the Effective Date until all provisions and conditions set forth herein have been fully satisfied.

4. Special Provisions.

A. A sum not to exceed ONE MILLION FIVE HUNDRED TWELVE THOUSAND ONE HUNDRED NINETY DOLLARS (\$1,512,190.00) or sixty-seven percent (67%) of the actual development costs, whichever is less, shall be disbursed to the SPONSOR according to the terms of this Agreement. The SPONSOR is responsible for acquiring thirty-three percent (33%) of the PROJECT funds from other sources.

B. Prior to the release of funds under this Agreement, the SPONSOR shall submit to the COMMISSION a copy of a resolution approved by the town council authorizing participation in this PROJECT and accepting the financing package.

C. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for design and construction engineering services authorized by the approved contract between the SPONSOR and the SPONSOR'S ENGINEER, to pay for consultants, permits, easements or land essential to construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses must be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

D. A total of five (5) municipal use, include stock use, taps will be provided from the existing eight (8) inch and twelve (12) inch diameter treated water pipelines located generally in the vicinity of the City of Gillette's Madison Well Field in Crook County on a first come, first served basis.

E. Any additional or existing taps in Crook County located on the eight (8) and twelve (12) inch diameter treated water pipelines shall be used solely for rural domestic use.

F. Existing water service agreements in Crook County shall remain in full force and effect.

G. Any new water service agreement entered into under this subparagraph shall be similar in form to existing individual and wholesale water service agreements previously executed prior to 2018 in Crook and Campbell counties.

H. The water rates, connection charges and fees associated with the taps provided under this subparagraph shall be identical to similar rates, charges and fees assessed to City of Gillette water customers, in accordance with city ordinances.

I. Any additional or future water districts formed in the immediate vicinity of the City of Gillette's Madison Well Field shall be able to connect to the eight (8) and twelve (12) inch diameter treated water pipelines. The water districts shall be served as a regional, wholesale water customer. Any new district shall own, operate and maintain their system downstream of a master meter. The city shall own the water pipelines and infrastructure from the eight (8) and twelve (12) inch diameter treated water pipelines up to and including the master meter within the control building. The city has no obligation to plan, finance, develop or construct an additional or future regional extension project in Crook County.

J. New water customers from the existing eight (8) and twelve (12) inch diameter treated water pipelines shall be limited to forty thousand (40,000) gallons per month for rural domestic use and eighty thousand (80,000) gallons per month for municipal use, including stock used, during the city's high demand months of June, July, August and September.

K. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Cause the SPONSOR'S ENGINEER to hold progress review meetings at the ten percent (10%), fifty percent (50%) and ninety percent (90%) levels of completion of the PROJECT plans.
- (4) Comply with all applicable State statutes regarding contractor retainage accounts.
- (5) Provide to the COMMISSION a summary of bids received by the SPONSOR'S ENGINEER.
- (6) Communicate to the COMMISSION all information on all aspects of the PROJECT and cause the SPONSOR'S ENGINEER to submit or make available for inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.
- (7) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to design, inspect and

monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.

(8) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

L. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR will have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT.

M. Once the plans and specifications are in acceptable form and the COMMISSION determines it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall notify the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

N. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) DEQ Permit to Construct;
- (7) Compliance with Governor's Executive Order 2011-5 Sage Grouse Core Population Area Strategy;
- (8) Final Plans and Specifications approval by State Engineer;
- (9) Incidental work required to prepare the PROJECT for construction; and
- (10) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

O. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

(1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and

(2) The SPONSOR'S proposed advertisement for bids from SPONSOR'S ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. § 16-6-101, *et seq.*, and to determine the lowest responsible bid.

P. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

Q. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify all requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the SPONSOR'S ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements from the COMMISSION. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

R. Sixty-seven percent (67%) of each eligible billing request received by the COMMISSION authorized under the terms of this Agreement must be paid from grant funds. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

S. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one (1) year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

T. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the SPONSOR'S ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

U. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

V. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time, along established easements, for the purpose of inspection during construction of the PROJECT described in this Agreement, and during the term of the economic life of the project. The SPONSOR will not be responsible for the safety of such representatives of the COMMISSION while they are on or about the premises.

W. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2023 and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

X. The grant is subject to the following conditions regarding management of the completed PROJECT, restrictions on the sale of water, and restrictions on the sale of the PROJECT:

(1) Without prior written approval of the COMMISSION and either the State Engineer or Board of Control, there shall be no lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than the SPONSOR's purpose defined in the authorizing legislation use as determined by the COMMISSION in its sole and absolute discretion. If such a transaction is approved, the SPONSOR shall receive thirty-three percent (33%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than municipal and rural domestic use and the State of Wyoming shall receive sixty-seven percent (67%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT. If the SPONSOR has any pre-existing contracts or commitments for the sale of water which might apply to these conditions, the SPONSOR shall submit evidence of such commitments to the COMMISSION within ten (10) days of the execution of this Agreement for review and declaration of exemption.

(2) There shall be no lease, sale, assignment or transfer of ownership of the PROJECT without prior written approval of the COMMISSION. If this condition is met, the SPONSOR shall receive thirty-three percent (33%) and the State of Wyoming shall receive sixty-seven percent (67%) of the revenues generated by the lease, sale, assignment or transfer of ownership of the PROJECT. Before the SPONSOR may lease, sell, assign or transfer ownership of the PROJECT, the State of Wyoming shall be given a one (1) year first right of refusal option to purchase the SPONSOR's interest in the PROJECT for an amount equal to the principal, interest, maintenance and replacement costs incurred by the SPONSOR at the date the option is exercised.

(3) The SPONSOR may purchase the position of the State of Wyoming, as described in subsections (1) and (2) of this Section, for the amount of the grant described in Section 4.A. of this Agreement plus the interest that would have accrued on the grant amount in the Water Development Account from the date the PROJECT was substantially completed as defined by the COMMISSION. The State Auditor shall determine the interest that would have accrued on the grant amount.

Y. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

Z. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision in part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of eight (8) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms

of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the Commission. The SPONSOR agrees that no health or hospitalization benefits, workers' compensation, unemployment insurance or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR's agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be in writing either by regular mail or delivery in person at the addresses provided under this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, and approved as to form by the Office of the Attorney General.

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the parties may renegotiate the terms affected by the severance.

L. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and the COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereigns or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to immunity shall be construed in favor of immunity.

M. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

N. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

O. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

6. **Signatures.** The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The Effective Date of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

Chair

Date

Secretary

Date

CITY OF GILLETTE

Louise Carter-King, Mayor

Date

Karlene Abelseth, Clerk

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler Renner,
Assistant Attorney General

Date

**PROJECT AGREEMENT
LEAVITT RESERVOIR EXPANSION PROJECT
MSC No. _____**

1. Parties. The parties to this Agreement are the STATE OF WYOMING, acting by and through the WYOMING WATER DEVELOPMENT COMMISSION [COMMISSION], the agency authorized by law to enter into this Agreement, whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002 and the SHELL VALLEY WATERSHED IMPROVEMENT DISTRICT, BIG HORN COUNTY, Wyoming, a duly organized watershed improvement district existing under the laws of that state [SPONSOR], whose address is P.O. Box 346, Greybull, WY 82426.

2. Purpose of Agreement. The purpose of this Agreement is to implement the provisions of 2017 Wyo. Sess. Laws, Ch. 75, authorizing the design, construction, and operation of the Leavitt Reservoir Expansion Project [PROJECT]; describing the PROJECT; specifying terms for funding the PROJECT; providing for financing through the COMMISSION from the Wyoming Water Development Account; and providing for an appropriation. The PROJECT consists of the following components:

- (a) Construction of a new off-channel dam which will impound approximately six thousand six hundred (6,600) acre-feet, to include water supply facilities; and
- (b) Appurtenances necessary to make the PROJECT function in the manner intended.

The final plans and specifications have been prepared by a registered professional engineer [ENGINEER].

3. Term of Agreement. This Agreement is effective when all parties have executed it [EFFECTIVE DATE]. The term of the Agreement is from the EFFECTIVE DATE until all provisions and conditions set forth herein, including the SPONSOR'S repayment obligation, have been fully satisfied.

4. Special Provisions.

A. The STATE OF WYOMING has appropriated from the Water Development Account created by Wyo. Stat. § 41-2-124 (a)(iii), to the COMMISSION, a sum not to exceed FORTY-ONE MILLION DOLLARS (\$41,000,000.00) which will be disbursed to the SPONSOR for the purpose of completing the aforementioned PROJECT. The funds are divided as follows:

- (1) A grant to the SPONSOR of not more than THIRTY-NINE MILLION THREE HUNDRED NINETEEN THOUSAND DOLLARS (\$39,319,000.00) or ninety-five and nine-tenths percent (95.9%) of the actual development costs, whichever is less.
- (2) A loan to the SPONSOR of not more than ONE MILLION SIX HUNDRED EIGHTY-ONE THOUSAND DOLLARS (\$1,681,000.00) or four and one-tenth percent (4.1%) of the actual development costs, whichever is less, for a term of fifty (50) years at an annual interest rate of four percent (4%).

B. Prior to the release of any funds under this Agreement, the SPONSOR shall provide evidence to the COMMISSION that the SPONSOR has authorized the PROJECT pursuant to Wyo. Stat. § 41-8-116 and all assessments of benefited property have become final and conclusive pursuant to Wyo. Stat. § 41-8-119. The SPONSOR shall submit to the COMMISSION certified copies of all orders or resolutions, evidencing authorization of the PROJECT and related assessments.

C. Prior to the release of any funds under this Agreement, the SPONSOR shall execute a promissory note secured by a security agreement that

encumbers, pledges and assigns to the COMMISSION: (1) the fee interest the SPONSOR presently holds or hereafter acquires in any property and facilities necessary for construction and subsequent operation and maintenance of the PROJECT under the terms of this Agreement; (2) all easements, rights-of-way, water rights and permits necessary for the construction and subsequent operation and maintenance of the PROJECT, along with any other appropriate security agreements required by, and in form acceptable to, the Wyoming Attorney General's Office; and (3) revenues received or due under the assessment roll of the SPONSOR created as required by Wyoming statutes together with all the SPONSOR'S right, title, and interest the SPONSOR now has or may hereafter acquire in and to any of those revenues together with all proceeds of it, in an amount sufficient to meet the SPONSOR's obligations as outlined in Section 4 of this Agreement. Such promissory note, dated _____, and security agreement, dated _____, attached herein, shall be incorporated and made a part of this Agreement.

D. When the COMMISSION determines that PROJECT related benefits accrue to the SPONSOR, the term of the loan shall commence. The SPONSOR understands that the COMMISSION'S determination of when benefits accrue may not coincide with the ENGINEER's determination of substantial completion. As soon as possible thereafter the total amount of the loan shall be determined. The first loan payment will be due on December first immediately following the one year anniversary of the date benefits accrue. All subsequent payments will also be due on December first except the final (fiftieth) payment which will be due on the fiftieth anniversary of the date benefits accrue. Interest will be charged beginning with the date benefits accrue to the SPONSOR. Therefore the first loan payment will include an interest accrual period which is greater than one year which will make this first payment larger than any of the subsequent payments.

E. Funds disbursed under the terms of this Agreement may only be used, upon approval by the COMMISSION in its sole and absolute discretion, to defray construction costs identified in the final plans and specifications or authorized by approved change orders, to pay for bidding and construction engineering services authorized by the approved contract between the SPONSOR and the ENGINEER, to pay for consultants, permits, easements or land essential for construction of the PROJECT, and to meet necessary and reasonable PROJECT expenses or costs not directly identified above which have been granted prior written approval by the COMMISSION. Requests for prior approval of necessary and reasonable PROJECT expenses shall be accompanied by proposals describing the work, acquisition, or other expense, and detailed estimates of the cost.

F. As conditions for disbursing funds to the SPONSOR, the SPONSOR shall:

- (1) Provide to the COMMISSION for prior examination of and concurrence with all contracts to be executed by the SPONSOR for all work contemplated by this Agreement and any changes or work orders for items not covered in the contract documents.
- (2) Provide to the COMMISSION for examination and concurrence with all plans and specifications prepared and any bids received prior to bidding and project award.
- (3) Comply with all applicable State statutes regarding contractor retainage accounts.
- (4) Provide to the COMMISSION a summary of bids received by the ENGINEER.
- (5) Communicate to the COMMISSION all information on all aspects of the PROJECT and require that the ENGINEER submit or make available for

inspection, such reports on the progress of the work and on the results of tests of materials and workmanship requested by the COMMISSION.

(6) Provide to the COMMISSION for prior review the qualifications of the engineering or consulting firm proposed by the SPONSOR to inspect and monitor construction of the PROJECT. Said review shall include, but not be limited to, supervisory position assignments. The COMMISSION may review any changes to engineering or consulting firm personnel assigned to the PROJECT.

(7) Prior to incurring any cost increases to the PROJECT, submit all proposed cost increases to the COMMISSION for review and written concurrence. The SPONSOR shall execute an amendment or change order for all changes to the engineer or contractor's contract.

G. The SPONSOR shall submit to the COMMISSION all plans, specifications, and construction budgets. The COMMISSION shall have a reasonable time from the date of receipt of said plans, specifications, and budgets to examine them and submit comments. If the COMMISSION determines that it is reasonable to expect that the proposed PROJECT cannot be constructed with the funds available, the COMMISSION shall inform the SPONSOR in writing and the SPONSOR shall have a reasonable time within which to 1) provide such information as may be required by the COMMISSION, or to make such authorized alterations to the proposed PROJECT as are agreed upon by the parties and as are necessary to provide the COMMISSION with a reasonable expectation that the PROJECT may be constructed with the funds available, or 2) terminate the PROJECT. If the SPONSOR elects to terminate the PROJECT, the COMMISSION shall determine the total amount of loan funds disbursed prior to termination and the term of the loan will commence.

H. Once the COMMISSION determines that the plans and specifications are in acceptable form and it is reasonable to expect that the PROJECT as proposed may be constructed with the funds available, the COMMISSION shall so inform the SPONSOR in writing, and the SPONSOR may initiate the bidding process. If the SPONSOR initiates the bidding process without prior written notification by the COMMISSION, the SPONSOR shall bear all costs resulting from said action.

I. Prior to advertising the PROJECT for bids, the SPONSOR shall acquire or otherwise meet a series of prerequisites. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the submissions required under this section, which may include but not necessarily be limited to:

- (1) Right-of-way and option agreements;
- (2) Easements on public lands, if required;
- (3) Environmental assessments;
- (4) Section 401, Clean Water Act, Certification;
- (5) Section 404, Clean Water Act, Permit;
- (6) SEO Water Rights;
- (7) BLM Right-of-Way
- (8) Compliance with Governor's Executive Order 2015-4 Greater Sage Grouse Core Area Protection and Supplement Executive Order 2017-2 to Greater Sage Grouse Core Population Area Strategy;
- (9) Final Plans and Specifications approval by State Engineer;
- (10) Incidental work required to prepare the PROJECT for construction; and

(11) Approval by the COMMISSION of final plans, specifications, and construction budgets, which shall include revisions, deletions, or mitigation resulting from meeting items (1) through (9) above.

J. The SPONSOR shall not issue its advertisement for bids unless the COMMISSION has received the following:

(1) An attorney's title opinion, a letter and documents from a title company or abstractor, or other proof and certification acceptable to the COMMISSION that all land acquisition, access, easements, and rights-of-way for the construction and long term operation and maintenance of the PROJECT have been secured and recorded; and

(2) The SPONSOR's proposed advertisement for bids from ENGINEER, including the rules and standards to be used to establish the qualification of bidders, to determine whether submitted bids are responsive to the advertisement for bids, to determine whether bidders are qualified for the preference under Wyo. Stat. 16-6-101 *et. seq.*, and to determine the lowest responsible bid.

K. The SPONSOR shall not issue an award of the bid or any conditional award of the bid without the review and written concurrence of the COMMISSION.

L. The COMMISSION shall disburse funds on the basis of requests from the SPONSOR. The SPONSOR or its designated representative shall certify requests for the disbursement of funds and provide material invoices or other acceptable evidence of mature obligations, which may include periodic construction pay estimates approved by the ENGINEER. Upon review and approval by the COMMISSION, requests will be processed and disbursements will be electronically transferred to the SPONSOR or delivered to the representative of the SPONSOR designated as being responsible for receiving disbursements. Funds released to the SPONSOR shall be received and accounted for separately from all other funds of the SPONSOR.

M. Ninety-five and nine-tenths percent (95.9%) of each disbursement from the COMMISSION authorized under the terms of this Agreement shall be from grant funds and four and one-tenth percent (4.1%) shall be from loan funds. Payments made by the COMMISSION shall be coordinated with the SPONSOR and other funding sources so that the final grant amount provided by the COMMISSION shall not exceed ninety-five and nine-tenths percent (95.9%) of eligible PROJECT costs and the final loan amount provided by the COMMISSION will not exceed four and one-tenth percent (4.1%) of eligible PROJECT costs. The SPONSOR is responsible for completing the PROJECT and providing any funding in excess of that available from the COMMISSION.

N. The SPONSOR shall use funds disbursed by the COMMISSION immediately upon receipt strictly in accordance with the requests for payment submitted by the SPONSOR and approved by the COMMISSION. If at any time after execution of this Agreement and before one year after the date of final payment to the SPONSOR, the COMMISSION requests an audit of funds disbursed, the SPONSOR shall submit to and cooperate with the audit conducted by duly authorized representatives of the COMMISSION.

O. Disbursement of funds for final payment to a contractor will be made following an inspection of the completed PROJECT by the COMMISSION and upon inspection and certification of completion by the ENGINEER. Prior to final disbursement of funds, the SPONSOR shall furnish the COMMISSION proof in affidavit form that all claims, liens, or other obligations for the PROJECT have been properly paid and settled or will be paid and settled from the final disbursement. Further, the SPONSOR shall have published notice of completion and final settlement in a newspaper allowing forty (40) days for parties to present claims for payment due prior to the date of final payment, according to law.

P. The SPONSOR shall provide the COMMISSION with a certified copy of the as-constructed PROJECT plans and a copy of the operation and maintenance manual.

Q. Representatives of the COMMISSION shall have the right of ingress and egress to enter upon the premises at any time in perpetuity along established easements, rights-of-way, or through acquired properties.

R. It is further agreed that the SPONSOR shall grant public access in perpetuity to the Leavitt Reservoir proper and to all adjacent lands owned by the district or the State for the purposes of hunting, fishing and general recreation as deemed necessary by the COMMISSION, or the Wyoming Game and Fish Commission, to maximize the public enjoyment. Public access is excluded from areas restricted due to security concerns and public safety as agreed to by the SPONSOR and the COMMISSION.

S. The SPONSOR shall maintain an inviolate minimum pool of one thousand five hundred (1,500) acre-feet for fisheries, recreation, and environmental uses. The minimum pool will be maintained at all times, except for the following:

- (1) To conform with conditions associated with permits and clearances obtained under section 4. I.,
- (2) To allow the ability to renovate the fishery,
- (3) In emergency conditions or for dam safety inspections, which may be required on a periodic basis.

To gain approval to release any water from the minimum inviolate pool, the SPONSOR must, except in emergency conditions, provide a written request to the COMMISSION and any required regulatory agencies, thirty (30) days, or as soon as practically possible, in advance of the date when the release will be made. The letter must describe in detail the need for releasing of those waters and request written approval from the COMMISSION and any required regulatory agencies prior to doing so.

T. The SPONSOR shall complete the PROJECT and shall be responsible for operation and maintenance of the PROJECT in accordance with accepted engineering practices. The SPONSOR shall be responsible for all costs, including labor, for all operation, maintenance and repairs. In addition, the SPONSOR shall complete the PROJECT no later than the reversion date of July 1, 2025, and shall have settled all claims and paid all PROJECT expenses by that date. The COMMISSION shall not pay any funds to the SPONSOR after the reversion date specified, and the SPONSOR shall be solely responsible for payment of any expenses incurred or claims received after said date.

U. If through any cause, either party fails to fulfill in a timely and proper manner its obligations under this Agreement, or if either party breaches any of the covenants, agreements, or stipulations of this document, the other party shall thereupon have the right to terminate this Agreement if such default or violation is not corrected within thirty (30) days after submitting written notice to the defaulting party. If this Agreement is terminated, the principal amount of the loan is set, and the SPONSOR shall begin repayment on the first anniversary of the date of termination or continue as scheduled if repayment has already begun. If the COMMISSION determines that the SPONSOR has, without good cause, abandoned completion of the PROJECT, the SPONSOR, in addition to being required to repay the loan, shall immediately repay the full amount of all grant funds actually expended plus interest as established by the State Auditor in an amount equal to the interest that would have accrued on the expended grant funds in the Water Development Account from the date of expenditure.

V. The grant is subject to the following conditions regarding management of the completed PROJECT, restrictions on the sale of water, and restrictions on the sale of the PROJECT:

(1) Without prior written approval of the COMMISSION and either the State Engineer or Board of Control, there shall be no lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than the SPONSOR's agricultural water supply use as determined by the COMMISSION in its sole and absolute discretion. If such a transaction is approved, the SPONSOR shall receive four and one tenth percent (4.1%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT for purposes other than the agricultural water supply use and the State of Wyoming shall receive ninety five and nine tenths percent (95.9%) of the revenues generated by the lease, sale, assignment or transfer of ownership of water from the PROJECT. If the SPONSOR has any pre-existing contracts or commitments for the sale of water which might apply to these conditions, the SPONSOR shall submit evidence of such commitments to the COMMISSION within ten (10) days of the execution of this Agreement for review and declaration of exemption.

(2) There shall be no lease, sale, assignment or transfer of ownership of the PROJECT without prior written approval of the COMMISSION. If this condition is met, the SPONSOR shall receive four and one tenth percent (4.1%) and the State of Wyoming shall receive ninety five and nine tenths percent (95.9%) of the revenues generated by the lease, sale, assignment or transfer of ownership of the PROJECT. Before the SPONSOR may lease, sell, assign or transfer ownership of the PROJECT, the State of Wyoming shall be given a one (1) year first right of refusal option to purchase the SPONSOR's interest in the PROJECT for an amount equal to the principal, interest, maintenance and replacement costs incurred by the SPONSOR at the date the option is exercised.

(3) The SPONSOR may purchase the position of the State of Wyoming, as described in subsections (1) and (2) of this Section, for the amount of the grant described in Section 4.A. of this Agreement plus the interest that would have accrued on the grant amount in the Water Development Account from the date the PROJECT was substantially completed as defined by the COMMISSION. The State Auditor shall determine the interest that would have accrued on the grant amount.

W. Notwithstanding the above, the SPONSOR shall not be relieved of liability to the COMMISSION for damages sustained by the COMMISSION by virtue of any breach of this Agreement by the SPONSOR, and the COMMISSION may withhold any payments to the SPONSOR for the purposes of set off until such time as the exact amount of damages due the COMMISSION from the SPONSOR is determined. In the event of default or the SPONSOR's negligent or intentional failure to complete the PROJECT, the COMMISSION shall have the right of set off against any State of Wyoming accounts or sources of funding designated for use by, or on behalf of the SPONSOR for the full amount owed to the COMMISSION pursuant to this Project Agreement.

X. If the SPONSOR breaches any of the covenants, agreements, or stipulations of this document, the COMMISSION, in its discretion, may elect to operate the PROJECT. If the COMMISSION decides to operate the PROJECT, the SPONSOR shall transfer and assign all facilities, properties, easements, rights-of-way, water rights, and permits necessary to the operation and maintenance of the PROJECT.

5. General Provisions.

A. Amendments. Any changes, modifications, revisions or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed by all parties to this Agreement.

B. Applicable Law, Rules of Construction, and Venue. The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming, without regard to conflicts of law principles. The terms “hereof,” “hereunder,” “herein,” and words of similar import, are intended to refer to this Agreement as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

C. Audit and Access to Records. The COMMISSION and its representatives shall have access to any books, documents, papers, electronic data, and records of the SPONSOR which are pertinent to this Agreement.

D. Availability of Funds. Each payment obligation of the COMMISSION is conditioned upon the availability of government funds which are appropriated or allocated for the payment of this obligation and which may be limited for any reason, including, but not limited to, congressional, legislative, gubernatorial, or administrative action. If funds are not allocated and available for continued performance of the Agreement, the Agreement may be terminated by the COMMISSION at the end of the period for which the funds are available. The COMMISSION shall notify the SPONSOR at the earliest possible time of the services which will or may be affected by a shortage of funds. No penalty shall accrue to the COMMISSION in the event this provision is exercised, and the COMMISSION shall not be obligated or liable for any future payments due or for any damages as a result of termination under this Section.

E. Compliance with Laws. The SPONSOR shall keep informed of and comply with all applicable federal, state and local laws and regulations in the performance of this Agreement, including but not limited to laws and regulations governing assessment processes, public bidding, public works and contractor retainage. The SPONSOR shall comply with all resident and other preference requirements, including but not limited to those applicable to labor, materials and subcontractors.

F. Entirety of Agreement. This Agreement, consisting of nine (9) pages; including the Promissory Note dated _____, consisting of two (2) pages; and the Security Agreement, dated _____, consisting of four (4) pages, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

G. Indemnification. Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.

H. Independent Contractor. The SPONSOR shall function as an independent contractor for the purposes of this Agreement and shall not be considered an employee of the State of Wyoming for any purpose. Consistent with the express terms of this Agreement, the SPONSOR shall be free from control or direction over the details of the performance of services under this Agreement. The SPONSOR shall assume sole responsibility for any debts or liabilities that may be incurred by the SPONSOR in fulfilling the terms of this Agreement and shall be solely responsible for the payment of all federal, state, and local taxes which may accrue because of this Agreement. Nothing in this Agreement shall be interpreted as authorizing the SPONSOR or its agents or employees to act as an agent or representative for or on behalf of the State of Wyoming or the COMMISSION or to incur any obligation of any kind on behalf of the State of Wyoming or the COMMISSION. The SPONSOR agrees that no health or hospitalization benefits, workers’ compensation, unemployment insurance, or similar benefits available to State of Wyoming employees will inure to the benefit of the SPONSOR or the SPONSOR’s agents or employees as a result of this Agreement.

I. Notice. All notices arising out of, or from, the provisions of this Agreement shall be made in writing either by regular mail or delivery in person at the addresses provided in this Agreement.

J. Prior Approval. This Agreement shall not be binding upon either party, no services shall be performed, and the Wyoming State Auditor shall not draw warrants for payment, until this Agreement has been fully executed, approved as to form by the Office of the Attorney General, and filed with and approved by A&I Procurement, and approved by the Governor of the State of Wyoming, or his designee, if required by Wyo. Stat. § 9-2-1016(b)(iv).

K. Severability. Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.

L. Sovereign Immunity. Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming and COMMISSION expressly reserve sovereign immunity by entering into this Agreement and the SPONSOR expressly reserves governmental immunity. Each of them specifically retains all immunities and defenses available to them as sovereign or governmental entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable law. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

M. Third-Party Beneficiary Rights. The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

N. Time is of the Essence. Time is of the essence in all provisions of this Agreement.

O. Waiver. The waiver of any breach of any term or condition of this Agreement shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Counterparts. This Agreement may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Agreement. Delivery by the SPONSOR of an originally signed counterpart of this Agreement by facsimile or PDF shall be followed up immediately by delivery of the originally signed counterpart to the COMMISSION.

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6. Signatures. The parties to this Agreement, either personally or through their duly authorized representatives, have executed this Agreement on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement.

The EFFECTIVE DATE of this Agreement is the date of the signature last affixed to this page.

WYOMING WATER DEVELOPMENT COMMISSION

| | |
|-----------|-------|
| _____ | _____ |
| Chair | Date |
| _____ | _____ |
| Secretary | Date |

SHELL VALLEY WATERSHED IMPROVEMENT DISTRICT

| | |
|-----------------------------|-------|
| _____ | _____ |
| John Ed Anderson, Chair | Date |
| _____ | _____ |
| Lawrence Griffin, Secretary | Date |

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

| | |
|--|-------|
| _____ | _____ |
| Tyler M. Renner, Assistant Attorney General | Date |

ORIGINAL SENATE
FILE NO. SF0059

ENROLLED ACT NO. 28, SENATE

SIXTY-FIFTH LEGISLATURE OF THE STATE OF WYOMING
2019 GENERAL SESSION

99-3-2205. Level III construction projects - dams and reservoirs.

(a) Authorization is granted for the Level III dams and reservoirs construction projects identified in this section subject to the general conditions specified in W.S. 99-3-106, provided that the general condition related to repair and maintenance sinking funds as described in W.S. 99-3-106(a)(iii) shall not apply to these projects.

(c) Project - Middle Piney Reservoir:

(iv) Total project budget: ~~Twelve million one hundred sixty-eight thousand dollars (\$12,168,000.00)~~ Fourteen million two hundred twenty-eight thousand dollars (\$14,228,000.00);

(v) Appropriation: There is appropriated from water development account III to the commission for project land procurement, construction engineering and construction of the project ~~twelve million one hundred sixty-eight thousand dollars (\$12,168,000.00)~~ fourteen million two hundred twenty-eight thousand dollars (\$14,228,000.00) or as much thereof as is necessary to carry out the purpose of this subsection. Unexpended funds appropriated under this subsection shall revert to water development account III on July 1, 2022;

(vi) Special conditions:

(D) Upon approval by the commission, five hundred thousand dollars (\$500,000.00) from this appropriation shall be deposited in the Middle Piney reservoir account created by W.S. 99-99-1001(a)(x).

ORIGINAL SENATE
FILE NO. SF0059

ENROLLED ACT NO. 28, SENATE

SIXTY-FIFTH LEGISLATURE OF THE STATE OF WYOMING
2019 GENERAL SESSION

development commission shall administer the account and use any monies in the account to meet the operation, maintenance and replacement obligations of the state related to the Middle Piney reservoir and dam, and associated facilities.

[TRANSFER OF FUNDS]

Section 3. Pursuant to W.S. 99-99-1001(c), the Wyoming water development commission has reviewed the Buffalo Bill dam account and determined there to be five million five hundred thousand dollars (\$5,500,000.00) in funds in excess of that amount needed to meet obligations of the Buffalo Bill dam account as specified in W.S. 99-99-1001(e). The Wyoming water commission is hereby authorized to transfer five million five hundred thousand dollars (\$5,500,000.00) from the Buffalo Bill dam account created by W.S. 99-99-1001(a)(ii) to water development account II created by W.S. 41-2-124(a)(ii).

**CONTRACT BETWEEN
STATE OF WYOMING,
WYOMING WATER DEVELOPMENT OFFICE
AND
NEBRASKA COMMUNITY FOUNDATION**

1. PARTIES. The parties to this Contract ("Contract") are THE STATE OF WYOMING, acting through the Wyoming Water Development Office ("WWDO"), whose address is 6920 Yellowtail Road, Cheyenne, Wyoming 82002 ("State") and NEBRASKA COMMUNITY FOUNDATION ("Foundation"), representing all signatories to the Platte River Recovery Implementation Program ("Program"), acting on behalf of the Platte River Recovery Implementation Program, whose address is 4111 4th Avenue, Suite 6, Kearney, Nebraska 68845 (the Foundation and Program are collectively referred to herein as the "PRRIP"). The State and the PRRIP are sometimes referred to herein jointly as "the Parties."

2. RECITALS.

A. The Consolidated Natural Resource Act of 2008 (Public Law 110-229, Title V, Section 515) authorizes the Secretary of the Department of Interior ("Secretary") to construct, operate, and maintain the modification of the existing Pathfinder Dam and Reservoir, North Platte Project. This project was completed by the Department of Interior in 2012.

B. The United States completed construction of the existing Pathfinder Dam and Reservoir in 1909, which serves as the main water storage feature of the North Platte Project. Wyoming Permit No. 609R, with a priority date of December 6, 1904, is adjudicated for a total storage right to the United States of one million, seventy thousand (1,070,000) acre-feet.

C. The 2001 Final Settlement Stipulation of the settlement of the Nebraska v. Wyoming lawsuit authorizes and describes the Modification of Pathfinder Dam and Reservoir.

D. Chapter 105 of the 2006 Wyoming Session Laws, as amended in Chapter 38 of the 2009 Wyoming Session Laws, (W.S. 99-3-1105(b)), authorized the State to enter into an agreement with the United States for modification of the existing Pathfinder Dam and Reservoir, required approval of the Contract by the Governor and authorized funding for the modification of Pathfinder Dam.

E. The State and the United States of America entered into the Federal Contract, which, in part, provides the State the right to provide water from the Wyoming Account to the PRRIP under a water use agreement and to recover all costs associated with providing such water, so long as that use complies with the purposes of the Wyoming Account as specified in the 2001 Final Settlement Stipulation.

F. The original uses designated under Wyoming Permit No. 609R included irrigation and domestic use for the entire permitted capacity of one million, seventy thousand (1,070,000) acre-feet. On January 26, 2009, the United States obtained a change of use (for additional uses) for fifty-three thousand, four hundred ninety-three (53,493) acre-feet of the permitted capacity of one million, seventy thousand (1,070,000) acre-feet for Pathfinder Reservoir from the Wyoming State of Board of Control. The new uses for thirty-three thousand, four hundred ninety-three (33,493) acre-feet of the original storage right are environmental and fish and wildlife purposes for the establishment of the Environmental Account in Pathfinder Reservoir ("Environmental Account"). The new uses for twenty thousand (20,000) acre-feet of the original storage water right are municipal, environmental, and fish and wildlife purposes for the establishment of the Wyoming Account in Pathfinder Reservoir ("Wyoming Account") for which the State has the exclusive right to contract with the United States pursuant to Appendix F to the Final Settlement Stipulation in Nebraska v. Wyoming, 534 U.S. 40 (2001). The original designated uses under Wyoming Permit No. 609R, irrigation and domestic, are maintained for the entire permitted capacity of one million, seventy thousand (1,070,000) acre-feet.

G. W.S. 41-2-1301(b) states:
 "Pursuant to W.S. 41-3-115, and the Wyoming water development office is hereby authorized to transfer a maximum of nine thousand six hundred (9,600) acre feet of storage water per year from the Wyoming account in the Pathfinder Modification Project within Pathfinder reservoir to the Wyoming-Nebraska state line through a water use agreement with the Platte River Recovery Implementation Program in any year the storage water in the Wyoming account is not needed by the state of Wyoming as a municipal water supply or a replacement water supply to meet the state of Wyoming's obligations in the Nebraska v. Wyoming settlement agreement and the Platte River Recovery Implementation Program."

H. The United States, acting through the Bureau of Reclamation, will operate the Wyoming Account to insure an annual estimated firm yield of nine thousand, six hundred (9,600) acre feet per year.

I. The State and PRRIP entered into a Pathfinder Reservoir water supply agreement in 2011 and the full thirty-eight thousand, four hundred (38,400) acre-foot water supply obligation has been delivered under that agreement.

J. The first increment of the PRRIP is set to expire on December 31, 2019 and the Parties are working to extend the first increment for thirteen (13) years to December 31, 2032.

K. Chapter 94 of the 2018 Wyoming Session Laws appropriated funds for Wyoming's share of the proposed thirteen (13) year extension of the first increment of the PRRIP.

L. The Foundation has been selected by the Program signatories as the financial management entity providing support to the Governance Committee and Executive Director (as defined below) established pursuant to the Program Cooperative Agreement.

M. The Foundation is only authorized to enter into contracts specifically authorized by the Governance Committee.

N. The Foundation pays financial obligations of the Governance Committee under the contracts authorized by the Governance Committee in accordance with the terms of the contracts.

O. The Foundation serves as the Governance Committee's contracting agent.

P. Memorandum of Agreement No. R12AG60019 and the Program documents require that all contracts of the Program are conditioned on the continuing availability of funds from the Program signatories.

Q. The Program signatories provide funding to the Foundation for Program implementation, including this Contract, through separate financial assistance agreements.

R. The Foundation, by executing this Contract, is acting as the contracting agent of the Governance Committee.

NOW THEREFORE, for good and valuable consideration, and intending to be legally bound, each party to this Contract hereby agrees to the following:

3. PURPOSE OF CONTRACT. The purpose of this Contract is to set forth the terms and conditions for the purchase and sale of water from the Wyoming Account to which the State has a right under the Federal Contract, in accordance with the provisions herein. The water contracted for by the PRRIP under the provisions of this Contract shall be deemed, for the purposes of said Federal Contract, to have been used by the State. This Contract seeks to continue the water supply relationship established in the 2011 Pathfinder Reservoir water supply agreement that will expire on December 31, 2019.

4. TERM OF CONTRACT.

A. This Contract is effective on January 1, 2020.

B. Term. The term of this Contract shall extend until December 31, 2032 or the date that the State withdraws from the PRRIP, whichever comes first. There is no right or expectation of extension and any extension will be determined at the independent discretion of each party to the Contract.

5. SERVICES AND PAYMENTS.

A. Purchase Price.

The PRRIP shall purchase water from the State at a unit price of sixty-five dollars (\$65.00) per acre foot of water from the Wyoming Account.

1. The PRRIP shall be annually obligated to take delivery of a minimum of four thousand, eight hundred (4,800) acre feet or the Available Water Amount determined in accordance with subsection 5.B.1, whichever is less. Payment is due on or before July 31 of each water year.

2. If less water than the Delivery Water Amount as determined in accordance with subsections 5.B.2 and 5.B.3, is delivered to the PRRIP during a given water year, the PRRIP shall be credited for payments made for water not delivered at a unit price of sixty-five dollars (\$65.00) per acre foot of underrun. Such credit amount shall be adjusted to the then applicable unit price if the applicable purchase price has been adjusted by the State as provided in this Contract. Any such credit shall be applied to subsequent year payments due pursuant to the terms of this Contract. If any credits are remaining at the termination of this Contract, the amount of such credits shall be paid by the State to PRRIP within thirty (30) days of Contract termination.

3. The purchase price shall be increased if the Bureau of Reclamation assesses the State for a share of costs related to major repair and construction relating to Pathfinder Dam. In the event of major dam repair and construction, the price will be increased by eight and ninety-seven hundredths percent (8.97%) (4,800/53,493) of the State's actual allocation of major dam repair and construction costs assessed by the Bureau of Reclamation for the Pathfinder Modification Project. WWDO shall provide PRRIP with written notice of any major dam repair and construction projects as soon as WWDO is aware of the existence of major dam repairs and construction costs that may trigger the application of this section. A lump sum payment for the increase will be made by the PRRIP within thirty (30) days after receipt of an invoice from the WWDO. The invoice provided by the WWDO shall include information sufficient for PRRIP to evaluate the amount of the requested payment to be made by PRRIP, including the total cost of the major dam repairs and construction costs. The unit price described in subsection 5.A. may be adjusted to compensate for an increase in annual operations and maintenance costs resulting from major dam repair and construction costs.

B. Terms.

1. On or before May 1 of each year, the Director of the WWDO ("Director"), in consultation with the Wyoming Area Manager of the Bureau of Reclamation ("Area Manager") and the Wyoming State Engineer, will provide an estimate of the water in the Wyoming Account that may be available to the PRRIP (the "May Estimate"). The deliberations will be based on the amount of water needed by the State to meet its

obligations to its municipal customers, the State's obligations under the Nebraska v. Wyoming settlement, or the State's obligations to the Program (not including this Contract), and carryover requirements in the Wyoming Account to ensure a reliable supply for the following year. The May Estimate ("Available Water Amount") shall not exceed nine thousand, six hundred (9,600) acre feet and will be provided to the Executive Director of the PRRIP ("Executive Director") and the Environmental Account Manager of U.S. Fish and Wildlife Service ("EA Manager").

2. On or before June 1 of each year, the Executive Director, in consultation with the EA Manager, will respond to the Director with the quantity of water of the Available Water Amount the PRRIP would like to have released from the Wyoming Account ("Delivery Water Amount"). The Delivery Water Amount shall not be less than four thousand, eight hundred (4,800) acre feet unless the Available Water Amount is less than four thousand, eight hundred (4,800) acre feet. The Delivery Water Amount shall not be more than the Available Water Amount.

3. The Director will ensure the accuracy of the May Estimate and advise the Executive Director by July 1 if there have been changes to the Available Water Amount and if the Delivery Water Amount must be revised.

4. The Director will notify the Wyoming State Engineer's Office of the final Delivery Water Amount agreed to by the Parties.

5. There is a possibility that the demand from the WWDO's municipal customers will be less than anticipated. If this is the case, additional water will be added to the Available Water Amount on or before September 1. If the total is less than or equal to four thousand, eight hundred (4,800) acre feet, the Delivery Water Amount will be increased. If the total is greater than four thousand, eight hundred (4,800) acre feet, the PRRIP has the option to add the additional water to the Delivery Water Amount. If this option is exercised, the Delivery Water Amount will be increased accordingly but shall not exceed nine thousand, six hundred (9,600) acre feet. Payment for the additional Delivery Water Amount, pursuant to the exercise of the option by PRRIP, shall be due by October 1 of each year.

6. The Delivery Water Amount will be released beginning no earlier than August 15 of each year unless the Executive Director and EA Manager request an alternative release schedule. The alternative release schedule must be approved by the Director and Area Manager. No releases will be made that could result in or exacerbate flooding below Pathfinder Dam.

7. The Delivery Water Amount will be annually tabulated and agreed to by the Director and the Executive Director.

8. Release by the State of the Delivery Water Amount into the North Platte River at the Pathfinder Dam shall constitute delivery of the Delivery Water Amount

to the PRRIP. The Delivery Water Amount shall be measured and accounted for at the Pathfinder Dam. The PRRIP shall assume any loss of any nature whatsoever occurring to the Delivery Water Amount between the Pathfinder Dam and the PRRIP's point of use. Conveyance loss from Pathfinder Dam to the Wyoming and Nebraska state line shall be assessed by the Wyoming State Engineer. In accordance with Nebraska law, conveyance losses from the Wyoming/Nebraska state line to the PRRIP point of use will be assessed by the Nebraska Department of Natural Resources.

9. The State makes no warranty with respect to the quality of the Delivery Water Amount released to serve the PRRIP, it being understood that this is raw, untreated water as it naturally occurs in the North Platte River at Pathfinder Dam. In the use of the Delivery Water Amount, the PRRIP agrees to comply with all applicable State and Federal laws. The PRRIP agrees that it will comply fully with all laws, orders, standards, or regulations under federal, State and local jurisdictions now or hereafter in force as may be applicable to the facilities at which the Delivery Water Amount may be used.

6. SPECIAL PROVISIONS.

A. Assignability

1. The PRRIP shall not make any sale, gift, delivery, assignment or other disposition of this Contract or the whole or any part of the Delivery Water Amount except to any entity or entities associated with or retained by the PRRIP for purposes and operations advantageous to the PRRIP as determined by the Governance Committee of the PRRIP.

2. Nothing contained herein relating to the assignability of this Contract shall preclude the PRRIP from entering into arrangements with others for the installation, construction, operation and maintenance of water diversion, carriage and distribution facilities by which the Delivery Water Amount, separately or together with other permitted water appropriations, may be applied for PRRIP purposes.

3. If the Foundation is no longer the financial management entity providing support to the Governance Committee of the Program for any reason, the Foundation, as the financial management entity representing the Program, may assign its responsibilities and interest under this Contract to a successor financial management entity providing support to the Governance Committee of the Program, provided that the successor assumes all obligations of the Foundation applicable hereunder. The Foundation shall provide written notice of any such assignment to the State.

B. Delivery.

1. The State shall exercise all rights under the Federal Contract to arrange for release to the PRRIP of the Delivery Water Amount. In the event that the

schedule for release creates operational problems for the State which cannot be overcome by the exercise of reasonable effort and expense and which require a change in the specified schedule (e.g., rate of flow, timing of flow, etc.), then the State shall notify the PRRIP at the earliest time reasonable under the circumstances. The Parties will use their best efforts to develop a schedule that will accommodate the PRRIP's needs and avoid the operational problems being experienced by the State.

2. The State will comply with all applicable provisions of the Federal Contract and will make all required payments to the United States when they become due. If the United States withholds from the State scheduled deliveries of the Delivery Water Amount to the PRRIP, the PRRIP shall be credited for payments made for water not delivered.

7. PROVISIONS REQUIRED BY THE FEDERAL CONTRACT.

A. The provisions of Section 7 shall apply only to water delivered from the Wyoming Account within the terms of the Federal Contract.

B. The Parties agree that the delivery of water or the use of federal facilities is pursuant to the Federal Contract.

C. The United States, through its Contracting Officer, shall have the right to make determinations necessary to administer the Federal Contract, the laws of the United States and the State of Wyoming and the rules and regulations promulgated by the Secretary of the Interior. Such determinations shall be made in consultation with the State. If such determinations affect this Contract, the State will consult with the PRRIP as soon as practicable.

D. The PRRIP agrees that it will comply fully with air and water pollution control laws, orders, standards, or regulations under federal, state and local jurisdictions now or hereafter in force.

E. During the performance of this Contract, the PRRIP agrees as follows:

1. The PRRIP will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or disability. The PRRIP will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The PRRIP agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the United States setting forth the provisions of this Equal Opportunity clause.

2. The PRRIP will, in all solicitations or advertisements for employees placed by or on behalf of the PRRIP, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or disability.

3. The PRRIP will send to each labor union or representative of workers within which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the United States, advising the labor union or workers' representative of the PRRIP's commitments under this Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The PRRIP will comply with all provisions of Executive Order No. 11246 of September 24, 1965 as amended, and of the rules, regulations and relevant orders of the Secretary of Labor.

5. The PRRIP will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records and accounts by the contracting officers under the Federal Contract and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

6. In the event of PRRIP noncompliance with the Equal Opportunity clause of this Contract or with any of the said rules, regulations or orders, this Contract may be canceled, terminated or suspended, in whole or in part, and the PRRIP may be declared ineligible for further United States Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rules, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

7. The PRRIP will include the provisions of paragraphs 1 through 7 in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The PRRIP will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the PRRIP becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the PRRIP may request the United States to enter into such litigation to protect the interests of the United States.

F. The State shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), Title II of the Americans with Disabilities Act of 1990, and any other applicable civil rights laws, as well as with their

respective implementing regulations and guidelines imposed by the U.S. Department of the Interior and/or the Bureau of Reclamation.

G. In its operation of Pathfinder Dam and Reservoir, the United States, through its Contracting Officer, will use all reasonable means to guard against a condition of shortage in the quantity of water to be made available to the State pursuant to the Federal Contract. In the event the Contracting Officer determines that a condition of shortage appears probable, the Contracting Officer will notify the State of said determination as soon as practicable. In turn, the State will notify the PRRIP of said determination as soon as practicable.

H. If there is a condition of shortage because of errors in physical operations of Pathfinder Dam and Reservoir, drought, other physical causes beyond the control of the United States, through its Contracting Officer, or actions taken by the Contracting Officer to meet current and future legal obligations, then no liability shall accrue against the United States or the State or any of their officers, agents, or employees for any damage, direct or indirect, arising therefrom.

8. GENERAL PROVISIONS.

A. Amendments. Any changes, modifications, revisions or amendments to this Contract which are mutually agreed upon by the Parties shall be incorporated by written instrument, executed by all Parties to this Contract.

B. Default. No Delivery Water Amount shall be released to the PRRIP under this Contract if the PRRIP is in default in making any payment due the State under this Contract.

C. Americans with Disabilities Act. The PRRIP shall not discriminate against a qualified individual with a disability and shall comply with the Americans with Disabilities Act, P.L. 101-336, 42 U.S.C. 12101, *et seq.*, and/or any properly promulgated rules and regulations related thereto.

D. Applicable Law, Rules of Construction, and Venue. The construction, interpretation and enforcement of this Contract shall be governed by the laws of the State of Wyoming, without regard to conflict of law principles. The terms "hereof," "hereunder," "herein," and words of similar import, are intended to refer to this Contract as a whole and not to any particular provision or part. The Courts of the State of Wyoming shall have jurisdiction over this Contract and the Parties. The venue shall be the First Judicial District, Laramie County, Wyoming.

E. Audit and Access to Records. The State, WWDO and their representatives shall have access to any books, documents, papers, electronic data, and records of the PRRIP which are pertinent to this Contract.

F. Compliance with Laws. The PRRIP shall keep informed of and comply with all applicable federal, State and local laws and regulations in the performance of this Contract.

G. Entirety of Contract. This Contract, consisting of thirteen (13) pages, represents the entire and integrated Contract between the Parties and supersedes all prior negotiations, representations, and agreements, whether written or oral.

H. Force Majeure. Neither Party shall be liable for failure to perform under this Contract if such failure to perform arises out of causes beyond the reasonable control and without the fault or negligence of the nonperforming Party. Such causes may include, but are not limited to, drought, low water levels, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the Party failing to perform promptly notifies the other Party of the extent and nature of the problem, limits delay in performance to that required by the event, and timely takes all reasonable steps to minimize delays.

I. Indemnification. The PRRIP shall release, indemnify, and hold harmless the State of Wyoming, the WWDO, and their officers, agents, and employees from any and all claims, suits, liabilities, court awards, damages, costs, attorneys' fees, and expenses arising out of the PRRIP's failure to perform any of its duties and obligations hereunder or in connection with the negligent performance of PRRIP's duties or obligations hereunder, including but not limited to, any claims, suits, liabilities, court awards, damages, costs, attorneys' fees, and expenses arising out of PRRIP's negligence or other tortious conduct.

J. Notices. All notices arising out of, or from, the provisions of this Contract shall be in writing either by regular mail or delivery in person at the addresses provided below:

On behalf of the PRRIP:

Executive Director
Platte River Recovery Implementation Program
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845

And

Manager of Public/Private Partnerships
Nebraska Community Foundation
P.O. Box 83107
Lincoln, NE 68501-3107

On behalf of the State:

Director
Wyoming Water Development Office
6920 Yellowtail Road
Cheyenne, WY 82002

The designation of the addressee or the address may be changed by notice given in the same manner as provided in this Article for other notices.

K. Sovereign Immunity and Limitations. Pursuant to Wyo. Stat. § 1-39-104(a), the State and WWDO expressly reserve sovereign immunity by entering into this Contract and specifically retain all immunities and defenses available to them as sovereigns. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Contract shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.

L. Termination.

1. Upon failure of the PRRIP to make timely payments in accordance with this Contract, and upon thirty (30) days written notice to the PRRIP by the State and failure to cure such non-payment by the PRRIP, this Contract may be terminated at the option of the State.

2. If funds are not allocated and available for the project as set forth herein, this Contract may be terminated by the PRRIP upon thirty (30) days written notice to the State by the PRRIP.

M. Third-Party Beneficiary Rights. The Parties do not intend to create in any other individual or entity the status of third-party beneficiary, and this Contract shall not be construed so as to create such status. The rights, duties and obligations contained in this Contract shall operate only between the Parties to this Contract and shall inure solely to the benefit of the Parties to this Contract. The provisions of this Contract are intended only to assist the Parties in determining and performing their obligations under this Contract.

N. Titles Not Controlling. Titles of paragraphs are for reference only, and shall not be used to construe the language in this Contract.

O. Waiver. The waiver of any breach of any term or condition in this Contract shall not be deemed a waiver of any prior or subsequent breach. Failure to object to a breach shall not constitute a waiver.

P. Officials Not To Benefit. No Member of or Delegate to the Congress, or state or federal officials shall benefit from this Contract other than as a water user or landowner in the same manner as other water users or landowners.

Q. Time is of the Essence. Time is of the essence in all provisions of this Contract.

R. Counterparts. This Contract may be executed in counterparts. Each counterpart, when executed and delivered, shall be deemed an original and all counterparts together shall constitute one and the same Contract. Delivery by the PRRIP of an originally signed counterpart of this Contract by PDF shall be followed up immediately by delivery of the originally signed counterpart to the State.

S. Agency. Neither party hereto shall be, or be considered as, the agent, servant, or employee of the other party or be held responsible or liable for damages for the acts or conduct of the other party.

T. Foundation. The Foundation has represented to the State, and the State hereby acknowledges, that the Foundation is the financial management entity providing support to the Governance Committee of the Program and that the Foundation, by executing this Contract, is acting as the contracting agent of the Governance Committee of the Program.

U. Recitals. The Recitals set forth in Section 2 above are incorporated into this Contract and shall constitute a part of this Contract for all purposes.

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9. **SIGNATURES.** The Parties to this Contract, either personally or through their duly authorized representatives, have executed this Contract on the dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Contract.

NEBRASKA COMMUNITY FOUNDATION

Diane M. Wilson
Manager of Public/Private Partnerships

Date

STATE OF WYOMING

Harry C. LaBonde Jr.
Director, Wyoming Water Development Office

Date

WYOMING ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

for:  #190227
Tyler M. Renner
Assistant Attorney General

Feb. 19, 2019
Date

Tab 'UU'

*Water Service Contract with
Genesis Alkali Wyoming, L.P.
for water from Fontenelle
Reservoir*

Will be provided
at the meeting

**PUBLIC ACCESS AGREEMENT
BETWEEN
WYOMING GAME AND FISH COMMISSION
AND
WYOMING WATER DEVELOPMENT COMMISSION**

1. **Parties.** This Public Access Agreement (Agreement) is made and entered into by and between the Wyoming Game and Fish Commission, by and through the Wyoming Game and Fish Department (WGFD), whose address is: 5400 Bishop Boulevard, Cheyenne, WY 82006, and Wyoming Water Development Commission, by and through the Wyoming Water Development Office (WWDO), whose address is: 6920 Yellowtail Road, Cheyenne, WY 82002. The WGFD and the WWDO are collectively referred to as the “Parties”
2. **Purpose of Agreement.** The purpose of this Agreement is to provide public access to the reservoir commonly known as “Healy Reservoir” located north and west of US Highway 16 in Sections 4, 8, and 9, Township 51 North, Range 81 West of the 6th P.M., Johnson County, Wyoming, owned by the Wyoming Water Development Commission. The tract of land owned by Wyoming Water Development Commission located south and east of US Highway 16, in Sections 16 and 17, Township 51 North, Range 81 West of the 6th P.M., Johnson County, Wyoming, known as the “South Parcel” is not included in this agreement; however, the parties reserve the right to re-evaluate possible future public access and use to the South Parcel on an annual basis. Any agreement between the parties in regards to access and use of the South Parcel will be in writing. Both areas are depicted on the map attached to this agreement as Exhibit “A”, and incorporated into this agreement by this reference.
3. **Term of Agreement and Required Approvals.** This Agreement is effective on the day and date last signed and executed by the duly authorized representatives of the parties to this Agreement. The term of this Agreement is from the effective date and shall remain in full force and effect for a period of ten (10) years from the date of the last signature affixed to this Agreement. The Agreement is subject to final approval by the Wyoming Game and Fish Commission and the Wyoming Water Development Commission through the commission meeting process.
4. **Payment.** No payment shall be made to either party by the other party as a result of this Agreement.
5. **Terms and Conditions.**
 - A. **Public Access Area.** Public access to Healy Reservoir will be provided for recreational purposes including parking, boating and fishing. Hunting is prohibited. (See Sub-Section F “Hunting”) These recreational activities shall be provided free of charge with agreed upon limitations. Public access shall be regulated to designated areas clearly marked with signage managed by the WGFD

and in cooperation and agreement by both parties. Boating and fishing shall be restricted as per WGFD Regulations.

- B. Access Road, Parking Areas and Boat Ramps.** The public access road, parking areas and boat ramp are located in the approximate area as depicted on the maps attached to this agreement as Exhibit "B" and Exhibit "C", and incorporated into this agreement by this reference. The location and size of these facilities shall be within the size, length and general location as currently in place at the time of the effective date of this agreement. Both parties shall agree upon any expansion or adjustment of these facilities beyond general maintenance. The WGFD will be responsible for the cost and performance of general maintenance associated with the described public access road, parking areas and boat ramps. General maintenance of the road, ramps and parking areas includes repairs, grading, leveling, clean-up and litter control. Maintenance is to be completed in a good and workmanlike manner and kept in good condition and repair. Any maintenance work shall be done at the sole cost and expense of the WGFD. In the event that commercial or non-public WWDO sanctioned use of the described facilities results in increased damages to the roadway and parking facilities, an agreed upon joint maintenance plan will be established between the WGFD and the WWDO. The WGFD shall have the right, but are not required, to construct, maintain and reconstruct an additional boat ramp or other boat launch facilities, dock or pier as described by the WGFD. All plans for any such improvements shall be mutually agreed upon in advance by both parties in writing. No trash or littering is permitted.
- C. Comfort Station.** The WGFD has the right, but are not required to install a public comfort station at the parking area #2 as shown on Exhibit "C". The WGFD will be responsible for all cost, maintenance and permitting associated with the facility. Maintenance of the facilities includes general clean-up and litter control. All plans for the improvements will be mutually agreed upon in advance by both parties in writing. The WGFD will provide and maintain a minimum of one (1) temporary toilet facility until a permanent facility is installed.
- D. Signs.** The WGFD shall install signs necessary to define the lands covered by the Agreement and rights granted to explain the use, scope restrictions and privileges of the public access. The WGFD is responsible for determining the location of all signs and is responsible for installation and maintenance of all signs and sign structures. All signs, sign posts and sign structures will be kept in good condition and repair.
- E. Motorized Travel.** The WGFD will limit motorized travel to the designated road and parking areas. Proper signage will be posted and maintained with respect to road usage. Any off road vehicle use will be agreed upon by both parties in writing. Off road vehicle use will be managed by the WGFD and regulated through area signage. Public parking will be restricted to the previously established designated parking facilities.

- F. Hunting.** Discharge of firearms on the property is prohibited. Hunting is prohibited. Both parties reserve the right to re-evaluate hunting on the property in accordance with WGFD Regulations on an annual basis. Any agreement between the parties in regards to hunting will be in the form of a written Amendment.
- G. Camping.** All camping by the public is prohibited. All open fires and fireworks by the public are prohibited. Gas stoves, barbeques and heaters are permitted when fire regulations allow.
- H. Habitat Improvement.** The WGFD agrees to participate in habitat improvement projects including but not limited to noxious weed management within the boundary of the property. All habitat improvement projects will be agreed upon in writing by the parties.
- I. Law Enforcement Rules.** The WGFD is responsible for law enforcement of all users of the Agreement and rights granted under this Agreement.
- J. Fisheries Management.** The WGFD is responsible for fishery management at Healy Reservoir including stocking and regulations. The WWDO manages the reservoir water level for a variety of uses and does not guarantee a specific water level. The water level will fluctuate based on releases from the reservoir as solely determined by the WWDO.

6. General Provisions.

- A. Amendments.** Any changes, modifications, revisions, or amendments to this Agreement which are mutually agreed upon by the parties to this Agreement shall be incorporated by written instrument, executed and signed by all parties to this Agreement.
- B. Applicable Law/Venue.** The construction, interpretation, and enforcement of this Agreement shall be governed by the laws of the State of Wyoming. The Courts of the State of Wyoming shall have jurisdiction over this Agreement and the parties. The venue shall be the First Judicial District, Laramie County, Wyoming.
- C. Assignment/Agreement Not Used as Collateral.** Neither party shall assign or otherwise transfer any of the rights or delegate any of the duties set out in this Agreement without the prior written consent of the other party.
- D. Entirety of Agreement.** This Agreement, consisting of six (6) pages, Exhibit A, one (1) page, Exhibit B, one (1) page, and Exhibit C, one (1) page, represents the entire and integrated Agreement between the parties and supersede all prior negotiations, representations, and agreements, whether written or oral.

- E. Force Majeure.** Neither party shall be liable for failure to perform under this Agreement if such failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays. This provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the nonperforming party.
- F. Indemnification.** Each party to this Agreement shall assume the risk of any liability arising from its own conduct. Neither party agrees to insure, defend, or indemnify the other.
- G. Obligations.** Nothing in this Agreement shall be construed as obligating the expenditures of the WGFD in excess of appropriations authorized by law or as authorized by the WGFD.
- H. Prior Approval.** This Agreement shall not be binding upon either party, no services shall be performed under the terms of this Agreement until this Agreement has been reduced to writing, approved as to form by the Office of the Attorney General.
- I. Severability.** Should any portion of this Agreement be judicially determined to be illegal or unenforceable, the remainder of the Agreement shall continue in full force and effect, and the parties may renegotiate the terms affected by the severance.
- J. Sovereign Immunity.** Pursuant to Wyo. Stat. § 1-39-104(a), the State of Wyoming, the Wyoming Game and Fish Commission, the WGFD, the Wyoming Water Development Commission and the WWDO expressly reserve sovereign immunity by entering into this Agreement and specifically retain all immunities and defenses available to them as sovereigns. The parties acknowledge that the State of Wyoming has sovereign immunity and only the Wyoming Legislature has the power to waive sovereign immunity. Designations of venue, choice of law, enforcement actions, and similar provisions shall not be construed as a waiver of sovereign immunity. The parties agree that any ambiguity in this Agreement shall not be strictly construed, either against or for either party, except that any ambiguity as to sovereign immunity shall be construed in favor of sovereign immunity.
- K. Termination of Agreement.** This Agreement may only be terminated by written mutual agreement by the parties or by breach of the terms of this Agreement.

- L. Third Party Beneficiary Rights.** The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties, and obligations contained in this Agreement shall operate only between the parties to this Agreement and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.
- M. Time is of the Essence.** Time is of the essence in all provisions of this Agreement.

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK.

7. **Signatures.** In witness whereof, the parties to this Agreement, through their duly authorized representatives, have executed this Agreement on the days and dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this Agreement as set forth herein.

WYOMING GAME AND FISH COMMISSION

John Kennedy, Deputy Director
Wyoming Game and Fish Department

Date

ATTEST:

Meredith Wood, Chief Fiscal Officer

Date

WYOMING WATER DEVELOPMENT COMMISSION

Harry LaBonde, Director
Wyoming Water Development Office

Date

ATTORNEY GENERAL'S OFFICE: APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

GF 47
AG Rev 3-8-2017

Exhibit A



Exhibit B

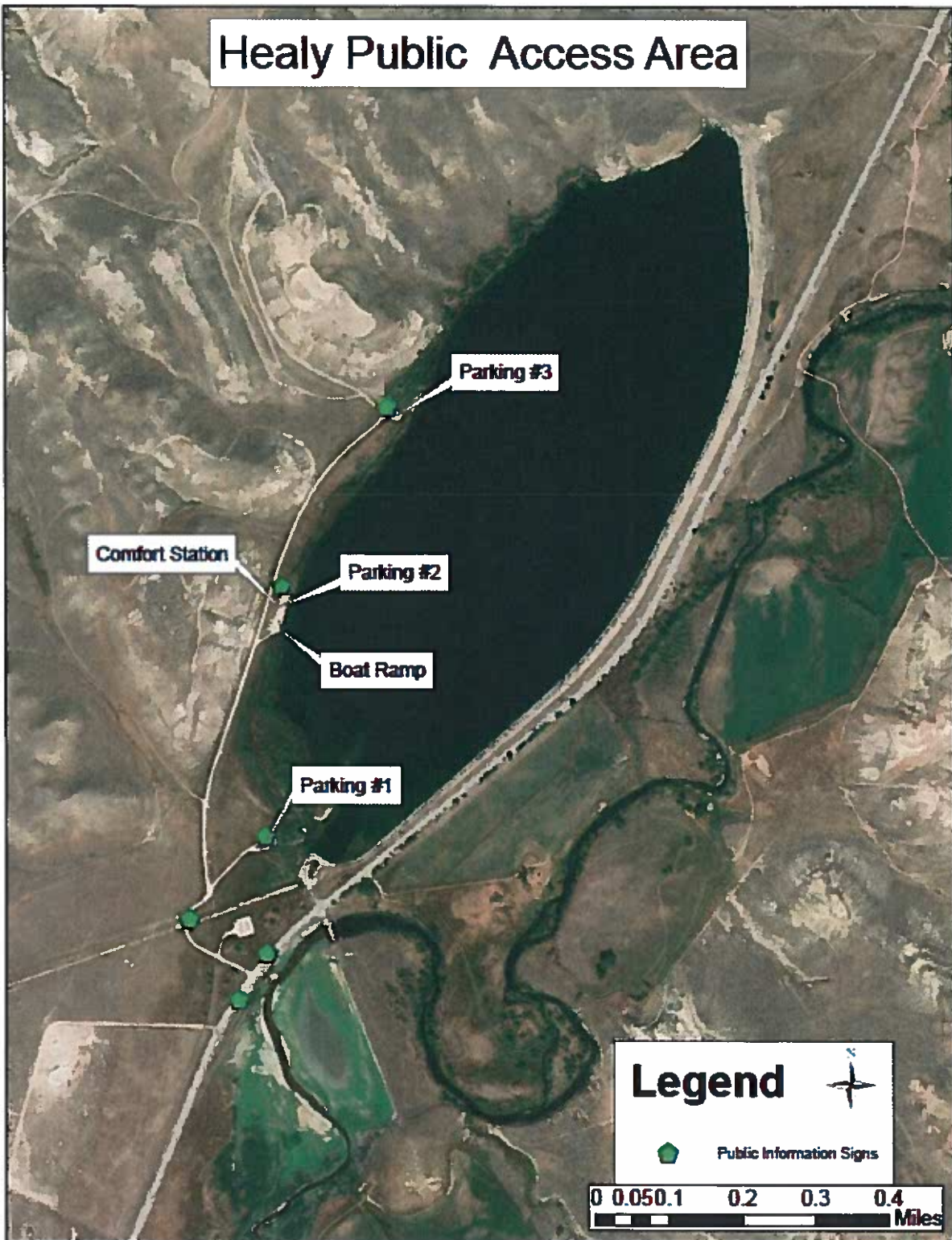


Exhibit C



BUFFALO BILL RESERVOIR ENLARGEMENT WINTER RELEASE OPERATION AGREEMENT 2019

THIS WINTER RELEASE AGREEMENT, entered into by and between the U.S. Bureau of Reclamation (Reclamation), and the State of Wyoming serves to replace in entirety all previous agreements specifically related to winter releases from Buffalo Bill Reservoir.

Background

In May 1982, Reclamation, the Wyoming State Engineer's Office, the Wyoming Game and Fish Department, and the U.S. Fish and Wildlife Service (Service) entered into an agreement entitled, *Operation Agreement, Buffalo Bill Reservoir* that provided minimum flow releases from Buffalo Bill Reservoir, subject to availability of water.

In October 1982, modifications to the existing Buffalo Bill Dam were authorized. The modifications included raising the dam 25 feet, increasing the existing capacity of the reservoir. On March 29, 1985, Reclamation and the State of Wyoming entered into a cost-sharing and repayment agreement for the Buffalo Bill Dam Modifications on the Shoshone Project. Construction on the dam was completed in 1992.

In 1994, Reclamation, the Service, and the State of Wyoming entered into an agreement entitled, *Revised Instream Flow Operation Agreement for Buffalo Bill Reservoir Enlargement* to provide wintertime flows below Buffalo Bill Dam for fisheries in the Shoshone River in conjunction with other water needs. The agreement also provided for the Wyoming Game and Fish Department to conduct fishery studies in the Shoshone River and provide a report regarding the results of those studies. In addition, the agreement provided that the Wyoming Water Development Commission (WWDC) provide a marketing plan for water use from the State's Account provided by the reservoir enlargement.

In 2004, Reclamation, the Service, and the State of Wyoming entered into the original *Buffalo Bill Reservoir Enlargement, Winter Release Operation Agreement*.

In 2009 and again in 2014, Reclamation, the Service, and the State of Wyoming renewed the *Buffalo Bill Reservoir Enlargement, Winter Release Operation Agreement*, pursuant to Article 7 of the Agreement.

Purpose of the Agreement

The purpose of this Buffalo Bill Reservoir Enlargement Winter Release Operation Agreement 2019 (Agreement) is to provide winter releases below Buffalo Bill Dam for fisheries in the Shoshone River in conjunction with other water needs such as hydropower generation and flood control. Winter releases for this Agreement occur in the non-irrigation season (normally October 16 through April 14). Further, the Agreement sets forth the criteria for determining the winter releases with respect to Buffalo Bill Reservoir.

WHEREAS, all parties agree to the need to provide releases to achieve recommended wintertime flows for fisheries in the Shoshone River in conjunction with other water needs.

NOW THEREFORE, the parties hereto mutually agree as follows:

1. Winter releases from the Buffalo Bill Reservoir shall provide a minimum winter release of 100 cubic feet per second (cfs) in the river at the Shoshone Power Plant. Additional winter releases up to a combined total of 350 cfs in the river below the Buffalo Bill Power Plant will be provided based on the conditions and criteria set forth in this Agreement.
2. Fifty cfs of water shall be released from the Reservoir enlargement (State Account) and 50 cfs of water from the Shoshone Project Account shall be released to achieve the minimum winter release of 100 cfs at the Shoshone Power Plant.
3. Additional winter releases beyond the 100 cfs minimum release up to a combined total of 350 cfs in the river below the Buffalo Bill Power Plant will be provided based on the criteria in the attached Exhibit "A" to this Agreement. Using the criteria found in Exhibit A, the following examples are provided for illustration.
 - a. When the previous water year (October 1 through September 30) total inflow into the Reservoir is greater than 650,000 acre-feet the winter release is determined based on the total Buffalo Bill Reservoir (Reservoir) content and the State Account at the end-of-water year. For example, if the previous year inflow was 700,000 acre-feet and the end-of-water year total Reservoir content and State Account were 385,000 acre-feet and 100,000 acre-feet, respectively, a winter release of 200 cfs will be provided in the river at the Buffalo Bill Power Plant. This 200 cfs release includes the 100 cfs minimum in the river at the Shoshone Power Plant. However, if under the same previous year inflow conditions the total end-of-water year Reservoir content and State Account were 476,000 acre-feet and 155,000 acre-feet, respectively, a release of 350 cfs will be provided in the river at the Buffalo Bill Power Plant. This 350 cfs release includes the 100 cfs minimum in the river at the Shoshone Power Plant.
 - b. When the previous water year total inflow is 650,000 acre-feet or less and the end-of-water year State Account is greater than 60,000 acre-feet, a winter release of 150 cfs will be provided in the river at the Buffalo Bill Power Plant. This 150 cfs release includes the 100 cfs minimum in the river at the Shoshone Power Plant. However, if under the same previous year inflow conditions the end-of-water year State Account is 60,000 acre-feet or less, the winter release will be the minimum 100 cfs in the river at the Shoshone Power Plant.
4. The Wyoming State Engineer (State Engineer) shall review the Bureau of Reclamation's Buffalo Bill Reservoir inflow records, together with other available information, such as the Reservoir ownership accounting and the monthly operating plan, and shall estimate the annual inflow for the water year. The State Engineer shall advise all parties to this agreement, state water administration officials, and local irrigation district administrators of the preliminary estimated annual inflow by September 1 and the final determination of annual inflow by October 5.

When the annual inflow for the water year ending on September 30 of the current calendar year to Buffalo Bill Reservoir is estimated to be 650,000 acre-feet or less, a meeting for the parties to this Agreement to discuss water availability and the logical implication of various

winter release scenarios during the upcoming water year will be held on or before October 5, if requested by one of the parties by September 15. Reclamation, taking into consideration the input provided, shall notify the parties as to the Buffalo Bill Reservoir winter release by October 10.

5. The winter releases from the Reservoir discussed in Sections 1, 2, 3, and 4 of this Agreement shall be provided only to the extent that the releases do not impact any project contract obligations existing as of the date of this Agreement.
6. Under this Agreement the State reserves the right to provide supplemental water to existing uses or to service new uses up to 20,000 acre-feet of water on a firm annual basis during the irrigation season (normally April 15 through October 15). The State also reserves the right to provide up to an additional 10,000 acre-feet to supplement existing uses or to service new uses when water is available. Any new uses shall be subject to a National Environmental Protection Act (NEPA) review. Under no circumstances will the State authorized uses exceed 30,000 acre-feet per year during the irrigation season.
7. This Agreement becomes effective when all signatures have been obtained. The term of the Agreement is from the date at the bottom of this page through the term of ten years. It may be modified during the term of the Agreement, subject to written approval from all parties. This Agreement may be renewed or modified at the end of the term by agreement of the parties in writing and subject to the required approvals.
8. This Agreement represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations and agreements, whether written or oral.
9. This Agreement shall not be binding upon either party unless this Agreement has been reduced to writing before performance begins as described under the terms of this Agreement, and unless this Agreement is approved as to form by the Wyoming Attorney General or his representative.
10. The United States, the U.S. Bureau of Reclamation, the State of Wyoming, the Wyoming Water Development Commission, the Wyoming Game and Fish Commission and the Wyoming State Engineer do not waive their sovereign immunity by entering into this Agreement, and each fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this Agreement.
11. The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties and obligations contained in this Agreement shall operate only between the parties to this Agreement, and shall inure solely to the benefit of the parties to this Agreement. The provisions of this Agreement are intended only to assist the parties in determining and performing their obligations under this Agreement.

THE PARTIES to this Buffalo Bill Reservoir Enlargement Winter Release Agreement have executed this Agreement as of this ____ day of _____, 2019. Individual signatures are on the following ____ pages.

UNITED STATES

Approved this ____ day of _____, 2019

**Carlie A. Ronca, Area Manager
U.S. Bureau of Reclamation**

WYOMING WATER DEVELOPMENT OFFICE

Approved this ____ day of _____, 2019

Harry LaBonde, Director
Wyoming Water Development Office

WYOMING ATTORNEY GENERAL'S OFFICE APPROVAL AS TO FORM

Tyler M. Renner, Assistant Attorney General

Date

WYOMING STATE ENGINEER'S OFFICE

Approved this ____ day of _____, 2019

**Patrick T. Tyrrell, State Engineer
Wyoming State Engineer's Office**

WYOMING GAME AND FISH DEPARTMENT

Approved this ____ day of _____, 2019

**Brian Nesvik, Director
Wyoming Game and Fish Department**

STATE OF WYOMING

Approved this ____ day of _____, 2019

**Mark Gordon, Governor
State of Wyoming**

Exhibit A: Buffalo Bill Reservoir Winter Release Criteria

Previous Water Year Total Inflow is greater than 650,000 Acre-feet

< winter release set based on previous end-of-year reservoir content
(Go to End-of-Year Reservoir Content Criteria Below, BOX #2)

Previous Water Year Total Inflow 650,000 Acre-feet or Less (Critical Low Flow Year)

< winter release set based on previous end-of-year State Account content
(Go to State Account end-of year content, BOX #3)

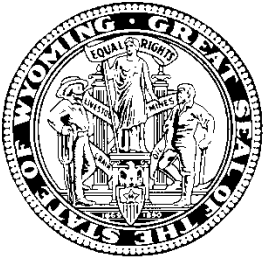
| BOX #2 | |
|---------------------------------------|------------------------|
| <u>Reservoir end-of-year Content:</u> | <u>Winter Release:</u> |
| Less than 375,000 AF | Go to BOX #3 |
| 375,000 - 475,000 AF | Go to BOX #4 |
| Greater than 475,000 AF | Go to BOX #5 |

| BOX #3 | |
|---|------------------------|
| <u>State Account end-of-year content:</u> | <u>Winter Release:</u> |
| Greater than 60,000 AF | 150 cfs |
| 60,000 AF or less | 100 cfs |

| BOX #4 | |
|---|------------------------|
| <u>State Account end-of-year Content:</u> | <u>Winter Release:</u> |
| Greater than 95,000 AF | 200 cfs |
| 60,001 - 95,000 AF | 150 cfs |
| 60,000 AF or less | 100 cfs |

| BOX #5 | |
|---|------------------------|
| <u>State Account end-of-year Content:</u> | <u>Winter Release:</u> |
| Greater than 150,000 AF | 350 cfs |
| 95,001 - 150,000 AF | 200 cfs |
| 60,001 - 95,000 AF | 150 cfs |
| 60,000 AF or less | 100 cfs |

50 cfs of the winter release comes from the Shoshone Project Account.



WYOMING WATER DEVELOPMENT OFFICE

6920 Yellowtail Road
Cheyenne, WY 82002

Phone: (307) 777-7626
wwdc.state.wy.us

Mark Gordon
Governor

Commissioners

| | |
|---------------------|-----------------|
| Nick Bettas | Sheridan Little |
| David Evans | Mike Purcell |
| Gerald E. Geis | Jeanette Sekan |
| Clinton W. Glick | Larry Suchor |
| Kellen K. Lancaster | Rodney Wagner |

Harry C. LaBonde, Jr., P.E.
Director

DATE: February 13, 2018

AGENCY: Wyoming Water Development Office

PROJECT MANAGER: Keenan Hendon

REGARDING: Wyoming Basin State Program (BSP) Applications

In January of 2019, WWDO received no funding applications for the WY BSP program. The WY BSP has currently funded one construction project and has secured funding for a salinity study.

In January of 2016, the Wyoming Water Development Office received two (2) BSP applications for a construction project and a study located in the Colorado River Basin. The BSP applications were reviewed, presented and approved by the Wyoming Water Development Commission at the March 2016 Commission meeting. The following is an update on the BSP projects in Wyoming:

- **Eden Valley Irrigation & Drainage District (EVIDD)**
EVIDD has secured project funding from WWDC and the BSP program to convert unlined irrigation canals to HDPE pipe. The project consists of converting ~27,000 feet of the F2, F3, F4 and F5 Farson laterals to HDPE pipe. The project will improve the operations, water efficiencies for EVIDD and reduce the salinity impacts to the Colorado River Basin. The project is anticipated to provide an annual salt load reduction of 1,619 tons. The project is designed and the necessary permits have been secured. This project will connect to a Wyoming MOA project that is being administered by Reclamation. The MOA project consists of converting approximately 6,800 feet of irrigation ditch into HDPE pipe. The project went to bid in late-summer of 2018. The bids received were in excess of available funding to complete the project. Currently, the project has requested additional funding from WWDC and the funding request is currently in the legislative approval process. The project has requested the ability to bid alternate pipe products and extend the funding reversion date from April 30, 2020 to September 30, 2020 from the Bureau of Reclamation. The request for the use of alternate pipe and extending the reversion date is under review by the Bureau of Reclamation.

- EVIDD Budget (including proposed additional funding)
 - Design & Construction:
 - WWDC Grant^{1,2} \$ 3,076,000 (58.04%)
 - WWDC Loan² \$ 200,000 (3.77%)
 - BSP \$ 2,024,413 (38.19%)
 - Total Project Funding \$ 5,300,413

¹ 2013/2015 Wyoming Legislature Appropriation - \$2,366,000 grant funding

² 2019 Wyoming Legislature - \$710,000 grant request;

² 2019 Wyoming Legislature - \$200,000 loan request.

- Blacks Fork Salinity Study

The Austin Wall Irrigation District submitted a request in 2016 to fund the activities necessary to conduct a salinity study in the Blacks Fork Drainage Basin. The project was submitted to Reclamation for review and approval. The project was tabled by Reclamation to determine an appropriate path forward to fund and conduct studies through the BSP program. WY, CO and UT all have BSP programs. WY is the first state to request funding for a salinity study through their BSP program. WWDO has worked alongside Reclamation, USGS and the Colorado River Basin Salinity Control Forum Workgroup to determine a path forward for the Blacks Fork Salinity Study. Currently, USGS is the only entity recognized by Reclamation to conduct salt loading determinations in a salinity study. During 2017, Reclamation was able to source alternative funding for the Blacks Fork Study. As a result, the WY USGS has the Blacks Fork Study underway and there is no funding required from the WY BSP program.

The following provides a summary of the WY BSP budget as of January 31, 2019:

- WY BSP Budget

| | |
|--------------------------------|-------------------|
| Reclamation Funding allocated: | \$ 2,800,000 |
| EVIDD Project: | \$ 2,024,413 |
| Administrative Expenses: | <u>\$ 280,000</u> |
| Remaining Funds: | \$ 495,587 |



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Cambria Tank

SPONSOR: Cambria Improvement and Service District

PROJECT DESCRIPTION: Design and construction of transmission pipeline, pumping facilities, 200,000 gallon tank and appurtenances.

WWDC MANAGER: William Brewer

FUNDING

| | | | | | |
|---------------------|----|------------|-------|-----------------|------|
| WWDC Appropriation: | \$ | 626,450.00 | 44.9% | WWDC Account: | I |
| WWDC Grant Amount: | \$ | 626,450.00 | 44.9% | Session Law: | 2015 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2020 |

| | |
|--------------------|---------------------|
| Funding Source #2: | DWSRF |
| Amount: | \$ 318,160.00 22.8% |
| Funding Source #3: | MRG |
| Amount: | \$ 450,000.00 32.3% |

| | |
|------------------------------|------------------------|
| <u>Total Project Budget:</u> | \$ 1,394,610.00 100.0% |
|------------------------------|------------------------|

ENGINEERING

| | | | |
|-------------------|------------------------------|-----------------|-------------|
| Engineer: | Camp Creek Engineering, Inc. | Agreement Date: | Dec-01-2016 |
| Design Fee: | \$ 43,743.00 | | |
| Construction Fee: | <u>\$ 65,160.00</u> | | |
| Total Fee: | \$ 108,903.00 | | |

CONSTRUCTION

| | | | |
|----------------------|-------------------------|--------------------|------------------|
| Bid Opening Date: | Jun-26-2018 | Number of Bids: | 2 |
| Low Bidder: | J.R. Civil Construction | Range of Bids: | \$1.16 to 1.20 M |
| Engineer's Estimate: | \$ 805,625.00 | Agreement Date: | Sep-20-2018 |
| Contractor Amount: | \$ 1,159,601.96 | Construction Time: | 330 |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| |
|-------------|
| Misc. Costs |
|-------------|

PROJECT CLOSEOUT

| | |
|------------------------|-------|
| Final Project Cost: | Date: |
| WWDC Funding Share: | |
| Other Funding Sources: | |
| WWDC Reverted Funding: | |

PROJECT STATUS

This project is in construction.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Central Wyoming Regional Elevated Tank
SPONSOR: Central Wyoming Regional Water System Joint Powers Board

PROJECT DESCRIPTION: Design and construction of a 1MG elevated water storage tank and connection pipelines

WWDC MANAGER: William Brewer

FUNDING

| | | | | | |
|---------------------|----|--------------|-------|-----------------|------|
| WWDC Appropriation: | \$ | 1,648,200.00 | 53.2% | WWDC Account: | II |
| WWDC Grant Amount: | \$ | 1,648,200.00 | 53.2% | Session Law: | 2014 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2019 |

| | |
|-------------------|-------------------------------------|
| Funding Source #2 | Central Wyoming Regional System JPB |
| Amount: | \$ 1,451,342.57 46.8% |

| | |
|------------------------------|------------------------|
| Total Project Budget: | \$ 3,099,542.57 100.0% |
|------------------------------|------------------------|

ENGINEERING

| | | | |
|-------------------|---------------------|-----------------|-------------|
| Engineer: | 609 Consulting, LLC | Agreement Date: | Jun-16-2015 |
| Design Fee: | \$ 107,500.00 | | |
| Construction Fee: | \$ 107,500.00 | | |
| Total Fee: | \$ 215,000.00 | | |

CONSTRUCTION

| | | | |
|----------------------|-----------------------------|--------------------|------------------|
| Bid Opening Date: | Apr-13-2017 | Number of Bids: | 5 |
| Low Bidder: | Landmark Structures I, L.P. | Range of Bids: | \$2.95M to 4.21M |
| Engineer's Estimate: | \$ 2,752,710.00 | Agreement Date: | May-01-2017 |
| Contractor Amount: | \$ 2,881,134.85 | Construction Time: | 550 Days |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| | |
|-------------|-------------|
| Misc. Costs | \$ 3,407.72 |
|-------------|-------------|

PROJECT CLOSEOUT

| | | | |
|------------------------|-----------------|-------|--|
| Final Project Cost: | \$ 3,099,542.57 | Date: | |
| WWDC Funding Share: | \$ 1,648,200.00 | | |
| Other Funding Sources: | \$ 1,451,342.57 | | |
| WWDC Reverted Funding: | \$ - | | |

PROJECT STATUS

The Project is complete and in operation. The WWDO project is closed-out.
Sponsor paid all additional engineering and construction costs above the WWDC eligible costs.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Douglas Box Elder Spring

SPONSOR: City of Douglas

PROJECT DESCRIPTION: Design and construction of a spring house and design and construction of approximately 16 miles of 16" transmission pipeline.

WWDC MANAGER: William Brewer

FUNDING

| | | | | | |
|---------------------|----|--------------|-------|-----------------|----------------|
| WWDC Appropriation: | \$ | 9,447,000.00 | 67% | WWDC Account: | I |
| WWDC Grant Amount: | \$ | 9,447,000.00 | 67.0% | Session Law: | 2011/2016/2018 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2021 |

| | |
|--------------------|-----------------------|
| Funding Source #2: | City of Douglas |
| Amount: | \$ 4,653,000.00 33.0% |

| | |
|-----------------------|-------------------------|
| Total Project Budget: | \$ 14,100,000.00 100.0% |
|-----------------------|-------------------------|

ENGINEERING

Phase I

| | | | |
|-------------------|---------------|-----------------|-------------|
| Engineer: | CEPI | Agreement Date: | Nov-10-2011 |
| Design Fee: | \$ 165,000.00 | | |
| Construction Fee: | \$ 92,400.00 | | |
| Total Fee: | \$ 257,400.00 | | |

Phase II

| | | | |
|-------------------|---------------|-----------------|-------------|
| Engineer: | CEPI | Agreement Date: | Jul-27-2015 |
| Design Fee: | \$ 541,320.00 | | |
| Construction Fee: | \$ - | | |
| Total Fee: | \$ 541,320.00 | | |

CONSTRUCTION

Phase I - Spring House

| | | | |
|------------------------|------------------------------|--------------------|-------------|
| Bid Opening Date: | Mar-12-2016 | Number of Bids: | 1 |
| Low Bidder: | Russell Construction Company | Range of Bids: | \$858K |
| Engineer's Estimate: | \$ 735,775.00 | Agreement Date: | Mar-16-2016 |
| Contractor Bid Amount: | \$ 857,996.80 | Construction Time: | 90 Days |

Phase II - Transmission Pipeline

| | | | |
|------------------------|------------------------------|--------------------|-----------------|
| Bid Opening Date: | Nov-13-2018 | Number of Bids: | 7 |
| Low Bidder: | Mountain View Builders, Inc. | Range of Bids: | \$7.9 to 11.0 M |
| Engineer's Estimate: | \$ 10,300,000.00 | Agreement Date: | Nov-27-2018 |
| Contractor Bid Amount: | \$ 7,917,556.00 | Construction Time: | 18 months |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| |
|-------------|
| Misc. Costs |
|-------------|

PROJECT CLOSEOUT

| | |
|------------------------|-------|
| Total Project Cost: | Date: |
| WWDC Funding Share: | |
| WWDC Reverted Funding: | |

PROJECT STATUS

Construction will begin in the spring of 2019.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Goshen Irrigation District
Rehabilitation 2017

SPONSOR: Goshen Irrigation District

PROJECT DESCRIPTION: Lateral 6.7 and 45.1 / replace 6,000 feet of tile line with 24-inch PVC pipe

WWDC MANAGER: Keenan Hendon

FUNDING

| | | | |
|---------------------|---------------|-----------------|------|
| WWDC Appropriation: | \$ 214,000.00 | WWDC Account: | II |
| WWDC Grant Amount: | \$ 214,000.00 | Session Law: | 2017 |
| WWDC Loan Amount: | | Reversion Date: | 2022 |

WWDC reimburses Sponsor for 100% of invoiced materials costs only

Funding Source #2: Goshen Irrigation District
Amount:

Sponsor is responsible for project Labor, Equipment and Engineering

Total Project Budget: \$ 214,000.00

ENGINEERING

| | | | |
|-------------------|------|-----------------|-----|
| Engineer: | N/A | Agreement Date: | N/A |
| Design Fee: | N/A | | |
| Construction Fee: | N/A | | |
| Total Fee: | \$ - | | |

CONSTRUCTION

| | | | |
|----------------------|-------------------|--------------------|-----------------|
| Bid Opening Date: | Oct-05-2017 | Number of Bids: | 2 |
| Low Bidder: | Deines Irrigation | Range of Bids: | \$117K - \$130K |
| Engineer's Estimate: | \$117,211 | Agreement Date: | Oct-19-2017 |
| Contractor Amount: | \$117,575 | Construction Time: | 30 days |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| | |
|-------------|-------------|
| Misc. Costs | \$ 8,781.56 |
|-------------|-------------|

PROJECT CLOSEOUT

| | | | |
|------------------------|---------------|-------|-------------|
| Final Project Cost: | \$ 126,356.56 | Date: | Feb-19-2019 |
| WWDC Funding Share: | \$ 126,356.56 | | |
| Other Funding Sources: | \$ - | | |
| WWDC Reverted Funding: | \$ 87,643.44 | | |

PROJECT STATUS

This project has been successfully completed and closed-out.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: High Meadow Ranch Well, Tank and Pipeline 2017
SPONSOR: High Meadow Ranch Water District

PROJECT DESCRIPTION: This project includes connecting the new Level II well to the existing system, a storage tank, back-up power supply, and a transmission pipeline

WWDC MANAGER: Wade Verplancke

FUNDING

| | | | | | |
|---------------------|----|--------------|-------|-----------------|------|
| WWDC Appropriation: | \$ | 1,991,910.00 | 67.0% | WWDC Account: | I |
| WWDC Grant Amount: | \$ | 1,991,910.00 | 67.0% | Session Law: | 2017 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2022 |

| | | | | | |
|--------------------|----------------------------------|------------|-------|--|--|
| Funding Source #2: | High Meadow Ranch Water District | | | | |
| Amount: | \$ | 981,090.00 | 33.0% | | |

| | | | | | |
|-----------------------|----|--------------|--------|--|--|
| Total Project Budget: | \$ | 2,973,000.00 | 100.0% | | |
|-----------------------|----|--------------|--------|--|--|

ENGINEERING

| | | | |
|-------------------|-----------|-----------------|-------------|
| Engineer: | Jorgenson | Agreement Date: | Aug-17-2017 |
| Design Fee: | \$ | 418,729.13 | |
| Construction Fee: | \$ | 382,229.13 | |
| Total Fee: | \$ | 800,958.26 | |

CONSTRUCTION

| | | | |
|----------------------|--------------|-----------------|------------------------------|
| Bid Opening Date: | Jan-10-2019 | Number of Bids: | 5 |
| Low Bidder: | Wilson Bros. | Range of Bids: | \$4.7 - \$5.7M |
| Engineer's Estimate: | \$ | 5,053,642.50 | Agreement Date: Feb-21-2019 |
| Contractor Amount: | \$ | 4,675,857.50 | Completion Date: 30-Apr-2020 |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| |
|-------------|
| Misc. Costs |
|-------------|

PROJECT CLOSEOUT

| | |
|------------------------|-------|
| Final Project Cost: | Date: |
| WWDC Funding Share: | |
| Other Funding Sources: | |
| WWDC Reverted Funding: | |

PROJECT STATUS

The project is in the construction phase.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Lovell Tank/Zone 2 Improvements **SPONSOR:** Town of Lovell

PROJECT DESCRIPTION: Design and construction of 400K water tank, transmission pipeline and pump station

WWDC MANAGER: Keenan Hendon

FUNDING

| | | | | | |
|---------------------|----|--------------|-------|-----------------|-----------|
| WWDC Appropriation: | \$ | 2,700,100.00 | 67.0% | WWDC Account: | Account I |
| WWDC Grant Amount: | \$ | 2,700,100.00 | 67.0% | Session Law: | 2015 |
| WWDC Loan Amount: | | | 0.0% | Reversion Date: | 2020 |

| | | | | | |
|--------------------|----------------|--------------|-------|--|--|
| Funding Source #2: | Town of Lovell | | | | |
| Amount: | \$ | 1,329,900.00 | 33.0% | | |

| | | | | | |
|------------------------------|----|--------------|--------|--|--|
| <u>Total Project Budget:</u> | \$ | 4,030,000.00 | 100.0% | | |
|------------------------------|----|--------------|--------|--|--|

ENGINEERING

| | | | |
|-------------------|----------------------|-----------------|-------------|
| Engineer: | DOWL | Agreement Date: | Oct-15-2015 |
| Design Fee: | \$ 280,000.00 | | |
| Construction Fee: | <u>\$ 275,000.00</u> | | |
| Total Fee: | \$ 555,000.00 | | |

CONSTRUCTION

| | | | |
|----------------------|-----------------|--------------------|----------------|
| Bid Opening Date: | Jan-05-2017 | Number of Bids: | 6 |
| Low Bidder: | Wilson Brothers | Range of Bids: | \$2.6 - \$3.4M |
| Engineer's Estimate: | \$ 2,712,170.00 | Agreement Date: | Jan-27-2017 |
| Contractor Amount: | \$ 2,627,575.00 | Construction Time: | 200 days |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| | | |
|-------------|----|-----------|
| Misc. Costs | \$ | 18,632.63 |
|-------------|----|-----------|

PROJECT CLOSEOUT

| | | | | |
|------------------------|----|--------------|-------|-------------|
| Final Project Cost: | \$ | 3,231,670.90 | Date: | Dec-07-2018 |
| WWDC Funding Share: | \$ | 2,165,219.50 | | |
| Other Funding Sources: | \$ | 1,066,451.40 | | |
| WWDC Reverted Funding: | \$ | 534,880.50 | | |

PROJECT STATUS

This project is completed and closed out.



WYOMING WATER DEVELOPMENT COMMISSION LEVEL III CONSTRUCTION REPORT

March-2019



PROJECT: Midvale Irrigation District
Rehabilitation 2018

SPONSOR: Midvale Irrigation District

PROJECT DESCRIPTION: Design and construction of both 27.0B (1.2 miles of 36") and 31.7(.8 mile of 24") lateral pipelines

WWDC MANAGER: Jason Fernandez

FUNDING

| | | | | |
|---------------------|----|-------------------|-----------------|----------|
| WWDC Appropriation: | \$ | 995,000.00 | WWDC Account: | II |
| WWDC Grant Amount: | \$ | 995,000.00 100.0% | Session Law: | 2018 |
| WWDC Loan Amount: | \$ | - 0.0% | Reversion Date: | 1-Jul-23 |

WWDC reimburses Sponsor for 100% of invoiced materials costs only

Funding Source #2: Midvale Irrigation District

Amount:

Sponsor is responsible for project Labor, Equipment and Engineering

Total Project Budget: \$ 995,000.00 100.0%

ENGINEERING

| | | | |
|-------------------|-----|-----------------|-----|
| Engineer: | N/A | Agreement Date: | N/A |
| Design Fee: | N/A | | |
| Construction Fee: | | | |
| Total Fee: | \$ | - | |

CONSTRUCTION

| | | | |
|----------------------|----------------------|--------------------|---------------------|
| Bid Opening Date: | Sep-13-2018 | Number of Bids: | 2 |
| Low Bidder: | Waterworks, Ferguson | Range of Bids: | \$482K-\$494K |
| Engineer's Estimate: | \$ 499,458.50 | Agreement Date: | Oct 5 2018 |
| Contractor Amount: | \$ 482,385.00 | Construction Time: | N/A |
| Bid Opening Date: | Sep-13-2018 | Number of Bids: | 2 |
| Low Bidder: | Big Horn Trucking | Range of Bids: | \$47,205 - \$53,086 |
| Engineer's Estimate: | \$ 58,687.00 | Agreement Date: | Sep 28 2019 |
| Contractor Amount: | \$ 47,205.73 | Construction Time: | N/A |
| Bid Opening Date: | Dec-21-2018 | Number of Bids: | 4 |
| Low Bidder: | Big Horn Trucking | Range of Bids: | \$173K - \$192K |
| Engineer's Estimate: | \$ 307,616.00 | Agreement Date: | Jan 9 2019 |
| Contractor Amount: | \$ 173,017.98 | Construction Time: | N/A |



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT

March-2019



PROJECT: Midvale Irrigation District
Rehabilitation 2018

SPONSOR: Midvale Irrigation District

Concrete / Steel / Misc. Const. Costs

Engineer's Estimate: \$ 28,350.00

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

Misc. Costs

PROJECT CLOSEOUT

Final Project Cost:

Date:

WWDC Funding Share:

Other Funding Sources:

WWDC Reverted Funding:

PROJECT STATUS

Contracts were awarded to bidders.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Opal Well Improvements 2017

SPONSOR: Town of Opal

PROJECT DESCRIPTION: Well head and well house piping improvements

WWDC MANAGER: Keenan Hendon

FUNDING

| | | | | | |
|---------------------|----|----------|-------|-----------------|-----------|
| WWDC Appropriation: | \$ | 4,690.00 | 52.2% | WWDC Account: | Account I |
| WWDC Grant Amount: | \$ | 4,690.00 | 52.2% | Session Law: | 2017 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2022 |

| | | | | | |
|--------------------|--------------|----------|-------|--|--|
| Funding Source #2: | Town of Opal | | | | |
| Amount: | \$ | 4,295.00 | 47.8% | | |

| | | | | | |
|------------------------------|----|----------|--------|--|--|
| <u>Total Project Budget:</u> | \$ | 8,985.00 | 100.0% | | |
|------------------------------|----|----------|--------|--|--|

ENGINEERING

| | | | | |
|-------------------|-----------------|----------|-----------------|-------------|
| Engineer: | Crank Companies | | Agreement Date: | Sep-12-2017 |
| Design Fee: | \$ | 1,725.00 | | |
| Construction Fee: | \$ | - | | |
| Total Fee: | \$ | 1,725.00 | | |

CONSTRUCTION

| | | | |
|----------------------|---------------------|--------------------|-----------------|
| Bid Opening Date: | Jan-26-2018 | Number of Bids: | 3 |
| Low Bidder: | Chapin Construction | Range of Bids: | \$7,260-\$8,829 |
| Engineer's Estimate: | \$3,800 | Agreement Date: | Feb-14-2018 |
| Contractor Amount: | \$7,260 | Construction Time: | 30 days |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| | | |
|-------------|----|---|
| Misc. Costs | \$ | - |
|-------------|----|---|

PROJECT CLOSEOUT

| | | | | |
|------------------------|----|----------|-------|-------------|
| Final Project Cost: | \$ | 8,985.00 | Date: | Feb-19-2019 |
| WWDC Funding Share: | \$ | 4,690.00 | | |
| Other Funding Sources: | \$ | 4,295.00 | | |
| WWDC Reverted Funding: | \$ | - | | |

PROJECT STATUS

This project was successfully completed and closed-out.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Wheatland 2016 Pipelines

SPONSOR: Town of Wheatland

PROJECT DESCRIPTION: Design and construction of approximately 4,500 feet of 10" transmission pipeline

WWDC MANAGER: William Brewer

FUNDING

| | | | | |
|---------------------|----|------------------|-----------------|----------|
| WWDC Appropriation: | \$ | 522,600.00 | WWDC Account: | I |
| WWDC Grant Amount: | \$ | 522,600.00 67.0% | Session Law: | 2016 |
| WWDC Loan Amount: | \$ | - 0.0% | Reversion Date: | 7/1/2021 |

| | |
|--------------------|---------------------|
| Funding Source #2: | Town of Wheatland |
| Amount: | \$ 257,400.00 33.0% |

| | |
|------------------------------|----------------------|
| <u>Total Project Budget:</u> | \$ 780,000.00 100.0% |
|------------------------------|----------------------|

ENGINEERING

| | | | |
|-------------------|------------------------|-----------------|-------------|
| Engineer: | Engineering Associates | Agreement Date: | Jun-16-2016 |
| Design Fee: | \$ 53,800.00 | | |
| Construction Fee: | \$ 53,800.00 | | |
| Total Fee: | \$ 107,600.00 | | |

CONSTRUCTION

| | | | |
|------------------------|-----------------------------|--------------------|-------------------|
| Bid Opening Date: | Nov-07-2018 | Number of Bids: | 10 |
| Low Bidder: | Mountain View Builders Inc. | Range of Bids: | \$582K to \$1.12M |
| Engineer's Estimate: | \$ 495,071.00 | Agreement Date: | Nov-27-2018 |
| Contractor Bid Amount: | \$ 581,742.00 | Construction Time: | 120 days |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

Misc. Costs

PROJECT CLOSEOUT

| | |
|------------------------|-------|
| Total Project Cost: | Date: |
| WWDC Funding Share: | |
| WWDC Reverted Funding: | |

PROJECT STATUS

Project is in construction at this time.



WYOMING WATER DEVELOPMENT COMMISSION
LEVEL III CONSTRUCTION REPORT
March-2019



PROJECT: Wheatland Wells 2017

SPONSOR: Town of Wheatland

PROJECT DESCRIPTION: Drill two 600' replacement wells, 2 new well houses, connection pipelines to the transmission system; and abandonment of old wells.

WWDC MANAGER: William Brewer

FUNDING

| | | | | | |
|---------------------|----|------------|-------|-----------------|------|
| WWDC Appropriation: | \$ | 994,950.00 | 67.0% | WWDC Account: | I |
| WWDC Grant Amount: | \$ | 994,950.00 | 67.0% | Session Law: | 2017 |
| WWDC Loan Amount: | \$ | - | 0.0% | Reversion Date: | 2022 |

| | | | | | |
|--------------------|-------------------|------------|-------|--|--|
| Funding Source #2: | Town of Wheatland | | | | |
| Amount: | \$ | 490,050.00 | 33.0% | | |

| | | | | | |
|------------------------------|----|--------------|--------|--|--|
| <u>Total Project Budget:</u> | \$ | 1,485,000.00 | 100.0% | | |
|------------------------------|----|--------------|--------|--|--|

ENGINEERING

| | | | |
|-------------------|------------------------|-----------------|-------------|
| Engineer: | Engineering Associates | Agreement Date: | Oct-17-2017 |
| Design Fee: | \$ 82,590.00 | | |
| Construction Fee: | <u>\$ 120,780.00</u> | | |
| Total Fee: | \$ 203,370.00 | | |

CONSTRUCTION

Phase 1 - Wells

| | | | | | |
|----------------------|---------------------|------------|--------------------|------------------|--|
| Bid Opening Date: | Nov-29-2018 | | Number of Bids: | 4 | |
| Low Bidder: | D.C. Drilling, Inc. | | Range of Bids: | \$429K to \$757K | |
| Engineer's Estimate: | \$ | 544,050.00 | Agreement Date: | 12/15/2018 | |
| Contractor Amount: | \$ | 429,390.00 | Construction Time: | 120 days | |

MISCELLANEOUS COSTS (Easements, Permits, Title Of Opinion, Title Search etc.)

| | | | | | |
|-------------|--|--|--|--|--|
| Misc. Costs | | | | | |
|-------------|--|--|--|--|--|

PROJECT CLOSEOUT

| | | | | | |
|------------------------|-------|--|--|--|--|
| Final Project Cost: | Date: | | | | |
| WWDC Funding Share: | | | | | |
| Other Funding Sources: | | | | | |
| WWDC Reverted Funding: | | | | | |

PROJECT STATUS

This well work is in progress. The pipeline and well house design will be completed after the new wells are in place and their final locations can be surveyed.

2019 WWDC/SWC MEETING SCHEDULE

MARCH

| | | |
|----------------|----------|----------------------------------|
| March 14, 2019 | Thursday | WWDC Workshop (Cheyenne) |
| March 15, 2019 | Friday | WWDC Meeting (Contract Approval) |
| TBD | | SWC Meeting (Contract Approval) |

MAY

| | | |
|--------------|----------|--|
| May 16, 2019 | Thursday | WWDC/SWC Workshop (Cheyenne) |
| May 17, 2019 | Friday | WWDC/SWC Joint Meeting (New Level I & II Apps Review/approval) |

AUGUST

| | | |
|--------------------|---------|--|
| August 14-16, 2019 | Wed-Fri | WWDC/SWC Workshop/Summer Tour/ Meeting (TBD) |
|--------------------|---------|--|

OCTOBER

| | | |
|-------------------|------------|--|
| October 1-3, 2019 | Tues-Thurs | Consultant Selection Interviews (Cheyenne) |
| October 4, 2019 | Friday | WWDC Meeting, Selection Approval |

NOVEMBER

| | | |
|--------------------|-----------|---|
| November 6, 2019 | Wednesday | WWDC/SWC Workshop (Casper) |
| November 7-8, 2019 | Thurs-Fri | WWDC/SWC Joint Meeting (Preliminary Funding Recs prior to WyoLeg) |
