

Water News

Dam & Reservoir Division Update



Middle Piney Reservoir

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The newsletter is available online at:

<http://wwdc.state.wy.us/newsletter/>

The WWDO Dam and Reservoir Division (Division), together with local community sponsors and multi-disciplinary teams of consultants, are engaged in a number of reservoir storage projects throughout the State, examining both the construction of new and the enlargement of existing dams and reservoirs. The projects with which the Division is engaged, directly relate to Governor Mead's priorities as laid out in the Wyoming Water Strategy, Ten in Ten initiative, which provides executive support and agency planning for the completion of ten small storage facilities. This article serves to provide a brief update on the first four potential projects to move forward and begin fulfilling the goal of providing water use flexibility through storage, for Wyoming citizens.

The reconstruction of Middle Piney Dam could be the first project to proceed to construction. Middle Piney Reservoir, located in the Green River Basin, was completed in 1940, and has a pre-Colorado River Compact priority date. Due to the Dam's age, dilapidated condition, and associated safety concerns, the U.S. Forest Service (USFS) has elected not to store water in order to minimize the safety hazard. USFS originally planned on breaching the unviable dam, but have supported the WWDC's efforts to reconstruct the facility, thereby allowing beneficial use of the storage by the Middle Piney Watershed Improvement District. An environmental assessment (EA) to reconstruct the dam has been completed by the USFS and a Special Use Permit is being drafted for

WWDC's reconstruction and future management of the reservoir. Further, final designs, specifications, and bidding documents are currently being completed. If construction documents are approved and the Green River Basin's record snowpack allows, construction could start in 2017.

The enlargement of Big Sandy Reservoir, intended to firm the water yield of the federally developed Eden Project for the Eden Valley Irrigation and Drainage District (District), continues to make progress. The WWDC worked with the Bureau of Reclamation (Reclamation), owner of the facility, to evaluate a 5' spillway raise which could result in approximately 13,500 acre-feet of additional storage. Environmental assessment and design are currently being completed by Reclamation, and if approvals are received, it is projected construction could begin as early as 2018. Furthermore, in response to a District application, Reclamation has recently approved the project for the Upper Colorado River Basin Fund Memorandum of Agreement (MOA). The MOA provides funding through a percentage of collected hydropower revenues generated by Colorado River Storage Projects (CRSP) for participating projects within the Upper Colorado River Basin.

The last two Division updates comprise the Alkali Creek Reservoir and Leavitt Reservoir Enlargement projects for the Nowood River Watershed Improvement District and the Shell Valley Watershed Improvement District, respectively. Both projects are located in

the Bighorn River Basin and involve Bureau of Land Management (BLM) property, therefore requiring BLM right-of-way grants, in addition to a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (USACE). Federal permitting of the projects necessitates review through the National Environmental Policy Act (NEPA). Third-Party NEPA contractors have been hired by WWDC to complete Environmental Impact Statements (EIS) for both projects under the direction of the BLM and USACE. Notice of Intent (NOI) packages for the projects are currently being reviewed by the Department of Interior and the BLM Washington Office for publication in the Federal Register. Once published, public scoping and internal scoping with cooperating agencies, will commence. As permit approvals are anticipated, final design of the projects will also proceed.

Funding for all four projects mentioned was included in the Omnibus Water Bill – Construction, House Bill 0086, and approved by the 2017 Legislature. In summary, with the support of the Legislature, all the agencies, organizations, consultants, and local communities involved, significant progress is occurring on Governor Mead's Ten in Ten initiative through the WWDO Dam and Reservoir Division. Information on current WWDC Dam and Reservoir Projects can be viewed at our new ESRI Story Map located under the Dam and Reservoir Planning link on the WWDC website:

http://wwdc.state.wy.us/dam_reservoir/

Municipal Watershed Wildfire Hazard Assessment Update



Photo: Burned area in the Lake Owen watershed, 2015

In 2013, Wyoming Governor Matt Mead created the Task Force on Forests to study the benefits that Wyoming forests provide and to analyze and consider new response strategies and recommendations for both active and passive management. Members of the Task Force included Director LaBonde; various local, state, and federal agency representatives; and private entities.

The January 2015 Final Report: Governor's Task Force on Forests (Report) highlights twelve recommendations brought forward by the Task Force members for the Governor's consideration to aid in decision making and policy implementation. Recommendation 3 states, "The State of Wyoming should proactively reduce the threat and occurrence of destructive wildfires by managing vegetation and fuels; protecting homes, communities, and other values at risk; and effectively and efficiently responding to wildfire." The Report recommends that, in order to protect homes, communities, and other values at risk, the State consider the "development of cross-jurisdictional watershed protection plans for municipal water supply drainages that focus on proactive management to preserve and enhance water quality and to avoid catastrophic effects large-scale fires have on municipal watersheds."

Subsequent to the Report publication, the Wyoming Water Development Office (WWDO), at the request of the Governor's Office, developed and administered two projects, the Cheyenne Municipal Watershed Wildfire Hazard Mitigation Assessment Project (CM-WHA) and the Buffalo Municipal Watershed Wildfire Hazard Mitigation Assessment Project (BM-WHA). Using in-depth fire modeling and post-fire hydrologic analysis, both projects worked to identify specific strategic locations within their respective watersheds that pose significant hazards to the water supplies. Throughout the projects, the WWDO and contracted consultants worked in close coordination with the Wyoming State Forestry Division, the City of Cheyenne Board of Public Utilities (BOPU), the City of Buffalo, and the U.S. Forest Service.

Since the development of the CM-WHA, the Medicine Bow-Routt National Forest (MBRNF) has begun the Medicine Bow Landscape Vegetation Analysis (LaVA) Project, which is using MBRNF and other stakeholder's data, including the CM-WHA, to respond to declining forest conditions presented by the bark beetle epidemic by actively managing forest vegetation using tree cutting

or prescribed burning. The project is consistent with the goals outlined in the Governor's Task Force on Forests, the Western Bark Beetle Strategy, and the Wyoming Statewide Forest Resource Strategy. To ensure the greatest utilization of the work produced under the CM-WHA; the WWDO, BOPU, and others have been actively participating in the LaVA Project NEPA analysis.

Upon completion of the BM-WHA, the Bighorn National Forest (BNF) has kicked off a collaborative effort focused on vegetation management that includes the City of Buffalo municipal watershed area. The BNF will soon be initiating a NEPA decision-making process to address the risks identified in the BM-WHA report along with other Forest Plan objectives. The BNF recognizes that implementing Forest Plan objectives is costly and is preparing to apply for a Joint Chiefs' Landscape Restoration Partnership Program grant in the fall of 2018. The Program endeavors to restore landscapes, reduce wildfire threats to communities and landowners, protect water quality, and enhance wildlife habitat. A multi-jurisdictional proposal that addresses watershed improvement and restoration across a large landscape with diverse

landownership has greater likelihood of receiving grant funding. Appropriately, the BNF is harnessing the BM-WHA project information to enhance their grant proposal and to identify projects for implementation.

Wyoming is using the lessons learned from our neighbors, where following multiple fires in the South Platte drainage, Denver Water spent slightly more than \$27.6M to mitigate the result of heavy rains washing the sediments from wildfire-affected lands into their reservoirs. In 2009, the City of Santa Fe established the Municipal Watershed Management Plan, which was estimated to cost a total of \$5.1M to implement. In contrast, it was also estimated that post fire mitigation costs (without preemptive treatment), would range between \$80M and \$240M not including increased water treatment and water utility costs. The WWDO is grateful to have been a part of the Task Force on Forests and now the identification and implementation of proactive cost saving strategies to manage Wyoming's municipal watersheds.

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Proposed Rules and Operating Criteria Revisions

The Wyoming Water Development Commission is proposing to revise the Rules and Regulations and Operating Criteria of the Wyoming Water Development Program. These two documents provide the framework for the functional operation of the program.

The WWDC is accepting written public comments on the two sets of revisions until 11:59 pm on May 30, 2017.

Interested persons wanting to review and comment on the proposed revisions may access them at the following websites:

- Rules and Regulations – Wyoming Secretary of State website – Administrative Rules System, or; <https://rules.wyo.gov/>. Find “Proposed Rules”, then scroll down to Water Development Commission (029), from there you will find the rules and comment links.
- Rules and Regulations can be found on WWDC website at: http://wwdc.state.wy.us/public_comment/rules_comment.html
- Operating Criteria can be found on WWDC website at: http://wwdc.state.wy.us/public_comment/opercrit_comment.html

These websites provide an electronic comment opportunity or written comments may be mailed to 6920 Yellowtail Road, Cheyenne, WY, 82002.

A brief summary of the Rules and Regulation revisions include:

- Defines eligible applicants as organized public entities with limited exceptions;
- Permits the WWDC to require reimbursement from applicants for Level II feasibility studies under the Dams and Reservoirs Program or Level I reconnaissance studies;
- Creates new project application deadlines;
- Delineates the required application submittals and fees; and
- Details the WWDC’s process for prioritization, review, and evaluation of applications.

A brief summary of the Operating Criteria revisions include:

- Revisions to reflect statutory changes;
- Additional application requirements for those sponsors that are not a public entity;
- Additional application requirements for all sponsors;
- Reducing the acreage for eligible irrigation requirement for sponsors from 2,000 acres to 1,000 acres;
- Requiring sponsors to cost share on Level I studies in the amount of 10% of study costs not to exceed \$50,000;
- Establishing new project priority schedules

Questions or problems accessing the rules or operating criteria may be directed to the Wyoming Water Development Office at 307-777-7626.

New Dam & Reservoir ESRI Story Map

The WWDC Dam and Reservoir Division, along with local sponsors and other state agencies, are engaged in a number of reservoir storage studies throughout Wyoming. As part of Governor Mead’s 2015 Wyoming Water Strategy, there has been an amplified effort to increase water storage projects throughout the state. The WWDC is examining both the construction of new and enlargement of existing dams to further this initiative.

In an effort to inform the public and other interested parties about these storage projects, an ESRI Story Map was created by WWDO and the Water Resources Data System (WRDS). ESRI Story Maps are web applications that tell stories involving maps, places, and locations. They allow users to spatially explore information about projects or resources throughout the area of interest. Anyone with internet access can access the Story Map from

the WWDC website. This application provides a quick and easy way for the public and interested parties to gain an understanding of projects throughout the state using an interactive map.



will open the application in a web browser with an overview map on the right half of the screen and the individual projects pictured on the left. The user can either zoom in to each project location using the map navigation tools (similar to Google Maps), or by clicking on individual projects.

Opening an individual project on the ESRI Story Map allows the user to view a location map of that project, as well as a brief summary description of the potential work at this site. Specific information located in the summary can include the potential uses of the site, storage capacity, and the status of the project. Once a specific project has been selected, the user can browse through the rest of the projects throughout the state.

Interested individuals can access the Story Map by clicking on the image on the WWDC Dam and Reservoir website. This

For additional information regarding the Dam and Reservoir Story Map please contact Jason Mead, 307-777-7626, Jason.mead@wyo.gov.

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CALENDAR OF WATER EVENTS

- * **May 3-5, 2017** - WWDC Consultant interviews & WWDC mtg - WWDO Office, Cheyenne, WY
- * **May 9, 2017** - SEO Water Forum, Hershler Bldg, Cheyenne, WY
- * **May 10, 2017** - Platte River Basin WY Water Update, Carbon Co. Library, Rawlins, WY
- * **May 8-12, 2017** - Board of Control mtg, WWDO Office, Cheyenne, WY
- * **May 16, 2017** - Bear River Basin WY Water Update, Uinta Co. Library, Evanston, WY
- * **May 17, 2017** - Green River Basin WY Water Update, Sublette Co. Weed & Pest, Pinedale, WY
- * **May 18, 2017** - Snake/Salt River Basin WY Water Update, Teton Co. Library, Jackson, WY
- * **May 18, 2017** - Snake River Agency mtg, Jackson, WY
- * **May 23, 2017** - Northeast River Basin WY Water Update, Niobrara Co. Fairgrounds, Lusk, WY
- * **May 24, 2017** - Powder/Tongue River Basins WY Water Update, Johnson Co. Library, Buffalo, WY
- * **May 25, 2017** - Wind/Big Horn River Basins WY Water Update, Fremont Co. Library, Lander, WY
- * **May 23-25, 2017** - Missouri River Recovery Implementation Cmte mtg, Sioux Falls, SD
- * **May 31-June 2, 2017** - WAM Convention, Gillette, WY
- * **June 5-6, 2017** - Upper Co. River Comm mtg., Moran, WY
- * **June 8-9, 2017** - WWDC/SWC mtg, WWDO Office, Cheyenne, WY
- * **June 7-9, 2017** - Salinity Control Forum, Moran, WY
- * **June 19-20, 2017** - WWA Summer Tour, Lander, WY
- * **July 18-19, 2017** - NP Water Users Tour, NE & WY
- * **Aug. 8-10, 2017** - Missouri River Recovery Implementation mtg, TBA
- * **Aug. 15, 2017** - New Project Applications Due to WWDO
- * **Aug. 14-18, 2017** - Board of Control mtg, WWDO, Cheyenne, WY
- * **Aug. 23-25, 2017** - WWDC/SWC Summer mtg and tour, Green River, WY
- * **Sept. 12, Oct. 10, Nov. 14, 2017** - SEO Water Forum, Hershler Bldg, Cheyenne, WY
- * **Oct. 1, 2017** - On-going project applications due - WWDO
- * **Oct 25-27, 2017** - WWA Annual Meeting, Sheridan, WY
- * **Nov. 1-3, 2017** - WWDC/SWC mtg., Casper, WY
- * **Nov. 7, 2017** - North Platte Decree Cmte., Torrington, WY
- * **Nov. 13-17, 2017** - Board of Control mtg, WWDO Office, Cheyenne, WY
- * **Nov. 21, 2017** - Bear River Commission, Salt Lake City, UT