

**2005 LEGISLATIVE REPORT**  
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**2005 LEGISLATIVE REPORT  
WYOMING WATER DEVELOPMENT PROGRAM**

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**January, 2005**

## CHAPTER 1. GENERAL COMMENTS/OVERVIEW/EXECUTIVE SUMMARY

**December 31, 2004**

### **I. Statewide Vision, Philosophy and Functional Goals**

#### A. Vision

We envision a Wyoming where people can develop the skills needed to seize the opportunities to live their individual dreams; a Wyoming where people enjoy an environment free from contaminants and secure from harm; a Wyoming where people can attain a quality standard of living; and a Wyoming where people can enjoy the benefits of our bountiful resources and natural beauty,

#### B. Philosophy

Public service is a public trust. As public servants, we take pride in the service we perform for our fellow citizens. We will be open, ethical, responsive, accountable, and dedicated to the public we serve. In the current context of the public's view of government, we must respond to citizen's needs in a manner that is more positive, more accommodating, and more attentive than ever before. Within our limited resources, we believe that innovation and creativity are keys to our long-term success. Through management support, training and development, and a respect for the views of our citizens, our employees will be empowered to deliver quality services.

#### C. Functional Goals

Functional Goals include establishing a program: that will ensure the wise, productive, and economically sound use of the state's natural resources while protecting and preserving our environment, within the context of state priorities.

### **II. Agency Mission Statement**

The 1975 Legislature passed W.S. 41-2-112(a) which provided the following definition for the Wyoming Water Development Program:

"The Wyoming water development program is established to foster, promote and encourage the optimal development of the state's human, industrial, mineral, agricultural, water and recreational resources. The program shall provide, through the commission, procedures and policies for the planning, selection, financing, construction, acquisition and operation of projects and facilities for the conservation, storage, distribution and use of water, necessary in the public interest to develop and preserve Wyoming's water and related land resources. The program shall encourage development of water facilities for irrigation, for reduction of flood damage, for abatement of pollution, for preservation and development of fish and wildlife resources [and] for protection and improvement of public lands and shall help make available the waters of this state for all beneficial uses, including but not limited to municipal, domestic, agricultural, industrial, instream flows, hydroelectric power and recreational purposes, conservation of land resources and protection of the health, safety and general welfare of the people of the state of Wyoming."



### **III. Agency Philosophy Statement**

The Wyoming Water Development Program was founded on the sound philosophy of utilizing a portion of the income the state receives from the development and use of its non-renewable resources, such as coal, oil and gas, and trona, to manage a renewable resource, water. One way in which water resource management is achieved is by evaluating development and rehabilitation strategies, and selecting the best alternative for constructing new or rehabilitating existing infrastructure. In this manner the Wyoming Water Development Program will ensure the delivery of water to Wyoming citizens in an economical and environmentally responsible manner. Sound water planning will preserve Wyoming's water entitlements and will promote the effective and efficient use of the state's water resources.

### **IV. Situation Analysis**

Each year precipitation events and runoff generate an average of 16 million acre-feet of surface water within the State of Wyoming. An additional 2 million acre-feet of stream flow originates from other states. Of this 18 million acre feet of surface water, Wyoming is entitled under the various interstate river compacts and court decrees to use or consume approximately 4 million acre feet per year. Presently, the state uses 2.8 million acre-feet of surface water. Therefore, approximately 1.2 million acre-feet of surface water remain available for Wyoming's future use.

The water demands of downstream states are increasing as these states approach or exceed the limits of their water entitlements. Consequently, Wyoming may expect requests for variances or challenges to the historic interpretations of the compacts and decrees that guarantee Wyoming a share of water originating in the state. Further, the federal government is seeking water to resolve endangered species and environmental issues that are occurring downstream.

Court decisions have validated the position that water entitlements are best protected by beneficial use. Unfortunately, Wyoming's water resources are not always located where they are needed. The Wyoming Water Development Program serves to provide and rehabilitate the infrastructure to deliver water to the people with water supply problems and to promote the effective and efficient management of the state's water, thus maintaining Wyoming's entitlements.

The Wyoming Water Development Program provides long-term economic benefits by managing our water supplies for the existing and future needs of Wyoming's citizens. Water availability is a key ingredient for development of a stable Wyoming economy. Implementation of water management opportunities provides short-term economic benefits to the state in the form of jobs, increased material and equipment sales, improved recreational and hunting and fishing opportunities, and other indirect benefits to local and state economies.

The Wyoming Water Development Program has served to maintain Wyoming's water entitlements and has assisted Wyoming citizens in meeting water management needs through planning and project development. The program's sponsor list includes eight (8) counties, eighty-six (86) municipalities, sixty-four (64) water districts, fifty-five (55) irrigation districts, thirteen (13) joint power boards and thirty-two (32) water user groups.

A. Program Status - Water Resource Development

In 1977, the revenue source that funds the New Development Program was established. In 1982, the Governor proposed and the legislature implemented the framework for the present Water Development Program. In 1983, the revenue stream that funds the Rehabilitation Program was established. Since 1983 the program's water resource management activities have evolved to the following:

1. New Development Program

The New Development Program provides planning services and construction funds for the infrastructure necessary to supply unused and/or unappropriated water to meet the present and future needs of Wyoming and its citizens. Water supply and storage facilities such as dams, diversion structures, groundwater wells and transmission pipelines are eligible for consideration under the New Development Program. The New Development Program is dedicated to the efficient and timely management of water resources, consistent with state policy, Wyoming water laws, and the desires of the citizens of the state. The criteria for scheduling new development projects is based on the general philosophy that effective beneficial use of Wyoming's water will insure its preservation for use by Wyoming residents. New development projects can proceed as sponsored projects or state projects.

a. Sponsored Projects

The project sponsor may be a municipality, irrigation district, or other approved assessment district that is a major beneficiary of the project. The project sponsor must be willing and capable of financially supporting at least 25% of the project development costs plus all operation and maintenance costs. Typically, sponsors request project specific technical and financial assistance from the Wyoming Water Development Commission through the application process. If the Commission approves the application, the project is assigned a study level. If the project is determined to be technically and economically feasible and serves to meet a water management need, the Commission may recommend that construction funding be appropriated by the legislature.

The New Development Program provides the opportunity for sponsors to manage their water resources to meet current and future needs, which will promote their economic growth and stability. The program has a philosophy that water resource management should be achieved through state and local partnerships. The sponsor can complete a water management project with state funding assistance. The actual loan/grant mix is based on WWDC funding criteria and the sponsor's ability to pay. If the sponsor uses the water, the project basically belongs to the sponsor. However, if there is the opportunity to sell water for other purposes, the sponsor and state share in the revenues.

b. State Projects

A state project typically benefits more than one entity and is multipurpose in nature. State projects often have difficult permitting or political issues that must be addressed, such as endangered species issues, water quality impacts and/or resistance from downstream states. The following is a listing and brief status of the state projects:

\* Buffalo Bill Enlargement. The project has been completed and stands ready to meet future growth and development. The Buffalo Bill Enlargement has a firm yield of 74,000 acre-feet at the mouth of the Shoshone River.

\* Deer Creek Dam and Reservoir. The recent settlement of the Nebraska v Wyoming lawsuit contains provisions that encourage the construction of the Pathfinder Modification Project in lieu of the Deer Creek Dam and Reservoir Project. If Pathfinder is modified as planned, it will provide North Platte municipalities similar benefits as would have been provided by the Deer Creek Project. Once the Pathfinder Modification Project is constructed, Wyoming will release the Clean Water Act Section 404 permit for the Deer Creek Project.

\* Little Snake River Valley Dam and Reservoir. This project was formerly referred to as the "Sandstone Project" and more recently as High Savery Dam. After years of study and permitting work the project began storing water in 2004, and should be completely finished in 2005.

## 2. Rehabilitation Program

The Rehabilitation Program provides funding assistance for the improvement of water projects completed and in use for at least fifteen (15) years. Improvements to insure dam safety, decrease operation and maintenance costs, and provide a more efficient means of using existing water supplies may be funded by the Rehabilitation Program. The program insures that existing water supplies and supply systems remain effective and viable.

Rehabilitation projects are typically initiated by an application from a project sponsor. If the application is deemed feasible and approved, the project is assigned a study level and can proceed through construction. The project sponsor must be willing and capable of financially supporting all operation and maintenance costs and at least 25% of the project development costs. The actual loan/grant mix is based on WWDC funding criteria and the sponsor's ability to pay.

### B. Program Status - Water Resource Planning

#### 1. Water Investment Management

During the development of the Department of Commerce, the Wyoming Water Development Commission (WWDC) was named as the successor agency to the Economic Development and Stabilization Board for the administration of the state's investment in Buffalo Bill and Fontenelle Reservoirs (Chapter 44 of the 1990 Session Laws). Subsequently, the state acquired storage in Palisades Reservoir (Chapter 18 of the 1991 Session Laws).

As part of this administration the WWDC is responsible for insuring that the state's annual loan payments and operation and maintenance obligations are met on these facilities.

In addition, the WWDC collects payments against outstanding project loans. Presently, all project loan payments have been made. The WWDC also monitors potential water sales from those completed projects in which the state retained limited partnerships.

## 2. Instream Flow

The Water Development Commission has two roles relative to the instream flow law. One is assigned by statute, and serving as the water planning and development agency for the state implies the other.

a. W.S. 41-3-1004 assigns the Commission the responsibility to prepare feasibility reports for all instream flow permit applications. The reports are hydrological analyses of the water availability in the reach of the stream to which the applications apply. The analyses also quantify existing water rights above and within these stream segments.

b. As the water planning and development agency, the Commission will also review the instream flow requests to insure that they do not conflict with future potential water development opportunities.

To date, ninety-two (92) applications for instream flow water rights have been prepared by the Wyoming Game and Fish Department. As of December 31, 2004, the WWDC has published seventy-nine (79) feasibility studies. The Wyoming Game and Fish Department has indicated that it will be preparing four applications per year for instream flow water rights.

## 3. Water Related Research

The Commission participates in research projects relative to water resource issues that are not necessarily project specific but that may influence water resource management in Wyoming. Many research projects gather information that is useful in addressing permitting issues, environmental problems, etc.

The Commission has developed working relationships with the State Engineer's Office, the U.S. Geological Survey and the University of Wyoming to conduct research on such water related issues as hydrologic modeling, flushing flows, irrigation consumptive use requirements, conveyance loss, and riparian zone management.

## 4. Basin Wide Planning

As the state's water resource-planning agency the WWDC identifies water related issues and establishes the framework to resolve them and promote water resources management. As an example, the WWDC develops basin-wide plans that identify water supply problems and water development opportunities. Planning studies have been completed for Northeastern Wyoming and the Big Horn River, Powder River, Tongue River, Upper Bear River, Upper Green River, Upper Laramie River and Wind River Basins.

These basin wide plans, as well as the project specific evaluations, can be used to inventory water supplies, estimate existing uses, and outline basin-wide water management strategies. Chapter 81, 1999 Session Laws, authorized the Commission to implement and administer the statewide water planning process. River Basin Plans for the Bear, Green/Little Snake, Powder/Tongue, Northeast Wyoming (Little Missouri, Belle Fourche, Cheyenne, Niobrara), Wind/Bighorn, and Snake/Salt River Basins have been completed. The Platte River Basin is currently under way. Upon completion a framework report will be prepared summarizing the State's water resources, and the planning staff will begin the process of updating each basin plan on five-year intervals with the ongoing assistance of the Basin Advisory Groups. The Statewide Water

Planning Process will produce seven river basin plans, a summary framework report, and a current statewide water resources database.

Following completion of all seven river basin plans and the framework plan it is anticipated that the update process will begin, and funding requests will be submitted to the legislature in subsequent sessions.

#### 5. Groundwater Grant Program

The 1981 Session of the Wyoming Legislature enacted W.S. 41-2-119 which authorized the Water Development Commission to grant up to three million dollars to incorporated cities and towns. These funds were to be utilized for feasibility studies and exploration programs to evaluate the potential use of underground water for municipal purposes. Municipalities were eligible to receive up to \$200,000 in state funds, and were required to provide 10% of total project costs in local matching funds. In 1984, the legislature amended W.S. 41-2-119 to add an additional one million dollars to the account and to increase the required local match from 10% to 25%.

Municipalities are required to submit an application containing a detailed feasibility study of the area where exploration is anticipated. If the data is sufficient to indicate a high probability of locating water, the Commission can award funds for exploratory drilling. If no feasibility study exists, or if existing data is judged inadequate, municipalities can apply for funds to complete such a study. Approval of feasibility study funding also reserves a specified amount to be used for exploratory drilling. If the funded study indicates a high probability of locating groundwater, the Commission can authorize release of exploratory drilling funds. If not, the Commission will terminate the project at that point and return the earmarked exploratory drilling funds to the groundwater account for distribution to other communities.

As of July 1, 2004, 42 municipalities had received assistance from the program. During the 2002 Session the Wyoming Water Development Commission recommended and the legislature provided an additional \$1,500,000 for the groundwater grant program, which authorized the inclusion of water and sewer districts and service and improvement districts as eligible program participants. This legislation also increased the funding eligibility to \$400,000 per project.

#### 6. Small Water Project Program

In 2002 the legislature appropriated a total of one million dollars (\$1,000,000), five hundred thousand dollars (\$500,000) from Water Development Account I and five hundred thousand dollars (\$500,000) from Water Development Account II, to initiate pilot projects in the Green and Yellowstone River basins. The pilot projects were intended: 1.) To develop a process to leverage non-Water Development Program funding, and 2.) Be used, along with non-program funding sources, for construction of small, inexpensive projects such as small dams, windmills, spring development, and pipeline networks for livestock, wildlife, environmental and recreational purposes.

During the 2003 session, the legislature removed the pilot status from the statute and allowed for construction of these "small projects" throughout the state. Water Development Program funding is limited to fifty percent (50%) of the actual construction

cost; or a maximum grant of twenty-five thousand dollars (\$25,000) for construction of the project; whichever is less. The Water Development Commission was given the responsibility for developing program criteria and the authority to fund these “small water projects” anytime during the calendar year.

Due to interest in the program, the Wyoming Water Development Commission will occasionally recommend amendments to the statute to reflect changes in the program and to recommend to the legislature that additional funds be appropriated to finance the construction of the “small water projects.” An additional funding request is being presented to the 2005 Legislature.

## C. Program Funding

### 1. Water Resource Development

The administrative costs of the Water Development Commission are approximately \$4,400,000 per biennium. These costs are included in the agency budget, which is appropriated from Water Development Account No. 1. This amount does not include project specific budgets, which are appropriated by the legislature as described in the following paragraphs:

#### a. Water Development Account No. 1

The New Development Program is funded by Water Development Account No. 1 [W.S. 41-2-124(a)(I)] which has received general fund appropriations of \$117,600,000, receives revenues from the severance tax distribution account, and receives the accrued interest on the account's unspent balance. Legislative approval must be granted prior to allocating water development account funds to a particular project. Income from the tax and interest and payments for outstanding loans ranges from \$26,000,000 to \$29,000,000 per year. The WWDC is committed to phase or delay projects to insure its recommendations do not result in overruns of the account.

By enacting W.S. 16-1-301 the Legislature authorized the use of water development account I and II funds to meet federal matching grant requirements through the year 2003. The federal capitalization grant and the state's matching share will be used to finance a “drinking water state revolving loan fund” (DWSRF) program. The DWSRF program may be used to fund improvements to water treatment systems and other Safe Drinking Water Act compliance issues. This program is not included in the annual omnibus water bill. Water Development program funds are appropriated automatically by statute to match 10% of the federal capitalization grant.

#### b. Water Development Account No. 2

The Rehabilitation Program is funded by Water Development Account No. 2 [W.S. 41-2-124(a)(ii)] which receives revenues from the severance tax distribution account and the interest accrued on the account's unspent balance. Legislative approval must be granted prior to allocating water development account funds to a particular project. Income from the tax and interest and

payments for outstanding loans is approximately \$6,000,000 per year. In 1995 and 1999 requests for project funding exceeded the funds available. The WWDC is committed to phase or delay projects to insure its recommendations do not result in overruns of the account.

By enacting W.S. 16-1-301 the legislature authorized the use of water development account I and II funds to meet federal matching grant requirements through the year 2003. The federal capitalization grant and the state's matching share will be used to finance a "drinking water state revolving loan fund" (DWSRF) program. The DWSRF program may be used to fund improvements to water treatment systems and other Safe Drinking Water Act compliance issues. This program is not included in the annual omnibus water bill. Water Development Program funds are appropriated automatically by statute to match 10% of the capitalization grant.

## 2. Water Resource Planning

### a. Water Investment Management

These activities are funded by the agency budget, which has historically been appropriated from Water Development Account No. 1. However, as project financial commitments on Fontenelle Reservoir cannot be met with existing revenues from water sales, appropriations of \$675,000 per biennium are needed to meet loan payment and operation/maintenance obligations to the Bureau of Reclamation.

### b. Instream Flow

The WWDC requests \$100,000 per biennium for consultant services for completion of instream flow feasibility studies.

### c. Water Related Research

Over the past ten years the budget for contract services for this work has been reduced by the WWDC from \$250,000 to \$25,000 per biennium. In addition, the state's involvement in recovery efforts for endangered species in the upper Colorado River Basin is funded from this budget category, which costs approximately \$69,000 per biennium. Research related expenditures authorized in the recent Omnibus Water Bill - Planning have been \$200,000 annually. The Wyoming Water Development Commission is recommending that the legislature appropriate an additional \$200,000 this session to match available United States Geological Survey research funds.

### d. Basin Wide Planning

Depending on the complexity, basin wide planning studies cost between \$200,000 and \$1,500,000. Until recently much of Wyoming's water planning information was seriously out of date. To resolve this shortcoming, studies on the Bear, Green/Little Snake, Northeast Wyoming, Powder/Tongue, Wind/Bighorn, and Snake/Salt River Basins have been completed. The final River basin plan, on the Platte basin, is currently underway. The operation of the Water Resources Data System and other necessary contract services costs approximately \$750,000 per biennium.

e. Groundwater Grant Program

The Legislature appropriated \$1,500,000 of additional funds during the 2002 Session to the Wyoming Water Development Commission to finance groundwater exploration studies for cities, towns, improvement and service districts and water and sewer districts. Due to the ongoing drought, the appropriation has proven to be timely and effective. Several public water purveyors have utilized the program to augment their water supplies.

3. Other

The Wyoming legislature has periodically appropriated funds from the water development accounts to fund the operation of state government, special projects, and litigation. As of July 1, 2004, \$164,316,158 has been expended from Water Development Accounts I and II for these non-project purposes. In addition, through an executive order by the Governor the interest income to be received by the accounts was diverted to the general fund for three years, which impacted the accounts by approximately \$41,284,873.

D. Program Evolution

In order to develop a strategic plan for the program, the history and future of the Wyoming Water Development Program must first be considered. During the 1982 legislative session, funding was requested for 28 projects. Over half of the projects included new dams or rehabilitation of existing dams. By contrast, during the 1995 legislative session, construction funding was requested for 18 different projects. None of those projects included a dam.

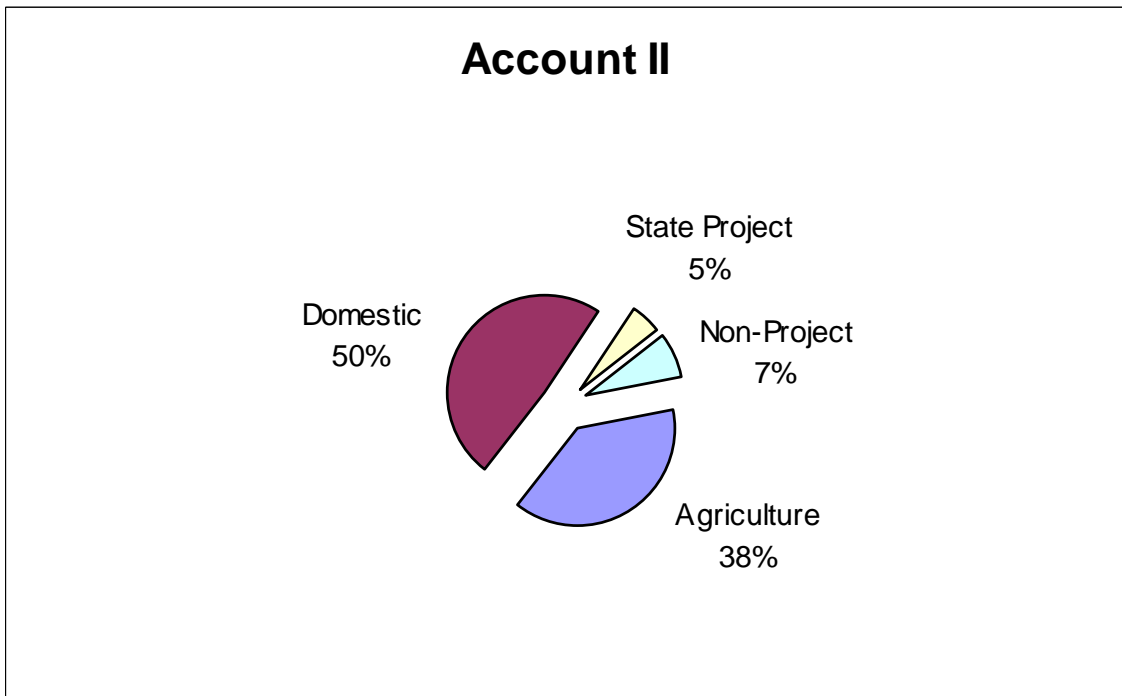
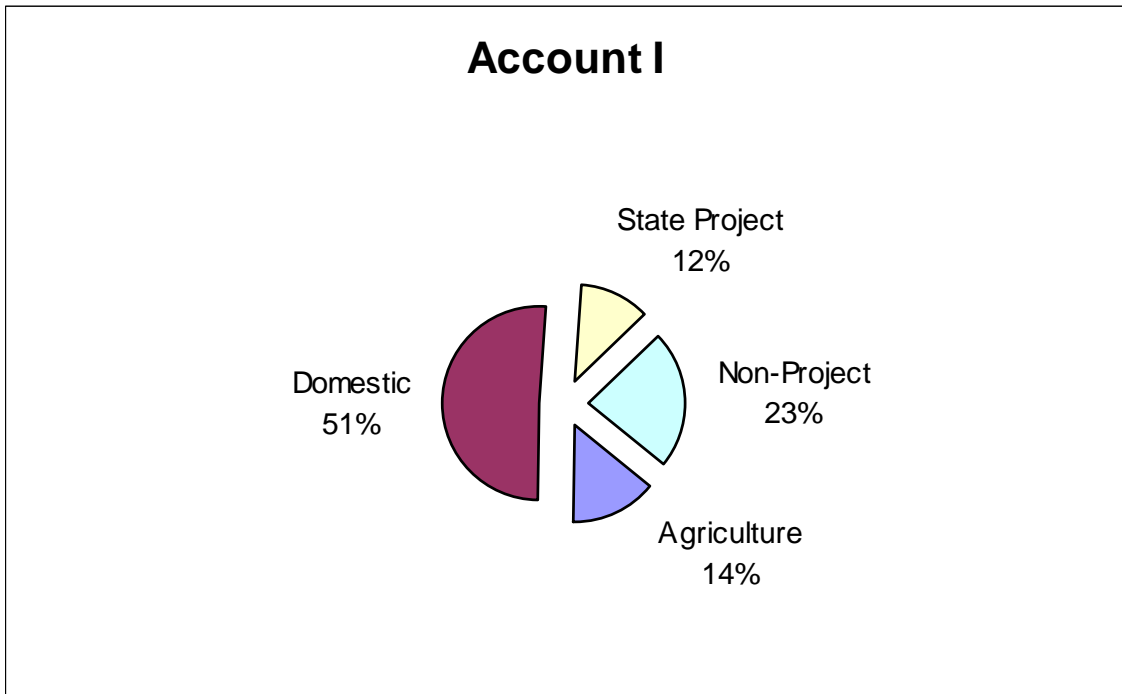
While dam construction and rehabilitation remains an important element of the Water Development Program, the number of storage projects will not be as great as other water development projects. To date, seven new development storage projects and fourteen dam rehabilitation projects have been completed. The Buffalo Municipal project (Tie Hack Dam and Reservoir), Sheridan's Twin Lakes Dam and Reservoir, and the Greybull Valley Irrigation District's Roach Gulch project are the most recent projects. The Water Development Office recently received the Clean Water Act, Section 404 Permit from the U.S. Army Corps of Engineer for the Little Snake River Valley Dam and Reservoir project (High Savery), and construction is underway. The project is to be completed in 2004. Due to provisions outlined in the settlement of the Nebraska v Wyoming lawsuit, the Pathfinder Modification Project is expected to replace the Deer Creek Project. Other dams in the planning process are the enlargement of Ray Lake Dam on the Little Wind River, storage on the Wind River upstream of Riverton in Fremont County, new storage on the Big Horn River between Thermopolis and Worland, the enlargement of Viva Naughton Reservoir, which is located in the Ham's Fork drainage, and Church Reservoir within the East Fork of the New Fork River drainage.

There are reasons the number of storage projects in the Water Development Program are less than originally anticipated. The first and foremost reason is cost. It is very difficult for a project sponsor to afford a storage facility even with the most favorable financing terms available. Second, the federal permitting processing is more costly, time consuming, and restrictive than it was in 1982. For example, in 1985 the federal 404 permit for the Sulphur Creek Dam was obtained in nine months, at a cost of approximately \$50,000. In 1996, after three and one-half years, we received the 404 Permit for the Buffalo Municipal Dam, a smaller and less complex project than the Sulphur Creek Dam. The actual costs related to permit acquisition were approximately \$650,000. New federal requirements for wetlands mitigation, criteria involving purpose and need, and alternative analyses are the major reasons for the increased costs.



The impact of federal requirements on the program can best be demonstrated by the history of the Little Snake River Valley Dam and Reservoir Project (Sandstone Project). Originally, the WWDC sought a 404 permit for a 52,000 acre foot reservoir that would yield 12,000 acre feet per year for irrigation purposes and 20,000 acre feet per year for future industrial use. The U.S. Army Corps of Engineers denied the permit using the argument that there was no specific defined use for 20,000 acre-feet of the water. The project did not meet the federal requirements for "purpose and need." Therefore, according to personnel from the Army Corps of Engineers, the impacts to wetlands and aquatic habitat resulting from the project were not warranted, no matter how well those impacts were to be mitigated. This decision severely impacted the ability of the program to construct storage projects and market water for future uses. More recently the federal agencies have determined, based on their rules and regulations, that they can only issue permits for the "least environmentally damaging alternative." Unfortunately, the federal interpretation of "purpose and need" tends to ignore state goals and objectives such as increased recreation, hydropower production, instream flow releases, and economic development. The result of this federal position is a predisposition toward the construction of small, single purpose projects. If this position prevails, dam construction will be limited to small, off-channel reservoirs supplied by canals diverting water from streams and rivers. For example, the Greybull Valley Project, intended as a supplemental agricultural water supply, consists of a 30,000 acre foot off-channel reservoir supplied by a canal and diversion structure on the Greybull River.

Another descriptor of the program's history is an analysis of how water development funds have been spent over the past twenty-one years. The following is a breakdown of total program expenditures from 1980 to June 30, 2004:



Based on the program's history and projections into the future, the following conclusions can be made relative to the next five years:

1. While the Water Development Program has provided assistance to a number of agricultural projects, those projects have been relatively small in scope. The agricultural industry is presently concentrating on preserving what they have, rather than developing new supplies. With one exception, the Wyoming Water Development Program has not been requested to assist in a water project that would place new lands under production. The agricultural projects that rely on federal storage projects can expect financial impacts caused by unfunded federal mandates relating to dam safety, water conservation, endangered species, and environmental protection.

2. The major expenditures in the state project category have been for the state's share of the construction of the Buffalo Bill Dam Enlargement and the repair and maintenance of Fontenelle Dam. It is difficult to acquire the necessary federal permits and clearances for construction of large mainstream dams and reservoirs. In addition, the costs associated with construction of large mainstream dams are extremely high. For the short term, it is anticipated that multi-purpose state project expenditures will be limited to enlargements of existing facilities to replace storage lost due to silt accumulation, to construction of small off channel reservoirs, and to the construction of other miscellaneous projects which serve more than one type of use, e.g. diversion structures that provide water for irrigation while simultaneously accommodating fishery needs.

3. The domestic category includes municipal and special district projects. Municipalities and other public water systems have been the major beneficiaries of the Wyoming Water Development Program. Communities must not only be concerned with the quantity of water they can supply for culinary, irrigation, and fire flow purposes, but must ensure that their water quality meets ever-changing EPA requirements. Further, as urban populations increase, the amount of water communities must supply for public health and welfare purposes must also increase. Municipalities need enough good quality water to meet their existing demands and the demands of the increasing number of subdivisions presently outside their corporate limits, as well as enough water to ensure future economic growth. The Wyoming Water Development Program has been responsive to the needs of Wyoming communities for the past 20 years, and while major municipal water supply projects have been funded, demands on the program for municipal purposes will continue for the next five years and beyond.

Special districts that provide domestic water are faced with the same EPA requirements as municipalities. As a result the Water Development Program is receiving an increasing number of requests for funding assistance from special districts. Wyoming's previously weak subdivision laws are partially to blame for this problem. Subdivisions served by shallow wells sometimes experience water quality problems caused by septic and leach field systems. The long-term solution is to improve the municipal water supply systems so they can be supportive in solving the problems of the surrounding subdivisions. In the short term it is apparent that the Wyoming Water Development Program will be receiving additional requests for funding assistance from special districts. However, the legislature enacted measures during the 2000 budget session that amended existing subdivision regulations to more thoroughly address water and sewer health and safety needs. This action, coupled with improvement and expansion of municipal systems so they can be more supportive in solving water supply problems of the surrounding subdivisions, may provide the necessary long-term solutions for special districts.

4. Non-project expenditures relate to appropriations made from the water development accounts to augment the general fund. For example, the agency budgets for the Water Development Office, State Engineer's Office, and Water Resource Data System have been appropriated from the water accounts. An appropriation was also made to supplement funding for education. In addition, the state's costs for water related litigation is funded from the water development accounts.

In summary, the scope of the Wyoming Water Development Program has changed over the past 20 years. However, the program continues to serve the principle that initiated the program; the effective and efficient use of water entitlements is necessary to preserve Wyoming's water for Wyoming's future.

#### E. Program Operation

The State Engineer's Office of Water Planning Program originally staffed the Interdepartmental Water Conference, which was the predecessor to the Wyoming Water Development Commission. In 1979, the Wyoming Water Development Commission was formed and an independent staff was developed. The Commission was created to streamline the administration of the program and make it more effective.

The statutory authority for the Wyoming Water Development Program is vested with the ten-member Wyoming Water Development Commission (WWDC), which meets 8 to 12 times per year. The program is administered through the Wyoming Water Development Office (WWDO), which includes a director, 18 staff members, and one contract employee. Over the past five years, the commission and staff have overseen and administered project expenditures averaging approximately \$30 million dollars per year.

The Wyoming legislature has periodically increased the responsibilities of the WWDC and WWDO. In 1986 the administration of the construction of water development projects was transferred from the Department of Economic Planning and Development (DEPAD) to the WWDC. Also in 1986, the legislature assigned the WWDC responsibilities with respect to the instream flow law. In 1991 the management of the state's water investments was transferred from the Economic Development and Stabilization Board to the WWDC. In 1999 the legislature authorized 3 additional staff to conduct river basin planning

The Wyoming Water Development Office includes a Project Planning Division, a Basin Planning Division, and a Construction Division. An administrator, who also assists with project management, oversees each division. The Project Planning, Basin Planning, and Construction divisions each have four project managers who are responsible for day-to-day project administration and special projects. The Planning Division serves to administer project studies (Level I Reconnaissance Studies and Level II Feasibility Studies), assists the Director and WWDC in making funding recommendations, and performs the planning functions of the agency. The operation of the Planning Division is guided by the "Operating Criteria of the Wyoming Water Development Program". The Basin Planning Division administers basin planning studies, assists the Director and the WWDC in making funding recommendations, and performs the basin planning functions of the agency. The Construction Division serves to administer Level III construction projects. The operation of the Construction Division is guided by the "Operating Criteria of the Construction Division, Wyoming Water Development Office". The Director is responsible for the operation of the entire program, serves as the contact with the WWDC, Governor, and legislature, and performs special assignments for the Governor. A small fiscal control and secretarial staff support the Director, administrators, and project managers.

Individual project administration has historically been the priority of the WWDO. However, because of renewed interest in the statewide water planning process, additional staff has been authorized for basin planning purposes. It is interesting to note that the number of projects within the program determines the staff workload, as opposed to the level of the appropriations. Administering a small project can be more time consuming than working on a larger project. The WWDC will continue to use up-to-date technology to reduce administrative costs and to produce state-of-the-art plans and projects.

The WWDC contracts with private sector consultants for the preparation of river basin plans and project technical studies, such as Level I Reconnaissance Studies and Level II Feasibility Studies. Further, the WWDC contracts with the project sponsors who serve as the lead agency during the Level III Construction process. The project sponsors use private sector consultants for preparation of project plans and specifications. They are also required to solicit bids from private contractors for project construction.

While the statutes pertaining to the Wyoming Water Development Program provide guidance and the framework for the program, they were intentionally meant to be very broad. The Wyoming Water Development Commission is responsible for developing the priorities, guidelines, and criteria for the program. The "Operating Criteria of the Wyoming Water Development Program" has been developed by the WWDC in consultation with the legislature's Select Water Committee.

The criteria is reviewed on an annual basis to ensure it directs the program in an efficient and effective manner, and continues to address the needs of Wyoming in a manner consistent with available program resources.

## CHAPTER 2. SPECIFIC REQUIREMENTS OF STATUTES

The Wyoming Water Development Commission is directed to prepare water and related land resource plans as provided for in Wyoming Statutes. The following are specific references to the applicable authorizations:

W.S. 41-2-107. Water Resources plans; review; submission to commission.

The Commission shall formulate and from time to time review and revise water and related land resources plans for the State of Wyoming and for appropriate regions and river basins. The plans shall implement the policies stated in the Wyoming constitution and in statutes pertaining to the state's water and related land resources.

W.S. 41-2-110. Use of plans; publication; recommendation and employment of plans.

- (a) The commission shall:
- (i) Publish the water resource plans as they are formulated and adopted and disseminate them to people, industries, and governmental departments and agencies;
  - (ii) Give advice and assistance, if requested, to governmental departments and agencies, furnish to them the appropriate plans, and make available related subsidiary and additional data and information, or data and information related to plans in the process of preparation;
  - (iii) Recommend action or legislation needed to implement and carry out the plans.

The Wyoming Water Development Commission is directed to report project specific results and findings to the legislature as provided for in Wyoming Statutes and Wyoming Session Laws. The following are specific references to the applicable authorizations:

W.S. 41-2-115. Report; authorization; assignment.

- (b) The commission shall, within ninety (90) days following the public hearings, transmit its findings and recommendations to the governor and legislature pursuant to W.S. 41-2-1214(a)..."

## **CHAPTER 3. IMPACT/CONSEQUENCES/OUTCOMES**

### **2005 Legislative Program**

The Water Development Commission utilizes the following process to generate funding recommendations for legislative consideration.

#### 1. New Applications

The deadline for new project applications is the fifteenth of September. Upon receipt, new applications and supporting documentation are reviewed, and project sites are visited. The WWDC makes preliminary recommendations regarding new applications at its November meeting.

#### 2. Existing Projects

Typically, consultant project reports are drafted by the first of October. These reports are reviewed to determine whether the projects warrant advancement in the program. At the November WWDC meeting consultant reports are presented, which include a project budget and financing plan. Project sponsors are given the opportunity to present their requests. The WWDC director also presents his recommendation. The WWDC takes preliminary action on the sponsor's request at this meeting.

#### 3. Public Meetings/Hearings

If a proposed Level I Reconnaissance Study or Level II Feasibility Study is of particular concern or controversy, the WWDC may solicit public input at a public meeting prior to finalizing its project recommendation. The Commission holds formal public hearings on all projects that are proposed for Level III Final Design and Construction funding.

#### 4. Coordination with the Governor

The WWDC provides the Governor with its preliminary recommendations and a financial report addressing impacts to the water development accounts. The Governor may provide input throughout the recommendation process.

#### 5. Final Recommendations

The WWDC meets in December or early January to finalize its legislative recommendations on new applications and existing projects. The Commission considers public input received at the meetings and hearings and recommendations from the Governor. Sponsors and interested parties who disagree with the Commission's preliminary recommendation are provided the opportunity to address the Commission with their concerns.

#### 6. Select Water Committee

The Select Water Committee is comprised of 6 senators and 6 representatives. They provide legislative oversight for the program, and review the Commission's recommendations and budgets. Typically, the Select Water Committee serves as sponsors for the Water Development Program legislation.

#### 7. Legislative Process

The legislature must authorize the allocation of funds from the water development accounts to particular projects. This approval is solicited through the "Omnibus" Planning and Construction Bills.

Fiscal Data  
 Water Development Account No. 1  
 January 2004 CREG Report

Total Revenues			
	General Fund	117,600,000	
	Budget Reserve	70,000,000	
	Taxes	420,134,491	
	Interest	161,912,034	
	UST Repayment	2,500,000	
	Coal Bonus	4,840,305	
	Other	<u>33,408,522</u>	
Total Revenues			\$810,395,352
Total Expenditures			<u>\$663,011,693</u>
Cash Balance (6/30/03)			\$147,383,659
Outstanding Commitments			
	Active Appropriations	234,192,306	
	Paid	<u>119,906,426</u>	
Total Commitments (7/1/04)			<u>\$114,285,880</u>
Total Uncommitted Balance (7/1/04)			\$33,097,779
FY05 - Anticipated Revenues			
	Taxes	19,300,000	
	Interest	6,000,000	
	Other	<u>4,000,000</u>	
Total - FY05 Revenues			\$29,300,000
FY06 - Anticipated Revenues			
	Taxes	19,300,000	
	Interest	6,000,000	
	Other	<u>4,000,000</u>	
Total - FY06 Revenues			<u>\$29,300,000</u>
Subtotal Revenues			\$91,697,779
	Estimated Balance Available for Appropriation		\$91,697,779
	<b>Less Green River and Wind/Big Horn Reservoir Reserve</b>		<b><u>\$54,070,000</u></b>
			<u>\$37,627,779</u>
	FINAL BALANCE AVAILABLE FOR APPROPRIATION		\$37,627,779



Fiscal Data  
Water Development Account No. 2  
January 2004 CREG Report

Total Revenues			
	Taxes	110,200,884	
	Interest	33,606,064	
	Federal Mineral Royalty	5,000,000	
	Other	<u>20,905,274</u>	
Total Revenues			169,712,222
Total Expenditures			<u>138,884,455</u>
Cash Balance (6/30/04)			30,827,767
Outstanding Commitments	Active Appropriations	45,046,913	
	Paid	<u>11,694,115</u>	
Total Commitments (7/1/04)			<u>33,352,798</u>
Total Uncimmitted Balance (7/1/04)			-2,525,031
FY05 - Anticipated Revenues	Taxes	3,300,000	
	Interest	1,100,000	
	Other	<u>1,700,000</u>	
Total - FY05 Revenues			6,100,000
FY06 - Anticipated Revenues	Taxes	3,300,000	
	Interest	1,100,000	
	Other	<u>1,700,000</u>	
Total - FY06 Revenues			<u>6,100,000</u>
	Estimated Balance Available for Appropriation		9,674,969

## Wyoming Water Development Program Funding Requests, 2005 Session

### Level I Reconnaissance Studies

DESCRIPTION	ACCOUNT I	ACCOUNT II	PRELIMINARY STATUS	MEETS CRITERIA
Beatty Gulch Master Plan			Recommended	Yes
Casper Master Plan Update	\$200,000		Recommended	Yes
Framework Water Plan	\$500,000		Recommended	Yes
Gooseberry Transbasin Diversions	\$75,000		Recommended	Yes
GreenRiver/Rock Springs JPWB	\$250,000		Recommended	Yes
Heart Mountain Return Flow Study	\$75,000		Recommended	Yes
Hoback Junction Rural Regional	\$75,000		Recommended	Yes
Kirby Municipal Master Plan	\$75,000		Recommended	Yes
Lysite Water and Sewer District	\$75,000		Recommended	Yes
Sundance Meadows Master Plan			Recommended	Yes
Sweetwater Watershed Plan	\$300,000		Recommended	Yes
UW Research	\$200,000		Recommended	Yes
West Side Irrigation NEPA	\$1,200,000		Recommended	Yes
WSGS Powder River Interactive Data	\$575,000		Recommended	Yes
Urban Sprawl		\$150,000	Recommended	Yes
Water Value Study	\$150,000			
Willwood ID Masterplan		\$50,000		
Subtotal	\$3,850,000	\$200,000		

### Level II Feasibility Studies

Big Horn Regional Groundwater	\$1,500,000		Recommended	Yes
Burlington Regional Master Plan	\$75,000		Recommended	Yes
Cottonwood Lake Storage Enlargement	\$100,000		Recommended	Yes
Kaycee Well, Tank & Lines	\$650,000		Recommended	Yes
Laramie Management Plan	\$300,000		Recommended	Yes
LeClair/Riverton Valley Storage	\$250,000		Recommended	Yes
Rawlins Raw Water Storage	\$150,000		Recommended	Yes
			Conditionally	
Upper Green River Storage	\$175,000		Recommend	Yes
Weather Mod Salt/Wyoming Ranges	\$100,000		Recommended	Yes
Alpine Level II	\$75,000		Recommended	Yes
Boulter Lake Outlet Wks/Enlargement	\$75,000		Recommended	Yes
Bridger Valley JPB Level II, Phase II	\$100,000		Recommended	Yes
			Conditionally	
Cokeville Reservoirs	\$150,000		Recommend	Yes
Eight-Mile/High Plains	\$450,000		Recommended	Yes
Lander Paleozoic Well	\$425,000		Recommended	Yes
Owl Creek ID Storage	\$200,000		Recommended	Yes
Saratoga Test Well	\$25,000		Recommended	Yes
Viva Naughton, Phase II	\$300,000		Recommended	Yes
Weather Mod Phase II	\$8,825,000		Recommended	Yes
Big Horn Canal Rehab		\$150,000	Recommended	Yes
Big Valley & Crossed Arrow		\$75,000	Recommended	Yes
Cody Canal Rehab & Hydro		\$250,000	Recommended	Yes

Frannie Well Rehab		\$65,000	Recommended	Yes
Riverton/Mountain View Acres		\$300,000	Recommended	Yes
Sheridan VA Center Water Supply		\$75,000	Recommended	Yes
Thermopolis Storage & Raw Water		\$175,000	Recommended	Yes
WID Conservation Upgrades		\$100,000	Recommended	Yes
Worland Area Irrigated Lands GIS		\$200,000	Recommended	Yes
Owl Creek ID Conservation		\$100,000	Recommended	Yes
Worland Flow Test		\$125,000	Recommended	Yes
Subtotal	\$13,925,000	\$1,615,000		

**Level III Construction**

DESCRIPTION	ACCOUNT I	ACCOUNT II	PRELIMINARY STATUS	MEETS CRITERIA
Alta	\$366,000		Recommended	Yes
Baggs Dedicated Storage Line & Raw Water	\$663,000		Recommended	Yes
Big Piney	\$37,500		Recommended	Yes
Canyon Water Supply	\$740,000		Recommended	Yes
Bridger Valley JPB Big Hill	\$67,600		Recommended	Yes
Casper Zone II Supply, Phase II	\$1,300,000		Recommended	Yes
Gillette Well Field	\$1,000,000		Recommended	Yes
Small Water Projects, New Dev.	\$500,000			
Wright WS North Side Transmission	\$269,000		Recommended	Yes
Albin Well	\$171,000		Recommended	Yes
Buffalo Water Storage	\$550,000		Recommended	Yes
Cheyenne Crystal Extension	\$1,000,000		Recommended	Yes
Chugwater Water Supply Extension	\$0		Recommended	Yes
Greybull Valley ID/ Time Extension	\$0		Recommended	Yes
Eden Valley, E-25 Lateral		\$1,508,000	Recommended	Yes
Evanston Bear River		\$0	Not Recommended	No
Gillette Madison Pipeline, Joint Bonds		\$1,225,000	Recommended	Yes
Green River Supply Canal		\$200,000	Recommended	Yes
Lake DeSmet		\$165,000	Recommended	Yes
Meade Creek Rehab		\$401,250	Recommended	Yes
Meeteetse Storage Tank Rehab		\$125,000	Recommended	Yes
Ranchester Water Supply		\$314,000	Recommended	Yes
Taylor Ditch		\$270,000	Recommended	Yes
Casper Alcova		\$285,000	Recommended	Yes
Deaver Flume		\$163,500	Recommended	Yes
Rafter J		\$41,500	Recommended	Yes
Sheridan Pipeline Rehab		\$500,000	Recommended	Yes
Small Water Projects, Rehab.		\$500,000		
Stone Gate PSD		\$130,000		
Wind River Diversion Dam		\$138,000	Recommended	Yes
Subtotal	\$6,664,100	\$5,966,250		
<b>TOTAL REQUESTS</b>	<b>\$24,439,100</b>	<b>\$7,811,250</b>		
Available For Appropriation	\$37,627,779	\$9,674,969		
Preliminary Balance	\$13,188,679	\$1,863,719		
Less Groundwater Studies	\$1,000,000			
Less Dam and Reservoir Section	\$526,000			
	<b>\$11,662,679</b>	<b>\$1,863,719</b>		

## **CHAPTER 4. STATISTICAL INFORMATION**

### **2005 Project Reports**

A typical water development project proceeds through the following levels, however, some levels may be bypassed if there is pertinent existing information available on the project.

#### 1. Level I, Reconnaissance Studies

These studies are preliminary analyses and include a comparison of alternatives.

The typical Level I study should identify or provide the following:

- a. Identify development options.
- b. Identify potential beneficiaries and benefits of each option.
- c. Describe factors that could impair or prohibit the development of any option, including legal and environmental constraints.
- d. Analyze water rights, including identification of conflicting prior rights.
- e. Compare options based on physical and legal water availability, technical, economic, legal, and environmental considerations.

#### 2. Level II, Feasibility Studies

The typical Level II study consists of two phases. During Phase 1 project feasibility is addressed. If the project is determined feasible the proposal is advanced to Phase 2, where it is refined to the status necessary for a Level III funding request.

The typical Level II, Phase I investigations should include the following activities:

- a. A qualification of the amount of water that can physically and legally be developed.
- b. A determination of the water needs that could be served by the project.
- c. A determination of the technical feasibility including a safety analysis.
- d. The development of a general configuration depicting preliminary physical characteristics of the project.
- e. The development of a preliminary project operation plan.
- f. An estimation of costs for construction, consultant services, and operation and maintenance.
- g. An identification of direct benefits that could result from project implementation.
- h. An identification of costs and benefits that would result by incorporating recreation, fish and wildlife, hydropower, and flood control functions into the project.
- i. A definition of economic, legal, environmental, and administrative problems and the identification of alternate solutions to those problems.
- j. The development of an ownership map of lands that may be affected by the project.
- k. The collection of data to identify environmental impacts and potential mitigation and enhancement opportunities.
- l. The inclusion of an analysis of the project sponsor's ability to pay.

After the above information has been provided and reviewed, the technical, economic, and legal feasibility will be considered by the Commission. This consideration, coupled with the sponsor's need for the project, interest in the project, and willingness and ability to financially participate, will be the factor used to determine if the project should proceed to Level II, Phase II.

The typical Level II, Phase II investigations should include the following activities:

- a. Technical design which includes:
  - i. Hydrologic investigations,
  - ii. An operating plan which addresses water management during and after construction, and
  - iii. A conceptual design of the general project configuration.
- b. The identification of state and federal permits and clearances necessary to construct the project.
- c. Performance of an environmental analysis of the proposed operation and configuration. On the more complex projects the Wyoming Game and Fish Department assists the WWDC in these analyses. The WWDC contracts with the Game and Fish Department on an as needed basis to provide environmental baseline data, evaluate project impacts, and recommend mitigation measures.
- d. Performance of a cultural resource survey of the general project area, as applicable.
- e. Determination of lands that must be acquired to implement the project. Including applications to purchase or obtain easements on public lands, and appraisals of lands that must be acquired.
- f. The development of a detailed schedule of the activities necessary to complete the project.
- g. Preparation of an itemized project budget, including costs for design engineering, permitting, land acquisition, environmental mitigation, construction, construction engineering, operation, maintenance and replacement.
- h. Performance of an economic analysis comparing the allocated costs with project primary and secondary benefits. For the more complex projects an analysis of indirect benefits may be appropriate.

### 3. Level III, Final Design and Construction

The typical Level III project includes the following:

- a. Preparation of the project agreement, note and mortgage that formalizes sponsor and WWDC project responsibilities and which defines the financing plan/procedures. Funds are not available for expenditure until these documents are executed.
- b. Securing consultant services required for final design, permitting, and construction inspection.

- c. The preparation of permit applications.
- d. The preparation of Environmental Impact Statements or Assessments. Typically, the 404 permit application will trigger this activity.
- e. Preparation of the construction documents including technical specifications, contract documents and bidding plans. This work may be performed concurrently with the permitting process if it is determined that the project feasibility will not be impacted by permit conditions. If there are particularly sensitive permitting issues, this task should be postponed until those issues are successfully resolved.
- f. The acquisition of options on or title to the necessary project lands and easements. The scheduling of this task should be sequenced to minimize impacts to property owners and as dictated by the permitting process.
- g. The compilation of mitigation measures to address impacts on environmental and cultural resources.
- h. Preparation of the advertisement for bids.
- i. Construction review and monitoring services.
- j. The determination of the date the sponsor accrues project benefits in order to establish loan repayment schedules.
- k. The initiation of project acceptance and completion procedures.

## Active Projects

- 01.    PROJECT:                    Albin Pipelines and Well Rehabilitation**  
**LEVEL:**                        III  
**SPONSOR:**                    Town of Albin  
**LOCATION:**                    Laramie County  
**PROGRAM:**                    Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$160,000	2004
Level III	118	2004	II	\$215,000	2008

**PROJECT INFORMATION:**

In 2001 the Town of Albin applied for a project with the name of Albin Well and Main Rehab. Albin would like to pursue detailed cost analyses of rehabilitation of their municipal water system. The Town has access to four wells, all of which have individual problems. All of these wells are piped into the distribution system rather than to the storage tank. This configuration causes major problems with treatment and system pressures. The transmission pipeline also has problems with pressure, leakage, and dead end lines. This project would provide a water system master plan to the town, with a replacement well, and plans/cost analysis for upgraded transmission mains and storage. The project was approved in 2002 with the name of Albin Water Supply Rehabilitation and the Level II study was underway.

The Level II Test Well and Master Plan Study recommended several schedules for upgrades, additions, and improvements to the Town of Albin water supply system. The Town requested Level III construction funding assistance for the first priority phase, including rehabilitation of the Station Well and the Albin No. 1 Well, replacement of a 6" transmission line from the Station Well to the 100,000 gallon elevated storage tank, and a new cross-connecting segment of 8" transmission line that will feed from the Albin No. 4 Well. WWDC funding for rehabilitation work on the Station Well will be contingent on acquisition of the well from Union Pacific Railroad. The estimated Level III project cost was \$430,000 dollars, and a 50% grant was requested.

In 2004 a Level III Rehabilitation project, named Albin Pipelines and Well Rehabilitation, was approved and a \$215,000 (50%) grant was appropriated for the design, permit procurement, project land procurement, construction engineering, and construction of the project. The project is currently active.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 02.    PROJECT:                    Albin Transmission Lines**  
**LEVEL:**                        II  
**SPONSOR:**                    Town of Albin, Incorporated Municipality  
**LOCATION:**                    Laramie County  
**PROGRAM:**                    Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$160,000	2004



**PROJECT INFORMATION:**

The Level II Test Well and Master Plan Study recommended several schedules for upgrades, additions, and improvements to the Town of Albin water supply system. The Town is presently requesting Level III construction funding assistance for the first priority phase, including rehabilitation of the Station Well and the Albin No. 1 Well, replacement of a 6” transmission line from the Station Well to the 100,000 gallon elevated storage tank, and a new cross-connecting segment of 8” transmission line that will feed from the Albin No. 4 Well. WWDC funding for rehabilitation work on the Station Well will be contingent on acquisition of the well from the Union Pacific Railroad.

**Estimated Level III**

**Phase 1 Costs**

Design \$ 37,264

**Phase 2 Costs:**

Mobilization, Bonds, Insurance	\$ 26,780
Pipeline, Fittings, Valves	\$109,810
Well Rehab	\$ 58,000
Electrical	\$ 7,500
Boring	\$ 20,700
Surfacing, Revegetation	\$ 36,860
Traffic Control	\$ 5,822
Quality Control Testing	\$ 5,822
Unlisted Items	\$ 23,287
Permitting	\$ 5,000
Easements	\$ 138
Legal	\$ 5,000
Engineering (10%)	\$ 29,458
Contingency (15%)	\$ 48,606
Total Project Costs	\$420,047
<b>Rounded</b>	<b>\$430,000</b>

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$215,000 (50% Grant).

- 03. **PROJECT:** Albin Water Supply Rehabilitation
- LEVEL:** II
- SPONSOR:** Town of Albin, Incorporated Municipality
- LOCATION:** Laramie County
- PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$160,000	2004
Level II	34	2004	II	\$140,000	2006

**PROJECT INFORMATION:**

The 2002 Level II Albin Water Master Plan Study recommended an extension and budget increase for continuation of test drilling for emplacement of a new municipal well. The original test drilling conducted installed seven (7) pilot wells at various locations in and near town. Test drilling revealed unexpected complexities in the Arikaree and Ogallala Formations that resulted in varied yet mostly inadequate yield potential. One location immediately west of town was discovered to have suitable production characteristics for siting a production-size municipal well.

The town requested additional Level II funding to complete test drilling with two (2) more pilot holes and a production-size test well.

The 2004 Level II project continuation encountered difficult drilling conditions at the new site. Three pilot holes were attempted in the Ogallala formation with a direct circulation drill rig. All three holes collapsed preventing the holes from being completed. A forth try with a reverse circulation drill rig was successful. This well was tested and compared to the original Town test wells, with the original test wells being more productive. It was decided to drill a production well at the original test well site. The production well was drilled and produces approximately 125 gpm. The Town will use 6<sup>th</sup> penny tax money for their 50% share of the project cost.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level III with an appropriation of \$171,000.

- 04. PROJECT:     **Alpine Master Plan Update**  
LEVEL:            II  
SPONSOR:        Town of Alpine  
LOCATION:         Lincoln County  
PROGRAM:        New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	II	\$40,000	2002
Level III	88	2002	I	\$41,700	2006

**PROJECT INFORMATION:**

The town of Alpine received level III funding in 2002 to complete the design of a raw water irrigation system. Since this funding was received the town has experienced growth that was not anticipated by the previous study. Due to the loss of their springs to surface water contamination, the town is now looking for a new water supply, for an evaluation of additional water storage, and to quantifying system leakages.

It is the town's wish to terminate the funding appropriated in 2002 for the design of the raw water system. The town's previous administration did not act on the appropriation and in the interim their priorities have shifted. In place of the Level III funding previously mentioned the town would instead like to continue the previous Level II work.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$75,000.

- 05. PROJECT:                 **Alpine Raw Water**  
LEVEL:                        III  
SPONSOR:                    Town of Alpine  
LOCATION:                     Lincoln County  
PROGRAM:                    New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	II	\$40,000	2002
Level III	88	2002	I	\$41,700	2006

PROJECT INFORMATION:

The Town of Alpine would like to move forward with the design to both the improvements to Little Jenny Lake Spring area and the raw water irrigation system that was recommended in the Level II study completed in October 2001.

The applicant requests funding to finance the first phase of a two-phase construction project. Phase I also includes engineering design and specifications for the second phase. Phase I also addressed permitting and mitigation work, legal fess and rights-of-way issues. Phase II would include constructing improvements to the spring area and installation of the irrigation system.

Phase II of the project was approved by 2002 Legislature and some engineering investigation began. The town has experienced dramatic increases in system demand and simultaneously lost the use of the spring supply. The severity of this situation has caused the present mayor and council to request a stop in the raw water system and an update to it's master plan.

This project will be closed and the small amount of loan funds expended will be repaid to the WWDC.

RECOMMENDED LEGISLATIVE ACTION:

The Town is requesting approval of a Level II study in the amount of \$ 75,000.

- 06. **PROJECT:** Alta Master Plan
- LEVEL: II
- SPONSOR: Targhee Town Water District
- LOCATION: Teton
- PROGRAM: Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	II	\$50,000	2004
Level II	125	2003	II	\$166,000	2004
Level II	34	2004	II	\$65,000	2006

PROJECT INFORMATION:

In 2004 the sponsor requested additional Level II funding to continue a ground water supply testing program. The original ground water testing and development plan is described in the 2002 WWDC Level I Alta Master Plan Study. This plan was intended to be the scope for the Level II Study. However, due to the information collected after the Level I Study was completed and after consultation with the sponsor, the testing and development plan has been altered. Concerns were raised by the sponsor because of sediment production at the existing site. Concerns were also raised that seasonal low groundwater levels could compromise the production capacity of the existing facilities. Fieldwork conducted in 2003, as recommended in the Level I Study, consisted of diagnostic testing (geophysical logs, video log, spinner survey, and flow testing) of the existing Targhee Towne wells and flow testing of two neighboring wells.

The study was extended from rehabilitation and expansion of the existing water supply at the location of the two existing Targhee Towne wells, to an evaluation of ground water development opportunities at alternative sites. This provides an evaluation of potential groundwater development sites where groundwater level fluctuations can be better accommodated and where sediment production problems may be less. Successful development of an additional well outside the present well field may also provide valuable operational redundancy. The increased budget provides for an alternative test well siting evaluation and two (2) pilot test wells at Alta for the Targhee Town Water District.

RECOMMENDED LEGISLATIVE ACTION:

No Legislative action required

- 07. PROJECT: Alta Water Supply**
- LEVEL: III
- SPONSOR: Targhee Town Water District
- LOCATION: Teton
- PROGRAM: Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	II	\$50,000	2004
Level II	125	2003	II	\$166,000	2004
Level II	34	2004	II	\$65,000	2006

PROJECT INFORMATION:

The Targhee Towne Water District is located at Alta, Wyoming, along Teton Creek as it exits Wyoming and flows into Idaho. The 2002 WWDC Level I Study for the District recommended an additional water supply source be added to provide reliability and redundancy to the system. Level II test well drilling is scheduled to begin in early November 2004. With positive yield results from this effort, the District wishes to pursue Level III funding to make planned improvements to the existing water supply system in addition to connecting the new well source supply.

**Estimated Level III Costs (Includes Engineering, Permitting, Legal/ROW, Contingency)**

Supply Well.....	\$ 156,545
Control Bldg., Vaults, Well Connections.....	\$ 362,200
Transmission Lines .....	<u>\$ 256,020</u>
Total Project Costs.....	\$ 774,765
Rounded.....	\$ 775,000

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the Alta Water Supply Project be incorporated into the New Development Program at Level III with an appropriation of \$366,000 (50% Grant). Legislation will also authorize District purchase of the Level II test well at \$42,465.

- 08. PROJECT: Antelope Valley Water Supply**
- LEVEL: III
- SPONSOR: Antelope Valley Improvement & Service District
- LOCATION: Campbell County
- PROGRAM: New Development

EXISTING LEGISLATION

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	28	1994	II	\$850,000	1997
Level III	96	2000	II	\$102,000	2004

PROJECT INFORMATION

Antelope Valley has purchased Well No. 5, emplaced by WWDC in 1999, and is in process of making improvements to their water system as delineated in the 1999 Level II study. Construction tasks include; 1) Install pump, well house, appurtenances at Well No. 5 and, 2) Install chlorine feed system at storage site.

The Level II study was a combined project that included analysis of Antelope Valley and Crestview Estates subdivisions. These projects were advanced to Level III in 2000. The legislation approving the projects required an agreement between Antelope Valley and Crestview prior to starting construction. This agreement was completed in 2002. Construction is complete.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 09. PROJECT:                      **Baggs Water Supply/Baggs Master Plan****  
**LEVEL:**                              **II**  
**SPONSOR:**                        **Town of Baggs**  
**LOCATION:**                         **Carbon County**  
**PROGRAM:**                        **New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	36	2000	I	\$50,000	2002
Level III	2	2001	II	\$92,000	2005
Level I	7	2002	I	\$40,000	2004
Level III	125	2003	II	\$28,000	2005
Level II	34	2004	II	\$50,000	2006

**PROJECT INFORMATION**

The residents of the Town of Baggs utilize treated water from a Little Snake River intake diversion. High turbidity counts (NTU'S) during spring runoff have plagued the town in the form of drinking water standard exceedance. Because of the water quality violation, the town applied to explore groundwater options.

The 2000 Level II study of the existing water supply and treatment system was completed as a continuance of the WWDC Groundwater Grant study awarded the town in 1999. The purpose of the study was to investigate alternative diversion systems, utilizing results of 1999 test well drilling, and prepare conceptual designs, cost estimates, economic analysis, and project financing guidelines for funding opportunities.

The 2002 Level I Master Plan was a continuation of water projects currently underway. The projects were funded by the WWDC and the USDA Rural Utility Service. The project will replace the Town's infiltration gallery and upgrade the water treatment plant.

The 2002 Master Plan included mapping, provided an evaluation of the water supply and distribution system, and developed a maintenance and replacement schedule for the water mains. The plan recommended increasing the size of the mains and adding 100,000 gallons of storage to meet fire suppression needs. If the town's system is to be expanded beyond the city limits, a regional system that extends to Dixon should be examined. There is no direct line from the water treatment plant to the storage tank. A direct line to the tank would fill the tank quicker and improve water pressures throughout the system. The water system losses observed in 2000 seem to be due to un-metered taps on the system. A program should be undertaken to eliminate the un-metered taps.

Plans and specifications for the Level III construction project were prepared during 2002. The project was let for bids in August 2002. However, only one bid was received, and it exceeded the engineer's cost estimate by approximately \$56,900.00. The Sponsor and its Engineer recommended the bid be accepted. Due to the extreme drought conditions, it was imperative that this project be completed as soon as possible. The construction continued using local funds to

make up the shortfall. However, this created a burden on the Town's finances, therefore a funding increase will be used to reimburse the Town.

In 2003, the WWDC approved an additional \$28,000 grant to cover approximately 50% of the cost overrun in the Level III project increasing it from \$92,000 to \$120,000. The Level III portion of this project was completed in 2004.

In 2004, the Baggs Water & Raw Water Supply Level II study looked at and made recommendations to add a raw water system and a dedicated transmission main to the storage tank, replace undersized aging distribution lines, increase their storage capacity and reviewed a regional water system from Savery down to Baggs. It was found that the regional system did not have regional support at the current time and is not requested. As for the other options, the Town voted to pursue funding for the dedicated transmission line and the raw water system at this time.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level III with an appropriation of \$663,000.

- 10. PROJECT:                    Bairoil Water Supply/Bairoil Master Plan**  
**LEVEL:                         III**  
**SPONSOR:                    Town of Bairoil**  
**LOCATION:                     Carbon County**  
**PROGRAM:                    New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	81	1999	I	\$225,000	2000
Level II	36	2000	I	\$200,000	2002
Level III	96	2000	I	\$480,000*	2004
Level II	7	2002	I	\$ 40,000	2004
Level III	118	2004	I	N/A	2006

\*60% grant

**PROJECT INFORMATION:**

The Town of Bairoil is supplementing its municipal supply by developing an alternative groundwater supply to the Battle Springs Pipeline, which was originally operated by BP-Amoco, and by rehabilitating Abel Springs. BP-Amoco, sold the Lost Soldier Oil Field operations to Merit Energy, which is a significant portion of Bairoil's water supply. Merit Energy also uses water from the Battle Springs Pipeline. With 1999 WWDC Level II funds, a production-sized test well was drilled to improve Bairoil's water supply. Deep groundwater sources are difficult to find because of the variable aquifer supply available and widespread occurrence of uranium deposits, which adversely affect radionuclide levels. The town purchased the test well as a supply well and was granted an additional \$200,000 Level II appropriation (Session 2000) to drill a second production well. The second supply well was completed during 2001, however its yield was significantly less than the first production well's design yield of 60 gpm.

The town subsequently decided not to purchase the second well and has completed design and construction on the transmission line to connect the first test well into the town's water system.

Remaining funds of the Level III 2000 appropriation are to be used to construct improvements to enhance flows derived from the original Abel Springs source, including extending the springs collection lateral and fencing of the source area to prevent surface contamination of the spring collection area. An application for easement and improvements on the Town's spring source is

currently under review by the BLM. The Sponsor requested and received a two-year extension of the reversion date until July 1, 2006 to allow adequate time to obtain the BLM permit and ensure that project components of the spring improvements are properly constructed and placed into operation. These improvements will be completed during the summer of 2006.

The Level II study revealed that water consumption by the town far exceeds the normal demand by a town its size. A continued Level II study was authorized by the 2002 Legislature to prepare a master plan of the town's water system to include an audit of the town's transmission, storage, and distribution system, and to investigate additional sources of water supply at the Abel Springs.

The additional study work was completed in March 2003. It was concluded that significant distribution leaks exist in the system on the customer side of the service lines and recommending extension of the Abel Springs collector lateral lines.

The 2004 Legislature authorized an amendment to the project description and scope of the original authorizing legislation to include the deepening of an existing well within the Town, which is used to irrigate a park area and living snow fence. Deepening of the well is needed to improve the quality of the well for use in irrigation in order to eliminate up to 10 gpm of treated drinking water, which is currently supplementing the irrigation demands. The improvements to the well would also include the provision of a windmill power source. The irrigation well and windmill improvements are estimated to be approximately \$20,000 and will be completed during the spring of 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 11. PROJECT: Basin Area Water Supply (formerly Manderson Water Supply)/Basin Gardens Water Project**  
**LEVEL:** III  
**SPONSOR:** South Big Horn County Water Supply Joint Powers Board  
**LOCATION:** Big Horn County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III-1	206	1995	I	\$670,000*	1999
Level III-1	59	1996	I	\$5,360,000*	1999
Level III-1	38	1998	I	\$ 200,000*	2002
Level III	69	2003	I	\$ 559,450*	2008

\*67% grant

**PROJECT INFORMATION:**

The South Big Horn County Water Supply Joint Powers Board (SBHCWSJPB) was formed to serve as the sponsor for the project. The sponsor has 820 taps committed to the project.

A groundwater exploration program was conducted by the WWDC in 1985 that indicated a good potential exists for obtaining groundwater from the Paleozoic formations approximately 8 miles east of Manderson. In 1993, an exploratory well was constructed that produced water of excellent quality, but lacked sufficient yield to supply the projected 750 taps in the regional water system. In 1994 the well was hydraulically fractured in an attempt to stimulate water production. The well now flows approximately 350 gpm of good quality water. A second well has been drilled into the Madison formation that produces approximately 250 gpm. The water supply from the two wells will meet demand for many years.

The overall project delivers water from the well field located east of Manderson to the Town of Manderson, the South Big Horn County Water District and the Town of Basin. Four separate bid lettings have been conducted for the project. The first contract was for the second production well that has been drilled and placed into operation. The second construction contract provides the major transmission pipeline between the wells and the towns of Basin and Manderson. The third phase constructed the rural distribution system. The fourth contract was to reconnect the Manderson water storage tanks to the system.

Basin Gardens is a rural area of Big Horn County on the east side of the Big Horn River, near the Town of Basin. The area was included in the original Basin Area Water Supply Project, but constructing a pipeline to serve the Basin Gardens area was not cost effective at the time the SBHCWSJPB's system was installed. An updated feasibility analysis for Basin Gardens was performed in the presently active Big Horn Regional Water Supply Level II Study, of which SBHCWSJPB is a sponsoring entity. The number of taps in Basin Gardens now meet the minimum WWDC criterion. Combining this project with the BHR's transmission pipeline now makes this project cost effective.

An engineering firm has been retained by the SBHCWSJPB to design this system, which will be integrated into the Big Horn Regional Joint Powers Board's system. Construction of the project should commence in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

12. **PROJECT:** Basin Raw Water Pipeline  
**LEVEL:** III  
**SPONSOR:** Town of Basin, Incorporated Municipality  
**LOCATION:** Big Horn  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$ 202,000*	2008

\*50% grant

**PROJECT INFORMATION:**

This project will construct a raw water transmission supply line from the Big Horn River to the Town's reservoir. The project includes installing new pumps in the existing unused pump house at the Town's abandoned water treatment facility.

The pipeline would be used to supply domestic raw irrigation water for the Town of Basin during periods when the Big Horn canal is out of service. This includes times when the canal is not flowing, as well as times when the canal is under repair. This project would also enable the town to maintain their water right of 3.08 cfs in the Big Horn River.

Consulting civil engineers have been retained to design this system.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.



13. **PROJECT:** Bedford Water Tank  
**LEVEL:** III  
**SPONSOR:** Bedford Water & Sewer District  
**LOCATION:** Lincoln County  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	15	1996	I	\$250,000**	1998
Level III	118	2004	I	\$ 500,000	2008

\*\*The Bedford study was included in a regional study which incorporated the Town of Thayne, Bedford Water & Sewer District, and the Willow Creek Pipeline Company (now known as the Turnerville Water & Sewer District)

PROJECT INFORMATION:

The Bedford system was designed and constructed in 1990. The main elements were the development of two springs, drilling a groundwater well and transmission and distribution piping. At that time a storage tank was included as an integral element as system demand increased. The system has seen increases in demand and recent problems with one of the springs has resulted in taking it out of service. The increased storage capacity is now needed to meet peak demands within the system and allow the well and spring to operate at a regulated level.

The district is attempting to secure matching funds which will allow them to proceed with the project.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is necessary

14. **PROJECT:** Big Horn Canal Rehabilitation  
**LEVEL:** New Application  
**SPONSOR:** Big Horn Canal Irrigation District  
**LOCATION:** Big Horn and Washakie Counties  
**PROGRAM:** Rehabilitation

PROJECT INFORMATION:

The Big Horn Canal District's main canal is over 60 miles long and extends from south of Worland to Greybull. An area of primary concern to the District is a narrow area between the Big Horn river and the Big Horn canal. This area experienced a structural failure several years ago and the District would like it evaluated for structural integrity. There are several other areas of concern along the canal length to be evaluated as well as several structures that have been identified as needing evaluation for structural integrity. The District would also like to determine the cost and feasibility of installing measuring devices at farm turnouts.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level II with an appropriation of \$150,000

15. **PROJECT:** Big Horn Regional Ground Water  
**LEVEL:** II  
**SPONSOR:** Big Horn Regional Joint Powers Board  
**LOCATION:** Big Horn, Washakie, Hot Springs Counties  
**PROGRAM:** New Development

EXISTING LEGISLATION:

See Big Horn Region Joint Powers Board Pipeline above

PROJECT DESCRIPTION:

The WWDC Level II Big Horn Regional Water Supply Study, commenced in 2000, completed an investigation of groundwater potential for a municipal water supply in the southern Big Horn Basin. Eight (8) well sites were investigated within the southern Big Horn Basin that could potentially yield abundant (>500gpm), good quality (<500 mg/l TDS) water. These sites were chosen on the basis of geologic structure, drilling depths, geothermal gradient, distance from known geothermal activity, accessibility, and potential groundwater quality. An extensive review of groundwater data within the southern Big Horn Basin reveals that the most likely aquifer to yield abundant, good quality water is from the Paleozoic-age Madison-Big Horn aquifer system. A secondary target aquifer, that is deemed viable in the study, is the Cambrian-age Flathead Sandstone.

The original intent of ground water exploration in Hot Springs County was to establish a southern-basin well field capable of providing yield to match or exceed maximum daily use requirements of Hot Springs County users (including the town of Thermopolis) and provide a supplemental supply to water users, to the north when needed. One well will not feasibly meet this requirement. For example, other source well field configurations serving the joint powers service area utilize multiple wells, i.e., the Worland well field (2 wells), Manderson well field (2 "Wild Horse" wells), and the Greybull supply wells (2 Trapper Creek wells and Shell Canyon well).

A test well was completed in late 2001 at the Wild Horse Anticline site, about 13 miles ESE of Thermopolis, as a Madison-Big Horn Aquifer completion. Production yield at this site did not meet the requirements of the project. A second test well was drilled and completed at the Buffalo Creek Monocline site, 4½ miles SE of Thermopolis, in early 2004. A 6 foot cavern in the Madison formation was encountered that hindered advancement of drilling and caused lost circulation of drilling fluids to total depth (1,068 feet below land surface). Subsequent pump testing revealed good potential for a high yielding well. In fact, the 200 hp pump was scarcely stressing the well capacity over a 5-day pump test with only 49 feet of drawdown at an average pumping rate of 615 gpm (end of test specific capacity = 11.9 gpm/ft).

The Big Horn Regional Joint Powers Board is requesting a new study that focuses only on additional test drilling to explore the new found potential for a regional water supply in the Southern Big Horn Basin. This would specifically include further testing of the Buffalo Creek No. 2 Well and drilling another production-size test well. The pump testing phase will include monitoring of nearby wells, springs, and the thermal springs at Hot Springs State Park.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$1,500,000. The appropriation includes funding for a ground water exploration drilling and testing program.

- 16. **PROJECT:** Big Horn Regional Joint Powers Board Pipeline
- LEVEL:** II/III
- SPONSOR:** Big Horn Regional Joint Powers Board
- LOCATION:** Big Horn, Washakie, Hot Springs Counties
- PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	36	2000	I	\$160,000	2002
Level II	86	2001	I	\$670,000	2002
Level III	88	2001	I	\$5,500,000*	2007
Level II	7	2002	I	\$675,000	2004
Level III	118	2004	I	\$13,628,500*	2010

\*The grant has been raised from 50% to 67%

PROJECT INFORMATION:

In December, 1996, the City of Worland's transmission Pipeline ruptured in a remote location, leaving Worland without potable water. Because of the remoteness of the rupture, this crisis lasted for about 10 days. The crisis revealed the vulnerability of other potable water systems in the region with remote water sources. Therefore, in 1999 the Big Horn Regional Steering Committee was organized to discuss ways to minimize the impact of future pipeline breaks. This committee evolved into the Big Horn Regional Joint Powers Board with the following objectives:

- Route a second water transmission pipeline from the City of Worland's well field to Worland;
- Connect the Town of Greybull's system to the Regional's system with a Greybull River crossing;
- Explore means to support and enhance water supply to public water supply systems in rural and incorporated Hot Springs County; and,
- Develop a southern-basin water supply well or well field.

The 2000 WWDC Level II Study by BRS Inc. completed an investigation of ground water potential for a municipal water supply in the southern Big Horn Basin. Eight (8) well sites were investigated within the southern Big Horn Basin that could potentially yield abundant (>500gpm), good quality (<500 mg/l TDS) water. These sites were chosen on the basis of geologic structure, drilling depths, geothermal gradient, distance from known geothermal activity, accessibility, and potential ground water quality. An extensive review of ground water data within the southern Big Horn Basin reveals that the most likely aquifer to yield abundant, good quality water is from the Paleozoic-age Madison-Big Horn Aquifer system. A secondary target aquifer, that is deemed viable in the study, is the Cambrian-age Flathead Sandstone.

A test well was completed in late 2001 at the Wild Horse Anticline site as a Madison-Big Horn Aquifer completion. Production yield at this site did not meet the requirements of the project. The original intent of ground water exploration in Hot Springs County was to establish a southern-basin well field capable of providing yield to match or exceed maximum daily use requirements of potential Hot Springs County users (including the Town of Thermopolis) and provide a supplemental supply to joint powers users to the north if and when needed. One well would not feasibly nor reliably provide this requirement just as envisioned for other source well field configurations serving the joint powers service area, i.e., the Worland well field (2 wells), Manderson well field (2 "Wild Horse" wells), and the Greybull supply wells (2 Trapper Creek wells and Shell Canyon well). The Wild Horse Anticline test well was not a success, however the Big Horn Rural Joint Powers Board wishes to pursue a second test well in Hot Springs County.

The continued Level II study includes exploration into the feasibility of expanding joint powers service area in Big Horn County with a conceptual look at routing pipelines through south Big Horn County to Greybull. Potential rural users who have shown interest in regional supply are Greybull River users SW of Greybull and users west of Basin to the area centered at Otto. The town of Burlington may also benefit from regional supply. At the present time the study is focused upon the continued pursuit of exploration for a well in the southern part of the system.

The Big Horn Regional Joint Powers Board (BHRJPB) retained HKM, Inc., consulting engineers, to design the northern system. As a first task in this process, HKM was asked to prepare a design report for the project. Early in the preliminary study of the project it became clear that the scope needed to be expanded to develop a hydraulic model of the BHRJPB's northern service area. This area includes the City of Worland, Washakie Rural Improvement and Service District, South Big Horn County Water Supply JPB, Town of Basin, and Town of Greybull. HKM and Engineering Associates (Washakie Rural's consultant) worked very closely with the SPONSOR and the funding agencies to develop a comprehensive hydraulic model and system configuration.

In an effort to reduce the overall costs to the BHRJPB and Washakie Rural I. & S. District, portions of Washakie Rural's system were upsized and reconfigured to carry regional water to its member agencies. This resulted in an estimated saving of about \$2,000,000, with savings shared by both sponsors.

Delivery of the Town of Greybull's allocated emergency water supply was expected to be transmitted through the South Big Horn Water Supply JPB's existing system. However, based on the hydraulic modeling, it was determined that this system can only serve in a limited capacity, but is inadequate to supply the full need. Several alternatives to improve the existing system were considered. However, the engineering team determined that a new pipeline from a point on the Regional's main transmission system east of the Town of Manderson to the Town of Greybull is the most cost effective solution.

The project also includes funding for a regional water storage tank, several pressure reducing stations, booster pump stations, and a SCADA system which may be integrated with the member agency systems.

Plans for the first phase of the project are nearly complete. Construction should begin in the spring of 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

17. **PROJECT:**                    **Big Piney Water Supply**  
**LEVEL:**                            III  
**SPONSOR:**                      Town of Big Piney, Incorporated Municipality  
**LOCATION:**                        Sublette County  
**PROGRAM:**                        Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	10	1994	I	\$200,000	1996
Level III	206	1995	I	\$410,000	1999
Level III	59	1996	I	\$590,000	1999
Level III	69	2003	II	\$475,000	2008

**PROJECT INFORMATION:**

The 1994 WWDC Level II Study for Big Piney/Marbleton recommended upgrades for Big Piney, including those that are being requested in this project. These upgrades are designed to increase system reliability, improve public health and safety, provide emergency and fire suppression water, and increase overall system operating efficiency. As a small town with limited resources and a stable population, Big Piney has worked since 1994 to develop priorities for improvements

that will achieve the most value. The proposed improvements include a new 200,000 gallon elevated storage tank, updated well system controls, conversion to liquid chlorination, a new supply well, and a transmission line connecting the Big Piney and Marbleton water supply systems.

The project has proceeded in two phases. The first phase is to install the pipeline connecting Big Piney and Marbleton. This portion of the project is complete. The second phase, including the storage tank was designed, bid, modified and re-bid. Increases in steel prices has put the project above existing funding. The town needs additional funds of \$ 37,500 to proceed with the project.

**RECOMMENDED LEGISLATIVE ACTION:**

Additional appropriation of \$37,500 grant is needed.

- 18. PROJECT:                    **Big Valley & Crossed Arrows Improvement District Water Supply****  
**LEVEL:**                         New Application  
**SPONSOR:**                    Big Valley & Crossed Arrows Improvement District  
**LOCATION:**                      Park County  
**PROGRAM:**                     Rehabilitation

**PROJECT INFORMATION:**

In 2004 Big Valley & Crossed Arrows Improvement District submitted an application requesting a study named Big Valley & Crossed Arrows Improvement District Water Supply that would determine the feasibility of utilizing the municipal system of the town of Meeteetse to supply them with water. This would require tapping the Town of Meeteetse’s main water line and running a transmission main to the Improvement District a distance of approximately 1.2 miles. There is also a need for new storage and upgrade to their current transmission infrastructure. The current system is served by a common well that fills two 1,500 gallon concrete cisterns; the water is then transmitted through four-inch terminal distribution lines. The main transmission lines may need to be expanded to serve everyone in the district. Water from the district’s well is high in dissolved solids, and most households buy drinking water. Additionally, there are a number of individuals and businesses immediately north of Meeteetse that have expressed interest in getting water from Meeteetse. This project will determine the feasibility of supplying these interests with water from the same line.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at a Level II with an appropriation of \$75,000.

- 19. PROJECT:                    **Black Willow Water Supply****  
**LEVEL:**                         II-Hold  
**SPONSOR:**                    Blackwillow Subdivision  
**LOCATION:**                      Hot Springs County  
**PROGRAM:**                     New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
Level I	8	1995	I	\$25,000	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\* A block appropriation of \$15,000 was made for all hold projects.

PROJECT INFORMATION:

Black Willow subdivision is located northeast of Thermopolis. There are 16 existing homes in the subdivision and surrounding area; all are on individual wells. The wells produce small quantities of poor quality water. Some residents have individual water treatment systems or haul water. In 1994, the sponsor requested assistance from the WWDC to complete a Level I study to determine their options for securing a good quality water supply.

The Level I study was completed by BRS Inc. in 1995. The Level I study delineated a possible service area, defined water supply alternatives, and recommended a preferred alternative. Preliminary designs and cost estimates were developed for the preferred alternative. The study determined that there are other homes in the area with similar problems. The subdivision has elected not to pursue further study at this time pending formation of a water district and the results of the test-drilling program for the Southern portion of the Big Horn Regional Water System.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends that the project be retained at Level II-Hold status.

20. **PROJECT:** **Boulter Lake Outlet Works/Enlargement**  
**LEVEL:** New Application  
**SPONSOR:** The Upper Green River Water Basin Joint Powers Board  
**LOCATION:** Sublette County  
**PROGRAM:** New Development

PROJECT INFORMATION:

The purpose of this project is to investigate the possibility for rehabilitation of the outlet works and potential enlargement of Boulter Lake. Boulter Lake is located in the Bridger National Forest east of Boulder Wyoming. The lake is located in a roadless area adjacent to the Bridger Wilderness.

Boulter Lake was permitted in 1934 for supplemental irrigation supply to the East Fork River Water Users. In the 1970's the outlet works were vandalized rendering them inoperable. The Green River Water Basin Joint Powers Board requests a Level II study to investigate the possibility of returning the outlet works to their original functioning condition, and to determine the feasibility of enlarging the current 563 acre-feet pool.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$75,000.

21. **PROJECT:** **Bridger Valley Big Hill Transmission Line**  
**LEVEL:** New Application  
**SPONSOR:** Bridger Valley Joint Powers Board  
**LOCATION:** Uinta County  
**PROGRAM:** New Development

PROJECT INFORMATION:

The Bridger Valley Joint Powers Board (BVJPB) wishes to extend a transmission line to serve a group of twelve (12) residences in an area south of Mountain View known as Big Hill. This group was previously designated as an area to be included as part of the service area for the Pioneer

Water and Sewer District (PW&SD) in a Level II study completed in August 1995. The Bridger Valley Joint Powers Board provides water service in the area immediately adjacent to this area and believes it is in their best interest to expand their customer base where feasible.

The private ground water wells and springs in the Big Hill area are of very poor water quality, do not meet Safe Drinking Water Act standards, have unpleasant odor and taste characteristics, are very corrosive and are not found in sufficient quantities to meet even the resident's non-potable needs for washing, lawn irrigation, and sanitary. Consequently the area residents are forced to haul potable water for their domestic use from the Town of Mountain View.

The BVJPB, which serves the Towns of Mountain View and Lyman along with approximately 1,200 rural service connections, wishes to extend an 8-inch transmission line (4,100 feet) into this area and to provide ¾ inch distribution laterals (2,400 feet) to the twelve (12) residences. The BVJPB is requesting a 50% grant (\$67,600) for the WWDC eligible transmission line portion of the project with estimated engineering, contingency, and construction costs for the transmission line, valves, and fire hydrants of \$135,200. Remaining project costs are being requested from the Drinking Water State Revolving Loan Program and Mineral Royalty Grants Program.

**Estimated Level III Costs**

Design.....	\$ 14,980
Mobilization and Bonding.....	\$ 16,000
Transmission Pipeline.....	\$102,500
Gate Valves.....	\$ 6,000
Fire hydrants and accessories.....	\$ 5,000
Misc. Fittings and Piping.....	\$ 3,300
Laterals and Service Connections.....	\$ 11,000
Restoration.....	\$ 6,000
Construction Engineering (10%).....	\$ 14,980
Contingency (10%).....	\$ 14,980
Total Project Costs.....	\$194,740
CHAPTER II <u>Rounded</u> .....	\$ 195,000

**Eligible WWDC Project Costs..... \$135,200**

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends that the project be incorporated in the Rehabilitation Program at Level III with an appropriation of a \$67,600 grant.

22. **PROJECT:**                    **Bridger Valley Intake Structure Rehabilitation/ Bridger Valley Reservoir**  
**LEVEL:**                            **III**  
**SPONSOR:**                        **Bridger Valley Joint Powers Board**  
**LOCATION:**                         **Uinta County**  
**PROGRAM:**                        **Rehabilitation/New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	2	2001	II	\$138,000*	2005
Level III	88	2002	II	\$367,000*	2005
Level II	125	2003	I	\$125,000	2004

New Application

\*50% grant

### PROJECT INFORMATION:

A pre-design report was completed in March 2000 by Nelson Engineering and Richard P. Arber Associates for the replacement and expansion of the Bridger Valley Joint Powers Board (BVJPB) water treatment plant. The report includes an evaluation of intake upgrade alternatives, which took into consideration pressure requirements at the WTP, access to intake site, sediment removal, permitting costs, regulatory issues and life cycle costs. Alternatives looked at included: alluvial wells, alternate diversion locations, raw water transmission line replacement and construction of a booster pump station. The most cost effective and implementable alternative incorporates the replacement of the existing 14-inch raw water pipeline along with the intake structure.

The BVJPB received Level III funding in 2001 to assist in the construction replacement of the existing intake and raw water diversion structure in the Smith's Fork River at the site of the existing structure. The intake is located 8,800 feet upstream from the regional water treatment plant. The previous structure was inadequate to provide the total raw water capacity of the new 4 MGD water treatment plant that is being funded by a Drinking Water State Revolving Fund (DWSRF) loan. The intake structure also had problems associated with capacity at low river flows as well as problems with ice and trash accumulations.

The BVJPB completed design and construction of the intake structure and raw water transmission line during the summer of 2003. Storage tank design and construction was completed during the fall of 2004.

A Level II study was authorized by the 2003 Legislature to conduct a feasibility study for a water storage reservoir. The BVJPB owns and operates the water treatment facility that provides treated water for the Town of Lyman, Town of Mountain View, Blacks Fork Water and Sewer District and much of rural Uinta County in the Bridger Valley. The BVJPB has water rights from the Smiths Fork and Blacks Fork Rivers. They also have 1,500 acre feet (af) of water storage in the Stateline Dam. Their contract with the Bureau of Reclamation requires predetermined volumes of water be released from Stateline Dam each month. This means that about 700 af are released in the winter when water demands are low and when stream flow can typically meet the needs. There is also an instream flow requirement, which is met by the winter releases. The BVJPB wants to develop a water storage reservoir to store releases from the Stateline Dam in times of adequate stream flow to allow use of the stored water in summer and fall periods when flows are low and demand is high.

The study was completed in July 2004. The study looked at several alternatives to provide the BVJPB access to their stored water in Stateline Dam during drought situations. There were five new dam sites and three reservoir enlargements reviewed plus other alternatives. The best alternatives were to construct dams on Willow Creek or Jack Hollow. The Jack Hollow site was the most suitable and had the least environmental impacts. However, the cost of constructing a dam was higher than expected by the BVJPB. Additionally, water conveyance to the Jack Hollow site presents a problem. The BVJPB would like to continue the study through a Level II Phase II to further examine less costly alternatives for developing the Jack Hollow site and conveying water to the reservoir. They would like to evaluate the potential for developing a multiple use reservoir, which might spread costs over a larger number of users. Other innovative alternatives would also be examined.

### RECOMMENDED LEGISLATIVE ACTION:

The Commission recommends that the project be incorporated into the New Development Program at Level II Phase II with an appropriation of \$100,000.



23. **PROJECT:** **Bridger Valley Water Supply**  
**LEVEL:** II-Hold  
**SPONSOR:** Bridger Valley Joint Powers Board and Pioneer Water and Sewer District  
**LOCATION:** Uinta County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	43	1992	I	\$125,000	1994
Level II	10	1994	I	\$300,000	1996
Level II	15	1996	I	Hold	1998
Level II	82	1998	I	Hold	2000
Level II	36	2000	I	Hold	2002
Level II	7	2002	I	Hold*	2004

\* A block appropriation of \$15,000 was made for all hold projects.

PROJECT INFORMATION:

In 1990, the Bridger Valley Joint Powers Board requested assistance from the WWDC in determining the feasibility of expanding the board's service area. The Joint Powers Board presently supplies water to the towns of Mountain View and Lyman; the Blacks Fork, Lower Bench and Fort Bridger Water Districts; and 176 individual homes and businesses. Water users not in the service area have no potable water or have poor quality water in limited supplies. The Bridger Valley Joint Powers Board felt at that time they had sufficient water rights and water treatment plant capacity to serve additional users not included in the present service area.

In 1991, the WWDC completed the Level I study which evaluated the possibility of serving additional areas. The areas identified as the most likely to connect to the present system include: the area east of Mountain View and south of Lyman; the area surrounding Millburne, which is south of the Fort Bridger Water District and west of Mountain View; and the area surrounding the Uinta County Highway Shop, which is north of the treatment plant. These areas were organized into the Pioneer Water and Sewer District. The cost to connect the district to the present system was estimated to be \$3,440,000. The number of potential taps in the district was estimated to be approximately 120. The costs to the potential users to purchase water from the board and repay the loans was estimated at \$60-\$65 per month per tap.

Due to the Joint Powers Board's inability to provide the necessary loan security, as the proposed project was outside its boundaries, the Pioneer Water and Sewer District took over as the project sponsor.

In 1992, the Level II study defined the proposed transmission pipeline alignment, mapped the proposed alignment, investigated the geologic conditions along that alignment, and evaluated the present water treatment plant. The Level II study found that the Bridger Valley Joint Powers Board system is operating at its maximum capacity and will need a major upgrade to provide clean water to its current members in the very near future. The Lyman Springs, which are a major component of the area water supply, also became a concern due to the possibility of EPA regulation.

In 1993, the sponsor requested an extension of the Level II study. This Level II study extension would investigate the possibility of developing a groundwater source. This groundwater source could serve the Pioneer District and be tied into the Bridger Valley Regional System as an additional water supply. This additional study was to include a groundwater exploration program and detailed cost estimates for a groundwater supply system to serve the district or to serve the regional system.

In 1994, the Level II study determined that there is a surface water connection problem with the Lyman Springs.

The Lyman Springs Rehabilitation project has been completed with construction of springs modifications, funded by WWDC and the installation of bag filters funded by the Town of Lyman. In 1995, due to the protests of the landowners in the area, the sponsors decided not to pursue the groundwater exploration program. The joint powers board is presently upgrading their diversion and treatment facilities with construction completion anticipated in the fall of 2003.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project for expansion of water service be retained on Level II-Hold status.

24. **PROJECT:**                    **Buffalo Valley Water Supply**  
**LEVEL:**                         III  
**SPONSOR:**                    Buffalo Valley Water District  
**LOCATION:**                     Teton County  
**PROGRAM:**                    New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	46	1997	I	\$90,000	1999
Level III	38	1998	I	\$475,000*	2001
Level III	2	2001	I	\$475,000*	2005

\*60% grant; 40% loan (7.25%, 30 years); plus \$6,264 loan for well (7.25%, 30 years)

**PROJECT INFORMATION:**

The WWDC staff prepared a Level I study in 1996 that inventoried the existing system, evaluated water supply needs, and evaluated water supply alternatives for the water users in the Buffalo Valley area. Preliminary plans and cost estimates were developed for the identified alternatives and a preferred alternative was selected. In 1997 a Level II study was performed to drill a test well and test the well performance and prepare conceptual designs and cost estimates. The well was successfully completed in 1997 at a cost of \$15,561.

The Buffalo Valley Water District received a 1998 grant and loan appropriation in the amount of \$475,000 from Water Development Account I. The grant is for 60% of the WWDC eligible project costs with a 40% loan at a 7.25% interest rate over 30 years. The project scope included construction of a new 80,000-gallon storage tank system, well pump installation, control building, chlorination facilities, valving, telemetry system, and a transmission line to the storage tanks.

The WWDC funding legislation provided for a reversion date of July 1, 2001. There was a substantial project time delay owing to the issuance of a U.S. Department of Agriculture - Forest Service Special Use Permit for the storage tank system site, which required amending the project legislation in 2001 to extend the reversion date to July 2005.

Construction of the project was started in August 2002, with final completion and Forest Service acceptance of site restoration work in December 2003. Final project closeout will take place by January 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

25. **PROJECT:** Buffalo Water Storage Tank  
**LEVEL:** III  
**SPONSOR:** Town of Buffalo, Incorporated Municipality  
**LOCATION:** Johnson  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	I	\$ 50,000	2004
Level III	69	2003	I	\$2,152,500	2008

PROJECT INFORMATION:

In October 2002 a Level II study was completed for the Town of Buffalo to determine the costs and feasibility of placing an additional storage tank within the Town's water system. The town will have a 2.5 million gallon tank and transmission mains constructed.

The sponsor has contracted with an engineer to design the improvements. Surveying, legal description preparation and negotiations for the necessary rights of way are in process. Due to the nature of the project, two construction contracts will be bid and these will be built concurrently. Both projects must be constructed, or the project will not function as intended. Due to increased construction costs, the project has been delayed until sufficient funding can be put in place to insure both projects can be constructed.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends increasing the appropriation by \$550,000 to \$2,702,500

26. **PROJECT:** Burlington Regional Master Plan  
**LEVEL:** New Application  
**SPONSOR:** Town of Burlington  
**LOCATION:** Big Horn County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	15	1996	I	\$75,000	1998
Level III	45	1997	I	\$360,000*	2000

\*60% grant

CHAPTER III PROJECT INFORMATION:

In 1996, a Level II report was completed by MSE/HKM. The report noted several deficiencies in the water system including inadequate chlorination, flow bottlenecks, minimal fire flows, and unprotected shallow alluvial wells. The Level III project implemented a well head protection area around the existing wells, constructed a larger 8-inch pipeline from the wells to the water storage tank, installed a gas chlorination system, and replaced existing well pumps in the two production wells with larger capacity units.

In 2003, a Level II study was completed by BRS, Inc. for the Big Horn Regional Water Supply project. The study examined the feasibility of expanding the joint powers service area in Big Horn County. Potential rural users who have shown interest in regional supply include those west of Basin to the area centered at Otto. The town of Burlington may also benefit from regional supply. The town has requested a study of alternate water sources as well as an update of their current water system.

The town of Burlington currently possesses two shallow alluvial wells with a transmission and distribution system. In most years, during peak demand in the summer, the wells do not supply enough water for the town's needs. Otto, which is not an incorporated town, does not have a public domestic water supply. The residents of Otto and areas surrounding Burlington and Otto rely on water haulage or private shallow alluvial wells with very poor water quality. The town would like to study alternate water sources, including the purchase of water from either the Big Horn Regional Joint Powers Board or the South Big Horn Regional Water Supply Joint Powers Board. In addition, they desire a study of the town's current water system with potential to expand to undeveloped town areas.

**RECOMMENDED LEGISLATIVE ACTION:**

It is recommended that this project be incorporated into the New Development Program at Level II with an appropriation of \$75,000.

27. **PROJECT:**                    **Byron Raw Water**  
**LEVEL:**                            III  
**SPONSOR:**                      Town of Byron, Incorporated Municipality  
**LOCATION:**                        Big Horn County  
**PROGRAM:**                        Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$40,000	2004
Level III	69	2003	II	\$912,000*	2008
Level III	118	2004	II	\$752,000*	2008

\*50% grant, 30% loan (6%, 30 years)

**PROJECT INFORMATION:**

The Town of Byron has an open lined ditch system to convey water for residential irrigation. The system has been in place for many years and is very expensive to maintain. It is also prone to backwater spills caused by debris in culverts, is a side-of-the-road hazard for vehicles, and an attractive nuisance for children. Subsequent to the level II study completed in 2002 the sponsor received construction appropriations for Phases I and II of the project in 2003 and 2004, respectively.

The sponsor has executed the necessary legal documents and the entire project is being designed for construction beginning in 2005 and likely being completed in 2007.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

28. **PROJECT:**                    **Canyon/Newcastle Area Water Supply**  
**LEVEL:**                            II  
**SPONSOR:**                      Canyon Improvement & Service District  
**LOCATION:**                        Weston County  
**PROGRAM:**                        New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	125	2003	II	\$75,000	2004
Level II	34	2004	II	\$600,000	2006

**PROJECT DESCRIPTION:**

The sponsor is a newly formed rural district located less than 5 miles northeast of Newcastle. Stetson Engineering, Inc completed a regional feasibility, cost analysis, and well siting study for Canyon I & S District in a 2003 Level II study. The study considered connecting Canyon users to existing supply and transmission infrastructure in and adjacent to Newcastle versus a stand-alone supply/storage/transmission/distribution system that could possibly tie into and enhance the regional system.

The City of Newcastle is the dominant purveyor of water to a regional system that also includes Salt Creek Water & Sewer District, West End Water District, Blacktail Water Users, and Cambria Water District. Presently, all of the above entities have their own water supply wells with the exception of Cambria WD. According to the 2000 WWDC Level II Newcastle Area Water Supply Master Plan, all existing source wells in operation could meet and exceed average day, maximum day, and peak hour demands for the duration of that study’s planning period (to year 2023). The report concedes however, that the oversupply statement is misleading because of existing pipeline lengths and sizing, lack of storage at Salt Creek, West End, and Blacktail, and dependence on the Newcastle No. 1 Well (drilled in 1949), which if removed from service would result in even present demand not being met.

Presently, several factors preclude supplying Canyon users from already existing wells and supply lines in the Newcastle area. Present infrastructure cannot practically provide reliable supply to Canyon users. A topographic barrier prevents efficient transmission to Canyon users from the City of Newcastle’s 373,000 gallon storage tank at Cambria. Salt Creek W&S District, which neighbors Canyon WD to the south, is unable to meet additional demands on its well. Moreover, water is moved between entities at Newcastle via contract sales. Currently, a regional entity (e.g., a joint powers organization) does not exist to manage common system components or rate structures. An interconnection with the region’s dominant purveyor is not feasible because the City of Newcastle is concerned that growth in the Canyon area could potentially exhaust water supplies and force the City to develop new supply or limit growth.

The preferred alternative is to provide water supply to Canyon users by construction of a new well facility and supply system. If a high capacity well is discovered at a Canyon District location, it may prove to be an asset to the regional system since it could easily tie into the Salt Creek system. With the drilling and testing budget provided in 2004, a test well was commenced in late October 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 29. PROJECT:** Canyon Water Supply
- LEVEL:** III
- SPONSOR:** Canyon Improvement & Service District
- LOCATION:** Weston County
- PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	125	2003	II	\$75,000	2004
Level II	34	2004	II	\$600,000	2006

**PROJECT DESCRIPTION:**

The sponsor is a recently (2003) formed rural district located less than 5 miles east and north of Newcastle. Stetson Engineering, Inc completed a regional feasibility, cost analysis, and well siting study for Canyon I & S District in a 2003 Level II study. The study considered connecting

Canyon users to existing supply and transmission infrastructure in and adjacent to Newcastle versus a stand-alone supply /storage/transmission/distribution system that could possibly tie into and enhance the regional system.

The preferred alternative is to provide water supply to Canyon users by construction of a new well facility and supply system. Test drilling began in late October 2004. Results of the drilling and testing program should be available by mid November to confirm the source supply component of the project. A high capacity well discovered at a Canyon District location may prove to be an asset to the regional system since it could easily tie into the Salt Creek District system.

**2005 Estimated Level III Costs (includes design, engineering, contingency)**

Well Supply Improvements (Pump, power, etc).....	\$ 152,690.00
Storage .....	\$ 135,000.00
Transmission .....	\$ 1,112,000.00
SCADA Controls .....	\$ 27,500.00
Cost of Funding (RUS, SRF, SLIB).....	\$ 10,000.00
Project Management (\$35K/yr as required).....	\$ 35,000.00
<b>Total WWDC Grant Eligible Costs (Rounded) ...</b>	<b>\$ 1,481,000.00</b>

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the Canyon/Newcastle Area Water Supply Project be incorporated into the New Development Program at Level III with an appropriation of \$740,000 (50% Grant). Legislation includes authorization for the District to purchase the Level II test well for fifty percent of the project cost.

- 30. PROJECT: Casper Alcova Ditch Rehabilitation**  
**LEVEL: III**  
**SPONSOR: Casper-Alcova Irrigation District**  
**LOCATION: Natrona County**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	II	\$595,000*	2010

\*100% grant for invoiced materials. The sponsor is responsible for all other project costs.

PROJECT INFORMATION:

The Lateral 128-170 project segment includes replacement of earthen ditch with about 3,600 feet of pipe plus structures, valves, and measuring devices necessary to deliver irrigation water. The improvement should reduce seepage loss and improve operational efficiency. The Lateral 239 project segment will be replacement of several concrete drop structures with a pipe drop about 1,500 feet long including a concrete inlet structure and a concrete outlet stilling basin structure. The largest project component is converting Laterals 256-680 and 256-681 from open ditch to pipe. The new pipe delivery is anticipated to facilitate conversion of irrigated acres from flood to sprinkler and reduce seepage loss from the delivery laterals. The combined effect should reduce selenium concentrations in local drainage water. This project component is desired to be funded jointly with EPA 319 grant money administered by the Wyoming DEQ and funding from the WWDC. The WWDC funds will be used for purchase of materials only, while the 319 funds are planned to assist the sponsor with labor, equipment costs, and engineering for this component. NRCS is providing design and construction engineering services for Laterals 256-680 and 256-681.

The sponsor is responsible for all labor, equipment, engineering, permitting, legal, and land rights costs. WWDC is financing the purchase of materials with grant funds.

During 2004 the NRCS completed final design of Laterals 256-689 and 256-681, allowing a more precise list of materials required for construction. This coupled with increased prices for pvc pipe and other building materials in 2004, led to the sponsor making the request to increase funding for materials for the entire project from \$595,000 to \$880,000.

Construction is anticipated to begin on Laterals 256-680 and 256-681 in 2005. The other project components are being designed with construction beginning in 2005 and completed in 2006.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be continued at Level III in the Rehabilitation Program with an additional appropriation of \$285,000 for the increased cost of materials. The financing plan includes an additional 100% grant of \$285,000 to be used only for the purchase of invoiced materials. The total project appropriation is increased from \$595,000 to \$880,000.

31. **PROJECT:** Casper Alcova Tunnel Rehabilitation  
**LEVEL:** III  
**SPONSOR:** Casper-Alcova Irrigation District  
**LOCATION:** Natrona County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$170,000*	2008

\*50% grant, 50% loan (6%, 30 years)

**PROJECT INFORMATION:**

The proposed project includes rehabilitation of Tunnel 3 and Tunnel 4 on the Casper Canal. These tunnels are concrete lined with concrete transitions to the earthen canal. Cracking and deterioration of the concrete lining and transitions resulting in heaves and voids are the primary items to correct. These tunnels are relatively high in the water delivery system and are therefore extremely important to the irrigators to keep in service. The proposed project would help assure water delivery to the irrigators and keep the irrigation district in good standing with the US Bureau of Reclamation, which owns the facilities. The project has been estimated to cost approximately \$170,000.

This project is under construction and should be complete prior to the 2005 irrigation season.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

32. **PROJECT:** Casper Master Plan  
**LEVEL:** New Application  
**SPONSOR:** City of Casper  
**LOCATION:** Natrona County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The City of Casper's 1982 Water Master Plan delineated several water transmission lines, storage tanks, and booster stations for all the pressure zones, and was prepared in response to the high

growth rate at that period of time. In 1997, the city updated the plan. While several improvements have, and are being made to Zone II as a result of this study, the 1997 study did not indicate any new tanks or booster stations for Zone III or IV because of low Casper growth projections at that time.

Since 2001 the city has experienced a large amount of growth, including growth within Zones III and IV in South Casper. Transmission system redundancy is also of concern in these pressure zones. The recently completed Level II Feasibility Study for the South Garden Creek area analyzed these zones for adequacy to meet 2004 water demands in preparation of pumping from Zone IV. The existing booster station system was found to be in good shape, but water storage was approaching capacity.

Because of accelerated growth and growth projections since the 1997 Water Master Plan update, the city is requesting help in developing an updated 2005 Water Master Plan. This plan would determine future sizing and locations of new and/or modified water storage tanks, booster stations, and transmission lines throughout the city, especially to service Casper Pressure Zones III and IV.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level I with an appropriation of \$200,000.

- 33. **PROJECT:** Casper Zone II
- LEVEL:** Level III
- SPONSOR:** City of Casper
- LOCATION:** Natrona County
- PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	I	\$60,000	2002
Level II	88	2002	I	\$3,188,000*	2007

\*50% Grant

**PROJECT INFORMATION:**

Due to the rapid growth in the East Zone II area of Casper, the city would like to expand its storage and transmission facilities that serve the area. There have been two studies in the past in this area. However, rapid growth has changed the demands since that time. Civil Engineering Professional Inc. were retained to conduct the Level II analysis of the project. The study identified numerous infrastructure improvements that should be made by the City. The City has selected a development plan that includes new pipelines and storage facilities in the Eastern part of the City.

Design and construction of the project proceeded during 2003. Design and construction of Phase I – Part I of this project is complete. Some difficulties with obtaining the easements for Phase I – Part II have delayed progress, but all easements have now been obtained. Therefore, a contract for Phase I - Part II construction consisting of additional transmission pipeline and a water storage tank has been awarded. Construction began in November 2004 and should be complete in the spring of 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.



34. **PROJECT:** Casper Zone II – Phase II  
**LEVEL:** New Application  
**SPONSOR:** City of Casper  
**LOCATION:** Natrona County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

This is a new application for the continuing Casper Zone II project. The city is requesting a grant only for this next phase of the project.

**Estimated Level III – Phase II Project Costs**

Design .....	\$ 168,100
Construction:	
Pipeline.....	\$1,680,300
Permitting.....	\$ 5,000
Easements.....	\$ 28,000
Legal.....	\$ 6,000
Engineering (10%).....	\$ 169,100
Contingency (15%).....	\$ 277,300
Multi-Year Construction Inflation (5%/yr.x 2 yrs.)	\$ 233,280
<b>SUBTOTAL CONSTRUCTION COSTS.....</b>	<b>\$2,397,980</b>
<b>TOTAL PROJECT COSTS.....</b>	<b>\$2,566,080</b>
<b>ROUNDED.....</b>	<b>\$2,600,000</b>

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be incorporated into the New Development Program at Level III with an appropriation of \$1,300,000.

35. **PROJECT:** Cheyenne Belvoir Ranch  
**LEVEL:** II  
**SPONSOR:** City of Cheyenne/Board of Public Utilities  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	II	\$350,000	2006

**PROJECT DESCRIPTION:**

The City of Cheyenne purchased the Belvoir Ranch, located west of the city, in June of 2003. The ranch consists of approximately 17,000 acres of stream valley and uplands located generally south of I-25 and north of the Wyoming-Colorado state line in Township 13 North and Ranges 68 and 69 West of the 6<sup>th</sup> Prime Meridian. Lonetree Creek flows west to east from the flank of the Laramie Range through the ranch.

The purchase of the Belvoir Ranch was pursued by the City of Cheyenne in part because of the known ground water resource residing at relatively shallow depths (High Plains Aquifer System), and due to the possibility of locating deep ground water sources, which could easily be connected to the existing municipal well field infrastructure. Several irrigation wells experience flowing conditions and have excellent water quality. The ranch acquisition falls within the City’s strategic plan for securing an additional/supplemental supply for the City of Cheyenne’s future water needs.

The City of Cheyenne and Cheyenne Board of Public Utilities (BOPU) applied for a study of the newly acquired Belvoir Ranch to fully characterize the present development of water resources on and near the ranch and determine the potential for future development of ground water resources. The project will include test drilling to determine best potential municipal well siting.

The 2004 Level II study is in the process of evaluating environmental concerns, drilling sites, water rights, flow monitoring needs, and contamination issues. This is a two-year project with the test drilling to take place during the second year in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 36. PROJECT: Cheyenne Hydro Power**  
**LEVEL:** II  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	I	\$60,000	2004

**PROJECT INFORMATION:**

The City of Cheyenne wished to pursue a detailed cost analysis of placing hydropower generators in their municipal water system. Their system has several reservoir and pressure reduction points with flow and pressure potential to generate power. The City completed a study in 1980 on the feasibility of hydropower generation in the water treatment plant feed lines. This new study updated and expanded that original 1980 study. This two-year study also examined the transmission requirements to get the generated power to a power user.

In 2003, the Board of Public Utilities liked the possibilities of power production at their water treatment plant intake listed in the report. However, with the City's large expenditures in 2003, the City did not feel they were ready to pursue the project at this time.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be retained at a Level II-Hold status.

- 37. PROJECT: Cheyenne Raw Water Supply #2**  
**LEVEL:** III  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	8	1995	II	\$250,000	1996
Level III	45	1997	II	\$1,800,000*	2000
Level III	69	2003	I	\$5,000,000*	2008

\*50% grant, 50% loan @ 6%, 30 years

**PROJECT INFORMATION:**

The 1997 Legislature authorized WWDC funding in the amount of \$1,800,000 (50% grant, 50% loan) to construct the first phase of a raw (untreated) water system to economically provide irrigation for parks, golf courses, cemeteries and recreational fields in the city. Under the first

phase, an existing 16-inch water main was converted from transmitting treated water to conveying raw water for irrigation use at Lion's Park and at three 18-hole golf courses located in the northwest part of the city. This phase of the project resulted in a 3 million gallons per day (mgd) reduction in peak day demands for treated water.

The 2003 Legislature authorized funding in the amount of \$5,000,000 (50% grant, 50% loan) for Phase II of the project, which originally was intended to extend the raw water system from the Sloans Lake/Lions Park area further east, across the municipal airport to the Prairie View Golf Course area. This would enable the system to serve the four cemeteries south of the airport, the Morrie Avenue/Airport parkways, the Veterans Administration grounds, East High School grounds and athletic fields, two softball field complexes, the golf course, two baseball field complexes and two soccer field complexes. The irrigated lands served would be approximately 200 acres resulting in another 1.5 to 2.0 mgd savings in peak day treated water demands. A 1996 States West Water Resources Level II Water Supply Study indicates that each 1 mgd in reduced water treatment capacity saves approximately \$1.3 million in capital costs plus a significant reduction in yearly operation and maintenance costs.

During 2004, the design work on the project was temporarily suspended, while the City of Cheyenne determined whether to proceed with a raw water irrigation system expansion eastward from the Sloans Lake area or to provide the raw water irrigation source from the treated effluent of the Crow Creek waste water treatment plant. A final determination was made by the city in the spring 2004 to pursue an additional Clean Water State Revolving Fund (CWSRF) loan to construct advanced treatment facilities at the Crow Creek Wastewater Plant in order to meet Department of Environmental Quality effluent standards for the irrigation of public areas. The additional CWSRF loan was approved in August 2004, allowing the City to make a final determination to use treated wastewater effluent as the additional raw water irrigation source. Design of the wastewater effluent transmission lines and storage facilities will be initiated in early 2005, with scheduled construction starting in the fall of 2005 and completion by the end of 2006. In the meantime, construction of the advanced treatment facilities at the Crow Creek Wastewater Treatment Plant has been started with a scheduled completion by December 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 38. PROJECT: Cheyenne Supply Pipeline**  
**LEVEL:** Level III  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	74	1993	I	\$250,000	1994
Level II	8	1995	II	\$250,000	1996
Level III	96	2000	I	\$11,000,000*	2004
Level III	69	2003	I	\$2,000,000*	2007

\* 60% grant; 40% loan (7.25%, 30 years)

**PROJECT INFORMATION:**

In 1992, the CBPU requested funding for several projects. The WWDC suggested the CBPU complete a master plan to prioritize future improvements. The city's existing master plan had become dated and did not address the latest EPA requirements.

In 1993, the Wyoming legislature approved funding to update the Cheyenne Water Supply Master Plan. In 1994 the master plan was completed. The plan identified needed improvements, suggested priorities, estimated costs, and now serves as a planning tool for the city. Approximately \$62,000,000 in needed capital improvements has been identified. The identified improvements include an extensive upgrade to the CBPU Sherard Water Treatment Plant and several transmission system improvements. These improvements were prioritized and recommended for completion by the year 2007. Additional Level II analysis was recommended to refine designs and cost estimates.

In 1996, a Level II study of the Cheyenne Water Supply System was completed. Conceptual designs and cost estimates were prepared for 1) a raw water system to irrigate parks and golf courses, 2) improvements to the raw water lines feeding the water treatment plant, 3) a new water transmission main to the east side of Cheyenne, 4) corrosion analysis, and 5) improvements to the Supervisory Control and Data Acquisition System.

WWDC funding was authorized during the 2000 Legislature in the amount of \$11,000,000 (60% grant, 40% loan) to construct a portion of a second raw water supply line from Crystal Reservoir to the new Sherard water treatment plant. The new 36-inch line's total length is approximately 15 miles. The City of Cheyenne proposed to build approximately 12.1 miles of the lower part of the 36-inch line as the first phase of the project, based upon a project estimate of \$11,000,000 and the knowledge that existing lines and the line extension to that point would be able to provide 36 MGD flows to the new Sherard water treatment plant. The remaining upper 3 miles of the 36-inch line would then be built as a future Phase II as flow demands in Cheyenne increase beyond 36 MGD. When Phase II of the 36-inch line is completed, total flow capacity of existing and new lines is estimated to be 58 MGD.

Excellent competitive bids on the first phase of the project has allowed the City of Cheyenne to extend the first phase of the project an additional 1.6 miles beyond the original 12.1 miles, increasing the raw water delivery capacity to the Sherard water treatment plant to 48MGD. The remaining 1.3 miles from the Hecla diversion to the Crystal Dam and Reservoir, providing final pipeline capacity of 58MGD, are to be completed as part of Phase II of the project.

The City has been cautioned by their engineer not to utilize the full increased capacity of the pipeline (48MGD – 58 MGD) until the outlet works at Crystal Reservoir are modified to safely handle the increased flow. In 2002 the City of Cheyenne requested and received approval to change the original 2000 Legislation to amend the original project scope to include the modification of the Crystal Dam outlet works, pipes, valves and flow control building; and to increase the project appropriation by \$2 million to be complete this work along with the final 1.3 miles of pipeline through the Crystal Canyon.

Design for the Crystal canyon extension started in May 2003, with plans to bid the project in December 2003. However in October 2003, the Army Corps of Engineers (ACOE) notified the City that it would require the City to obtain an Individual 404 permit before allowing construction of the final phase. The ACOE 404 permit process has been very arduous, slow and difficult to comply with. Over the past year the City has been directed to conduct studies/surveys and resolve issues relating to the Preble's Meadow Jumping Mouse, Bald Eagle nesting sites, Ute Ladies-tresses Orchid, Platte River Depletions, Wyoming Historic Preservation Office Class II cultural survey, National Register of Historic Sites, wetlands mitigation, fish habitat mitigation, along with a detailed analysis for project justification and project alternatives review.

As a result of the ACOE 404 permit studies, the final project phase has been delayed approximately one year. The delay has directly led to an increase in project costs that includes: (1) Steel pipeline price increases, (2) General inflation to materials, labor, fuel and supplies, (3) 404 study/ survey costs, (4) Expenses related to environmental issues such as Bald Eagle nesting,

wetland and fish mitigation, (5) Limited construction season between August 15<sup>th</sup> – February 15<sup>th</sup> which likely doubles the construction seasons along with requiring construction during the fall and winter. The project engineer estimates the remaining project costs will increase by \$1,000,000 from the 2002 project costs. Total Project costs for Phase I pipeline; Phase II pipeline and dam outlet modifications are now estimated to be \$14,000,000. Construction is currently scheduled to start in August 2005 with completion by December 2006.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be continued at Level III in the New Development Program with an additional appropriation of \$1,000,000. The financing plan includes an additional 60% grant of \$600,000 and an additional 40% loan of \$400,000 at 7.25% interest for 30 years. The total project appropriation would be increased from \$13,000,000 to \$14,000,000.

- 39. PROJECT: Chugwater Water Supply**  
**LEVEL: III**  
**SPONSOR: Town of Chugwater**  
**LOCATION: Platte County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	15	1996	I	\$75,000	1998
Level II	46	1997	I	\$100,000	1998
Level III	45	1997	II	\$103,500*	2000
Level III	16	1999	I	\$967,800**	2003***
Level III	69	2003	I	\$240,000**	2005

\*50% grant

\*\*60% grant

\*\*\*This reversion date was extended to 2005.

**PROJECT INFORMATION:**

Under the 1997 Level III construction appropriation the pipeline from the in-town wells to the storage tank was replaced with larger pipe. Under the 1999 Level III construction appropriation one in-town well was replaced, another in-town well rehabilitated, a new water storage tank west of town built, a connecting pipeline between the new tank and the distribution system installed, and a new roof and plumbing rehabilitation performed on the older tank north of town. The town purchased property west of town subsequent to finding a promising groundwater supply there. One new production well has been completed on the property. This makes the pipeline from the new well to the new storage tank plus a pump and controls the final components of this project to be completed. The town encountered delays in negotiating land rights at some locations and will need to negotiate land rights for the pipeline from the new well to the new water storage tank. In order to complete the project the town has requested an extension to the July 1, 2005 reversion date.

Remaining design and construction will likely take another fifteen to eighteen months to complete. The time required to acquire land rights is more uncertain. When complete this project will provide the town with a new water source away from the potential hazards of the in-town wellfield area. WWDC funding is 60% grant with the remaining 40% provided by the sponsor through RUS.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the reversion date for project funding be amended to be July 1, 2007.

40. **PROJECT:** Coates Road Water Supply  
**LEVEL:** III  
**SPONSOR:** Coates Road Improvement & Service District  
**LOCATION:** Natrona County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	I	\$100,000	2004
Level III	69	2003	I	\$275,000	2008

PROJECT INFORMATION:

The recently completed South Garden Creek Level I Study looked at the potential of adding the area south of Casper (and alongside Casper Mountain) to the City of Casper's public water supply system. Five unique service areas were identified in the Level I Study, including: Squaw Creek/Wolf Creek, South Garden Creek, Elkhorn Valley, Coates Road and Pursel Lands. The preferred water supply source for the Coates Road service area was identified as the City of Casper water system as an outside City wholesale water customer. The area would construct a water system with smaller water lines that provide for only domestic uses. Additionally, the area would own, operate and maintain their system, and perform the meter reading, billing and the repair processes.

An appropriation of \$275,000 for 50% of the eligible cost of the improvements was approved by the 2003 Legislature. The district has thus far been unsuccessful in obtaining the remaining 50% to begin the project.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

41. **PROJECT:** Cody Canal Irrigation District Rehabilitation & Hydropower  
**LEVEL:** New Application  
**SPONSOR:** Cody Canal Irrigation District  
**LOCATION:** Park County  
**PROGRAM:** Rehabilitation

PROJECT DESCRIPTION:

The Cody Canal Irrigation District was formed in 1911, serves 11,432.85 acres with a canal system running from above the South Fork of Buffalo Bill Reservoir to a point several miles northeast of Cody. The system supplies raw water to both agricultural uses and urban users as well as supplying irrigation water for Cody. The district would like to evaluate their system components, most of which were installed in the early 1900s. There are approximately 200 system components on the main canal and 500 on the rest of the canal system. Most of the components are in need of major repairs or replacement. The system has at least two major water drop structures that have the capabilities of producing power. This hydropower potential should be a consideration in the upgrades to these base structures.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$250,000.

42. **PROJECT:** Cokeville Reservoir/Smiths Fork Dam  
**LEVEL:** I  
**SPONSORS:** Cokeville Development Company  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	10	1994	I	Hold	1996
Level II	15	1996	I	Hold	1998
Level II	82	1998	I	Hold	2000
Level II	36	2000	I	Hold	2002
Level II	7	2002	I	Hold*	2004
*A block appropriation of \$15,000 was made for all hold projects.					
Level I	125	2003	I	\$200,000	2004

PROJECT INFORMATION:

In 1984, the States of Wyoming, Utah and Idaho joined forces to evaluate the potential to construct storage on the Smiths Fork of the Bear River, which would provide benefits to all three states. The project would provide a reliable water supply, and generate electricity. The project would also improve water quality and provide flood control and recreation benefits. In 1986, the State of Utah prepared an economic feasibility report, which concluded that the project was economically feasible only if all three states participated in financing the project.

The project could provide flood control, recreation, hydropower, and supplemental irrigation water supply benefits to Wyoming water users and the public. Presently, the tri-state Smiths Fork project appears to be the most economical means to develop the Cokeville and Cokeville Development Company's storage allocation of 14,520 acre-feet. Therefore, the WWDC has included the Smiths Fork among its candidates for state projects to be pursued when the states of Utah and Idaho are able to obtain their share of required project funding.

In 1988, the U.S. Corps of Engineers (COE) prepared a development plan for the entire Bear River. The report was completed in 1989. Several options were identified. The report verified that a dam on the Smiths Fork would provide considerable flood control, storage and water quality benefits. However, the economic assessment concluded that the project had an unfavorable benefit-cost ratio and, therefore, would not be eligible for federal funding under existing criteria. The project is presently on hold status in the New Development Program.

In 2003 the Cokeville Development Company requested a Level I study to identify storage opportunities in the Smiths Fork drainage. The Company's request identified the need for a multipurpose reservoir that would provide water for agricultural uses, for flood and erosion control. This study differed from past studies in that it looked at water use only in Wyoming and the potential of developing off-channel sites. The states of Idaho and Utah are not interested in developing storage in Wyoming at this time, and therefore, down stream uses and benefits were not significant in the evaluation.

The Level I study was completed in August 2004. There were a number of sites evaluated in the initial screening and no off-channel sites were feasible due to lengthy conveyance canals and large embankment volumes. Six on-channel sites were then the focus of study. All of these sites had been evaluated in previous studies. Sites lower in the basin are best from an operations standpoint and provide the best irrigation reliability with the smallest pool. They also offer the best flood control, greatest hydropower potential, and least environmental impacts. It appears

there would be significant impacts to fish and wildlife from development of the reservoir and mitigation costs would be high. Economics based only on water uses in Wyoming render the project in feasibility support of Idaho and Utah would greatly improve the economics.

The Smiths Fork Irrigation District and the Cokeville Development Company have requested a Level II study. These groups and other organizations in the Cokeville/Smiths Fork area are in the process of forming a Cokeville Water Conservancy District to support a project on Smiths Fork.

However, the project recommended by the Commission entails working with interests in Utah and Idaho to construct a larger project. Interests in each state plan to petition congress to fund a Flood Control Study, which would be conducted by the US Army Corps of Engineers. The appropriation would be used to update previous studies, which commended construction of an 125,000 af dam and reservoir on the Smith's near Cokeville.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$150,000 conditioned on the Corp of Engineer's Flood Control Study.

- 43. **PROJECT:**                    **Cottonwood Lake Storage Enlargement**
- LEVEL:**                         New Application
- SPONSOR:**                    Cottonwood Irrigation District
- LOCATION:**                     Lincoln County
- PROGRAM:**                    New Development

**PROJECT INFORMATION:**

The district would like to evaluate the potential of storing additional water in Cottonwood Lake for late season irrigation. Cottonwood Lake is a natural lake on Cottonwood Creek, and is the source of irrigation water for the district. There was once a control structure on the lake but it is no longer functional and has not been used for many years. The study would evaluate Cottonwood Creek hydrology; the potential for storage; irrigation water demands; geotechnical considerations; and wetlands, environmental and permitting issues.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level II with an appropriation of \$100,000.

- 44. **PROJECT:**                    **Crestview Water Supply**
- LEVEL:**                         III
- SPONSOR:**                    Crestview Estates Improvement & Service District
- LOCATION:**                     Campbell County
- PROGRAM:**                    Rehabilitation

**EXISTING LEGISLATION**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	82	1999	I	\$200,000	2000
Level III	96	2000	II	\$41,000	2004

**PROJECT DESCRIPTION:**

This project entails completion of the connection of the Crestview Estates system to the Antelope Valley system and rehabilitation of the existing Crestview well. Crestview completed an agreement for the exchange of water with Antelope Valley in 2002.



In 2003, the district completed its connection with the Antelope Valley System. This is a prerequisite to rehabilitation of the district's well. It also provides an emergency water supply. The district's well will be taken off line, rehabilitated and put back in service in 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 45. PROJECT: Crook County Reservoirs and Water Management**  
**LEVEL:** I  
**SPONSOR:** Crook County Irrigation District  
**LOCATION:** Crook County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	82	1998	I	\$100,000	2000
Level I		2004	I	\$150,000	2005

**PROJECT INFORMATION:**

A study was completed in 1999 that investigated the possibility of providing additional water to the sponsor for irrigation purposes with the transfer of ownership of Driskill Reservoir. Due to a limited number of beneficiaries the transfer of ownership was never undertaken. This year Crook County Irrigation District requested an expansion of the study to include the entire Belle Fourche Drainage below Keyhole Reservoir.

The purpose of this study is to investigate the Belle Fourche Drainage and its tributaries within the State of Wyoming to identify areas of shortage. Shortages will be quantified and reservoir storage opportunities will be identified to satisfy the shortages. This study is similar to the Green River Groundwater Recharge and Alternative Storage Study that was designed to take the information generated by the River Basin Plan and use it to develop a list of storage sites that satisfy the needs of the basin. Wyoming is allocated 10% of the flow in the Belle Fourche River by the Belle Fourche River Compact. Not all of Wyoming's water is used in the state of Wyoming. This study will consider the amount of water allocated to Wyoming by the compact and identify ways to put Wyoming's undeveloped share to use in Wyoming.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required at this time.

- 46. PROJECT: Crow Creek Groundwater Recharge**  
**LEVEL:** II-Hold  
**SPONSOR:** Laramie County Conservation District  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	79	1988	I	\$150,000	1990
Level II	123	1990	I	\$1,000	1992
Level II	43	1992	I	\$1,000	1994
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\* A block appropriation of \$15,000 was made for all hold projects.

**PROJECT INFORMATION:**

In 1986 Laramie County submitted an application to the WWDC requesting a flood control and groundwater recharge study of the Crow Creek drainage. The County indicated that development in Cheyenne has aggravated flooding problems on Crow Creek. The flood control portion of the study was completed in 1989. As a result, flood control plans were developed for Crow Creek below Cheyenne, Dry Creek, and Allison Draw.

The groundwater recharge portion of the study was completed in 1990, and concluded that without Cheyenne wastewater effluent there was a limited amount of water available for recharge. Stream gaging equipment was installed in the Carpenter area to better quantify the volume of water available.

In 1997 the Laramie County Conservation District applied to the WWDC for assistance in developing inexpensive spreader dikes, and other facilities, to economically induce recharge from Crow Creek into the alluvial aquifer near Carpenter. Their application was rejected because the conservation district was unable to provide sufficient security. However, the project was placed on hold to allow WWDC staff to provide technical support.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be retained at Level II-Hold status.

- 47. PROJECT: Crowheart Area/Dinwoody Canal System**
- LEVEL:** I
- SPONSORS:** Shoshone & Arapaho Tribes
- LOCATION:** Fremont County
- PROGRAM:** Rehabilitation

**EXISTING LEGISLATION**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	34	2004	II	\$150,000	2005

**PROJECT INFORMATION:**

A Level I water supply study was requested to help identify solutions to chronic water shortages at the end of the Dinwoody Canal System (Crowheart and Willow Creek areas). Specifically, the study would investigate the feasibility and cost/benefits of a storage facility on Willow Creek, enlargement and/or improvement of the Dinwoody Canal System, and enlargement of Lower Dinwoody Lake. The study is currently underway.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 48. PROJECT: Dayton Water Supply Rehabilitation**
- LEVEL:** III
- SPONSOR:** Town of Dayton
- LOCATION:** Sheridan County
- PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	2	2001	II	\$440,000	2005
Level III	88	2002	II	\$179,200	2005

**PROJECT INFORMATION:**

During the 2001 legislative session approval was given to fund the replacement of an existing transite water line, to fund the installation of pipeline to an existing booster station, and to fund the addition of a new booster station for the Town of Dayton. This project was called the Dayton Water Supply Rehabilitation Project. After funding was received the town of Dayton hired Entech, Inc. to design and supervise construction of the new pipeline and booster station. The towns of Dayton and Ranchester began discussions for a potential for a regional system after the initial appropriation was approved.

To facilitate this regional concept the transmission main line that was approved for construction funding during the 2001 legislative session was designed to allow for an increased capacity should the two towns combine. The total project cost authorized by the 2001 legislative session was \$880,000. To accommodate the regional supply concept the project cost was increased in 2002 to \$1,032,000 and the grant/loan mix was adjusted from a 50/50 split to 60/40 split. Construction of the pipeline portion of the project was completed in 2004.

With the completion of the well and pipeline the town has begun design of the previously mentioned booster station. The town has retained HKM Engineering to design and supervise construction, which is scheduled for the completion in the spring of 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required at this time.

- 49. PROJECT: Deaver Flume Rehabilitation Project**
- LEVEL: III
- SPONSOR: Deaver Irrigation District
- LOCATION: Park/Big Horn
- PROGRAM: Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	II	\$100,000	2002
Level III	69	2003	II	\$46,500*	2008

\*100% grant for invoiced materials. The sponsor is responsible for all other project costs.

**PROJECT INFORMATION:**

Subsequent to recommendations from a Level II study financed by WWDC and completed in October, 2002, the Deaver Irrigation District has taken steps to rehabilitate an aging irrigation delivery system. Portions of Deaver’s delivery system utilize metal and wood flumes, many of which are becoming aged and un-repairable. Following a 2002 request, the District received funding from the water development account to replace the Marchant Coulee flume liner with a stainless steel bent sheet metal flume liner and replace the Deaver flume, which is an 80 year old wooden legged flume, with a buried siphon. The Deaver Siphon has been completed as planned. On the Marchant Coulee flume the sponsor has opted to apply a spray-on liner using its own funds in lieu of the planned stainless steel liner using state funds. As a result there is about \$26,500 of the initial appropriation that has not been spent.

The sponsor has requested funding for materials to replace the steel flume liner at Polecat Flume with a weathering steel flume liner. The Polecat Flume is about 430 feet long and is approximately a semi-ellipse with a radius of more than six feet. The recommendation is to increase project funding to \$210,000.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be continued at Level III in the Rehabilitation Program with an additional appropriation of \$163,500 for the added Polecat Flume. The financing plan includes an additional 100% grant of \$163,500 to be used only for the purchase of invoiced materials. The total project appropriation is increased from \$46,500 to \$210,000.

50. **PROJECT:** Deer Creek Dam and Reservoir  
**LEVEL:** III  
**SPONSOR:** State of Wyoming  
**LOCATION:** South of Glenrock, Converse County, Wyoming  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	52	1984	I	\$3,000,000	N/A
Level IV	89	1985	I	\$45,000,000	N/A
Level IV	59	1996	I	\$15,000,000	N/A
Level IV	81	1999	I	\$13,500,000	N/A

PROJECT INFORMATION:

The Pathfinder Modification Project has been proposed as a less expensive replacement for the Deer Creek Project. The Pathfinder Modification Project will also address Platte River endangered species issues. The estimated construction cost for the Deer Creek Project is between \$66,000,000 and \$100,000,000. The estimated cost for the Pathfinder Modification Project is less than \$5,000,000.

The Pathfinder Modification Project involves increasing the height of Pathfinder Dam by 2.39 feet to recapture 54,000 acre feet of storage space lost to sediment. Twenty thousand (20,000) acre feet of the recaptured space would be allocated to achieve the same municipal water supply benefits as the Deer Creek Dam. The remaining 34,000 acre feet of storage space would serve the federal water contractors in Wyoming and Nebraska and other Wyoming water users by resolving the outstanding Section 7 Endangered Species Act consultation on the federal reservoirs and pending Section 7 consultations of special use permits on forest lands.

The 34,000 acre feet storage space would be allocated as a water supply component to resolve endangered species issues in the North Platte Basin through the Platte River Recovery Implementation Program. While the parameters of the program are still being negotiated, Wyoming's goal in participating in the program is to continue diverting and beneficially using North Platte water by achieving regulatory certainty on issues relating to the recovery of the whooping crane, piping plover, least tern, and pallid sturgeon.

In order to alleviate the impacts of recapturing the 54,000 acre feet and to compensate for the municipal storage account, project funds would also be used to finance both Kendrick and North Platte project irrigator's share of upcoming safety of dams modifications on the federal dams in Wyoming and to resolve the selenium problems at Goose and Rasmus Lee Lakes within the Kendrick Project. While the recaptured space would enjoy the benefits of the 1904 storage right, provisions would be provided to insure that the recaptured space could not place a call on existing non-federal direct flow and storage rights above Pathfinder Reservoir.

In order for the Pathfinder Enlargement to be implemented, the following institutional issues must be resolved:

1. The Department of Interior must approve the concept and agree to provide the regulatory certainty desired by the state and the water users.

2. The Governor must approve the project.
3. The legislature must authorize the use of the Deer Creek funds to participate in the safety of dam modifications, the selenium issues on the Kendrick Project, and enlargement of Pathfinder Dam.
4. Formal agreements must be negotiated with the Bureau of Reclamation, the affected federal water contractors, and the municipal water users.
5. The Board of Control must approve a change of use for the recaptured storage space in Pathfinder Reservoir. The State Engineer and legislature must approve the interstate transfer of water residing in the 34,000 acre foot environmental account to transport to Nebraska for endangered species purposes.
6. Congressional authorization may be required to amend the original purpose of the Pathfinder Dam to include municipal and environmental uses.
7. NEPA and Section 404 of the Clean Water Act clearances must be achieved.

It is obvious that in order to achieve the above, there must be broad based public support for the project.

With the recovery of storage space under the 1904 Pathfinder water right, the Kendrick Project water rights, which are junior to the Pathfinder water rights, would not come into priority as often. Therefore Kendrick Project irrigators would be adversely impacted. The WWDC hired a consultant to investigate the magnitude of the impact and to evaluate the operations of the Casper-Alcova Irrigation District (The Kendrick Project) for opportunities to conserve or otherwise mitigate these adverse impacts. The Phase I Study evaluated the impacts and recommended potential mitigation measures. Phase II of the study included conceptual design of selected components for construction. Phase III was an evaluation of available technology that might facilitate the implementation of conservation measures. The Legislature provided funds during the 2002 session to design and to acquire all necessary construction permits and environmental clearances.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required at this time.

- 51. PROJECT:                      **Dubois Regional Water Supply****  
**LEVEL:**                              II  
**SPONSOR:**                        Town of Dubois, Incorporated Municipality  
**LOCATION:**                         Fremont County  
**PROGRAM:**                        New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	82	1998	I	\$75,000	2000
Level II	7	2002	I	\$75,000	2004
Level II	125	2003	I	\$20,000	2004
Level II	34	2004	I	\$400,000	2006
Level III	118	2004	I	\$45,000	2008

**PROJECT INFORMATION:**

In 1999 a WWDC Level I master water supply plan was completed for the Town of Dubois. The study recommended that the town pursue a Level II feasibility study (test drilling, preliminary design, cost estimation, funding planning) that concentrated on constructing a new well at the airport and siting a new water storage tank. Other improvements to be considered for construction funding were: 1) a new municipal supply well on the west side (near Well #8), 2) extending the municipal system to serve the Painted Hill Estates subdivision, which lies southeast of town, 3) replace defective distribution system valves, 4) replacing undersized mains, 5)

looping dead end transmission lines, 6) installing additional fire hydrants in fire flow deficient portions of town, 7) replacing the tank level and pump control systems, 8) installing chlorinators at each supply well, and 9) implementing a more efficient system operating plan. 2004 Level III funding was acquired to implement a SCADA operating system

The 2003 WWDC Level II Study for Dubois recommended a test-drilling program to replace Well No. 8 and determine viable sites for future municipal wells. Also recommended was a test well at the town airport. The budget for extending the present Level II study includes funding for two (2) pilot test wells, one (1) production size test well to replace Well No. 8, one (1) production-size test well located at the town's airport, and consultant engineering fees to manage and complete this additional phase of the study. 2004 Level II funding was acquired for the above proposed tasks and the project is awaiting environmental clearances before commencement of test drilling.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required

- 52. PROJECT: Dubois SCADA**  
**LEVEL: III**  
**SPONSOR: Town of Dubois, Incorporated Municipality**  
**LOCATION: Fremont County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	82	1998	I	\$75,000	2000
Level II	7	2002	I	\$75,000	2004
Level II	125	2003	I	\$20,000	2004
Level III	118	2004	I	\$45,000	2008

**PROJECT INFORMATION:**

The 2003 WWDC Level II Study for Dubois concluded that a Supervisory Control and Data Acquisition (SCADA) telemetry system should be installed to replace antiquated and problematic control systems (basically, hand switches). The new SCADA should have the following features: 1) an Ethernet base radio system, 2) non-proprietary PLC based Master Terminal Unit (MTU) and Remote Terminal Units (RTU's), 3) a central control station, and 4) an alarm dialer system.

The SCADA system will also aid the Town in meeting their Home Land Security goals by providing a method to install and monitor intrusion/tamper alarms on the tanks, well buildings, and vaults.

A construction contract has been awarded, and the project should complete in early 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 53. PROJECT: Eden Valley Irrigation District Rehabilitation**  
**LEVEL: New Application**  
**SPONSOR: Eden Valley Irrigation District**  
**LOCATION: Sweetwater County**  
**PROGRAM: Rehabilitation**

**PROJECT INFORMATION:**

The Eden Valley Irrigation District wishes to secure WWDC and Bureau of Reclamation Salinity Control funding to convert three laterals with in their district from open ditch to pipe. The Eden Valley Irrigation District has been working with the USDA-NRCS to develop a plan for the conversion of their major system components into pipe. It is their intention to use the money obtained from WWDC to leverage federal funding for the other 50% of the project costs. The NRCS has already completed portions of the projects design allowing this project to go straight to Level III funding.

The irrigation district would like to begin their system conversion with laterals E-25, E-19, and E-9. These three laterals are responsible for high amounts of seepage and evaporation for the district. The NRCS has agreed to continue with the design of this project after it has reached level III funding.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$1,508,000.

- 54. PROJECT:                      **Eight Mile-High Plains Well****
- LEVEL:**                              **II**
- SPONSOR:**                        **Eight Mile Improvement & Service District**
- LOCATION:**                         **Campbell County**
- PROGRAM:**                        **New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$60,000	2005

**PROJECT INFORMATION:**

In 2003 the Eight Mile Improvement and Service District submitted an application requesting a study to assess their water system as well as the system of a smaller neighboring subdivision (High Plains Subdivision) and determine preferred alternatives for combining the two systems. Eight Mile Subdivision and District is located eight miles west of Gillette, just north of the I-90 and Force Road interchange. The district is supplied by a single deep well (1,466 total depth, completed in Fort Union Formation Aquifer) drilled in 1981. The well and storage tank are unable to meet the present demand. High Plains Subdivision is approximately one mile west of Eight Mile and is under EPA Administrative Order to correct system deficiencies within their drinking water systems. High Plains is too small to qualify for WWDC funding; therefore, they would need to join the Eight Mile Improvement and Service District. These entities currently lie outside the Gillette Planning District Boundary established in 1994.

In 2004 a Level II New Development project named Eight Mile-High Plains Well was approved and appropriated \$60,000. Based on the findings of the Level II report Eight Mile Improvement and Service District will ask to continue the Level II study and drill a Fort Union Formation test well, site and design a new storage tank, and determine the feasibility of connecting the High Plains Subdivision to the Eight Mile system. The engineer’s estimated cost for completing the continuation of the project is \$450,000.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be continued in the New Development Program at Level II with an appropriation of \$450,000.

55. **PROJECT:** Encampment/Sierra Madre Water Supply  
**LEVEL:** Level II  
**SPONSOR:** Town of Encampment and Sierra Madre Joint Powers Board  
**LOCATION:** Carbon County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$250,000	2006

PROJECT INFORMATION:

This project requires an evaluation of existing wells and of the historic water use for both Encampment and the Sierra Madre JPB as well as drafting an agreement between both entities to allow for common use of wells and infrastructure. With decreasing supplies coupled with tightening federal drinking water regulations, it seems evident that Encampment will have to join the Sierra Madre Joint Powers Board and utilize their groundwater source. In order for the Sierra JPB to meet the new demands an additional well is needed.

Encampment currently has a raw water irrigation component which serves a majority of homes in town, this study is also looking at the cost and feasibility of serving the Sierra Madre JPB with an expansion of this raw water irrigation system. Encampment wants to maintain their existing surface water right for the raw water system.

This project began in July 2004 and is progressing well, the Consultant has began projecting the long term needs of the community and preparing an interim report summarizing the second phase of the project which includes well evaluation and potential well drilling.

RECOMMENDED LEGISLATIVE ACTION:

No further legislative action is required at this time.

56. **PROJECT:** Evanston/Bear River Regional  
**LEVEL:** Level II  
**SPONSOR:** Towns of Evanston and Bear River  
**LOCATION:** Uinta County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$70,000	2006

PROJECT INFORMATION:

In September 2000, the WWDC completed a Level I master plan for the North Uinta County Improvement and Service District. In 2001 the area in and around the District incorporated into the town of Bear River and the District has dissolved and all of its functions have been assumed by Bear River.

In the Level I master plan, a regional pipeline between the two towns was identified as the preferred alternative to meet the long term needs of Bear River and the unincorporated area south to Evanston. A level II study feasibility and cost analysis of this alternative to determine supply sources, potential customers, operation of the system, and individual costs to residents is being performed at this time. Additionally, the sponsor has made a formal request to the State Engineer to permanently allocate approximately 525 acre-feet of additional storage to the Sulphur Creek reservoir for the projected needs of Bear River.



**RECOMMENDED LEGISLATIVE ACTION:**

No further legislative action is required at this time.

- 57. PROJECT: Fayette Irrigation District**  
**LEVEL: III**  
**SPONSOR: Fayette Irrigation District**  
**LOCATION: Sublette County**  
**PROGRAM: Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	81	1999	II	\$75,000	2000
Level III	96	2000	II	\$98,500	2004
Level III	88	2002	II	\$75,000*	2005

\* Reduced appropriation from \$98,500 to \$ 75,000 at sponsor's request.

**PROJECT INFORMATION:**

The Fayette Irrigation District would like to rehabilitate a major conveyance ditch known as the West Lateral. This portion of the system has the potential to irrigate 403 acres or roughly 19% of the total adjudicated acres in the district. A Level II study by WWDC was completed in 1999.

The district is eager to repair their aging system and is wary of involuntary abandonment of their water rights. This district holds a 1906 water right for approximately 21 cfs; and another right secured in 1952 for 7.45 cfs. By completing the rehabilitation of this irrigation system, WWDC can prevent the loss of this water to downstream, out of state users.

While most lots are broken into 10 acres, there are several district members who own several lots and are able to produce hay for sale. The largest agricultural production occurs on 300 acres of irrigable land known as the Christmann Ranch.

The 1999 Level II study conducted an inventory of the system, identified needed rehabilitation and improvements, examined the potential for an improved water supply, and prepared conceptual designs and cost estimates for those items.

The 2000 session of the legislature authorized a Level III project loan of \$98,500 for a period of 20 years at 7.25% interest. The project has a reversion date of July 1, 2004. The sponsor declined to move forward with the project due to financial concerns.

The sponsor is currently rehabilitating a smaller portion of the conveyance system, which would result in a smaller debt load to the District. The sponsor's request was approved by the 2002 legislature. An engineer has been hired and design work is underway. Easements for the old ditch were never recorded and much time has been spent describing and securing the easements. Repairs should be completed in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 58. PROJECT: Frannie Well Rehabilitation**  
**LEVEL: New Application**  
**SPONSOR: Town of Frannie**  
**LOCATION: Park/BigHorn County**  
**PROGRAM: Rehabilitation**

**PROJECT INFORMATION:**

The Town of Frannie is the northernmost incorporated community in Wyoming, two miles south of the Wyoming-Montana border on US HWY 310. Geographically, the town is situated in the northern Big Horn Basin within the drainage of Sage Creek (tributary Shoshone River), which flows south out of Montana. The town is requesting a Level II study to investigate alternatives for rehabilitating a flowing, warm water supply well that has served the town for almost 50 years. The Kirk No. 1 Well (Well Registration No. U.W. 406, Priority 10/18/1955, Adjudicated 500 gpm, Municipal Use) is a 4,500 foot Madison Formation well that was the town’s water supply for many years before Frannie tied into the Shoshone Rural/Municipal Pipeline. The well has since been used for raw water needs but yield (artesian surface flow reduction from 2000 gpm in 1955 to approximately 100 gpm presently) has steadily dropped since an attempt to rehab the well in the mid-1980’s.

Over the years the well has been an economic asset to the community, but because of its degraded condition recent economic opportunities that could have developed from use of the well water have been missed. An operationally sound well, through either a successful rehabilitation or a new well, would provide Frannie with a viable supply for economic development and restoration of a dependable raw water source for the town.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Frannie Well Rehabilitation Project be incorporated into the New Development Program at Level II with an appropriation of \$65,000.

- 59. **PROJECT:**                    **Gillette Central Zone Isolation Project**
- LEVEL:**                        **III**
- SPONSOR:**                   **City of Gillette**
- LOCATION:**                   **Campbell County**
- PROGRAM:**                   **Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	2	2001	II	\$75,000	2005
Level III	88	2002	II	\$684,500	2006

**PROJECT DESCRIPTION:**

Pursuant to the 1999 City of Gillette Water System Evaluation, this project calls for construction of four new transmission lines and the installation of isolation valves to increase static pressure in an area of town known as Twin Spruce. Modeling of this area was done to investigate areas of low pressure and low available fire flows. To create higher pressures, the area must be isolated and included in one of the other existing higher pressure zones in the City or a new pressure zone must be established.

An evaluation of this project was prepared for the city by Stetson Engineering, Inc. This report served as the basis for the design funding that was provided by the 2001 legislature. The design was completed in 2002, and a construction contract was awarded to Hot Iron, Inc. The amount of eligible work was \$618,201.25. This project is complete with only paperwork remaining.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required on this project.

**60. PROJECT: Gillette Madison and Pine Ridge Tanks**  
**LEVEL: III**  
**SPONSOR: City of Gillette**  
**LOCATION: Campbell County**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	II	\$550,000	2008

PROJECT DESCRIPTION:

The City of Gillette's water system is supplied by a number of Madison wells which pump to the Madison and Pine Ridge pump stations located approximately 10 miles north of Moorcroft. At each station is a storage tank which serves to level out the pumping rates of the wells and provides a small quantity of in line storage. These storage tanks are in need of rehabilitation. Each tank will be taken out of service and recoated. In order to accomplish this, an alternate method of providing the in line storage will need to be in place.

The city has contracted for the design and contract administration of this project. Bidding will occur in spring or summer of 2005. Construction will commence soon thereafter.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**61. PROJECT: Gillette Madison Pipeline Joint Bonding**  
**LEVEL: New Application**  
**SPONSOR: City of Gillette**  
**LOCATION: Campbell County**  
**PROGRAM: Rehabilitation**

PROJECT DESCRIPTION:

The City of Gillette is served by a 34 mile water transmission line from the Madison well field to town. Over time, the electrical connections which have served to protect this line from corrosion have failed causing a loss of continuity across the pipeline. This has severely reduced the corrosion protection required in the soils in this area. Each joint will be excavated and continuity reestablished.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$1,225,000.

**62. PROJECT: Gillette Well Field**  
**LEVEL: III**  
**SPONSOR: City of Gillette, Incorporated Municipality**  
**LOCATION: Campbell County**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	206	1995	II	\$1,725,000	1999
Level II	7	2002	I	\$510,000	2004

PROJECT INFORMATION:

The Gillette Southern Fort Union Well Field Project consists of development of a Fort Union well field approximately 10 miles south of the City of Gillette. The 2004 Level II Study (“Coal Bed Methane-Aquifer Storage and Retrieval Project and Southern Fort Union Well Field Exploration and Development Study”) concluded with a successful test well in the area delineated to have the greatest composite saturated sand thickness in the Fort Union Formation near Gillette. The well field is anticipated to consist of 15 wells with approximately one-mile spacing between wells. It is anticipated, from the conceptual design conducted during the Level II study, that water from the wells will be pumped to a well field pumping facility where it will be pumped to town in a 20-inch pipeline. After the water is conveyed to town, it will be treated in a new booster station situated in the southeast part of the City and blended with water from the Madison Well Field and existing Fort Union Wells.

The overall project will be developed in three phases. The first phase, costing about \$1,972,000, will consist of: further exploration of the well field; conducting environmental studies to facilitate future federal funding; easement and right-of-way acquisition; and conducting a pre-design effort to better define the overall project and refine the project costs. The second phase, costing about \$5,056,000, will consist of drilling the remainder of the wells and conducting the final design. The third phase, costing about \$29,528,000, will consist of the construction of the pipelines, booster stations, roadways, well houses and treatment facilities.

The overall project is estimated to cost approximately \$38.5 million with cost refinements occurring as final design is completed through Phase II. Funding requests to WWDC are anticipated in three consecutive years starting with funding in 2005 (see below) with construction proceeding from then on to late 2008.

2005 Estimated Level III Phase 1 Costs

Engineering (4 wells and 10% pre-design).....	\$ 452,926.43
Permitting and Mitigation .....	\$ 100,000.00
Legal Fees .....	\$ 100,000.00
Acquisition of Access and Rights of Way .....	\$ 319,717.50
Construction (4 Wells) .....	\$ 869,320.00
Contingency (15%) .....	\$ 130,398.00
Total .....	\$ 1,972,361.93
Rounded Total.....	\$ 2,000,000.00

2006 Estimated Level III Phase 2 Costs:

Engineering (10 Wells and Final Design) .....	\$ 2,557,201.17
Construction (10 Wells) .....	\$ 2,173,300.00
Contingency (15%).....	\$ 325,995.00
Total .....	\$ 5,056,496.17

2007 Estimated Level III Phase 3 Costs:

Engineering .....	\$ 2,334,231.30
Construction (Pipelines) .....	\$ 23,342,313.00
Contingency (15%).....	\$ 3,851,481.65
Total .....	\$ 29,528,025.95

2004 Level II Well .....	\$ 133,035.13
Cost of Funding (RUS, SRF, SLIB).....	\$ 10,000.00
Multi-Year Construction Inflation (5%/yr).....	\$ 1,729,226.11
Project Manager (\$35k/yr as required).....	\$ 140,000.00
Total Estimated Project Cost.....	\$ 38,569,145.29

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the Phase I Gillette Well Field Project be incorporated into the New Development Program at Level III with an appropriation of \$1,000,000.

63. **PROJECT:** Glenrock Sunup Ridge Tank Rehabilitation  
**LEVEL:** III  
**SPONSOR:** Town of Glenrock-Municipality  
**LOCATION:** Converse County  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	II	\$132,750	2008

PROJECT INFORMATION:

In 2002 the Town of Glenrock contracted for inspection of the Sunup Ridge storage tank. This inspection revealed the need for interior structural repairs, repair to the overflow, and recoating. This project will complete these necessary repairs and complete some miscellaneous electrical repairs.

Engineering design has begun. A contract should be awarded in early 2005 with completion in late 2005 or early 2006.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

64. **PROJECT:** Glenrock Well and Tank  
**LEVEL:** II  
**SPONSOR:** Town of Glenrock  
**LOCATION:** Converse County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$600,000	2006

PROJECT INFORMATION:

In 2003 the Town of Glenrock submitted an application requesting to drill a test well near the Town's existing Well #5 and determine the feasibility of constructing a water storage tank near this location, as well as evaluate a power generation system at the current pressure reducing valve near Well #2, and include a hydraulic analysis of the present system. The Town of Glenrock is supplied by three wells. "Well #1" and "Well #2" are shallow wells (230' deep) drawing from the Deer Creek alluvium, "Well #5" is 1174 ft deep and located in a now alluvial aquifer. Wells #1 and #2 have a direct impact on surface water flows and can be shut down if State Regulation is requested by affected water users which leaves the entire towns' water supply reliant on Well #5. The Town would like the flexibility of shutting Well #1 and Well #2 off during the summer. Well #5 has shown enough promise that Glenrock would like to investigate drilling another well near Well #5, which would give the town flexibility and ensure adequate water supply when Wells #1 and #2 are off. In addition, the town would like to construct a new water storage tank near Well #5 with the hopes of connecting the new well and Well #5.

In 2004 a Level II New Development project was approved. A well site has been chosen and the proper environmental tasks are ongoing prior to drilling, siting a tank, and determining a pipeline route.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 65. **PROJECT:** Gooseberry Creek Irrigation District Tran Basin Diversions
- LEVEL:** New Application
- SPONSOR:** Gooseberry Creek Irrigation District
- LOCATION:** Washakie County
- PROGRAM:** New Development

PROJECT DESCRIPTION:

The Gooseberry Creek Irrigation District was formed in 1984, serves approximately 8000 acres and runs from south of Meeteetse to the Worland area. Storage of basin runoff will be analyzed. This project would review the previous study data, update that information, add any additional needed information primarily on basin storage, and produce cost estimates in year 2006 dollars.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level I with an appropriation of \$75,000.

- 66. **PROJECT:** Goshen Irrigation District Water System
- LEVEL:** III
- SPONSOR:** Goshen Irrigation District
- LOCATION:** Goshen County
- PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	81	1999	II	\$75,000	2000
Level III	96	2000	II	\$1,726,000*	2004**
Level III	118	2004	II	\$500,000*	2010

\*100% grant for invoiced materials. The sponsor is responsible for all other project costs.

\*\*This reversion date was extended to 2010.

PROJECT INFORMATION:

The Goshen Irrigation District received a grant of \$1,726,000 for 100% of invoiced materials purchased to automate the water delivery system, to rehabilitate farm turnouts and to implement seepage control measures, such as canal lining and placing ditches into pipe. The construction will be performed with district resources at district cost. Engineering, permitting, and other project costs will be borne by the district. In 2004 the legislature appropriated an additional \$500,000 for this project and extended the date that unused project funds revert to the water development account to 2010.

When constructed, the improvements will reduce seepage losses in canals and laterals and enable GID to increase system efficiencies.

Essentially all of the laterals initially contemplated for construction have been completed, using about 55% of project funding. The sponsor is constructing additional sites during the winter of 2004-2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**67. PROJECT: Goshen Re-regulating Reservoir**  
**LEVEL: II-Hold**  
**SPONSOR: Goshen Irrigation District**  
**LOCATION: Goshen County**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	10	1994	I	Hold*	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\*A total appropriation of \$15,000 is available for projects on hold

PROJECT INFORMATION:

The Goshen Irrigation District delivers water to 52,484 acres, which is owned by approximately 355 farmers. The present assessment is \$18.76/acre.

In 1992, the GID requested an evaluation of a small (1000 acre feet) re-regulating reservoir. The reservoir was planned to be located on Horse Creek, upstream of siphon #4. A small reservoir at this location would enable the district to better regulate delivery of water to lands at the end of the system. In addition, a dam at this site would store water when storms allow water deliveries to be reduced. At the present time, water in the canal is wasted when calls for irrigation water are no longer needed because of rain. Six thousand (6,000) acre feet of water could be saved annually if the reservoir is constructed.

A December 1993 Level II study evaluated several alternate dam sites. The original site at the Horse Creek Siphon was determined to be the most cost effective. Conceptual designs and cost estimates were prepared.

Negotiations between the district and the U.S. Bureau of Reclamation, the U.S. Army Corps of Engineers, the Wyoming Game and Fish Department and the Gering Fort Laramie Irrigation District must be successfully completed if the project is to proceed. The district has decided to postpone any further planning for this project until institutional constraints involving water rights and wetland mitigation issues are resolved.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends that the project be retained at Level II-Hold status.

**68. PROJECT: Green River-Rock Springs-Sweetwater County Master Plan**  
**LEVEL: New Application**  
**SPONSOR: GR-RS-SC Joint Powers Water Board**  
**LOCATION: Sweetwater County**  
**PROGRAM: New Development**

PROJECT INFORMATION:

The Joint Powers Water Board (JPWB) is seeking funding and the Wyoming Water Development's assistance in performing an update to the master plan for the water supply system. The current master plan and hydraulic model were developed in 1990. That project has served as the basis for the planning and implementation of system extension, modifications and improvements from 1990 till now. Growth, new development, expanding regulations and

technical limitations of the hydraulic model have challenged the efficacy of the current master plan. The JPWB is requesting funding for developing an updated master plan that addresses the following items and concerns: 1) expand, update and calibrate the hydraulic model; 2) develop and calibrate the hydraulic model for extended period simulation capable of residual and contaminant tracing; 3) examine the disinfection residual management within the system; 4) analyze pumping inefficiencies and storage issues; 5) provide system optimization and pressure zone analysis; 6) identify future service areas and demands; and 7) prioritize system upgrades.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level I with an appropriation of \$250,000.

- 69. PROJECT: Green River Supply Canal**  
**LEVEL: II**  
**SPONSOR: Green River Irrigation District**  
**LOCATION: Sublette County**  
**PROGRAM: Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$200,000	2004
Level II	34	2004	II	\$ 40,000	2006

**PROJECT INFORMATION:**

The Green River Canal has been in operation for many years and delivers water to irrigators with water rights that date back to the early 1900's. Water is delivered to 5,830 acres from Cotton Wood Creek and the Green River. The canal suffers from delivery, conveyance, erosion, and seepage problems. The primary diversion is from the Poole Slough off of the Green River. The condition of Poole Slough diversion has deteriorated to the point that it is hazardous to operate. The Green River Canal water is transported through Cottonwood Creek. It is believed that there are significant losses suffered through this stretch of the canal. Due to the length of the canal this study was established on a two-year time line focusing on solutions to the problems facing the Green River Canal Irrigators.

New research in the area of canal seepage indicates that polyacrilamide (PAM) added to irrigation canal water causes suspended sediments to flocculate out of canal water, which in turn may help to seal the canal and prevent seepage. This technology has been used in water treatment for years to settle particulates from drinking water. A pilot study was funded by the 2004 legislative session to examine application rates, monitor seepage rates, and report on application procedures. The final report for this seepage study should be available soon.

With the completion of the Level II study the irrigation district would like to proceed with Level III funding. The district is seeking funding to repair several safety problems, under drains, washouts, replace diversion structures, and reshape problem areas identified by the Level II study. The estimated cost for this work is \$200,000 with a 50/50 grant loan split at 6% interest for 20 years.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with a 50% grant of \$100,000 and a 50% loan of \$100,000 for a total appropriation of \$200,000 with terms of 6% for 20 years.



**70. PROJECT: Greybull Crossing & Tank**  
**LEVEL: III**  
**SPONSOR: Town of Greybull**  
**LOCATION: Big Horn County**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	46	1997	I	\$55,000	1998
Level III	96	2000	I	\$1,850,000*	2004

\*60% Grant & 40% Loan (7¼%, 20 years)

PROJECT INFORMATION:

The Town of Greybull system consists of an infiltration gallery, three flowing wells, two tanks with 1.3 million gallons of storage, and a number of manual and automatic control valves. The town is under administrative order from EPA for violations of the Surface Water Treatment Rule associated with the diversion through their infiltration gallery on Shell Creek. EPA has recommended that the town add storage on the west side of the river. Currently the town's only storage facility is located on the east side of the river, this situation leaves them vulnerable to a line failure at their river crossing. In addition, residents southwest of Greybull have requested water service.

The Level II study makes recommendations regarding additional storage, transmission and distribution lines that will resolve the town's storage problems, provide water to areas adjacent to town, and provide for more efficient operation of the system.

The town has selected an engineer to design a new, redundant pipeline river crossing, additional transmission pipelines and a storage facility. The plans and specifications are complete and construction on the first phase of the project was completed in 2003. Phase I consists of piping east of the Big Horn River and the river crossing.

Phase II of the project includes transmission pipeline and a storage tank west of town. The transmission pipeline has been routed around the old oil refinery site in an effort to avoid the contaminated soil. BP Amoco, owner of the site, has agreed to pay the additional costs for this construction change.

Phase II construction began in August 2004 and should be completed in the spring of 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**71. PROJECT: Greybull Highway 14 Crossings**  
**LEVEL: New Application**  
**SPONSOR: Town of Greybull**  
**LOCATION: Big Horn County**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$240,000*	2008

50% Grant & 50% Loan (6%, 25 years)

**PROJECT DESCRIPTION:**

The Town of Greybull has been ordered to relocate portions of their potable water transmission pipelines parallel to and crossing Highway 14 by the Wyoming Department of Transportation due to reconstruction activities along the highway.

The water transmission pipelines that are to be relocated are a part of the highway construction project. Construction of the highway project has begun and should be completed in early 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 72. **PROJECT:** Greybull Valley Dam and Reservoir
- LEVEL:** III
- SPONSOR:** Greybull Valley Irrigation District
- LOCATION:** Park County
- PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III-I	28	1994	I	\$3,000,000*	2000
Level III	59	1996	I	\$37,000,000*	2000
Level III	88	2002	I	\$7,942,542**	2005

\*75% grant, 25% loan (4%, 50 years)

\*\* 2002 Session laws reduced appropriation to \$32,057,458. This is the final budget amount.

**PROJECT INFORMATION:**

The Greybull Valley Irrigation District serves 80,000 acres of irrigated land in Park and Big Horn Counties and has experienced severe water shortages for several years. Increased storage will provide considerable agricultural and economic benefits.

The project includes a diversion dam on the Greybull River, a 4-mile supply canal, and an off-channel reservoir on a tributary of Roach Gulch, which is a tributary of the Greybull River downstream of Meeteetse. The reservoir will have a capacity of 30,000 acre feet.

The Level II study was phased. The first phase was completed in 1990 and concentrated on the hydrologic and geotechnical feasibility of the project. It was determined that the project is technically feasible. The second phase served to evaluate the costs and benefits of the two most feasible dam sites and select the preferred site. The third phase included the development of the conceptual designs and cost estimates. In 1992, contacts with the Bureau of Reclamation indicated that the project may be eligible for partial federal funding through the Small Reclamation Project Act. The sponsor and WWDC decided it would be in the best interests of both parties to delay the project and seek federal funding. However, in 1993, Dan Beard, the Commissioner of the Bureau of Reclamation, indicated that the Small Reclamation Program would be discontinued. Therefore, it was concluded that the project would have to be funded by the Water Development Program.

The estimated total cost for the proposed project was \$40,000,000. Due to a lack of funds in Water Development Account I, a phased Level III recommendation was made and granted in 1994. The initial appropriation of \$3,000,000 provided funding for permit procurement, land acquisition, and final design for the project. In 1994, consultants were selected by the district and the U.S. Army Corps of Engineers to prepare an environmental impact statement (EIS) for the proposed project. In 1996, an additional appropriation of \$37,000,000 completed funding and allowed the project to proceed to construction.

The design of this project was complete in 1998. The design included extra measures to strengthen a weak foundation. This delayed completion by nearly one month.

Project construction started in the summer of 1998. The supply canal was complete in December of 1999 and the Dam was complete in Spring of 2000. Lack of adequate runoff has prohibited the complete first fill and has stalled the evaluation of the dam performance. A contingency fund has been set aside, to correct deficiencies that typically arise during the initial phase of operations.

The district has requested that, due to the extreme drought conditions which have prevailed since completion of the dam, the reversion date for the funds be extended to June 30, 2010. Further, the district has requested an extension of the deferment of accrual of interest and payment of principal and interest for one year.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends extension of the reversion date to June 30, 2010.

73. **PROJECT:**                   **Greybull Valley ID Hydro Power**  
**LEVEL:**                        II - Hold  
**SPONSOR:**                   Greybull Valley Irrigation District  
**LOCATION:**                    Park/Big Horn County  
**PROGRAM:**                    New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	I	\$60,000	2004

**PROJECT INFORMATION:**

The Greybull Valley Irrigation District wished to pursue a detailed cost analysis of placing hydropower generators at the base of their three major reservoir dams. The two-year study included an examination of the transmission requirements to get the generated power to users.

In 2003, the District Board liked the possibilities listed in the report. However, with the change in leadership in the district and a problem with electrical transmission line capacity, the Board did not feel they were ready to pursue the project this year.

In 2004, the project was placed on hold status. Due to the drought and other problems, it may take many years before it is feasible to proceed with this project. The project was initiated July 2001 and was completed May 2003.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be retained at a Level II-Hold status.

74. **PROJECT:**                   **Greybull Wells Rehabilitation**  
**LEVEL:**                        Level II  
**SPONSOR:**                    Town of Greybull, Incorporated Municipality  
**LOCATION:**                    Big Horn County  
**PROGRAM:**                    Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	II	\$475,000	2006

**PROJECT DESCRIPTION:**

In 1996, WWDC funded the drilling and testing of the Shell Well No. 3 for the Town of Greybull as part of a Level II study of the town’s water supply. Wellhead pressure and artesian flow from Shell Well No. 3 have declined since its construction in 1996-1997.

In 1983, the WWDC funded the drilling and testing of the “Grey Well”, located between Shell and Greybull, under the Ground Water Exploration Grant program. This well was not adequate for the town’s needs, but it was later determined that the well was not completed through the target Madison Formation.

The Town of Greybull acquired 2004 Level II funding to re-enter these wells and attempt to improve their performance. This project also includes an evaluation of ground water studies conducted in this sector of the Big Horn Basin and any new data that might be helpful in future well siting opportunities. Workover activities are anticipated to commence in December 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 75. **PROJECT:** Groundwater Studies
- LEVEL: N/A
- SPONSOR: State
- LOCATION: Statewide
- PROGRAM: New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
GW Grants	8	1981	I	\$3,000,000	N/A
GW Grants	35	1984	I	\$1,000,000	N/A
GW Grants	7	2002	I	\$1,500,000	N/A

**PROJECT INFORMATION:**

In 1981 the Legislature appropriated \$3,000,000 to be granted to incorporated municipalities for the purpose of groundwater exploration. Grants were limited to \$200,000 and a 10% match was required. Only one award could be made to a municipality. In 1984 an additional \$1,000,000 was appropriated and the local share was increased to 25%. Over the years, 37 communities have benefited from this program.

During the ongoing drought, it became apparent that additional funding would be beneficial to assist municipalities and special districts address shortages in their drinking water supply. In 2002, an additional \$1,500,000.00 was appropriated for the program, the grant amount was raised to a maximum of \$400,000.00 per entity, and the program was expanded to include water, water & sewer, and service & improvement districts. To maintain a program budget to meet anticipated needs, the WWDC is requesting \$1,000,000 be incorporated in 2005.

**CURRENT SPONSOR + ACTIVE/OBLIGATED FUNDS**

- City of Cheyenne/Board of Public Utilities (Laramie County) : \$400,000
- Central Campbell County Improvement & Service District (Sleepy Hollow): \$385,000
- Town of Afton (Lincoln County): \$172,000
- Squaw Creek Water District (Teton County): \$45,000

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Ground Water Exploration Grant Program be continued with an appropriation of \$1,000,000.

76. **PROJECT:** Guernsey Water Supply  
**LEVEL:** III  
**SPONSOR:** Town of Guernsey  
**LOCATION:** Platte County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	8	1995	I	\$ 75,000	1996
Level III	59	1996	II	\$550,000	1999
Level II	125	2003	II	\$ 40,000	2004
Level III	118	2004	II	\$615,000	2008

PROJECT INFORMATION:

In 1994, Guernsey and Hartville submitted applications requesting assistance in evaluating water supply, treatment, storage, transmission and distribution systems. Since the two municipalities are in proximity and take water from the same source (shallow wells along the North Platte River), the Commission conducted a joint Level I Master Plan study to determine the feasibility of a regional approach to solving the area’s water supply problems. The study determined that a combined system was not feasible. Two separate project reports were submitted, with separate recommendations for each community. Guernsey’s existing supply source is a series of wells into the North Platte alluvium. This project included replacing one of the older and more vulnerable wells with a new production well, and provided the necessary wellhead appurtenances, controls and pipeline connections to incorporate the new well into the existing system.

In 1996 the Commission recommended that the project be advanced in the New Development Program at Level III status with a budget of \$550,000. The financing plan included a 67% grant and a 33% loan at an interest rate of 4% and a term of 20 years.

In 1997 the new well was drilled and developed. Construction of the new pipeline system was delayed due to the need to comply with federal program guidelines as the project was partially funded by the federal Rural Utility Service. These remaining improvements were constructed in 1999.

In the summer of 2002, the Town of Guernsey had its water storage tank inspected. The results indicated a need for a total removal and replacement of the existing coating and removal and replacement of corroded areas. The ensuing Level II WWDC project determined that additional items were also needed for the Guernsey system upgrade. These items consist of upgrades to the SCADA system, upgrades to undersized system mains, dedicated lines from the wells to the storage tank, and an emergency system connection to the Wyoming Army Guard Camp.

The 2004 Legislature appropriated a grant of \$615,000 to assist the town with these repairs. However, the town has thus far been unsuccessful in arranging the remaining 50% of the necessary funds for the project.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

76. **PROJECT:** Hanover Repair  
**LEVEL:** III  
**SPONSOR:** Hanover Irrigation District  
**LOCATION:** Washakie County  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$87,000*	2008

\*Option I is 50% grant and 50% loan at 6% interest for up to a 30 year term.

\*Option II is 100% grant in the amount of \$43,500 for invoiced materials, with the sponsor responsible for all other project costs.

PROJECT INFORMATION:

The project will rehabilitate a steel flume that was lined in the 1990's under a project financed with water development funds. The lining is deteriorating. The project will serve to help assure delivery of water to the irrigators below the flume.

Sponsor elected to use funding option II, as described in SL2003, Chapter 69.

Construction should be complete prior to the 2005 irrigation season.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

- 78. PROJECT: Heart Mountain Irrigation District Return Flow Study**  
**LEVEL: New Application**  
**SPONSOR: Heart Mountain Irrigation District**  
**LOCATION: Park County**  
**PROGRAM: New Development**

PROJECT DESCRIPTION:

The Heart Mountain Irrigation District was formed in 1960 and serves 33,600 acres located between Cody and Powell. In a conservation effort, the district would like to study the water usage in the district, concentrating on the stream flows within the district and the return flows leaving the district. To better manage their existing supply, the district would also like to review and upgrade their system's water measurement structures.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level I with an appropriation of \$75,000.

- 79. PROJECT: Heart Mountain Pipe Conversion**  
**LEVEL: III**  
**SPONSOR: Heart Mountain Irrigation District**  
**LOCATION: Park**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	II	\$595,000*	2010

\*100% grant for invoiced materials. The sponsor is responsible for all other project costs.

PROJECT INFORMATION:

Heart Mountain Irrigation District would like to convert two laterals in their system from open channel to PVC pipe. Lateral H28 is 14,000 feet long and serves 700 acres with 13 farm turnouts; Lateral R39 is 9,500 feet long and serves 875 acres with 6 farm turnouts. The District would like the WWDC to pay for all materials costs and the District will provide all labor, equipment, and associated costs.

Construction on Lateral H28 has begun and should be complete prior to the 2005 irrigation season. Construction on Lateral R39 should begin in the fall of 2005 and be complete prior to the 2006 irrigation season.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 80. PROJECT: Heart Mountain Weed Screen and Mapping**  
**LEVEL:** Level II  
**SPONSOR:** Heart Mountain Irrigation District  
**LOCATION:** Park  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	II	\$100,000	2006

**PROJECT INFORMATION:**

Heart Mountain Irrigation District has had ongoing problems with build up of aquatic vegetation, (primarily pondweed), and wind blown trash in their canals and laterals. This build up can cause numerous problems with flow measurements and flow efficiencies; and requires considerable man-hours in removal of vegetation/trash from screens and gates. Currently a study to determine the feasibility of placing mechanical weed screening devices at several locations along the main canal is being performed along with the evaluation of several types of weed screens to find one to best fit the needs of the District.

Having their conveyance system digitally mapped was also requested by the sponsor. This is currently being done in a method similar to the Level II Study completed by the WWDC for the Deaver Irrigation District. This involves mapping the main canals and laterals and each structure along with condition estimates which is then placed into a database to allow the District to modernize their maintenance schedules as well as create a living, updateable map of the District.

**RECOMMENDED LEGISLATIVE ACTION:**

No further legislative action is required at this time.

- 81. PROJECT: Hidden Valley**  
**LEVEL:** II  
**SPONSOR:** Midvale Irrigation District  
**LOCATION:** Fremont  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$100,000	2004
Level III	118	2004	II	\$1,474,103	2010

**PROJECT INFORMATION:**

The Midvale Irrigation District requested a study to determine the feasibility of converting approximately 7 miles of an open, unlined canal known as the Hidden Valley lateral of the Pilot Canal into a gravity-pressurized pipeline serving the Hidden Valley area. Hidden Valley is located along the Wind River at the top end of Boysen Reservoir. A gravity-pressurized system would serve approximately 2,200 acres and would conserve an estimated 7,000 acre-feet of water once flood irrigation is converted to sprinkler irrigation and conveyance efficiencies are increased. The study also included evaluation of re-regulation reservoir sites.

Midvale Irrigation District plans to rehabilitate the Hidden Valley conveyance system to continue their conservation program as specified in the WWDC Level II Report: Hidden Valley Pipeline Level II Feasibility Study, November 2003, with the installation of buried pipe to replace the existing Hidden Valley open lateral canal conveyance system. The 2004 Legislature appropriated \$1,474,103 for the purchase of materials to install the buried piping system. Engineering, installation and permitting costs will be provided by the District.

During 2004, the District entered into an agreement with the Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture, to provide engineering design and to develop plans for the buried piping installation. The NRCS, by use of a contracted engineering firm, will also assist the District with development of the materials bidding documents and construction oversight. As of December 2004, the design and plans had nearly been completed. Construction is anticipated to take place following the 2005 irrigation season.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 82.     PROJECT:                     Highline Canal**  
**LEVEL:**                             III  
**SPONSOR:**                         Shell Valley Watershed Improvement District  
**LOCATION:**                         Big Horn County  
**PROGRAM:**                         Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$50,000	2004
Level III	69	2003	II	\$531,000.00*	2008
50% Grant & 50% Loan (6%, 30 years)					

**PROJECT INFORMATION:**

The WWDC recently completed a level II study of the Highline Canal that diverts from Trapper Creek. The District would like to implement the recommendations made in the study to replace the diversion structure, convert approximately 2 miles of open ditch to pipeline, and install new delivery structures. Improvements to this delivery system would benefit the irrigators along the Highline canal as well as the residents of the community of Shell. Past WWDC projects completed for the Shell Valley Watershed Improvement District include Shell Canal and Lake Adelaide.

The District has completed their assessment role and the design is being prepared. This project should be completed during 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 83.     PROJECT:                     High Savery Reservoir (Sandstone)**  
**LEVEL:**                             III  
**SPONSOR:**                         State of Wyoming  
**LOCATION:**                         Carbon County  
**PROGRAM:**                         New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	79	1988	I	\$5,000,000*	1998
Level III	268	1989	I	\$5,000,000	1998



Level III	89	1993	I	\$20,400,000	1998
Level III	38	1998	I	\$20,400,000	2005
Level III	02	2001	I	\$3,800,000	2005

\*\$400,000 has been allocated by statute to the Little Snake River Basin Planning Study; therefore, the total appropriation available to the project is \$30,000,000. 1998 Session laws continued the \$20,400,000 appropriation and extended the reversion date to 2001.

PROJECT INFORMATION:

The following paragraphs give a brief project history and update. For a more detailed description of the project history please refer to the 1999 and 2000 WWDC Legislative Report.

In 1979, the legislature enacted WS 41-2-204, which described the Stage I, II, and III transbasin diversion Projects, and "in-basin needs". The 1980 Wyoming legislature directed the WWDC to study the feasibility of constructing in the Little Snake River drainage above the confluence of the river and Savery Creek, a reservoir of at least 3,000 acre feet. The reservoir shall satisfy immediate in-basin agricultural, recreational, and municipal needs and shall promote in-basin water purity. In 1984, the legislature included in the WWDC project budget request criteria for a project in the Little Snake River basin. The intent was to mitigate and alleviate any water supply shortages caused by Cheyenne Stage I and Stage II projects.

The legislature in 1991 appropriated \$10,000,000 for the project. Four hundred thousand dollars was earmarked for a study of alternative reservoir sites in the Little Snake River basin that would be competitive with the Sandstone site. More than 20 alternative reservoir sites were identified and assessed.

This study concluded that a small 23,000 acre-foot dam was feasible at the Sandstone site. The Savery Little Snake Water Conservancy District determined that the smaller Sandstone alternative was their preferred alternative. The legislature in 1993 appropriated an additional sum of money, which brought the total appropriation to \$30,000,000.

In 1997, the legislature amended the authorization for the project from "Sandstone Dam and Reservoir Project" to "Little Snake River Valley Dam and Reservoir Project". This provided a broader definition of what could be considered mitigation for Cheyenne Stage I and Stage II transbasin diversion projects. The Stage III Transbasin Diversion Project was dropped. In July 1998, the WWDC submitted a Section 404 Permit application for the High Savery Dam and Reservoir alternative. In August 1998, the Draft EIS for the Little Snake Supplemental Irrigation Water Supply Project was published.

The High Savery alternative became the WWDC preferred alternative. In August 1999, the WWDC contracted with a consulting engineering firm to design the High Savery Dam. The Final EIS was published in October 1999.

The Section 404 permit and record of decision for construction of the High Savery Project were issued December 20, 2000. The Bureau of Land Management issued the right-of ways for roads and facilities and the State Land and Investment Board granted a permanent easement for the dam and facilities in early 2001.

On May 22, 2001, bids were opened. The low bidder was Ames Construction of Burnsville Minnesota, with a bid of \$22,685,000. Notice to proceed was issued on June 22, 2001. Actual construction started soon thereafter.

During 2003, the majority of the embankment was moved into place, all concrete and mechanical work was completed. Substantial Completion was achieved on November 15, 2003. Remaining work includes telemetry, some minor wetland work, other miscellaneous work and cleanup.

First fill was started in the Spring of 2004. Due to low runoff, only the minimum pool was filled. At the end of 2004, the reservoir will hold approximately 5,700 acre-feet of water. First fill will continue through 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required

- 84. PROJECT: Hoback Junction Rural Regional Master Plan**  
**LEVEL:** New Application  
**SPONSOR:** Teton County Commission  
**LOCATION:** Teton County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I*	46	1997	I	\$250,000	2000

(\*Teton County Master Water Supply Plan)

**PROJECT INFORMATION:**

Hoback Junction is located in Teton County at the Hoback River/Snake River confluence and the three-way junction of US HWY 26 and US HWY 89, 13 miles south of the Town of Jackson. The junction area, consisting of residential and commercial properties, has had problems with water quantity and quality since its inception. Single-family residences have dealt with the quantity problem by limiting irrigation of yards, and have remedied the quality problem with in-house treatment units and bottled water. Commercial users, particularly the public water supply systems falling under EPA's jurisdiction, have had difficulty meeting minimum drinking water standards and are utilizing small water treatment units and conservation. There is no fire protection system in place; fire suppression supplies are obtained from the Hoback or Snake River.

Nitrate levels in area wells have been measured as high as 51 mg/L and as low as 3mg/L (EPA MCL=10mg/L). These elevated nitrate levels may be a result of high septic tank density, but could also be an ambient condition of the aquifer. Water from some wells has a sulfur odor. Some property owners have potable water while others pump from the Hoback or Snake River. There are approximately 150 residences in the proposed service area and at least five public water supply systems. One of the public systems, the Snake River Mobile Home Park, is a community water system. The other four public systems are transient non-community water systems. The EPA lists one of the latter, the Snake River Park, as a ground water source under the direct influence of surface water. Another system, Hoback Stores, has nitrate levels of 42 mg/L from a well that yields 3 gpm.

The study will determine the water supply options in the Hoback Junction vicinity, and prepare preliminary designs and cost estimates for a water supply system in the project area.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Hoback Junction Rural Regional Master Plan Water Supply Project be incorporated into the New Development Program at Level I with an appropriation of \$75,000.

- 85. PROJECT: Hyattville Water Supply**  
**LEVEL:** Level II  
**SPONSOR:** Town of Hyattville  
Hyattville Service & Improvement District  
**LOCATION:** Big Horn County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	I	\$75,000	2004

PROJECT INFORMATION:

In 1968, the residents of Hyattville formed the Hyattville Water Company for the purpose of developing a safe, reliable supply of water for their community. Subsequently, a deep well was drilled into the Madison Formation that flowed 100 g.p.m. at the time of completion. Using the average daily per capita use for Wyoming (Wyoming Dept. of Environmental Quality – Water Quality Division Rules & Regulations, Chapter XII, Section 8) of 125 gallons per day per person, the well could be expected to provide water for 1152 people. In reality, however, Hyattville’s water system has consistently failed to deliver an adequate supply of water to the population (approx. 52) ever since it was brought online.

A WWDC Level I Master Plan was completed for Hyattville in 2002. Recommendations were generated in the final report regarding an additional groundwater supply source, for improving the distribution system, and for adding storage. A Level II feasibility study will evaluate alternatives for the new district (formerly operated as a water company). The project budget includes funding for a test well that would target the Madison Aquifer at a site near Hyattville which was identified in the Level I study.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required

- 86. PROJECT: Jon’s Drop/4-Mile Flume Rehabilitation Project**  
**LEVEL: III**  
**SPONSOR: West Side Canal Company/Savery-Little Snake Conservancy Dist.**  
**LOCATION: Carbon County**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$25,000	2002
Level III	69	2003	II	\$142,000*	2008

\*50% grant; 50% loan, 6%, 20 years

PROJECT INFORMATION:

The West Side Canal Company requested a Level II feasibility study to provide recommendations and cost estimates for rehabilitation of the Jon’s Drop and the 4-mile flume within the canal system. The Jon’s Drop is a chronic maintenance problem on the canal and is currently experiencing bank failure that may, if allowed to continue, disrupt water flow to irrigators below the drop. The 4-mile flume has reached its useful life expectancy and is in need of overhaul or replacement.

It was recommended that installing a HDPE pipe drop with a riprap energy dissipation pool will be used to rehabilitate Jon’s Drop. This drop will direct the flow away from the erosion area and to an area where flow can be controlled. It is recommended that 4-mile flume be replaced with an inverted siphon pipe.

The 2003 Legislature authorized Level III funding for the project. Design on the Jon’s Drop rehabilitation was completed in August 2004 and the project construction was bid during the fall of 2004 with a spring 2005 completion date

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 87. PROJECT:** Kaycee Well & Storage
- LEVEL: New Application
- SPONSOR: Town of Kaycee
- LOCATION: Johnson County
- PROGRAM: New Development

PROJECT INFORMATION:

The Town of Kaycee is located in southern Johnson County where the Middle Fork of the Powder River intersects I-25. The town is anticipating the need for significant upgrades in water storage capacity/operation and for adding a second Paleozoic Aquifer well to the system. Currently the town has a 200,000 gallon tank, located on the east side of town, fed from the existing well 12 miles west of town. Water can circulate through the town’s distribution system without ever reaching the storage tank. A second well is desired to meet maximum-day demand.

A new K-12 school is nearing completion and the state fire marshal has questioned the town system’s ability to meet fire flows. The building will be in compliance but it leaves the entire town lacking in providing adequate fire protection. Growth is also an issue at Kaycee because the present system cannot support expansion. Tertiary recovery efforts (CO2 drive) at the Salt Creek Oil Field by Anadarko Petroleum Corporation have brought jobs into this locality and will likely cause a population increase as this technology moves to other oil fields in the area (e.g. Sussex, Meadow Creek, Hertzog Draw, etc.). The town has discussed a moratorium on new taps as a near term solution to their inadequate supply problem.

The town therefore desires a feasibility study to determine best alternatives for rehabilitating and expanding the present supply and storage opportunities. This includes a request for funding a production-size test well to be drilled in 2005.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the Kaycee Well & Storage Project be incorporated into the New Development Program at Level II with an appropriation of \$650,000. The appropriation includes funding for a ground water exploration drilling and testing program.

- 88. PROJECT:** Kennington Springs Level II Study
- LEVEL: II
- SPONSOR: Kennington Springs (District formation pending\*\*)
- LOCATION: Lincoln County
- PROGRAM: Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	II	\$40,000	2004
Level II	32	2004	II	\$100,000	2006

PROJECT INFORMATION:

The WWDC completed a Level I master plan for the Kennington Springs Pipeline Company in November 2003. The results of that study revealed several problems with their spring and pipeline that need to be corrected soon in order to avoid some potentially serious issues. The Company would like a level II study to determine the cost of addressing these issues and the various funding scenarios available to them to help pay for the repairs. This study would also

determine the feasibility of joining together with a nearby system, such as Fairview, creating a more regional system. The Company is not yet a legal entity but has drafted a resolution to pursue district formation with Lincoln County and plans to have the District in place prior to commencement of the level II study.

\*\*The Level II study has not yet begun and is pending district formation by the sponsor. If district formation is not successful the 2004 appropriation will revert back to WWDC Account II.

**RECOMMENDED LEGISLATIVE ACTION:**

No further legislative action is required at this time.

- 89.    PROJECT:                    Kirby Area Water Supply Study**  
**LEVEL:**                            I  
**SPONSOR:**                        West Side Irrigation District  
**LOCATION:**                         Big Horn and Washakie Counties  
**PROGRAM:**                        New Development

**EXISTING LEGISLATION**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	34	2004	I	\$150,000	2005

**PROJECT INFORMATION:**

The Kirby Reservoir site is located near the Washakie/Hot Springs County line. Its major purpose is to re-regulated winter releases from Boysen Reservoir. In addition it would provide a means of delivering irrigation water to irrigators in the Worland area when stream flows are not sufficient to meet water-right demands. The study is underway.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 90.    PROJECT:                    Kirby Creek Watershed Management Plan**  
**LEVEL:**                            I  
**SPONSOR:**                        Hot Springs Conservation District  
**LOCATION:**                         Hot Springs County  
**PROGRAM:**                        Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	II	\$175,000	2004

**PROJECT INFORMATION:**

The Kirby Creek watershed is approximately 128,427 acres with land ownership divided among federal (50%), private (38%), and state (12%), The watershed includes one primary river system, the main stem of Kirby Creek. The Conservation District plans to look at several variables within the watershed. District constituents have concerns based on water quality issues in the Kirby Creek drainage. Specific issues identified by the District being evaluated are the effects of large run-off events, including main-stem head cutting, to the drainage. Also of interest to the district is the lack of developed upland livestock and wildlife water and impacts to riparian areas within the drainage.

This report will provide baseline information from which the District can continue to expand upon to begin implementation of management practices that address the natural resource issues within the drainage. The 2003 Legislature incorporated this project into the Rehabilitation Program at Level I with an appropriation of \$175,000. A time extension has been granted for this project and the final report is due in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required at this time.

- 91.     PROJECT:                     **Kirby Municipal Master Plan**  
**LEVEL:**                         New Application  
**SPONSOR:**                     Town of Kirby  
**LOCATION:**                     Hot Springs County  
**PROGRAM:**                     New Development**

**PROJECT INFORMATION:**

A Level I master plan study was requested to help identify solutions to chlorination issues, which are related to the town's water distribution system. The town receives its water from Thermopolis via a 12-mile transmission line. Specifically, the study will model the town's water system, conduct a leak detection test, and create a GIS based water system map to identify distribution and transmission piping that needs to be replaced and/or constructed.

**RECOMMENDED LEGISLATIVE ACTION:**

It is recommended that this project be incorporated into the New Development Program at Level I with an appropriation of \$75,000.

- 92.     PROJECT:                     **Lake DeSmet Master Plan and Reservoir Rehabilitation Plan**  
**LEVEL:**                         II  
**SPONSOR:**                     Lake DeSmet Counties Coalition, Joint Powers Board  
**LOCATION:**                     Johnson County  
**PROGRAM:**                     Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$100,000	2004
Level II	34	2004	II	\$150,000	2004

**PROJECT INFORMATION:**

The Lake DeSmet Counties Coalition, Joint Powers Board (JPB) requested assistance with planning water use and reservoir operation and a level II project was approved in 2002. The initial level II study was completed and the JPB requested continued assistance in reservoir management and operation. Several issues were identified during the initial study that require follow-up evaluations or continued monitoring. These issues are discussed below.

There is a need to continue seepage monitoring and inspection around the reservoir. Seepage occurs when the reservoir is filled above the 4612-foot elevation. Over the last twenty years, the reservoir has been operated at or under the 4612-foot elevation eliminating the need for seepage monitoring. However, when the reservoir is operated at full capacity the water elevation approaches elevation 4620. To take full advantage of the reservoir and the associated water rights, the JPB may wish to fill the reservoir to elevation 4620. They wish to continue the seepage monitoring effort and install weirs and addition shallow observation wells to evaluate the seepage.

The JPB also wished to conduct an inspection of the water supply tunnel from Piney Creek to the Lake. The tunnel is the main water supply for the reservoir and if it were to fail the reservoir would be greatly impacted. The tunnel is over twenty years old and internal inspections have never been completed. Investigations will require underwater inspections either by divers or by remote controlled equipment. Funds were not available to perform the underwater inspections during the initial study and the JPB requested that the tunnel investigations of be funded as part of the Phase II request.

The JPB has a water right from Rock Creek for 875 acre-feet annually. The conveyance from Rock Creek to Lake DeSmet is through the Chevron/Texaco irrigation system. The JPB would like preliminary design plans prepared for conveyance of Rock Creek water. This would consist of preliminary design plans, cost estimates, and identifying environmental and landowner impacts associated with proposed improvements.

Work was completed on the level II Phase II of the project in November 2004. The tunnel inspection showed the tunnel to be in good condition and no repairs are needed at this time.

However, the Phase II study recommended several repair and maintenance projects for Level III final design and construction. These include repair or replacement of the outlet slide gates, fabrication and installation of a top grate on the tunnel outlet shaft, installation of piezometers in the north dam, and grading and rip rapping an area of the southwest shoreline.

**Estimated Level III**

**Phase 1 Cost** Design.....\$ 11,800.00

**Estimated Level III**

**Phase 2 Costs:** Repair/Replace N. Dam Outlet Slide Gates.....\$ 70,000.00  
 Fabricate/Install Top Grate for Tunnel Outlet Shaft \$ 5,000.00  
 Install 3 Piezometers in N. Dam..... \$ 7,500.00  
 SW Shoreline Safety Fencing & Warning Signs.....\$ 5,000.00  
 SW Shoreline Stabilization Earthwork & Riprap ...\$ 30,000.00  
 Engineering (10%)..... \$ 11,800.00  
 Contingency (15%)..... \$ 19,400.00  
 Total Project Costs..... \$160,500.00

**Rounded..... \$165,000.00**

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be continued in the Rehabilitation Program at Level III with an appropriation of \$165,000. The funding will be 50% loan and 50% grant. The Loan will be at 6% interest for a 20-year term.

- 93. **PROJECT:** Lake Hattie Outlet Works
- LEVEL: III
- SPONSOR: Pioneer Canal-Lake Hattie Irrigation District
- LOCATION: Albany County
- PROGRAM: Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	12	1988	II	\$360,000	1990
Level II	7	2002	I	\$ 60,000	2004
Level III	118	2004	II	\$163,000	2010

**PROJECT INFORMATION:**

Lake Hattie is located 15 miles southwest of Laramie. Sediment carried by wind and wave action is deposited in the area of the lake’s outlet which renders it inoperable. This problem increases as the level in the reservoir falls. The sediment that is carried through the outlet pipes is deposited in the canal below the dam. The sediment builds up and eventually plugs the outlet tubes. Divers have been hired in recent years to clear the sand with vacuums, but the outlets soon silt back in. In the late 1980’s, the outlets were reconstructed with the emphases on the structure rather than the sedimentation problem. Pioneer Canal-Lake Hattie Irrigation District requested a Level II study to examine the rehabilitation of the outlet works with the emphases on the sedimentation problem. This project required sediment transport analysis.

In 2003, WWC Engineers examined the dam and several options to mitigate the sediment problem. The district chose to request level III funding for the construction of an intake silo. Funding for the intake silo was approved during the 2004 legislative session. The project design is proceeding rapidly and the district hopes to have construction completed before spring runoff.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action recommended at this time.

- 94. PROJECT: Lander Paleozoic Well**
- LEVEL: II
- SPONSOR: City of Lander
- LOCATION: Fremont County
- PROGRAM: New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	I	\$40,000	2004
Level II	125	2003	I	\$540,000	2004

**PROJECT INFORMATION:**

The City of Lander is presently dealing with the effects of an extended drought. Diminished flows in the Middle Fork Popo Agie River, has taxed the city’s ability to provide water to their customers. Previous Level I and Level II studies explored the potential for developing supplemental and/or replacement shallow ground water sources. The effort was focused on water quality not quantity. The Paleozoic-age aquifer system (Tensleep Sandstone, Madison Limestone, Bighorn Dolomite), along the east flank of the Wind River range, may provide additional drought insurance. This aquifer system has long been recognized as having potential for providing high-quality ground water from wells that could possibly produce over 1000 gpm. To minimize the risk to water users during dry cycles, the city requested an in-depth Phase I groundwater study that identifies an optimal location for drilling a test well that may ultimately be developed for municipal use.

The Level II, Phase I Study revealed several sites along the flank of the Wind River Range near Lander, where a Paleozoic-age Test Well could be drilled. The legislature appropriated funds for drilling a test well in 2003. The Level II, Phase I study identified eight (8) possible drilling sites in reasonable proximity to Lander. With WWDC funding in 2003, a test well was drilled at a site west of Lander, near the Sinks Canyon Road. that fully penetrated the Tensleep Sandstone formation. The resulting well flowed 90 g.p.m. and was pump tested for 7 days at 325 g.p.m. The pump test demonstrated however, that development/operation of the well at that rate would likely impact the water level in nearby Tensleep wells, thus potentially resulting in injury to existing senior ground water rights.



The Town of Lander, not wishing to acquire a source that could have interference issues, desires additional Level II funding to deepen the well and test the Madison Formation. The proposed budget contains costs for deepening the well and testing the Madison, and for well stimulation (acid fracturing) if appropriate.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Lander Paleozoic Well Project be continued in the New Development Program at Level II with an appropriation of \$425,000. The appropriation includes funding for an expanded ground water exploration drilling and testing program.

- 95.    PROJECT:                    **Laramie East Side Tank**  
**LEVEL:**                        **III**  
**SPONSORS:**                    **City of Laramie**  
**LOCATION:**                     **Albany County**  
**PROGRAM:**                    **New Development****

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	88	2002	I	\$3,955,000	2002
Level III	69	2003	I	\$825,000	2007

**PROJECT INFORMATION:**

A Level II study and funding for Level III design for this project was included in the Laramie North Side Water Supply Project, which was funded by the legislature in 2001 and 2002. Further information regarding the history of this project can be found under the above mentioned project in this report. The purpose of this project is to construct transmission lines, water storage facilities, and pump stations for the City of Laramie. The Level II study recommended that additional storage and new transmission lines be installed to provide a more reliable water supply to the East side of Laramie.

The level II study recommended that the completion of this project be undertaken utilizing a three-phase construction process. The first phase, design, is nearly complete. During design the Engineers identified a new design alternative that resulted in a significant savings to the State of Wyoming and to the City of Laramie. This new design resulted in the elimination of the third construction phase of this project.

Phase one of this project will include the construction of the transmission lines and the tanks. Phase one was funded during the 2002 legislative session. This City of Laramie requested \$825,000 for Phase II of this project. Phase II was approved during the 2003 session and included the installation of a new pump station and the rehabilitation of an existing pump station. Construction for Phase I of this project currently underway and is scheduled for completion late in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required at this time.

- 96.    PROJECT:                    **Laramie North Side Supply**  
**LEVEL:**                        **III**  
**SPONSORS:**                    **City of Laramie**  
**LOCATION:**                     **Albany County**  
**PROGRAM:**                    **Rehabilitation****

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	36	2000	II	\$ 45,000	2002
Level III	2	2001	II	\$970,000	2005
Level III	88	2002	II	\$3,225,000	2007

PROJECT INFORMATION:

A master plan was conducted for the town of Laramie in the mid 1990's that evaluated various options for expanding Laramie's water supply. These options included improvements to the storage, treatment, transmission and distribution system, which are needed to meet expanding demands. This master plan also recommended a long-term schedule for improving both the surface and groundwater supply systems. Recommendations were made for Level III construction funding from both the New Development and Rehabilitation accounts based on the master plans recommendations.

The 2000 legislature authorized funding for the Laramie North Side Supply Level II Study. This study included an evaluation of the 20 inch pipeline south and west of town, identification of alternatives to provide increased storage to East Laramie, suggested solutions to the system deficiencies in the Corthell Hills area, and lastly an evaluation of the system short comings and recommend alternatives for providing water service to the North Laramie area.

The Level II Study authorized by the 2000 legislature recommended that the City of Laramie rehabilitate the previously mentioned 20 inch pipeline, and add a tank and additional transmission lines in East Laramie to provide water for the Corthell Hill and Altavista areas. These projects should be finished in 2006.

Level III Design funding was appropriated during the 2001 legislative session. It included the design of the 20 inch pipeline rehabilitation and the tank and transmission line installation on the east side of town. During the 2002 legislative session the City of Laramie requested that funding for the construction of the 20 inch line rehabilitation be separated from the funding for the improvements on the east side of Laramie. The rehabilitation of the 20 inch pipeline was funded as the Laramie North Side Supply Project. The second much larger piece of the project, the installation of a new tank and transmission line on the East side of Laramie, was funded as the Laramie East Side Tank Project.

Construction on the Laramie North Side Rehabilitation Project has been completed. Designs for the final phase of the Laramie East Side Tank Project are also being funded by this project and are yet to be completed.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required at this time.

97. **PROJECT:** Laramie Water Management Study  
**LEVEL:** New Application  
**SPONSOR:** City of Laramie  
**LOCATION:** Albany County  
**PROGRAM:** New Development

PROJECT INFORMATION:

The City of Laramie recently completed a study that investigated the long-term management of their Monolith Ranch Water rights. The study was sponsored by Laramie and was completed by Fassett Consulting in association with WWC Engineering of Laramie. The study investigated the

city's current water supply and made recommendations for more efficient use of the City's water resources. Laramie has requested a Level II study to further refine the top three suggested alternatives proposed by that study. The proposed alternatives are listed below.

a. Water Treatment Supply Pipeline – Laramie's surface water supply is diverted from the Laramie River through the Pioneer Canal. Water loss from the canal accounts for 30% of the city's 14.31 cfs water right. Eliminating this loss from the city's system would have provided an additional 850 acre-feet of saved water per year for the period of 1991 through 2002.

b. Turner Well Field / City Springs Improvements – Laramie's two Turner wells have experienced an increase in the rate of drawdown in recent years even though the aquifer appears to be holding steady. The wells have to be pumped at a rate of 2 mgd to prevent water loss through city springs. To avoid water loss through the springs several shallow wells could be drilled to the top of the Casper aquifer. The wells would be designed to pump at a rate of 500 gallons per minute (preliminary estimate) and be located to create a more effective cone of depression that maintains an elevation head in the Casper Aquifer that is below ground surface. Additionally, the city would like to perform a down hole camera survey to determine if the current Turner wells have had a reduction in fracturing due to biofouling or mineral precipitation.

c. Raw Water Irrigation – The City of Laramie would like to investigate the feasibility of a Raw Water Irrigation system for the city's parks, cemetery, recreation areas, and Jacoby Golf Course. The city would like to transfer a portion of their Dowlin Water Right from the Monolith Ranch to a diversion in town for raw water irrigation.

The City of Laramie has also requested an update of the city's Water System Master Plan. The city is in need of a system wide network analysis to determine the ability of the city's water system to continue to serve existing customers efficiently, and to incorporate changes made to the system with the addition of the Laramie West and the East Side Tank projects. These additions to the Laramie system were not anticipated in the 1996 plan.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$300,000.

**98. PROJECT: LeClair Laterals**  
**LEVEL: III**  
**SPONSOR: LeClair Irrigation District**  
**LOCATION: Fremont County**  
**PROGRAM: Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$50,000	2004
Level III	69	2003	II	\$650,000*	2008

\*Material costs only

**PROJECT INFORMATION:**

The LeClair Irrigation District would like to rehabilitate a number of their laterals in an effort to continue their conservation program as outlined initially in the WWDC Level I Report: Wind River Study: LeClair Canal and Riverton Valley (Wyoming No. 2 Canal Rehabilitation), March 1993. The study suggested piping of open-ditch laterals in a phased approach, allowing the District to implement improvements in a prioritized sequence. A subsequent 1994 Level III project began the process of installing the pipe, with WWDC financing the cost of materials and the district providing the labor for installation. Easement and access issues significantly slowed

the progress of installation of pipe by the district. The district believes that it has now resolved these issues. A Level II engineering study was recently completed to update project costs from the 1993 study and to include seven additional laterals. This 2002 study recommended the installation of pipe in twelve open laterals and provided a revised estimate for rehabilitation costs totaling \$1,130,000.

The 2003 Legislature authorized Level III funding for the lateral rehabilitation, providing for the reimbursement of project materials. The District continues to have difficulties in obtaining permanent and construction easements for laterals that are on Tribal and allotted lands of the Wind River Reservation. This has resulted in delays to the lateral rehabilitation construction throughout 2004. Rehabilitation construction will be performed during the non-irrigation season following canal shut off in September for the years 2005 – 2007.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 99.     PROJECT:                    **LeClair/Riverton Valley Irrigation Storage**  
LEVEL:                         New Application  
SPONSOR:                    LeClair and Riverton Valley Irrigation Districts  
LOCATION:                     Fremont County  
PROGRAM:                    New Development**

**PROJECT INFORMATION:**

The LeClair Irrigation District encompasses 14,204 acres serving approximately 1,400 landowners, while the Riverton Valley Irrigation District encompasses 8,017 acres and serves approximately 710 landowners. These districts have submitted a joint application for a study to assess the feasibility of the establishment of storage facilities within the two systems. Several potential sites exist, and such storage facilities would act to provide a supplemental supply of water during the irrigation season. Furthermore, such facilities could operate in a re-regulating manner in that they would store water from LeClair for possible exchange with Riverton Valley, thus allowing for diversions by direct flow into the LeClair System. The proposed Level II Study will review all existing information regarding the two systems, perform appropriate analyses, investigate possible locations for storage facilities (to include geotechnical work), analyze alternatives, evaluate permitting requirements, and prepare conceptual designs and cost estimates.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level II with an appropriation of \$250,000.

- 100.   PROJECT:                    **Lingle Water Supply Phase II**  
LEVEL:                         III  
SPONSOR:                    Town of Lingle  
LOCATION:                     Goshen County  
PROGRAM:                    Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	82	1998	I	\$ 40,000	2000
Level III	16	1999	II	\$400,000*	2003
Level III	88	2002	II	\$711,000*	2007

\*50% grant, 50% loan (7.25%, 30 years)

**PROJECT INFORMATION:**

The town utilizes three shallow wells and two storage tanks as their water supply source. Their water system is quite old, and portions are in poor condition. The main part of town is fed by 4 inch lines from a 50,000 gallon, 1928 vintage storage tank. The much smaller new section of town is feed from a new 126,000 gallon storage tank.

Level III funding authorized in 1999 replaced the 6 inch line from the tank to the north edge of the older part of town with an 8 inch pipeline and replaced 4 inch lines through the center of town with 8 inch lines. The 1928 storage tank was removed from service. The most recent appropriation financed the installation of an 8 inch pipe in the southern part of town plus construction of a new storage tank. The construction is complete with close-out payments remaining to be made to the contractors and to the engineer.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 101. PROJECT: Little Snake River Dams, Grieve and Cottonwood Creek Dams**
- LEVEL:** Level II
- SPONSOR:** Little Snake River Conservation District.
- LOCATION:** Carbon County
- PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$80,000	2004
Level III	118	2004	I	\$2,900,000*	2010

\* 50% grant

**PROJECT INFORMATION:**

In 2003, Gannett Fleming completed a study of three potential dam sites in the Little Snake River basin for the WWDC and the conservancy district. The district requested that two of the sites, Upper Cottonwood and Grieve, be advanced to level III. They are seeking federal funding through the P.L. 566 program for the proposed projects and the Water Development Commission funding is contingent on obtaining the federal funding.

Grieve Reservoir was an existing reservoir which washed out in 1984. The Natural Resources Conservation Service (NRCS) developed a plan and designs in 1986 for reconstructing the reservoir up stream of its original location. As part of the 2003 study, Gannett Fleming reviewed the plans and designs and found them to be suitable and up-dated the costs. The reconstructed reservoir would impound approximately 317 acre-feet. The water yield is fairly certain because a ditch supplies the reservoir. Approximately 445 acres are permitted for irrigation from the reservoir.

Upper Cottonwood Creek Reservoir was first evaluated when alternatives were being considered in the Sandstone/High Savery Project. Gannett Fleming's 2003 study made additional evaluations and up-dated the estimated costs for this proposed site. They estimated a reservoir could be constructed that would impound about 1,000 acre-feet. They used regional curves and estimates to evaluate the storage and yield for the reservoir. No geotechnical evaluations were undertaken at this site. Therefore, before final plans and designs can be completed, additional hydrology studies and geotechnical work will need to be finalized.

Grieve Reservoir Estimated Level III Costs	\$ 383,000
Upper Cottonwood Creek Reservoir Estimated Level III Costs	\$5,407,000
Total Estimated Project	\$5,800,000

The 2004 Legislature authorized 50% Level III grant funding for the project in the amount of \$2,900,000. Prior to obtaining the matching federal funding through the P.L. 566 program, the Sponsor must complete environmental assessments and complete the National Environmental Protection Act requirements for an Environmental Impact Statement or Finding of No Significant Impact. The Sponsor is requesting assistance from the National Resources Conservation Services in performing these tasks, however, no significant accomplishments occurred during the year 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 102. PROJECT: Little Snake River Small Dams and Reservoirs Phase II**  
**LEVEL:** Level III  
**SPONSOR:** Little Snake River Conservation District  
**LOCATION:** Carbon County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	88	2002	I	500,000*	2007

\* 60% grant, 40% Loan (6.0%, 25 years)

**PROJECT INFORMATION:**

The 1999 Water Development Omnibus Construction legislation authorized \$215,000 for the purpose of building from one to twelve small dams and reservoirs to improve range and grazing conditions in the area. The total estimated volume of water impounded by the twelve reservoirs would be approximately 2,636 acre-feet and will service a total area of 9,780 acres of rangeland. Construction of the 12 dams was initially estimated to be in the range of \$2,254,650.

With the first appropriation of \$215,000, design on three dams was completed along with the purchase of spillway piping, outlet and inlet materials for two dams and the construction of a single dam and reservoir. An additional \$50,000 was included in the 2000 Water Development Omnibus Construction legislation to allow the completion of construction on the second dam and reservoir site. The cost for the design, construction and engineering inspection of the two dams and reservoirs is approximately \$1,670 per acre-foot.

The district has been instrumental in substantially lowering the overall project costs by undertaking the securing of permits from the Corps of Engineers, the DEQ Water Quality Division, the State Engineers Office and the Bureau of Land Management.

The 2002 legislative session appropriated an additional \$500,000 to continue the design and construction of four additional dams and reservoirs from the original list of twelve dams and reservoirs identified as being economically viable and feasible to construct. The dams/reservoirs include: Brown's Hill 21, Garden Gulch 3, Garden Gulch 32, and Ketchum Buttes 34. The four dams are estimated to provide over 425 acre-feet of storage capacity.

In order to qualify for Water Development Program funding, the Little Snake River Conservation District must provide sufficient collateral to secure the loan. The current appropriation provides for a \$200,000 loan and a \$300,000 grant. Collateral has been established in the form of an escrow account in the Rawlins National Bank with a current balance of over \$202,500.

Since the sites are located on BLM lands, maintenance of the currently constructed dams and reservoirs is being assumed by the Bureau of Land Management under operating agreements between the BLM and the district. Maintenance of additional dams and reservoirs constructed will be handled in a similar manner.

During 2002, initial permitting activities and geotechnical drilling were undertaken by the Sponsor. Construction of the initial Phase II reservoir , Loco Creek Reservoir (28.2 acre-ft.), was completed in September 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 103. PROJECT:                    **Lysite Water Supply****  
**LEVEL:**                        New Application  
**SPONSOR:**                    Lysite Water & Sewer District  
**LOCATION:**                     Fremont County  
**PROGRAM:**                    New Development

**PROJECT INFORMATION:**

The Town of Lysite is located in extreme northeast Fremont County about 8 miles north of where US HWY 20-26 (Shoshone Highway) passes through Moneta. This area of the Wind River Basin is drained by Badwater Creek and tributaries feeding from the southern flanks of the Big Horn Mountain Range and the Bridger Mountains. Lysite is an older community (unincorporated) situated on the original Burlington-Northern rail line that connects central Wyoming with the Big Horn Basin and points beyond. In the recent past, Lysite has been the center of extensive gas field development and is three miles SW of a large gas plant at Lost Cabin. An important cross-country pipeline/powerline route also passes near Lysite and Lost Cabin.

The recently formed Lysite Water & Sewer District is intent on exploring the option for a central water system to provide a reliable potable supply to residents in the area. Existing water supplies consist of poor quality shallow domestic wells. Because surface water flows are seasonal (intermittent) a ground water source will be investigated.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Lysite Water Supply Project be incorporated into the New Development Program at Level I with an appropriation of \$75,000.

- 104. PROJECT:                    **Meade Creek Ditch Rehabilitation****  
**LEVEL:**                        II  
**SPONSOR:**                    Sheridan County Conservation District  
**LOCATION:**                     Sheridan County  
**PROGRAM:**                    Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	36	2000	I	\$100,000	2002
Level II	34	2004	II	\$ 75,000	2005

**PROJECT INFORMATION:**

The Meade Creek Ditch Rehabilitation project developed from the Prairie Dog Creek Watershed Level I Master Plan (*Prairie Dog Creek Watershed Master Plan Level I Study, November 2001, EnTech, Inc. for the WWDC*). The Sheridan County Conservation District and the major

ditch companies in the area sponsored the Level I watershed plan. The Meade Creek Ditch Company and the Tunnel Hill Watershed Improvement District sponsored the Level II feasibility study.

As part of the Level I study, three ditches that divert flow from North and South Piney Creeks into the Prairie Dog Creek basin were studied. The ditch companies include: Prairie Dog Water Supply Company, Piney and Cruse Creek Ditch Company, and the Meade Creek Ditch Company.

Over the years the trans-basin diversions across Tunnel Hill have caused considerable erosion and down cutting affecting both the operation of the ditches and the local environment. The Meade Creek Ditch diverts water from North Piney Creek and moves it into the Prairie Dog Creek drainage via a 36-inch pipe and “drop”. The “drop” entails a 150-foot waterfall. This waterfall has caused considerable erosion and transport of sediment, which causes both operational problems in the irrigation system and water quality concerns.

The Sheridan County Conservation District, upon request from the Meade Creek Ditch Company, formed the Tunnel Hill Watershed Improvement District. The Tunnel Hill Watershed Improvement District made application to the WWDC for a Level II Feasibility Study. The Level II study expanded the Level I baseline information to develop a rehabilitation plan for the drop and to mitigate erosion and sedimentation concerns. The study also looked at other opportunities for rehabilitation and improvement within the full length of the irrigation system. This study was conducted to expedite the assessment of the Tunnel Hill drop component of the Meade Creek Ditch Company facilities in order to afford the District the opportunity to advance rehabilitation opportunities to Level III construction in 2004.

The Tunnel Hill Watershed Improvement District has applied for a Level III construction project to rehabilitate the Meade Creek drop structure from the diversion on North Piney Creek through Tunnel Hill to an energy dissipation structure located at the upper end of the conveyance system. The proposed drop is to be a 22” HDPE pipeline approximately 560 feet long traversing an estimated 100 feet of vertical drop. The existing site is also to be rehabilitated by reclamation of existing erosion on the north slope of Tunnel Hill. The District requests WWDC participation with NRCS-EQIP and landowner contributions in funding the engineering and construction of the Meade Creek drop rehabilitation.

**CHAPTER III** Estimated Level III Costs:

Mobilization, Bonds & Insurance.....	\$ 32,000
Construct/ Obliterate Temporary Access Road.....	\$ 15,000
Open-cut 22” SDR 21 HDPE Pipe.....	\$ 15,500
Line Interior of Existing 36”CMP.....	\$ 30,000
Imported Fill to Provide 2H:1V Slope.....	\$ 200,000
4” Drain Pipe.....	\$ 1,000
Gravel Drain Material.....	\$ 30,000
Geotextile Filter Fabric for Gravel Drain.....	\$ 3,000
Unclassified Excavation Above Subgrade.....	\$ 4,000
Energy Dissipation Structure.....	\$ 25,000
Seeding.....	\$ 2,000
Erosion Control Blanket.....	\$ 4,000
Construction Cost Subtotal.....	\$ 361,500



Engineering Costs @10% of Construction Subtotal.....	\$ 36,150
Contingency @ 15%.....	\$ 60,000
Geotechnical Investigation of Possible Imported Fill Borrow Sites.....	\$ 10,000
Preparation of Final Design and Specifications.....	\$ 35,000
Permitting, Mitigation and Environmental Report.....	\$ 5,000
Legal Fees.....	\$ 5,000
Acquisition of Access and ROW.....	\$ 5,000
Total Project Costs(2006 dollars w/ 3% inflation).....	\$ 533,180
<b>Rounded.....</b>	<b>\$ 535,000</b>

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$401,250. The balance of funding needed for the project will come from other sources.

- 105.    PROJECT:                    **Meeteetse Storage Tank Rehab****  
**LEVEL:**                            New Application  
**SPONSOR:**                        Town of Meeteetse  
**LOCATION:**                         Park County  
**PROGRAM:**                        Rehabilitation

**PROJECT INFORMATION:**

In 2004 the Town of Meeteetse submitted an application seeking grant funding to assist in the expense of the rehabilitation of their only water tank used for storage. This tank was built in 1976 and has only had periodic interior cleanings. There has been no exterior or interior refinish work.

The rehabilitation of the storage tank comes from the recommendations made by the Liquid Engineering Corporation in 2002. In 2004 James Gores & Associates was hired by Meeteetse to inspect the tank and make recommendations and cost estimates for rehabilitating the tank. Based on the inspection, the tank needs to be patched in places and repainted. The estimated cost for the project is \$250,000. The Town of Meeteetse requested \$125,000 (50% grant) and will fund the remaining \$125,000 or 50% with town funds.

**Estimated Level III**

**Phase 1 Costs**

Design.....\$ 11,200.00

**Estimated Level III**

**Phase 2 Costs:**

Mobilization Bonds and Insurance.....	\$ 20,000.00
Weld Plate Patching.....	\$ 3,000.00
Interior Tank Cleaning and Epoxy Coating.....	\$ 30,000.00
Lead Abatement Removal of Exterior Paint.....	\$ 70,000.00
Exterior Epoxy Coating System.....	\$ 33,000.00
Rehabilitate Valve Vault.....	\$ 8,000.00
Temporary Storage Tanks.....	\$ 4,050.00
<b>SUBTOTAL.....</b>	<b>\$168,050.00</b>
Engineering (10%).....	\$ 16,805.00
<b>SUBTOTAL.....</b>	<b>\$196,055.00</b>
Contingency (15%).....	\$ 29,408.25
<b>Total Project Costs.....</b>	<b>\$225,463.00</b>

**Rounded.....                    \$250,000.00**

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$125,000 (50% Grant).

- 106. PROJECT: Middle Fork Dam**
- LEVEL: II-Hold
- SPONSOR: State of Wyoming
- LOCATION: Johnson County
- PROGRAM: New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
Level II	10	1994	I	Hold*	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\*A block appropriation of \$15,000 was made for all hold projects

PROJECT INFORMATION:

The proposed project would be located on the Middle Fork of the Powder River. The Middle Fork Reservoir would have a total capacity of 59,600 acre-feet, of which 47,700 acre-feet would be active storage for water supply and the remaining 11,900 acre-feet would serve as a minimum pool for fisheries and recreation purposes. The project would yield 32,200 acre-feet per year for industrial, agricultural and instream flow purposes. The project would cost approximately \$60,000,000. In 1990, WWDC completed negotiations to obtain an interest in the reservoir permits from the Powder River Reservoir Corporation (PRRC).

The transfer required a separate contract between EXXON U.S.A. and the WWDC. EXXON has invested about 1.5 million dollars in the project and has a contract with the PRRC, which has to be addressed before the state can proceed toward construction of the project. The Commission contracted with the USGS for a study of water quality parameters in the Powder River drainage. This report was completed in 1992.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends that the project be retained at Level II-Hold status.

- 107. PROJECT: Midvale Conservation Program**
- LEVEL: II
- SPONSOR: Midvale Irrigation District
- LOCATION: Fremont County
- PROGRAM: Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	125	2003	II	\$300,000	2004
Level II	34	2004	II	\$ 75,000	2005

PROJECT INFORMATION:

The Midvale Irrigation District requested a feasibility Level II study to determine potential water savings that could be realized by converting the entire irrigation project to: (1) underground pipelines, (2) underground pipeline/canal lining combination, or (3) some other form of water conveyance improvements that would be more efficient than that currently in use.

This study includes a detailed inventory and assessment of structures/facilities currently in use, seepage and evaporation loss studies of all canals and laterals, proposed alternative methods to improve water conveyance, and estimated costs of such improvements. It is anticipated that improvements to this irrigation system are to be implemented over a 10 to 20 year time period as an ongoing construction effort that would optimize water conservation opportunities and minimize financial impacts to the District water users.

The WWDC Level II Report: Hidden Valley Pipeline Level II Feasibility Study, November 2003 investigated re-regulation storage sites. The Sand Gulch Re-Regulation Reservoir (1,160 AF) is undergoing further evaluation specifically to include a geotechnical investigation, assessment of specific permitting requirements and evaluate land acquisition costs pertinent to this project.

The Midvale Irrigation District, as a result of rehabilitation opportunities identified in the Level II Conservation Program and concurrent with the implementation timetable, has applied for a Level III construction project to rehabilitate the Wind River Diversion Dam gearbox facility. This diversion dam is the facility that diverts water from the Wind River, source of supply for the entire Midvale Irrigation District system, into the Wyoming Canal and the Pilot Canal conveyance systems. The existing gear boxes are aged, open air mechanisms and are to be replaced with modern mechanisms that will prevent sediment accumulation, reduce annual maintenance costs, and will facilitate future automation of the diversion dam. This will enhance water conservation efforts through improved water deliveries. The District requests WWDC participation with District contributions in funding the engineering and construction of the Midvale Irrigation District Wind River Diversion Dam rehabilitation.

**Estimated Level III Costs:**

Small Gear Boxes (6).....	\$ 65,000
Large Gear Boxes (4).....	\$ 71,000
Electric Motors (10).....	\$ 6,000
KCouplings (20).....	\$ 27,000
Miscellaneous Materials/Hardware.....	\$ 32,000
Subtotal.....	\$ 201,000
Engineering (10%).....	\$ 20,000
Subtotal.....	\$ 221,000
Contingency (15%).....	\$ 33,000
Final Design and Specifications.....	\$ 20,000
Permitting and Mitigation.....	\$ 1,000
Legal Fees.....	\$ 1,000
<b>Total Project Costs.....</b>	<b>\$ 276,000</b>

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level III with an appropriation of \$138,000.

- 108. PROJECT: Moorcroft Well**  
**LEVEL: III**  
**SPONSOR: Town of Moorcroft**  
**LOCATION: Crook County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	38	1992	I	\$35,000	1992
Level II	74	1994	I	\$225,000	1994
Level III	28	1994	I	\$930,000*	1997

Level II	36	2000	I	\$355,000	2002
Level II	86	2001	I	\$145,000	2002
Level III	69	2003	I	\$2,250,000**	2008

\*67% grant, 33% loan (4%, 30 years)  
\*\*60% grant

**PROJECT INFORMATION:**

In 1992, a Level I study conducted for the town of Moorcroft recommended construction of a new storage tank and connection piping collection system. The study also recommended that both a Lance/Fox Hills Formation well and a Madison Formation well be developed. In 1994, after the conclusion of a Level II study, the town of Moorcroft constructed the new storage tank, system piping, and drilled a new Lance/Fox Hills test well. The Madison test well was completed in 2001 to a total depth of 3,750 feet and produced 600 gpm during the pump test.

The 2003 funding from WWDC to connect the Madison well to the town's water distribution system has been secured for 60% of project costs. The sponsor is securing the balance of the project funding. When all of the funding is secured the sponsor will proceed with hiring an engineer for design services.

When the project is completed and the well is placed into service, the sponsor will be obligated to make amortized (6.0% interest, 30 years) payments on \$129,031.40, which represents 40% of the cost of the Madison Well completed in Level II.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 109. PROJECT: Newcastle Area Water Supply**  
**LEVEL:** III  
**SPONSOR:** City of Newcastle  
**LOCATION:** Weston County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I`	15	1996	I	\$100,000	1998
Level II	46	1997	I	\$500,000	2000
Level II	82	1998	I	\$140,000	2000
Level II	81	1999	I	\$420,000	2000
Level III	96	2000	I	\$1,320,000*	2004**
Level III	118	2004	I	\$-0-	2006

\*60% grant, 40% loan (7.25%, 30 years)

\*\*This reversion date was extended to 2006.

**PROJECT DESCRIPTION:**

The city of Newcastle received a loan and grant appropriation for construction of a water storage tank, pressure reducing valve stations, and transmission pipelines to improve the municipal water system and its ability to provide service to neighboring entities, e.g. Cambria, West End, Salt Creek, and Blacktail. Regional solutions were explored in the 1999 Level II study, which also provided for the drilling of a Madison formation well for the Salt Creek Water District.

The construction contract for pressure reducing valve stations and booster pump station is complete. During construction it was determined that by adding one more booster pump and opening a valve to allow the booster pumps to reduce the head on both Well No. 1 and Well No. 4, that possibly production from Well No. 4 could be increased to the point that the new storage

tank and appurtenant pipelines would not be needed now. The additional booster pump was installed and system performance has been such that the new storage tank and appurtenant pipelines will not be constructed under this project. Construction of the transmission pipeline from the booster pump station to the existing water storage tank no. 1 has begun and should be complete in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 110. PROJECT: North Alpine Water Supply/North Alpine Rehabilitation**  
**LEVEL:** III  
**SPONSOR:** North Alpine Improvement & Service District  
**LOCATION:** Lincoln  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$60,000	2004
Level III	69	2003	II	\$257,000	2008

**PROJECT INFORMATION:**

A consulting engineer has been hired and design work has been completed. Construction on the new well, transmission lines, storage tank, and distribution system are nearly complete. It is anticipated that the project will be completed in the spring of 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is needed.

- 111. PROJECT: North Cheyenne Master Plan**  
**LEVEL:** II-Hold  
**SPONSOR:** Laramie County Commission  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
Level II	10	1994	I	Hold*	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\*A total appropriation of \$15,000 is available for hold projects.

**PROJECT INFORMATION:**

Water levels in domestic and stock wells in the north Cheyenne area have been decreasing. There are approximately 1,500 residences in the north Cheyenne area with a population of approximately 5,000 people. The area encompasses approximately 30 square miles. All the residences are served by individual wells and wastewater is treated with individual septic systems. In 1991, the Laramie County Commissioners requested a Level I planning study to develop a master plan for the north Cheyenne area. The request was initiated in response to complaints of residents concerning reduced water levels in wells and possible water quality degradation.

In 1992, the WWDC contracted with a consultant to complete a Level I water supply master plan study of the north Cheyenne area. The study was completed in 1993 and identified several water supply alternatives. Reconnaissance level designs and cost estimates were prepared for a system that would utilize groundwater as a water source, a rural water supply system with transmission capacity to address future growth using water supplied by the Cheyenne Board of Public Utilities, and a water supply system with limited transmission capacity using water supplied by the Cheyenne Board of Public Utilities. In addition, water conservation, aquifer recharge and no action alternatives were also evaluated. The Level I report concluded that the preferred alternative is to purchase water from the City of Cheyenne and to systematically construct a transmission pipeline system to accommodate existing and future water supply needs. The cost of a water supply system built to the City of Cheyenne standards is about \$45 per household per month. Each landowner would also have to finance approximately \$14,000 needed to connect to the main water supply lines and to build an internal water distribution system.

The project was terminated at the conclusion of the Phase I work program because several issues (annexation, property owner interest) had to be resolved before additional technical work can be performed.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be retained at Level II-Hold status.

- 112. PROJECT:** Northeast Wyoming Interactive Database  
**LEVEL:** I  
**SPONSOR:** Wyoming Geological Survey  
**LOCATION:** Northeast Wyoming  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	86	2001	I	\$400,000	2003

**PROJECT INFORMATION:**

The coalbed methane development in the Powder River Basin is currently one of the most active in the U.S. These wells collectively produced 58.1 billion cubic feet of gas in 1999. The average water production per well is approximately 12 gpm, which equates to approximately 40 mgd. This water is typically discharged to the surface. BLM projects that a total of 35,000 to 70,000 cbm wells may ultimately be completed.

The purpose of the project is to generate an interactive database that will provide information on the surficial and subsurface geology, groundwater hydrology, and surface and subsurface water quality of part of the Powder River Basin. The study includes the northern half of the basin and was completed in 2004 in by the Wyoming Geological Survey and the University of Wyoming Water Resources Data System in cooperation with the United States Geological Survey-Water Resources Division, the Bureau of Land Management, the Wyoming Oil and Gas Conservation Commission, the Wyoming Water Development Commission, the Wyoming Department of Environmental Quality, and the Wyoming State Engineer’s Office.

The project is proposed to be continued in order to complete coverage of the entire basin. The project area is bounded on the north by the 12<sup>th</sup> Standard Parallel North, on the south by the 8<sup>th</sup> Standard Parallel, on the east by the basal contact between the Fox Hills Sandstone and Pierre Shale, and on the west by the geologic contact between the Fort Union and Lance Formations. More approximately, the project extends to Douglas on the south, Lance Creek on the east, and Kaycee on the west.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the Northeastern Wyoming Interactive Data base Project be continued in the New Development Program with an appropriation of \$575,000.

- 113. PROJECT:** Northern Arapaho Ground Water Development  
**LEVEL:** Level II  
**SPONSOR:** Joint Business Council of the Eastern Shoshone and Northern Arapaho Tribes  
**LOCATION:** Fremont County  
**PROGRAM:** New Development

**PROJECT DESCRIPTION:**

The Ethete area water system (operated by Northern Arapaho Utilities Organization) relies solely upon highly variable (both in quantity and quality) surface water diverted from the Little Wind River. Low flows due to irrigation demands in the summer and natural low flows in the winter often leave Arapaho Utilities unable to divert enough water to meet domestic water needs. High turbidities during runoff and after the South Fork II fire (June 2002) have also caused significant operational problems, which reinforces the need for a reliable ground water source of domestic water. In addition, existing ground water supplies in the Arapahoe service area and Industrial Park are insufficient to meet projected future demands.

In 2004, WWDC funding was acquired to further investigate the feasibility of developing available groundwater resources, drill wells test at locations identified in the feasibility study, and develop a Master Plan for Northern Arapaho Utilities to prioritize needed infrastructure improvements.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 114. PROJECT:** North Side Transmission Line  
**LEVEL:** New Application  
**SPONSOR:** Wright Water & Sewer District  
**LOCATION:** Campbell County  
**PROGRAM:** New Development

**PROJECT DESCRIPTION:**

The North Side Transmission Line is necessary to increase fire flow, meet peak water demands and provide redundancy for the Health Clinic, the local mall and the north side of the district.

The project will consist of the installation of a 12” transmission pipeline, connections to the existing distribution system and miscellaneous related items.

The District will construct the transmission pipeline with district personnel. The district personnel have experience with potable water pipeline installation.

**Estimated Level III Project Cost:**

Design.....	\$ 44,811
Construction:	
Pipeline.....	\$ 172,450
5” Asphaltic Concrete Patching.....	\$ 1,125
Connections to Existing Pipeline.....	\$ 1,000
Flushing Hydrants.....	\$ 10,000
Seeding.....	\$ 5,250

Concrete.....	\$ 1,000
Highway Bore Material.....	\$ 18,750
Chlorination.....	\$ 35,000
In-Kind Services.....	\$ 162,800
Engineering (10%).....	\$ 44,811
Contingency (10%).....	\$ 40,737
<b>SUBTOTAL CONSTRUCTION COSTS</b>	
<b>TOTAL PROJECT COSTS.....</b>	<b>\$ 537,734</b>
<b>ROUNDED.....</b>	<b>\$538,000</b>

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level III, with a grant only appropriation of \$269,000.

- 115. PROJECT: North Uinta/Bear River Water Supply**  
**LEVEL: III**  
**SPONSOR: North Uinta County Improvement & Service District**  
**LOCATION: Uinta County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	81	1999	I	\$40,000	2000
Level II	86	2001	I	\$100,000	2002
Level III	69	2003	I	\$580,000	2008

**PROJECT INFORMATION:**

The North Uinta County Improvement & Service District (NUCISD) is located 10 miles north of Evanston. The district consists of six different sections, Whitney Canyon, El Caballo 1, El Caballo 2, Lower Deer Mountain, Upper Deer Mountain 1, and Upper Deer Mountain 2. In June of 2001, these entities joined and incorporated into the Town of Bear River. During the Level I study, one of the two supply wells for the Deer Mountain subdivision began to fail. The district/town needed to drill a well in the Deer Mountain area to replace the failing well.

A successful test well was drilled in 2002 during the Level II Study. The Town acquired emergency State Land & Investment Board funding to tie the well into the existing system and applied to WWDC for 2003 Level III funding for a new tank and transmission line.

The town was awarded a \$290,000 loan and a \$ 290,000 grant by the 2003 legislature to complete the project. The appropriation was predicated upon the condition that the size of the storage installed is to be downsized if the Town of Bear River and the Town of Evanston cannot coordinate a water supply to serve a regional constituency.

The two entities are discussing whether a regional system is appropriate and a consultant was selected by the WWDC to conduct a Level II analysis of the regional system. Considerable coordination has occurred to insure that the facilities constructed by Bear River will be compatible with regional facilities if and when they occur.

An engineer has been selected and design work is nearly complete. Construction will commence in 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.



**116. PROJECT: NW Rural Water Storage**  
**LEVEL: III**  
**SPONSOR: Northwest Rural Water District**  
**LOCATION: Park and Big Horn Counties**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	I	\$1,120,000*	2008

\*50% grant, 50% loan (6%, 30 years)

PROJECT INFORMATION:

The project includes installation of water storage tanks at five locations within the Northwest Rural Water District water delivery system. The relatively new system was designed for limited growth, knowing that as users were added additional storage would be required. The number of users in certain service areas have increased to the point where additional storage is needed. The proposed project will serve to extend the time water is available to users during interruptions in supply.

The project is being constructed and should be complete in 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**117. PROJECT: Owl Creek Irrigation District Master Plan**  
**LEVEL: I**  
**SPONSOR: Owl Creek Irrigation District**  
**LOCATION: Hot Springs County**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	II	\$150,000	2004

PROJECT INFORMATION:

The Owl Creek Irrigation District is incorporated with the Wyoming Secretary of State's Office. The District's water supply is made up from a combination of Owl Creek direct flow water, storage water from Anchor Dam and pumped water from the Bighorn River. Owl Creek Irrigation District has three separate areas known as upper and middle serving 9,282 acres and Lucerne serving 3,997 acres. The upper and middle areas are dependent largely on direct flow supplies and storage from an active account in Anchor Dam of approximately 18,000 acre feet. The Lucerne area delivers pumped water from two lift stations through approximately 33 miles of conveyance system. The purpose of this study is to conduct a watershed evaluation of the Owl Creek drainage with emphasis on storage possibilities for the upper and middle areas and potential water conservation measures for Lucerne. The 2003 Legislature incorporated this project into the Rehabilitation Program at Level I with an appropriation of \$150,000. The final report was completed and delivered in 2004.

The Owl Creek Irrigation District has requested the Wyoming Water Development Commission conduct the Owl Creek Irrigation District Storage Supply, Level II, Phase II feasibility study. The purpose of this study is to install gauging stations to determine seepage and evaporative losses to Anchor Reservoir and District water conveyance facilities, conduct a literature and information review of seismic and geophysical analysis of Anchor Reservoir, conduct an analysis

and evaluation of conveyance of water from South Fork of Owl Creek to North Fork of Owl Creek, and conduct a feasibility study of the alternate reservoir sites recommended in the Owl Creek Master Plan, Level I study.

The Owl Creek Irrigation District has also requested the Wyoming Water Development Commission conduct the Owl Creek Irrigation District Conservation Study. The purpose of this Level II feasibility study is to conduct a seepage loss analysis, conduct a feasibility study and develop a rehabilitation plan of the conveyance system for the Lower (Lucerne) area of the Owl Creek Irrigation District, determine the costs of mitigation measures to deal with seepage losses to this conveyance system recommended in the rehabilitation plan, and evaluate the viability and efficacy of polyacralimide monomers (PAM) within this conveyance system.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends an appropriation of \$200,000 from the New Development Account for the Storage Supply Level II, and \$100,000 from the Rehabilitation Account for the Conservation Level II study.

- 118. PROJECT: Pine Bluffs Brule Formation Water Supply**  
**LEVEL: III**  
**SPONSOR: Town of Pine Bluffs**  
**LOCATION: Laramie County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$250,000**	2008

\*\*50% grant, 50% loan (6%, 30 years)

**PROJECT INFORMATION:**

During the summer of 2002, the Town of Pine Bluffs experienced critical water shortages due to extreme drought conditions. Substantial decline in the water table of the Brule Formation aquifer has been experienced in all wells in southeastern Laramie County. The Town's Municipal Well #5 has failed and the town procured WWDC Ground Water Exploration Grant funding in Fall 2002 to drill a replacement well. A successful test well was discovered and will serve as a replacement well for Well #5. Using the 2003 Level III appropriation, the installation of pumping equipment, controls, and pipeline to tie the new well into the town system is complete with closeout payments remaining to be made to the contractor and to the engineer.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 119. PROJECT: Pine Bluffs Lance-Fox Hills Test Well**  
**LEVEL: II**  
**SPONSOR: Town of Pine Bluffs, Incorporated Municipality**  
**LOCATION: Laramie County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	10	1994	I	\$75,000	1996
Level II	8	1995	I	\$150,000	1996
Level III	96	2000	I	\$1,245,000*	2004
Level II	34	2004	II	\$475,000	2006

\*60% grant, 40% loan (7.25%, 20 years)

PROJECT INFORMATION:

The Town of Pine Bluffs has depended solely on ground water supplied from shallow wells completed in the Brule Member of the White River Formation. The complexity of the aquifer and its vulnerability to nearby agricultural land use has guided the town to seek potential alternative aquifer sources. Underlying the White River Formation in southeastern Wyoming is the Upper Cretaceous-Age Lance Formation and Fox Hills Sandstone that have been developed elsewhere in Wyoming and the Denver Basin (Lance Formation equivalents in Colorado are Arapahoe and Laramie Formations) for drinking water supplies. A Lance aquifer well near Pine Bluffs (Lodgepole Valley Potatoes/Diamond Hill Farms well) has tested favorably for water quality and a deep test well drilled in February 2003 (WWDC Ground Water Exploration Grant Program) showed potential water sands at various intervals to a 995’ total depth. The goal of the requested Level II investigation is to drill a production size test well to fully penetrate and test the Lance-Fox Hills aquifer system at Pine Bluffs.

The 2004 Level II study is in the process of evaluating environmental concerns and drilling sites. Environmental clearances for federally associated projects are causing drilling timing and budget problems. This is a two-year project with the test drilling to take place during the second year in 2005 pending environmental clearances.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 120. **PROJECT:** Pine Bluffs Supply
- LEVEL:** III
- SPONSOR:** Town of Pine Bluffs
- LOCATION:** Laramie County
- PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	10	1994	I	\$75,000	1996
Level II	8	1995	I	\$150,000	1996
Level III	96	2000	I	\$1,245,000*	2004

\*60% grant, 40% loan (7.25%, 20 years)

PROJECT INFORMATION:

A Level I study funded by the WWDC recommended construction of a transmission line, which would connect the town’s wells directly to their storage tanks. This would accommodate construction of a single disinfection system at the tank, rather than installing disinfection systems at each well. In 1995, a Level II study also looked at rehabilitation of the town’s existing wells, and updated Level I results for constructing the above referenced transmission pipeline. A 1996 Level III construction project replaced one well (see Completed Construction Projects section near the back of the book). The 2000 Level III appropriation funded construction of the “wells to storage” transmission line to allow the town to more efficiently disinfect their water supply.

Construction of the transmission pipeline and appurtenances is complete.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**121. PROJECT: Pine Haven Madison Well**  
**LEVEL: III**  
**SPONSOR: Town of Pine Haven**  
**LOCATION: Crook County**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	36	2000	I	\$35,000	2001
Level II	7	2002	I	\$575,000	2004
Level III	69	2003	I	\$115,000*	2008

\*50% grant

PROJECT INFORMATION:

The “Town of Pine Haven Water System Master Plan,” completed by Stetson Engineering in 2000, recommended that a second water well be developed to meet increased demands associated with growth and development and to provide system redundancy. The town had only one source of supply, the Keyhole No. 1 Well. If this well should fail, the community would be out of water as soon as the storage tank emptied. To increase the reliability of service to the water system, it would be advantageous to have a second supply well. A successful Madison Formation Aquifer well was drilled and tested in August/September of 2002.

The 2003 Level III funding is to connect the new Madison Well to the water system. Construction is complete with closeout payments remaining to be made to the contractor and to the engineer. The sponsor is now obligated to make amortized (6.0% interest, 30 years) payments on \$144,847.45, which represents 50% of the cost of the Madison Well completed in Level II.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

**122. PROJECT Platte-Goshen Regional Master Plan**  
**LEVEL: I**  
**SPONSOR: City of Torrington**  
**LOCATION: Goshen and Platte Counties**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	I	\$150,000	2004

PROJECT INFORMATION:

Numerous communities in the Platte and Goshen Counties area have experienced problems with water quality from nitrates, radionuclides, coliform, etc. This project looked at alternate supply sources and transmission systems necessary for regional water use in this area. The communities in the area include Hartville, Guernsey, Camp Guernsey, Fort Laramie, Lingle, Torrington, major sub-areas around Torrington, Huntley, Veteran, Yoder, Hawk Springs, and the rural areas along the pipeline routes. This was a two-year study.

Four prospective groundwater drilling sites and a surface water treatment plant site were identified. The four drilling sites are Hartville, Dwyer, and Casebier Hill to the Northwest of the study area and Wycross to the south of the study area. Along with the water source areas, several distribution system layouts were identified. Due to the high cost of the transmission lines and treatment plants, no action was taken by any of the water users in the study area. The project was initiated in 2003 and was completed 2004.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 123. **PROJECT:** Powell Master Plan/Powell Water Supply Rehabilitation
- LEVEL:** III
- SPONSOR:** City of Powell
- LOCATION:** Park County
- PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	36	2000	II	\$45,000	2002
Level III	2	2001	II	\$127,000*	2005
Level III	88	2002	II	\$785,000*	2007
Level III	69	2003	II	\$51,000*	2007
Level III	118	2004	II	\$200,000*	2008

\* 50% Grant

PROJECT INFORMATION:

The sponsor would like to move forward with the recommended improvements to their water system as outlined in the Level I study funded by the WWDC in 2000. The Level I study recommended replacing the old 75,000-gallon elevated storage tank with a 400,000 elevated tank in the southwest part of the city. This new storage tank will meet the storage needs of the sponsor well into the future.

A new pressure zone is needed in Powell to increase marginal pressures in the western part of the city. Four pressure reducing valves and associated piping are also needed to complete the pressure zone. Phase 1 consists of designing the project, compiling specifications, securing construction permits and securing rights of way. Phase 2 will include the pressure reducing valves and piping construction. Phase 3 will include the construction of the storage tank and telemetry system.

Due to limited WWDC funds the project received \$ 127,000 in 2001 for design services only. The sponsor received \$ 785,000 in 2002 for construction of the new water storage tank. All funding was matched by the sponsor. Because of the lead-time necessary for tank delivery, the tank was bid first with appurtenances to follow.

In August 2002, the sponsor’s existing elevated storage tank was inspected. The interior of the tank was found to be in need of recoating, but the exterior was in acceptable condition. Since tank painters will be onsite to paint the new storage tank, the sponsor would like to include recoating of the old tanks in the Project. This will save the sponsor and state the cost of mobilization at a later date.

In 2003, the sponsor was given \$51,000 to complete the existing tank repairs.

The engineer has now completed design work for the control vaults and appurtenances and finds that some modifications to the original concept have resulted in an increase to the overall budget. For this reason an additional \$ 200,000 grant was added to the project in 2004. The sponsor matches all grand funds.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

- 124. PROJECT: Pursel Acres Water Project**  
**LEVEL: III**  
**SPONSOR: Pursel Lands Improvement & Service District**  
**LOCATION: Natrona County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	I	\$100,000	2004
Level III	69	2003	I	\$341,000	2008

**PROJECT INFORMATION:**

The recently completed South Garden Creek Level I Study looked at the potential of adding the area south of Casper (and alongside Casper Mountain) to the City of Casper's public water supply system. Five unique service areas were identified in the Level I Study, including: Squaw Creek/Wolf Creek, South Garden Creek, Elkhorn Valley, Coates Road and Pursel Lands.

The preferred water supply source for the Pursel Lands service area was identified as the City of Casper water system as an outside City retail water customer. The main City supply will be provided from a 12-inch transmission pipeline constructed under the highway from the Skyline Ranches area. Two other connections will be made to 6-inch and 8-inch water lines in Red Butte Village.

The 2003 legislature appropriated \$341,000 or 50% of the eligible cost for this project. The district has thus far been unsuccessful in its attempts obtain funding for the remaining 50% of the project.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 125. PROJECT: Rafter J Rehabilitation**  
**LEVEL: Level III**  
**SPONSOR: Rafter J Improvement and Service District and Teton County**  
**LOCATION: Teton County**  
**PROGRAM: Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	46	1997	II	\$ 60,000	1998
Level III	69	2003	II	\$ 510,000	2008

**PROJECT INFORMATION:**

The Rafter J Improvement and Service District has a population of approximately 2,500 people. The community has a water supply system supplied by two wells and a 200,000 gallon storage tank. The system serves 500 homes and 25 commercial taps. The system was originally designed to include three wells and an additional tank. The existing system is inadequate and cannot meet demands during the summer. The district would like to drill another well and provide additional storage.

The community formed their district in 1998, and a Level II evaluation was completed. The Level III funding request was approved in 2003. The district has contracted with an engineering firm and design of the project has begun.

The sponsor has been successful in securing matching funds from Teton County. In order to complete the project additional WWDC funds are necessary. An additional grant of \$ 41,500 will allow the sponsor to offset inflation and add a storage tank to the project.

**RECOMMENDED LEGISLATIVE ACTION:**

An appropriation of \$ 41,500 is requested.

- 126. PROJECT: Ranchester Water Supply / Ranchester Tank**  
**LEVEL:** II  
**SPONSOR:** Town of Ranchester, Incorporated Municipality  
**LOCATION:** Sheridan  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	II	\$75,000	2004
Level II	125	2003	II	\$80,000	2004

**PROJECT INFORMATION:**

A Level I Master Plan was completed for Ranchester in November 2002. The Master Plan identified several points of concern and possible alternatives for remedying these issues. Ranchester then requested a feasibility and cost analysis of the recommendations outlined in the Level I study. These recommendations included the evaluation of a new infiltration gallery; in-depth evaluation of water treatment processes used for taste and odor control and disinfection; as well as storage and distribution needs.

The Level II study was completed in November 2004 and the greatest need identified in the study was for additional treated water storage. To meet this need, Ranchester would like to combine WWDC funds, capital facilities tax revenues, and USDA Rural Utilities Service funds to construct a 500,000 gallon storage tank. Ranchester has an existing 500,000 gallon tank and this new tank would mirror the existing tank and double their capacity while allowing the existing tank to be rotated out of use during the winter for maintenance and repair.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level III with an appropriation of \$314,000.

- 127. PROJECT: Rawlins Raw Water Storage Project**  
**LEVEL:** New Application  
**SPONSOR:** City of Rawlins  
**LOCATION:** Carbon County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The City of Rawlins wishes to have a Level II study completed to better define plans, feasibility and parameters for construction of a second raw water peaking reservoir. The best location would be adjacent to the existing raw water storage reservoir. The drought over the past few years has pointed out the need for additional raw water storage. Although Rawlins has some excellent water rights, some of their rights are junior to other users. During the drought and calls on the North Platte River, the town has had to accommodate senior users. This has occurred on several occasions over the last three years. During most of the year water is available and by using a

peaking reservoir near the treatment plant they can store water when it is available from their various sources. They use water from the Sage Creek Springs, the Miller Hill Wells, and the Platte River Pipeline. Locating the reservoir at the water treatment plant provides the flexibility to store water from any of the various sources when it is available.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level II with an appropriation of \$150,000.

- 128. PROJECT:                      **Rawlins Water Supply****  
**LEVEL:**                              **III**  
**SPONSOR:**                         **City of Rawlins**  
**LOCATION:**                         **Carbon County**  
**PROGRAM:**                         **Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	10	1994	I	\$250,000	1996
Level II	46	1997	I	\$120,000	1998
Level III	38	1998	II	\$3,810,000*	2002
Level III	88	2002	II	*60% grant	2005

**PROJECT INFORMATION:**

In 1996, the City of Rawlins requested a Level II study to evaluate possible improvements to their Sage Creek spring collector system, the Fort Steele pipeline, and the water treatment plant. The Ft. Steele line is in poor condition, badly corroded, and is nearly unusable. The city has experienced taste and odor problems during summer months and has asked the Farm Loan Board to fund additional development of the springs on Sage Creek. It appears the algae growth in the reservoir in conjunction with the existing treatment process has resulted in unacceptable water quality. Level II funding was provided by the Wyoming legislature in 1997. The study was completed in the spring of 1998.

A preliminary report prepared by the consultant recommended expansion of the spring collection field, replacement of a wood stave transmission line in the spring field, replacement and relocation of the Platte River diversion, replacement and relocation of the Platte River water supply raw water transmission main, and major water treatment plant improvements. The preliminary Level II study concludes that these improvements will provide Rawlins with a reliable water supply for the next 25 years.

Expansion of the spring collector field alone is insufficient to provide adequate water to Rawlins for the 25 year planning horizon. In order to meet peak day demands, replacement of the pipeline that conveys water from the North Platte River to the city is needed. The proposed new pipeline would follow a more efficient route that will involve a change in the point of diversion. The new alignment will facilitate possible delivery of raw water to outlying subdivisions, potential raw water irrigation of some parks, and delivery of water to the town of Sinclair in emergencies.

Expansion and improvement of the spring field is contemplated at a later date. In addition, there are proposed water treatment plant upgrades that total \$3,500,000. The city of Rawlins will fund these improvements with capital facilities tax money and grants/loans from funding agencies other than the WWDC.

In 1998 the city of Rawlins received a 60% grant for replacement of the Ft Steele North Platte pipeline (\$6,352,000 total cost). The remaining 40% of the project cost was financed through a capital facilities sales tax that passed on November 4, 1997.



Constructions of improvements to the water treatment were completed in 2001. An engineering contract was awarded in April 1999 for design of the intake diversion, pumping station and transmission line. Design of the new raw water line has been completed and construction is scheduled to be completed by July 2003. Routing of the transmission line will provide raw water to the water treatment plant as well as for irrigation of the new city golf course which is to be located on the east side of the city.

There were substantial project time delays owing to the issuance of a BLM right-of-way use permit, Section 7 consultation pursuant to the Endangered Species Act and a preliminary design realignment owing to issues concerning state highway rights of way caused construction to be delayed. Construction of the transmission line was not able to proceed until next August 2002 because of wildlife stipulations, which limited construction activities to between August 1 and November 15th. The 2002 Legislature therefore extended the project reversion date until July 1, 2005.

In October 2002, the City of Rawlins and Town of Sinclair reached an agreement, which will have Sinclair's potable water being provided by the Rawlins drinking water treatment plant. Rawlins will lease "unrestricted water rights" for fifty years on one cubic foot per second, which would then be transferred from Sinclair to Rawlins at the end of the lease period. The Town of Sinclair will be charged \$0.84 per thousand gallons of treated water to serve Town residents and the Sinclair Oil Refinery. Sinclair Oil Refinery will continue to obtain its industrial water from the existing Town of Sinclair intake, treatment and transmission line that will be purchased from the Town in the amount of \$1.25 million. The Town of Sinclair will use these monies to make needed improvements to the Town's distribution system and to cover the Town's share of a WWDC funded project to construct a storage tank and transmission line west of the Town near the Shark's Tooth Ridge.

The 2003 Legislature authorized extension of the project reversion date and project description to allow construction of a new 2.5-mile 12-inch treated water transmission line to connect the Rawlins water system to the new Sinclair water storage tank. Construction on the treated water transmission line was completed in December 2003.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 129. PROJECT: Ray Lake Enlargement**  
**LEVEL: II**  
**SPONSORS: Shoshone & Arapaho Tribes**  
**LOCATION: Fremont County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$100,000	2005

**PROJECT INFORMATION:**

The enlargement of Ray Lake, on the Wind River Reservation, has been a potential project for many years. Designs were completed in 1996 for the project, but funding was not available at that time. When the State Legislature enacted Enrolled Act No. 50, allowing the tribes to sponsor water development projects through the Water Development Commission, Ray Lake Enlargement became a possibility. During the study phases for the Ray Lake project, an environmental assessment was completed, which provided information on impacts and potential benefits.

This Level II study project will review the designs and enlargement options, and begin the environmental evaluation process. The coordination process with the tribes and federal agencies would be a key component of the project. Additionally, important issues to be considered for the existing reservoir and the enlargement project are permitting and water rights. The study is under way and will be completed in 2005

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 130. PROJECT: Riverton/Mountain View Acres Water Supply**  
**LEVEL:** New Application  
**SPONSOR:** City of Riverton, Incorporated Municipality  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation

**PROJECT INFORMATION:**

The City of Riverton and the Mountain View Acres subdivision have come together to jointly apply for a study that would benefit both entities. The Mountain View Acres subdivision is currently being served by their own well, however, that well was drilled over 25 years ago and its continued long term use is in doubt. Riverton has determined a need for an additional well to serve the west side of the City, along with supply redundancy and increased pressures. During the study, WWDC will evaluate the Mountain View Acres well for its long term use and its potential for increased productivity. If the Mountain View well is determined not suitable for increased use, then a test well will be drilled for Riverton which would be capable of providing water to Mountain View Acres as well as meeting the needs of Riverton residents in the western portion of the city. The test well could be drilled at a cost of approximately \$170,000; if the Mountain View well were evaluated to be capable of meeting all the needs of both entities, then the test well would not be drilled and the appropriated money would remain in WWDC accounts.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level II with an appropriation of \$300,000

- 131. PROJECT: Riverton Raw Water Supply Rehabilitation Project**  
**LEVEL:** III  
**SPONSOR:** City of Riverton  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	46	1997	I	\$150,000	1998
Level II	81	1999	I	\$65,000	2000
Level III	2	2001	II	\$85,000*	2005
Level III	118	2004	II	\$1,001,500*	2010

\* 50% Grant

**PROJECT DESCRIPTION:**

This project proposal came from recommendations described in the WWDC Level II Riverton Water Supply Study completed by Nelson Engineering in June of 2000. The municipal and residential raw water distribution system within the City of Riverton is an offshoot of surrounding agricultural irrigation systems. The responsibility for operations and maintenance of the ditches,

pipes, and laterals comprising the system was assumed by the sponsor several years ago. The system serves approximately 200 paying customers (\$98.00/user/year), but actual users are estimated to be upwards of 400, and potentially 790 users could be served by an expanded, rehabilitated system.

Preservation and expansion of the system would extend the life-span of the City of Riverton's water treatment plant since the present-day use of the irrigation system is estimated at 400,000 gallons/day. Two laterals that are proposed for rehabilitation are primary laterals for Riverton Valley Irrigation District and LeClair Irrigation District that deliver water to irrigators downstream of the city of Riverton system. The sponsor has retained an engineering firm to design this project. The design should be completed early in 2004.

Due to limited WWDC funds the project received \$85,000 in 2001 for design services only. The sponsor is now intending to proceed with construction. The additional grant funds of \$1,001,500 appropriated in 2004 will be used to pay 50% of project eligible costs with the remaining funds from other sources.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 132. PROJECT: Riverton Valley Rehabilitation No. 2 -I**  
**LEVEL: III**  
**SPONSOR: Riverton Valley Irrigation District**  
**LOCATION: Fremont County**  
**PROGRAM: Rehabilitation**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	II	\$40,000	2002
Level III	88	2002	II	\$335,000*	2007

\*50% grant

**PROJECT INFORMATION:**

Flow measurements on the Riverton Valley Canal were conducted as part of the Wind River Basin study. The Riverton Valley open laterals experience high exfiltration as well as high maintenance costs. In 1994, the Commission recommended the project advance in the Rehabilitation Program to Level III status with an appropriation of \$350,000. This project addressed twelve laterals under the main canal system. These open canals were replaced by buried pipelines, which greatly reduced maintenance costs and water losses. The district prioritized system repairs and work was completed in four phases from 1995 through the spring of 1999. The district was granted funds to purchase project materials. The district was responsible for all costs related to project design, permit procurement, land procurement, construction engineering and construction of the project. A total of 12 laterals were rehabilitated over a four-year period from 1995 to 1999. The district has realized a 25% increase in delivery efficiency with the improvements made to date.

The Riverton Valley Irrigation District, in an effort to continue their conservation program updated the WWDC Level I Report: by using WWDC funds appropriated by the Legislature to determine the feasibility and practicability of implementing the conservation measures outlined in the Level I Report. The Level II Report recommended the installation of pipe in fifteen additional open laterals and provided a revised estimate for rehabilitation costs totaling \$670,000. The 2002

Legislature appropriated \$335,000 for 50% of the project costs to be used for the purchase of materials. Engineering, installation and permitting costs are provided by the district. Design and rehabilitation construction on twelve laterals has been completed through the end of 2004. The remaining three laterals are scheduled to be completed during 2005.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 133. PROJECT: Riverton Valley Rehabilitation #2, Phase II/Riverton Valley Underflow Project**  
**LEVEL:** III  
**SPONSOR:** Riverton Valley Irrigation District  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$40,000	2004
Level III	69	2003	II	\$140,000*	2008

\*50% grant: 50% loan, 6%, 25 years

**PROJECT INFORMATION:**

The district has approached the Commission for Level III construction funds to rehabilitate four underflow structures that were evaluated during a recently completed Level II Study. These 1930's vintage structures handle upstream return flow and flood flow and protect the canal from flood related erosion. The four crossings are in various states of disrepair, with Madden Draw being in the worst condition. This underflow structure has already partially failed (caved in). Additionally, the corrugated metal pipe utilized at these crossings is not sized correctly to handle extreme events. Rehabilitation of these crossings would provide protection to the canal during flood flows and ultimately improve the ability and reliability of the system to deliver water to the users.

The 2003 Legislature authorized Level III construction funding for the project. An engineering consultant has been selected to design the improvements. Construction is scheduled to be completed by the end of 2004.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

- 134. PROJECT: Rock Springs East Water Supply**  
**LEVEL:** II-Hold  
**SPONSOR:** Green River/Rock Springs/Sweetwater County Joint Powers Board  
**LOCATION:** Sweetwater County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
Level I	8	1995	I	\$50,000	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	Hold*	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	Hold*	2004
Level II	34	2004	I	Hold*	2006

\* A block appropriation of \$15,000 was made for all hold projects.

**PROJECT INFORMATION:**

Several areas east of Rock Springs, including the Arrowhead Springs Subdivisions, are interested in constructing a centralized water system. In order to supply water to the area, a new transmission pipeline would be required to transmit water from Rock Springs. SF Industries may be interested in participating in the project. Further, the Sweetwater County Airport, located 7 miles east of Rock Springs, would also like water service.

The Level I study delineated a service area and provided preliminary designs and cost estimates for the pipeline.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that the project be retained at Level II-Hold status.

- 135. **PROJECT:**                    **Saratoga Storage Standpipe Rehabilitation**
- LEVEL:**                      Level III
- SPONSOR:**                 Town of Saratoga and Carbon County Impact JPB
- LOCATION:**                 Carbon County
- PROGRAM:**                 Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	II	\$60,000	2004
Level III	118	2004	II	\$200,000	2008

**PROJECT INFORMATION:**

The water system for the Town of Saratoga is a shared operation between the town and the Carbon County Impact Joint Powers Board. The town operates, maintains and administers the day-to-day functions of the water system. The board owns and maintains capital improvements made to the water system.

The proposed project is the rehabilitation of a 1 million gallon welded steel storage standpipe that was constructed in 1978. The standpipe and foundation are in good condition, but the standpipe is in need of rehabilitation to extend its useful life, to bring it into compliance with OSHA requirements, and to protect the original investment. The standpipe paint contains lead and appropriate lead abatement and disposal procedures will be followed.

The standpipe was inspected and videotaped by divers in April 2000. The videotapes show numerous deficiencies including blistered and peeled paint, corrosion at failed paint areas, accumulated sediment, inoperable corrosion protection system, and missing and damaged overflow pipe supports. The standpipe exterior paint is chipped and peeling. Previously it was not practical to take this standpipe out of service for an extended period to perform maintenance and/or repairs, since it was the only storage facility. The standpipe was Saratoga's only water storage facility from 1978 until a second standpipe was completed in 2001. The second standpipe allows a redundancy in the system, so repairs and maintenance can be completed as needed.

The major work items for the rehabilitation include: stair and railing modifications, relocation of overflow piping, sandblasting and painting the interior, cleaning and painting the exterior, and installing a cathodic protection system.

This project has been delayed by the need for repairs to the town's other standpipe. Both tanks could not be simultaneously out of service. This situation should be corrected in late 2004, and the project should begin design and construction in 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

- 136. PROJECT:** Saratoga Test Well (Saratoga Master Plan)  
**LEVEL:** II  
**SPONSOR:** Town of Saratoga, Carbon County Impact Joint Powers Board  
**LOCATION:** Carbon County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	I	\$60,000	2002
Level II	125	2003	I	\$180,000	2004
Level II	34	2004	I	\$160,000	2006

PROJECT INFORMATION:

The 2002 Saratoga Level I Study recommended two (2) sites for test drilling in order to determine viability of a ground water source of supply to replace or subordinate the town's existing North Platte diversion and treatment facility. A test well drilled in 2003 at the proposed site, 2½ miles ENE of town on BLM lands, proved to be deficient based on desired yields of at least 300 gpm (test well apparently pumped efficiently at a rate of 75-100 gpm). Pump testing results however, revealed good aquifer conductivity potential in the North Park Formation aquifer.

The sponsor requested additional Level II funding for a 2004 drilling program to continue the ground water exploration program. The increased project budget provided for 3 additional pilot holes, a production-size test well, evaluation of the sites for engineering/economic feasibility, and permitting. The 2004 drilling budget was based on 2003 bid prices, which the driller (Watson Drilling, Laramie) had agreed to hold constant into 2004, with an allowance for increased fuel and materials costs. Costs for steel and fuel increased sharply in early 2004, and necessitated a decrease in test well depth and other modifications. This situation was compounded by permitting delays on federal lands (BLM) where the test wells are sited. Applications for access were submitted in May 2004 and were authorized in early October 2004. The delays were a result of BLM requirements to change sites and access routes, and to perform additional cultural resource surveys. As an additional condition, the permits restrict any drilling from November 15 to March 1 because the sites are situated in a protected wildlife management area. With prior commitments, the driller was not able to mobilize in time to commence and finish drilling/testing operations prior to November 15 of this year.

The sponsor is therefore requesting additional funding necessary to allow drilling to advance to original designed depths, i.e., to penetrate the maximum saturated thickness of the North Park Formation.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be continued in the New Development Program at Level II with an appropriation of \$25,000.

- 137. PROJECT:** Sheridan Pipeline Rehabilitation  
**LEVEL:** III  
**SPONSOR:** City of Sheridan  
**LOCATION:** Sheridan County  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	7	2002	I	\$50,000	2004
Level III	69	2003	II	\$5,184,00.00	2008

The Sheridan Pipeline Rehabilitation Level II project (previously referred to at the Sheridan Hydro Project) identified some corrosion problems in the 16” transmission line. Funding was requested to replace this 16” line with a new 20” line. Additionally the city of Sheridan requested funding for two shorter transmission lines in the South Hills area. The need for the smaller transmission lines in the South Hills area was urgent enough that the City of Sheridan requested that they be split out of the larger project and constructed as soon as possible. Their request was granted and the construction of this portion of the project has been completed.

In the mean time the design of the larger 20” line is also underway and progressing at a steady pace. The 20” line will likely begin construction in the Spring of 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required at this time.

- 138. PROJECT: Sheridan/Veterans Affairs Medical Center (VAMC) Water Supply Study**  
**LEVEL:** New Application  
**SPONSOR:** City of Sheridan, Incorporated Municipality  
**LOCATION:** Sheridan County  
**PROGRAM:** Rehabilitation

PROJECT INFORMATION:

The City of Sheridan would like to partner with the Veterans Affairs Medical Center (VAMC) to sponsor a study to identify the rehabilitation needs of the existing water delivery systems of the VAMC and to determine the feasibility of new treated and/or raw water storage for Sheridan and combined treatment for the mutual benefit of both systems.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level II with an appropriation of \$75,000.

- 139. PROJECT: Shoshone Drop Structures**  
**LEVEL:** III  
**SPONSOR:** Shoshone Irrigation District  
**LOCATION:** Park  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	88	2002	II	\$570,000*	2007

\*100% grant for invoiced materials. The sponsor is responsible for all other project costs.

PROJECT INFORMATION:

The Shoshone Irrigation District would like to continue the replacement of the drop structures on the Garland Canal. This is a large-scale project involving 4 drop structures and a drop structure combined with a diversion. Also included are the control works on the Ralston Reservoir and the conversion of approximately 1.5 miles of open ditch to a pressurized pipeline.

The district has constructed the pressurized pipeline and Garland Canal Drops #3, #4 and #5. During the winter of 2004-2005 the district is replacing Garland Canal Drop #6.

RECOMMENDED LEGISLATIVE ACTION:

No Legislative action required.

- 140. PROJECT: Shoshone Utilities Ground Water Development**  
LEVEL: Level II  
SPONSOR: Joint Business Council of the Eastern Shoshone and Northern Arapaho Tribes  
LOCATION: Fremont County  
PROGRAM: New Development

PROJECT DESCRIPTION:

The Fort Washakie and Boulder Flats water systems (operated by the Shoshone Utility Organization) relies solely upon highly variable (both in quantity and quality) surface water diverted from the Little Wind River. Low flows due to irrigation demands in the summer and natural low flows in the winter often leave Shoshone Utilities unable to divert enough water to meet domestic water needs. High turbidities during runoff and after the South Fork II fire (June 2002) have also caused significant problems for Shoshone Utilities, reinforcing the need for a reliable ground water source of domestic water

In 2004, WWDC funding was acquired to further investigate the feasibility of developing available ground water resources, identify potential drilling sites, estimate drilling budgets, and develop a Master Plan for Shoshone Utilities regarding a ground water supplemented system.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

- 141. PROJECT: Sleepy Hollow Pipeline**  
LEVEL: III  
SPONSOR: Central Campbell County Improvement & Service District  
LOCATION: Campbell County  
PROGRAM: New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	I	\$200,000*	2008

\*50% Grant

PROJECT DESCRIPTION:

Central Campbell County Improvement & Service District (CCCI&SD) has constructed an additional well (funded via WWDC Ground Water Exploration Grant Program) in an effort to meet the district's increasing demand. This new well will help meet peak demands, as well as provide emergency use.

Now that the new well is complete, CCCI&SD will need a transmission line from it to the upper tank. The transmission line can be constructed on existing easements, rights-of-way, and lands owned by the District or by the Sleepy Hollow Homeowners Association. Also, plumbing and metering connections will need to be made to the existing upper tank. The well will require a pump, motor, and controls at the well site. Control equipment must be compatible with the existing control system. The project should be completed in 2005.



RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

- 142. **PROJECT:** Small Water Project Program
- LEVEL: III
- SPONSOR: State
- LOCATION: Statewide
- PROGRAM: New Development/Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
Small Projects	88	2002	I & II	\$1,000,000	N/A
Small Projects	118	2004	I & II	\$1,500,000	N/A

PROJECT INFORMATION:

Small water program projects must provide multiple benefits for a total estimated cost of less than \$100,000 per project. Projects may include new development or rehabilitation of small reservoirs, pipelines, wells, windmills, springs, wetland developments and irrigation conveyance facilities. Projects must provide a public benefit through mitigation of water quality impairments, enhancement of Threatened or Endangered species habitat, the development or enhancement of habitat and water for fish and wildlife, increased recreational opportunities, provide water for maintenance of the integrity and vitality of plant and animal communities, serve as instruments to improve rangeland condition, or make beneficial use of water, and have supportive documentation in a watershed plan, environmental evaluation or equivalent planning documentation.

Following is a listing of projects approved in 2003:

<u>Account I – New Development</u>	<u>Account II - Rehabilitation</u>
Diamond S Ranch Pipeline*	Russell Ranch Pipeline*
Central Well*	Diamond S Ranch Well*
Big Bend Pasture Well	Big Sandy Pipeline*
Emigrant/Four Mile Pits*	Coyote Reservoirs*
Perino Pipeline*	Cabin Creek Water Development*
Gooseberry Creek Ranch Well*	TY Ranch Pipeline
Big Horn River Ranch Pipeline*	Old Steve Adams Duck Pond
East Dry Creek #1 Well*	Poison Buttes/Cottonwood Ponds
Crowfoot Ranch Well	Jones Water Project
Jensen Wash Well*	Dixon Summer Project
Migration Well	Croonberg Water Development
Asperation Well	
Lombard Well	
Blue Forest Well	
Gasson Well #2	
Four Mile Gulch Well	
Bench Well	
Twelve Mile Sink Well	
Bad Land Well*	
Emigrant Well*	

Following is a listing of projects approved in 2004:

<u>Account I – New Development</u>	<u>Account II – Rehabilitation</u>
Antelope Hills Water Well	Henthorne Pipeline
Range Unit 40 Young Bench Well	Hay Creek Project
Aaron Carroll Livestock	South Coffee Project*

Antone Swanda Well & Pipeline	Range Unit 40 Crowheart Butte Pipeline
Gordon Pries Irrigation Pipeline/Pond	Range Unit 38 Water Rocks Pipeline
Cherokee Allotment Ground Water	Double Tanks Pipeline
Chant Water Well #1	Blakely Big Draw
Springfield Ranch-Laramie Plains	Jones Bros. 2-B & #8 Reservoirs
Butte Water Development	Morrissey Pipeline Rehabilitation
PH Livestock Fillmore Pasture	Big Poddy Creek Pipeline
Black Thunder Watershed Project	Mishurda Mtn. Ranch, Phase 2 Pipeline
Basin Allotment Project	Struempf Ponds
Dobie Ridge Project	Lodgepole Water Project
Muddy Creek Ox Bow Restoration	Red Butte Water Project
Chant Stock Ponds #7 & #8	Muley Meadows Pipeline
Bridger Pass #5 Stock Pond	Little Jack Res., South Flat Top
Coal Gulch Grade Control/Diversion	
Vineyard Ranch Small Water Project	
Irvine Ranch Small Water Project	*Projects completed as of 12/31/04

RECOMMENDED LEGISLATIVE ACTION: The WWDC recommends an additional appropriation of \$1,000,000; 50% or \$500,000 from Account I and 50% or \$500,000 from Account II.

- 143. PROJECT: Smiths Fork Dam**  
**LEVEL: II-Hold**  
**SPONSOR: State of Wyoming**  
**LOCATION: Lincoln County**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	10	1994	I	Hold	1996
Level II	15	1996	I	Hold	1998
Level II	82	1998	I	Hold	2000
Level II	36	2000	I	Hold	2002
Level II	7	2002	I	Hold*	2004

\*A block appropriation of \$15,000 was made for all hold projects.

PROJECT INFORMATION:

In 1984, the States of Wyoming, Utah and Idaho joined forces to evaluate the potential to construct storage on the Smiths Fork of the Bear River, which would provide benefits to all three states. The project would provide a reliable water supply, and generate electricity.

The project would also improve water quality and provide flood control and recreation benefits. In 1986, the State of Utah prepared an economic feasibility report which concluded that the project was economically feasible only if all three states participated in financing the project.

The project could provide flood control, recreation, hydropower, and supplemental irrigation water supply benefits to Wyoming water users and the public. Presently, the tri-state Smiths Fork project appears to be the most economical means to develop the Cokeville and Cokeville Development Association's storage allocation of 14,520 acre-feet. Therefore, the WWDC has included the Smiths Fork among its candidates for state projects to be pursued when the states of Utah and Idaho are able to obtain their share of required project funding.

In 1988, the U.S. Corps of Engineers (COE) prepared a development plan for the entire Bear River. The report was completed in 1989. Several options were identified. The report verified that a dam on the Smiths Fork would provide considerable flood control, storage and water quality benefits. However, the economic assessment concluded that the project had an unfavorable benefit-cost ratio and, therefore, would not be eligible for federal funding under existing criteria. The project is presently on hold status in the New Development Program.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends that the project be retained at Level II-Hold status.

- 144. PROJECT: Smiths Fork Flumes**  
**LEVEL: Level III**  
**SPONSOR: Smiths Fork Irrigation District**  
**LOCATION: Lincoln county**  
**PROGRAM: Rehabilitation**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	II	\$ 15,000	2008

PROJECT INFORMATION:

The Smiths Fork Irrigation District is being required by the State Engineer's Office to provide better measurement of the diversion of water into their system. As a result they asked the WWDC's help in purchasing three flumes. The flumes will be installed at the head of the Covey Canal, in Burner Creek, and in Spring Creek. The district will provide the engineering, permitting, and installation required for this project.

All three flumes have been installed and the project will be closed in 2005.

RECOMMENDED LEGISLATIVE ACTION:

No action is needed.

- 145. PROJECT: State Stream Gage System**  
**LEVEL: II**  
**SPONSOR: State Engineer's Office**  
**LOCATION: Statewide**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	59	1996	I	\$200,000	None
Level II	82	1998	I	\$200,000	2000
Level II	36	2000	I	\$200,000	2002

PROJECT INFORMATION:

In 1996, \$200,000 was appropriated from Water Development Account II for stream gage rehabilitation and construction. The Bureau of Reclamation and the USGS also appropriated monies for work on these stream gages.

In 1998, a second \$200,000 was appropriated for stream gage rehabilitation. However, the SEO did not undertake any stream gage rehabilitation measures during FY 98-99 and the \$200,000 reverted back to Water Development Accounts.

In 2000, a third \$200,000 was appropriated from Water Development Account II for Wyoming stream gage rehabilitation and construction for FY 00-01.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

**146. PROJECT: State Water Plan**  
**LEVEL: I**  
**SPONSOR: State of Wyoming**  
**LOCATION: Statewide**  
**PROGRAM: New Development**

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due</u>
State Plan	1	1996	N/A	N/A	1996
Aerial Photo	1	1996	I	\$250,000	1998
State Plan	46	1997	I	\$250,000	1998
Basin Plan*	30	1998	I	\$250,000	2000
State Water Plan	81	1999	I	\$1,435,000	2001
State Water Plan	36	2000	I	\$800,000	2002
State Water Plan	86	2001	I	\$1,550,000	2003
State Water Plan 125		2003	I	\$600,000	2006

\*Contained in Agency Budget

PROJECT INFORMATION:

In 1996, the Wyoming Legislature directed the Wyoming Water Development Commission (WWDC) and the State Engineer's Office (SEO) to develop a proposal for updating the state's Framework Water Plan, which was written in the early 1970's and published in 1973. WWDC and the SEO prepared and submitted the proposal to the Governor and the Select Water Committee in October of 1996.

During the 1997 Legislative Session, \$250,000 was appropriated from Water Development Account I to enable the WWDC to conduct a feasibility study to determine the costs and methods of implementing a new water planning process for the state. The feasibility study concluded that a descriptive plan for each of the seven major river basins would be provided and would include a statewide computer database that will be updated as conditions change.

During 1997 and 1998, the WWDC undertook a pilot Basin Plan in the Bear River Basin to test data collection methods and procedures, information dissemination methods, presentation methods, etc. A coordination process was developed to present information on the proposed Statewide Water Planning Process, and to obtain input from interested parties.

Following authorization by the 1999 Legislature, the Water Development Commission formally established a River Basin Planning section to implement the Statewide Water Planning Process. The first two River Basin Plans were initiated in the Green and Bear River Basins. Consultants were selected to prepare these basin plans, and a coordination process was implemented to gain input from individuals, private interest groups, and local, state, and federal agencies. The Bear River Basin Plan was completed in November 2000, and the Green River Basin Plan was completed in January 2001. Products of the Statewide Water Planning Process are published on the Water Planning website at: <http://waterplan.state.wy.us>.

The 2000 Legislature authorized river basin plans to be prepared for the Powder/Tongue and Northeast Wyoming River Basins. Basin Advisory Groups were formed in those basins, and the consultant completed those plans in January 2002.

The 2001 Legislature authorized river basin plans to be prepared for the Wind/Bighorn and Snake/Salt River Basins. Basin Advisory Groups were formed in those basins, and the consultants completed those plans in early 2003.

The 2003 Legislature authorized the river basin plan to be prepared for the Platte River Basin. A Basin Advisory Group has been formed in this basin and the consultant is preparing the plan, with those reports scheduled for completion in April 2005.

Following the completion of the Platte River Basin Plan the Framework Water Plan will be initiated, which will be a summary of the seven river basin plans and a look into our future from a water resources perspective. Funding for preparation of the Framework Water Plan will be requested from the 2005 Legislature.

Upon completion of the Framework Plan the process of updating the seven basin plans will be initiated, with updates performed on approximately five-year intervals, as was defined with the initiation of the River Basin Planning Program in 1999.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level I with an appropriation of \$500,000.

- 147. PROJECT: Stone Gate Well**  
**LEVEL: New Application**  
**SPONSOR: Stone Gate Improvement & Service District**  
**LOCATION: Campbell County**  
**PROGRAM: Rehabilitation**

**PROJECT INFORMATION:**

The Stone Gate Improvement & Service District is located in Campbell County approximately 5 miles southwest of downtown Gillette. In the application submitted to WWDC, the District proposes to construct a water supply well to replace the Stone Gate No. 1 Well drilled in 1992 for the first filing of the Stone Gate Subdivision. The engineer's cost estimate for this well is \$459,351. The District also operates on the Stone Gate No. 2 Well, drilled a few years subsequent, which is has proved to be a dependable supply. According to the application, the No. 1 well was poorly designed and constructed, and produces sand to the extent that "numerous" pumps have been replaced. The application further states: "Well No. 1 should be replaced with a properly designed and constructed supply well to meet the current and future demands of the District in accordance with Wyoming Department of Environmental Quality requirements. Such a new well would decrease the hours per day each well is operated and would increase the time between pump replacement. When a well is out of service for needed repairs, the District would still have the necessary water supply with this additional well."

In 1993, the City of Gillette began adoption of a water service policy consistent with the Gillette Water Master Plan funded by WWDC. The City and Campbell County passed mutual resolutions creating a regional Planning District Boundary (PDB), within which the City would become the purveyor of water supplies to existing and future customers. For the WWDC, this arrangement eliminated the funding of duplicative new and replacement infrastructure (wells, transmission, storage) within the PDB. In 1993, there existed significant development outside the PDB, but City of Gillette infrastructure was not expanded to an extent at that time to accommodate additional users outside the PDB. Presently there are plans for the City and County to agree to an expansion of the PDB that would include the larger existing developments (Sleepy Hollow, Antelope Valley, Highway 59 south to the Gap, 4-J SW Corridor, Stone Gate, Means WSD, etc.)

and future growth areas. In a WWDC/City of Gillette water supply study ongoing at this time (Gillette CBM-ASR, Level II), a new municipal well field is proposed in a prolific quadrant of the Fort Union Formation Aquifer about 8 miles SSW of Gillette. This proposed development is planned to provide for the PDB's future demands and provide an increased measure of redundancy with respect to the Madison Aquifer supply.

The City of Gillette has a 12" main built out SW along Force Road to the east boundary of Stone Gate. Two years ago, WWDC and the City finished construction of a 3 MG storage tank two miles east of Stonegate, which culminated a major storage/transmission addition to the City's system along Southern Drive between US HWY 59 (Douglas Highway) and US HWY 50 (4-J Road). Connecting to City water would require a pre-annexation agreement and significant upgrades/replacements to Stone Gate's existing delivery system (estimated at over \$2 Million, see attached letter from District). Although Stone Gate was not within the 1993 PDB boundary, present City of Gillette regional water system infrastructure places Stone Gate in a de facto position to reasonably tie into the existing main. The City of Gillette agreed to provide water service to the Stonegate Improvement and Service District during the December 16, 2005 Select Water Committee meeting.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the Rehabilitation Program at Level II with an appropriation of \$130,000. The appropriation includes funding to connect to Gillette's water system.

- 148. PROJECT: Story Well Acquisition**  
**LEVEL: III**  
**SPONSOR: Story Fire District**  
**LOCATION: Sheridan County**  
**PROGRAM: New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	86	2001	I	\$24,000	2002
Level III	69	2003	I	*	

\* Sale of well to the sponsor.

**PROJECT INFORMATION:**

The Story Fire District is a Sheridan County fire district that has been in existence since 1952. The district provides fire protection to Story and the southern portion of the county south of Meade Creek. The district's ability to effectively respond to fire emergencies is limited due to a lack of a central, reliable year round water supply. In the winter months, the only reliable supply is from the Story Fish Hatchery, which is not centrally located. A central location is critical for response time. Other sources are iced over in the winter.

The district is planning upgrades by moving its base of operation to a new fire station and by replacing out-dated equipment. In addition, the district board wishes to improve the ISO (Insurance Services Office) rating for the district from its present rating of 9 to a rating of 7. WWDC funding was requested for test drilling for development of a ground water supply that is nearby and reliable in winter months. A test well was drilled and pump-tested in June/July of 2002 by WWDC at the district's new fire station site. Legislation was granted during the 2003 session to transfer the well to the fire district. Legal documents have been prepared to transfer the ownership of the well to the Story Fire District. The documents were sent to the district for their review in July of 2003 and the response from the district has been unfavorable to the cost of purchasing the well. Follow up phone calls have not been successful in getting the districts approval to move forward at this time.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required at this time.

- 149. PROJECT: Sunset Pipeline**  
LEVEL: III  
SPONSOR: Sunset Ranch Water District  
LOCATION: Weston County  
PROGRAM: New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	125	2003	I	\$75,000	2004
Level III	118	2004	I	\$212,500	2008

PROJECT INFORMATION:

In 2002 the Canyon Improvement & Service District and Sunset Ranch Water District submitted an application where residents in the Salt Creek and Beaver Creek valleys, north and east of Newcastle wish to investigate the feasibility and costs associated with developing a water supply system.

In 2003 the Canyon/Sunset/Newcastle Area Water Supply Level II project was approved. The study recommended tying Sunset Water District to the City of Newcastle water supply system. Specifically, a connection to Newcastle's No. 3 Tank North of town, which requires installation of 10,500 feet of 8" transmission line to connect the Sunset Water District distribution system to Newcastle. The estimated cost of the Level III project, referred to as Sunset Pipeline, was \$425,000. Sunset Ranch Water District applied for an appropriation of \$212,500 (50% grant), and plans to fund the remaining 50% with federal money.

In 2004 the Sunset Pipeline project was approved and appropriated \$212,500 (50% grant) for the design, permit procurement, project land procurement, construction engineering, and construction of the project. The project is currently active.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 150. PROJECT: Sweetwater River Watershed Plan**  
LEVEL: New Application  
SPONSOR: Popo Agie Conservation District  
LOCATION: Fremont County  
PROGRAM: New Development

PROJECT DESCRIPTION:

The Sweetwater River watershed is approximately 1.8 million acres with land ownership divided among federal (79%), private (13%), and state (8%). The watershed includes one primary river system, the main stem of the Sweetwater River, and its tributaries including Gold Creek, Willow Creek, Rock Creek, Granite Creek, Alkali Creek, Long Creek, Cottonwood Creek and Crooks Creek.

The Conservation District sponsor, in cooperation with other Conservation Districts within the watershed, would like to look at surface and ground water availability within the watershed. Of primary interest to the districts is the lack of developed upland livestock and wildlife water within the drainage. Surface and groundwater availability information would provide baseline information from which the District can coordinate and facilitate implementation of management practices that address the water distribution issues within the Sweetwater drainage.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level I with an appropriation of \$300,000.

- 151. **PROJECT:** Taylor Ditch Siphon
- LEVEL: New Application
- SPONSOR: Taylor Watershed Improvement District
- LOCATION: Fremont County
- PROGRAM: Rehabilitation

PROJECT INFORMATION:

The Taylor Watershed Improvement District is requesting Level III construction funding to replace an inverted siphon and the inlet and outlet structures on the Taylor Ditch. The project is a continuation of the Level I Popo Agie River Watershed Study. The request is for the 50% grant portion of the project cost. The remaining 50% will be acquired through local and federal funding sources. The final design will be provided through the NRCS Agricultural Management Assistance (AMA) Program. The planning and engineering conducted through the NRCS technical service provider (TSP) program by Anderson Consulting Engineers, Inc. corresponds to a WWDC Level II study for the project. The existing siphon was installed in 1941. The 28-inch siphon is 4,419 feet long and serves 2,800 acres of irrigated land. The steel siphon has exceeded its expected life, and has deteriorated beyond repair. Seepage from the siphon is limiting supply and adding salinity to the water and decreasing the water quality. The preliminary designs for the siphon were based on a 30-inch pipe and a 36-inch pipe. The 36-inch pipe would deliver the double appropriation flood right of 90 cubic feet per second. The 30-inch pipe would deliver more than the current 28-inch pipe but not the full flood right. Costs presented in this request are based on a 36-inch pipe.

**Estimated Level III**

**Phase 1 Costs** Design.....\$ 0.00

**Estimated Level III**

**Phase 2 Costs:**

Inlet Structure.....	\$ 8,000.00
Outlet Structure.....	\$ 5,000.00
36-inch Dia. 51-SDR PIP pipe.....	\$354,024.00
Fittings/Miscellaneous Materials.....	\$ 53,103.60
Engineering (10%).....	\$ 42,012.76
Contingency (15%).....	\$ 69,321.05
Total Project Costs.....	\$531,461.41
<b>Rounded.....</b>	<b>\$540,000.00</b>

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level III with an appropriation of \$270,000. The other 50% of the project cost will be provided through local and federal sources.

- 152. **PROJECT:** Ten Sleep Water Supply
- LEVEL: Level II
- SPONSOR: Town of Ten Sleep, Incorporated Municipality
- LOCATION: Washakie County
- PROGRAM: New Development



EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	I	\$75,000	2004
Level II	125	2003	I	\$80,000	2004

PROJECT DESCRIPTION:

The Town of Ten Sleep has two (2) Madison Formation aquifer supply wells that serve its water supply needs. The oldest well was drilled in 1955 and the second well was added in 1978. The total yield from these source wells (1350 gpm flowing at surface) has been more than ample to serve the community. Consumption however, far outstrips demand, with average use estimated at 2500 gallons per day per person. This use rate figure is approximately ten times the general design considerations suggested for Wyoming public water supply systems by the Wyoming Department of Environmental Quality – Water Quality Division Rules and Regulations (WDEQ-WQD Chapter XII, Section 8). This inefficiency is a central consideration to be addressed by the requested study. At task in the study would be an entire review of the system from an evaluation of source supply performance (Ten Sleep #1 Well and Ten Sleep #2 Well) to an appraisal of the transmission and distribution system.

The level II study will also evaluate expansion of Ten Sleep’s system to serve new rural users. Expansion of supply outside of town has occurred to some extent but recent residential development in the county near Ten Sleep has encountered insufficient water supply in their domestic wells from a quantity and quality standpoint. Installing deep wells is not an option for these residents who are at close proximity (within 2 to 3 miles) to the town.

A draft Level II study was delivered in November 2003 and the town plans, in the near term, to pursue recommended distribution system upgrades.

RECOMMENDED LEGISLATIVE ACTION:

No Legislative action required

- 153. PROJECT: Thermopolis Storage and Raw Water**  
LEVEL: New Application  
SPONSOR: Town of Thermopolis  
LOCATION: Hot Springs County  
PROGRAM: Rehabilitation

PROJECT INFORMATION:

In 2004 the town of Thermopolis submitted an application requesting a study to evaluate the condition and location of an existing 500,000-gallon tank and to further analyze the storage needs of Thermopolis. The study will help identify locations for a new tank or tanks based on the town’s needs as well as incorporating regional storage needs. A hydraulic analysis of the system will be conducted, and alternatives for using raw water for irrigation will also be developed.

The town of Thermopolis has a 500,000 gallon storage tank, believed to be 80+ years old, that is in disrepair and is in need of serious renovation or replacement. The roof is wooden with many openings that cannot be safely repaired. There is a crack at or near the elevation of the tank base with roots growing out, and the influent piping and overflow are in poor condition. In addition, water is leaking from several areas at the base of the tank. This tank provides approximately 20% of the towns total storage. A hydraulic analysis of the system will be necessary to properly analyze the storage.

Currently Thermopolis irrigates with treated water, which is stored in their system. The Town has expressed interest in using raw water for irrigation to alleviate water treatment loads and has some ideas with respect to where raw water use would be a benefit to their entire system.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level II with an appropriation of \$175,000.

154. **PROJECT:** Torrington Water Supply  
**LEVEL:** III  
**SPONSOR:** City of Torrington  
**LOCATION:** Goshen County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	8	1995	I	\$100,000	1996
Level I	15	1996	I	\$150,000	1998
Level III	38	1998	I	\$4,500,000*	2002**
Level III	88	2002	I		2007

\*60% grant, 40% loan (7.25%, 30 years)

\*\*This reversion date was extended to 2007.

PROJECT INFORMATION:

The city of Torrington received financing from the 1998 legislature to complete a new municipal well field and bring the water into the town's distribution system. Since the fall of 2003, SRF loan funds have been used in lieu of WWDC loan funds.

The purpose of the project is to replace older high nitrate wells with new wells located closer to the North Platte River, which are expected to be lower in nitrates. This approach has been used successfully in other communities in the region. Project components include wells, pumps, electrical service, control and disinfection facilities, telemetry, booster pumps, pipe, and appurtenances.

The sponsor explored groundwater at two locations. The first site had insufficient aquifer thickness and the second site had uranium concentrations in excess of drinking water standards. Independent of WWDC funding, the city installed reverse osmosis treatment units on four wells in the city. This action was necessary to comply with an EPA administrative order. Ownership of treatment units coupled with the inability to find groundwater that meets all drinking water standards has resulted in a shift in the project to seek relatively good quality water closer to the city in an effort to reduce pipeline and related capital costs and operationally to reduce but not eliminate treatment.

Three new wells drilled near the municipal golf course will be used in conjunction with the existing Well #15 as the water supply. Construction of the pumps, controls, transmission pipelines, and telemetry system should be underway by January 2005. Depending upon the coordination of the supply water components financed by WWDC and SRF, and the treatment water components financed by others (possibly SRF), the project is anticipated to be complete in the fall of 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

155. **PROJECT:** Turnerville Water Supply  
**LEVEL:** III  
**SPONSOR:** Turnerville Water & Sewer District  
**LOCATION:** Lincoln County  
**PROGRAM:** Rehabilitation

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	15	1996	I	\$250,000**	1998
Level III	118	2004	II	\$ 587,750	2008

\*\*The Turnerville study was included in a regional study, which incorporated the Town of Thayne, Bedford Water & Sewer District, and the Willow Creek Pipeline Company (now known as the Turnerville Water & Sewer District)

PROJECT INFORMATION:

The community of Turnerville was identified as having serious problems with their water supply, transmission and distribution systems during a WWDC Level II study conducted in 1998.

Turnerville has formed a water district and is anxious to utilize WWDC funding to rehabilitate and repair the existing system. The District would like to renovate the Willow Canyon spring and install four miles of six and eight inch piping. In addition, the District would like to construct a 250,000 gallon buried concrete storage tank.

The district received authorization for a grant of \$587,750 in 2004 from the legislature for one half of the projected project cost. The sponsor is awaiting the matching funds prior to proceeding with the project. Design should begin sometime in 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is needed.

156. **PROJECT:**                    **University of Wyoming Research**  
**LEVEL:**                            I  
**SPONSOR:**                        State of Wyoming  
**LOCATION:**                        Statewide  
**PROGRAM:**                        New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	30	1998	I	\$ 41,584	2000
Level I	36	2000	I	\$140,000	2002
Level I	86	2001	II	\$140,000	2002
Level I	7	2002	I	\$200,000	2004
Level I	125	2003	I	\$200,000	2004
Level I	31	2004	I	\$200,000	2006

PROJECT INFORMATION:

Greg Kerr, College of Engineering associate professor, is the principal investigator in charge of water related research at the University of Wyoming. The research, is being provided through a cooperative partnership. Participants include state natural resource agencies and the United States Geological Survey (USGS).

The WWDC, the State Engineer's Office, and other agencies present Mr. Kerr and a Selection Committee, formed from several state and federal governmental agencies, with several research topics each year. These topics cover water related subjects in need of research. The Committee then selects the projects to receive the program funding for the upcoming year.

Funding is being provided primarily by the Wyoming Water Development Commission and the USGS. The Water Development Commission provides approximately \$2 to every \$1 provided by the USGS. Other state agencies have provided labor or “in kind” research activities to leverage the USGS funds.

In year 2000, the legislature appropriated \$140,000 to match available USGS funds. These funds were used on the USGS year 2001 program. This program included administration, four ongoing projects and three new projects.

In year 2001, the legislature appropriated \$140,000 to match available USGS funds. These funds were used on the USGS year 2002 program. This program included administration, four ongoing projects and three new projects.

In year 2002, the USGS revised their program and increased their match. Therefore, the legislature was asked to appropriate \$200,000 in 2002 to continue to develop water related research in cooperation with the USGS year 2003 program. This program included three ongoing projects and four new projects.

In year 2003, the legislature appropriated \$200,000 to match available USGS funds. These funds will be used on the USGS year 2004 program.

In year 2004, the legislature appropriated \$200,000 to match available USGS funds. These funds will be used on the USGS year 2005 program. Greg Kerr of the College of Engineering has been appointed as Deputy Director of this program. He will take over as Director when Dr. Pochop leaves this position due to his retirement.

**RECOMMENDED LEGISLATIVE ACTION:**

The Commission recommends that the project be incorporated in the New Development Program at Level I with an appropriation of \$200,000. The WWDC anticipates yearly appropriations for the upcoming years for continuation to these research projects.

- 157. PROJECT: Upper Green River Storage**  
**LEVEL:** New Application  
**SPONSOR:** The Upper Green River Water Basin Joint Powers Board  
**LOCATION:** Sublette County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The Upper Green River Water Basin Joint Powers Board has requested a Level II study to investigate storage in the Green River Basin. This project will include both on channel and off channel sites. It will also include a review of existing storage sites and existing needs within the basin. This study will use the work that has already been completed within the Green River Basin, and will not duplicate any efforts.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$175,000.

- 158. PROJECT: Urban/Rural Sprawl Research Project**  
**LEVEL:** New Application  
**SPONSOR:** WWDC and UW  
**LOCATION:** N/A  
**PROGRAM:** Rehabilitation

PROJECT INFORMATION:

The project would analyze impacts and benefits that occur as a result of constructing large rural, regional water systems. The study will be conducted in one or two counties that are willing to participate. Issues that may be analyzed include drinking water quality, wastewater treatment/handling, impacts on county resources, economic considerations, aesthetics, infrastructure development before and after the WWDC project, and long-term maintenance of the project. As the project develops, issues may be added or dropped to best meet the counties' needs and to provide an unbiased evaluation of the impacts and benefits.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level I with an appropriation of \$150,000.

- 159. **PROJECT:** Viva Naughton Dam Enlargement
- LEVEL: II
- SPONSOR: City of Kemmerer
- LOCATION: Lincoln County
- PROGRAM: New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	10	1994	I	Hold	1996
Level II	15	1996	I	Hold	1998
Level II	82	1998	I	Hold	2000
Level II	36	2000	I	Hold*	2002
Level II	7	2002	I	300,000	2004

\* A block appropriation of \$15,000 was made for all hold projects

PROJECT INFORMATION:

Recent investigations completed for the Green River Groundwater Recharge and Alternate Storage Study indicate enlarging Viva Naughton Reservoir is one of the more efficient water development projects in the state. The reservoir has an existing capacity of 42,393 acre-feet. PacifiCorp has filed a water right application for an additional 39,502 acre-feet of storage. The existing reservoir is owned and operated by Scottish Power who has expressed an interest in the further investigation of the potential enlargement of Viva Naughton. The permitted enlargement reserves 10,752 acre-feet for irrigation on the Hams Fork down stream of the dam. The recent drought required Scottish Power to shut the reservoir off to all demands that were in addition to those required for electrical power generation. As a result, downstream users found the flows in the Hams Fork to be critically low. The following year, Senior downstream water rights put a call on the river, requiring water to be passed by the dam. The drought has greatly changed the water use agreement between downstream irrigators and PacifiCorp.

The Town of Kemmerer is also interest in participating in the project. The Town of Kemmerer has storage in Kemmerer Reservoir, however the reservoir is not able to pass the required down stream rights through its gates. As a result the reservoir is not used and remains full to allow water to be passed through the spillway. Existing agricultural uses show a need for additional storage on the Hams Fork. The enlargement of Viva Naughton would provide a much needed source of late season water to all uses below the dam including of the Hams Fork Water Users association, and the towns Kemmerer and Diamondville.

The study authorized in 2002 investigated the potential options for additional water supply on the Hams Fork. Three options were identified with conceptual level cost estimates all in the same range. The recently completed study was not able to provide required geotechnical information for the Dempsey Basin site, the Willow Creek site, or the required supply canal for either site.

This study will also quantify the wetland at all three sites. The local sponsors are interested in proceeding forward with permitting of this reservoir. However the permitting process can't begin until more information is obtained on site-specific geology and wetlands.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$300,000.

- 160. PROJECT:** Wagner Cherokee Irrigation Rehabilitation  
**LEVEL:** II  
**SPONSOR:** Wagner Cherokee Irrigation District  
**LOCATION:** Carbon County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	II	\$40,000	2004
Level II	125	2003	II	\$70,000	2004
Level II	34	2004	II	\$35,000	2005

**PROJECT INFORMATION:**

A Level II feasibility study is being conducted for the newly formed Wagoner Cherokee Irrigation District to evaluate projects that were recommended in the Level I master plan completed in 2002. Investigations include analysis and design of a single diversion structure on the Encampment River to serve both the Wagoner and Cherokee ditches, evaluation of combining the Wagoner and Cherokee ditches, and determining the best way to prevent seepage loss for the ditches.

The Wagoner Cherokee Irrigation District would like to expand the study and undertake a Phase 2 of the Level II study. The additional work would evaluate rock weir structures for the diversion. This would require undertaking a geomorphic evaluation of the Encampment River in the vicinity of the diversions and some distance up and down stream. From this evaluation, the cost and practicality of rock structures could be compared to other structure types. The studies are underway.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required at this time.

- 161. PROJECT:** Washakie Rural Water Supply  
**LEVEL:** III  
**SPONSOR:** Washakie Rural Improvement District  
**LOCATION:** Washakie County  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	10	1994	I	\$100,000	1996
Level II	15	1996	I	Hold*	1998
Level II	82	1998	I	\$100,000	2000
Level III	16	1999	I	\$5,220,000*	2004
Level III	2	2001	I	\$240,000*	2004
Level III	69	2003	I	\$3,000,000*	2010

\*67% grant, balance of project cost from other sources.

**PROJECT INFORMATION:**

The project consists of a rural water system extending from the Hot Springs county line on the south, to the Big Horn county line on the north, and encompassing most of the private lands along both sides of the Big Horn River. The new system will obtain its water from the City of Worland, which has an ample supply from two flowing Madison-Bighorn formation wells.

The sponsor's members currently utilize individual wells, which generally exceed EPA regulations for TDS and Sulfates. Some local wells are also high in Sodium, Selenium, and Nitrate. It is estimated that up to 70% of the Sponsor's members haul water or utilize bottled water for domestic use.

The sponsor's project was originally funded in 1999. Due to difficulties with obtaining a water purchase agreement with the City of Worland, preparation of an acceptable design obtaining easements and assessing the impact of the future Big Horn Regional JPB's project, construction of the first phase of this project was not started until May 2001.

Upon placing the Phase I project into service, operational problems surfaced. Subsequently, the engineering consultant's contract was terminated. A new consultant was selected through a competitive qualification based selection process.

After the new consultant began designing the remainder of the sponsor's system, a consultant was selected to design the Big Horn Regional JPB's project. The two consultants worked closely to hydraulically model the Big Horn Regional's northern service area, which includes the sponsor's system. The result of this model is a revised pipeline configuration for the sponsor's system, which saves about \$2,000,000, with savings shared by both sponsors.

With these savings and cooperation of the Big Horn Regional JPB, the total budget required for the sponsor's system has been reduced sufficiently that the USDA/Rural Utilities Service has agreed to de-obligate \$500,000 of the sponsor's loan. This reduction in loan will reduce the sponsor's yearly loan repayment costs by \$34,155. This will make the project more affordable for the water users.

In order to accomplish this loan reduction and insure full use of the existing WWDC's grant, the WWDC's percentage contribution was raised from 60% to 67%. The WWDC grant amount was not affected. There are several phases of the project yet to be constructed. The entire project should be completed by 2007.

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action required.

- 162. PROJECT:                      **Water Value Study****
- LEVEL:**                              I
- SPONSOR:**                        WWDC/State Project
- PROGRAM:**                        New Development
- LOCATION:**                         Green River Basin

**PROJECT DESCRIPTION:**

This Level I Reconnaissance study will examine the functions and value of water in the interconnected man-made and natural hydrologic regimes in the drainage basin of the Green River in Wyoming. The study should be designed to document, articulate, and quantify (where appropriate) the value of water in the many roles it performs under current management within the reach.

Those roles include but are not limited to: native hay meadow and crop irrigation; hydropower; industrial processes; watershed provision of quality rural domestic and urban water supplies; groundwater recharge; return flows supplying water for reuse and augmenting stream flows; riparian area sustenance; wetlands area sustenance; fish and wildlife habitat; water-related recreation; aesthetics; and tourism. The study should examine water values that have been created under current water management practices and identify opportunities for creation of additional values. The study should examine the man-made and natural hydrologic regimes as they actually function under local management customs and local operation of state and federal law.

The product of the study will be a document that may help create a better understanding of how a major basin of economic, social and cultural importance to the state of Wyoming. The document should provide decision-makers at all levels in water matters, from the ditch bank to state offices, with a way to identify, articulate, and quantify (where appropriate) the value of water in the full spectrum of its roles in the modern economy and society of Wyoming. The document, and supporting materials, should be able to serve as a template for the methodology for making assessments of the same sort in other river basins in the state.

The document will also include an initial survey of opportunities for supporting and enhancing practices that create positive value in water, or for changing practices where current management results in negative values or a lost opportunity to create positive value.

The Consultants chosen will, in consultation with the WWDC, select study areas within the Green River Basin representing:

- a variety of typical water use situations, such as those drawing supply from a large main-stem river, a reservoir, a small perennial stream, an intermittent stream, and a major canal as water sources
- the interplay between different locations and uses, as between irrigation upstream and industrial, municipal, or recreational uses downstream

To remain within budget, Consultants shall consult existing studies and individuals with knowledge of the area. Resources to draw upon run from the WWDC Green River Basin Plan to a variety of hydrologic studies, and from current and former state and local officers of the SEO and WWDO, to officers of the USBR, to local irrigators and municipal, recreation and industrial water managers.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends that Water Value Study be included in the omnibus water bill-planning and that the legislature appropriate \$150,000 to fund the study.

**163. PROJECT:                      **Weather Modification – Medicine Bow/Sierra Madre and Wind River Ranges****  
**LEVEL:**                                **II**  
**SPONSOR:**                            **State of Wyoming**  
**LOCATION:**                            **Albany, Carbon, Fremont, and Sublette Counties**  
**PROGRAM:**                           **New Development**

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	I	\$100,000	2006



PROJECT INFORMATION:

The 2004 Wyoming State Legislature funded a state sponsored weather modification feasibility study for the Medicine Bow/Sierra Madre and Wind River Ranges which evaluated the feasibility of conducting cloud seeding programs in each of the two project areas for winter snowpack augmentation. Included in the project was a determination of the exact experimental and control regimes to be employed for a proposed 5-year pilot program.

Particular attention was paid to the climatology of each target area from which project designs were developed. The study identified methods, equipment, siting issues, permitting, operational criteria, monitoring regimes, evaluation methodology, potential water resource benefits, costs and a cost/benefit analysis. Integral to the development of the project design was the application of a fine-scale mesoscale model to assess the potential for cloud seeding. Such simulations were completed by the National Center for Atmospheric Research (NCAR) in Boulder, CO. The proposed program would utilize a combination of ground and airborne resources and would operate from November 15<sup>th</sup> through April 30<sup>th</sup>.

Physical and statistical evaluation components of the program will be essential in establishing that the cloud seeding methodology is scientifically proven and will be an integral part of the proposed 5-year pilot. Winter orographic snowpack enhancement programs have generally shown that precipitation can be enhanced anywhere from 10 to 20%. Assuming that precipitation could be increased by 10% (which is a conservative value) this would result in an additional 75,300 ac-ft of water from seeding efforts in the Wind River Range, and an additional 54,900 ac-ft from the Medicine Bow/Sierra Madre Ranges. **The combined estimate for increased snowpack runoff for the two target areas is approximately 130,000 ac-ft per year. Such an increase would result in a cost of \$13 per ac-ft assuming a pilot program costing on average \$1,700,000 per year for both mountain ranges.** It is also important to note that these calculations assume conservative numbers and that with an effective cloud seeding program the cost-benefit ratios could be substantially increased.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be continued in the New Development Program at Level II with an appropriation of \$8,825,000.

164. **PROJECT:** Weather Modification – Salt River and Wyoming Ranges  
**LEVEL:** New Application  
**SPONSOR:** State of Wyoming  
**LOCATION:** Lincoln and Sublette Counties  
**PROGRAM:** New Development

PROJECT INFORMATION:

Area V of the Wyoming Association of Conservation Districts, representing six conservation districts in five counties (Teton, Lincoln, Uinta, Sublette, and Sweetwater) has requested that the Water Development Commission expand the current state sponsored Level II Weather Modification Study to the Salt River and Wyoming Ranges located in west central Wyoming. Runoff from winter snowpack in these areas impact flows in the Bear, Green and Snake/Salt River Basins.

The proposed study would assess the feasibility of conducting an operational program in the given target area(s), with particular attention being paid to the climatology of the region, including storm frequencies and characteristics, barriers, seeding potential, etc. From such information a project design can be developed, including methods and materials, equipment, siting issues, operational criteria, and most importantly, the viability of a meaningful evaluation

of project results through monitoring and statistical methods. Hydrologic investigations would also be conducted to estimate increased runoff and associated storage potential. Cost estimates would then be produced along with identification of the potential benefits to be realized, thus approaching a preliminary cost/benefit analysis.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the New Development Program at Level II with an appropriation of \$100,000.

- 165. PROJECT: West Side Irrigation NEPA Analysis**  
**LEVEL:** I  
**SPONSOR:** West Side Irrigation District  
**LOCATION:** Big Horn and Washakie Counties  
**PROGRAM:** New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	34	2004	I	\$250,000	2006

**PROJECT INFORMATION:**

The West Side Irrigation Project involves converting up to 16,500 acres of dry Federal land to privately owned irrigated land and has been under consideration for several years with significant studies being conducted by both the U.S. Bureau of Reclamation and the Wyoming Water Development Commission. The project was placed on hold more than 10 years ago pending resolution of the Federal land transfer issue. The District has since received Congressional approval (U.S. Senate Bill S. 610) authorizing the Secretary of the Interior to transfer the land and sell the land to the District at such time as it has been appraised and the requirements of the National Environmental Policy Act (NEPA) process have been completed.

The 2004 Wyoming State Legislature authorized \$250,000 to complete the NEPA analysis requirements (cultural, soils, wildlife, vegetation, paleontology, etc.) as required for the land transfer. Through the initial scoping process it has been determined that an Environmental Impact Statement (EIS) will be required to complete the NEPA analysis. Substantial concerns have been expressed with regards to aquatic habitat and diversions from the Big Horn River, as well as cultural and paleontological issues within the project boundaries. The latter will also necessitate a Class III Cultural Resource Survey as part of the analyses of any lands to be transferred through the proposed action. Such field surveys are labor and cost intensive and will mandate that the project timeline be extended by a year.

The total requested additional budget for all tasks necessary to complete the West Side NEPA analysis is \$1.2 million. This includes anticipated increased costs by the consultants in the preparation of the Environmental Impact Statement (to include Class III Cultural Resource Surveys) and cost recovery amounts of the Bureau of Land Management.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be continued in the New Development Program at Level I with an appropriation of \$1,200,000.

- 166. PROJECT: Wheatland – Black Mountain Water Supply**  
**LEVEL:** III  
**SPONSOR:** Town of Wheatland  
**LOCATION:** Platte County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	69	2003	I	\$100,000*	2008

\*50% grant

PROJECT INFORMATION:

The Platte County School District No. 1 is building a new middle school complex in the Black Mountain Village area (west of Interstate Highway I-25) in the Town of Wheatland. The West Elementary School is also located in the area. This section of the Town's water system was incapable of meeting the total water supply and fire supply requirements without major improvements. The Town seeks to eliminate this problem by constructing the project in three phases. The 2001 Legislature authorized WWDC grant funding in the amount of \$222,000 to construct the first two phases of the project that included a 1 million gallon storage tank, valves, pressure controls and necessary piping to connect the new storage and well to their water system.

The Town requested a 50 % grant for financial assistance with the final phase of the project, which includes completion of a third well in the Black Mountain Village area, system connection piping, a pump house and a disinfection system. Total project costs are estimated to be \$200,000. The 2003 Legislature authorized a 50% grant for the Level III construction. Completion of the Black Mountain No. 3 well was accomplished in September 2004. The well is capable of producing approximately 350 gallons per minute. Construction of the well house and storage tank connection will be accomplished in early 2005.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action is required.

- 167.    PROJECT:                    Wheatland Irrigation District System Conservation**  
**LEVEL:**                        New Application  
**SPONSOR:**                    Wheatland Irrigation District  
**LOCATION:**                    Platte County  
**PROGRAM:**                    Rehabilitation

PROJECT DESCRIPTION:

Wheatland Irrigation District was formed in 1947 and serves 54,180 acres with a conveyance system from Sand Lake above Arlington to points east of Wheatland. The district would like to undertake conservation upgrades to three areas of their system. These areas are the Canon Canal on the upper end of the system, Wheatland Reservoir No. 3 in the center of the system and the main service area on the lower end of the system around Wheatland. The upgrades consist of the following system components: enlargement of the Canon Canal, Reservoir #3 inlet/outlet head gates, approximately 4 small re-regulation ponds, rehabilitation of the system's head gates, and addition of short pipelines and check structures.

RECOMMENDED LEGISLATIVE ACTION:

The WWDC recommends the project be incorporated into the New Development Program at Level II with an appropriation of \$100,000.

- 168.    PROJECT:                    Willwood Irrigation District Master Plan**  
**LEVEL:**                        New Application  
**SPONSOR:**                    Willwood Irrigation District  
**LOCATION:**                    Park County  
**PROGRAM:**                    New Development

**PROJECT DESCRIPTION:**

The Willwood Irrigation District was formed on June 28, 1943 and serves 11,407 acres in the area just south of Powell. The district has requested a master plan to upgrade their system and better manage and conserve their existing supply. This study will include a review of their facilities and operations, and an evaluation of alternative rehabilitation measures. Emphasis will be placed on measurement structures and recommendations for new/improved measurement facilities to assist in their water conservation effort.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated into the New Development Program at Level I with an appropriation of \$50,000.

**169. PROJECT: Wind River Irrigation Rehabilitation**

**LEVEL:** III  
**SPONSORS:** Shoshone & Arapaho Tribes  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	118	2004	II	\$3,500,000*	2010

\* 50% grant

**PROJECT INFORMATION:**

The Bureau of Indian Affairs operated Wind River Irrigation Project is in very poor shape, with over 50 million dollars in deferred maintenance. According to a 1994 study, over 1,200 structures (60% of the structures) need repair or replacement, and 190 miles of canals and laterals (45%) need repair or reconstruction. Structure failures are common and catastrophic failure of segments of the water delivery system is imminent. In areas the efficiency of the delivery system is 35%.

This appropriation would help fund the first phase of a long-range plan to rehabilitate the system. The Tribes are also seeking funds from congress. They are seeking \$3.5 million each year for the next three years for the rehabilitation project. The first phase of the project, for which state funds are being sought, will focus on replacing or repairing the most important structures (primarily major canal head gates) with the highest likelihood of failure.

No action on the project occurred during 2004. The project is on hold pending the Tribes securing the balance of funding from the federal government.

**Estimated Level III Costs**

<b>State of Wyoming</b>	\$3,500,000
<b>Federal</b>	\$3,500,000
<b>TOTAL</b>	\$7,000,000

**RECOMMENDED LEGISLATIVE ACTION:**

No legislative action is required.

**170. PROJECT: Worland Area Irrigated Lands GIS**

**LEVEL:** New Application  
**SPONSOR:** Upper Hanover; Highland Hanover; Bluff; Upper Bluff; and Big Horn Canal Irrigation Districts  
**LOCATION:** Big Horn and Washakie Counties  
**PROGRAM:** Rehabilitation

**PROJECT INFORMATION:**

The irrigation districts listed above have come together to have their respective systems mapped digitally. Four of the five districts share a common diversion out of the Big Horn and share a common conveyance for at least part of their systems. The relatively close proximity of each of the districts' irrigated lands would make for an efficient method of data collection. The GPS mapping would involve mapping the main canals and laterals and each structure along with condition estimates which would be placed into a database to allow the Districts to modernize their maintenance schedules as well as create a living, updateable map of the Districts.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be incorporated in the Rehabilitation Program at Level II with an appropriation of \$200,000

- 171. **PROJECT:**                    **Worland Wells Test**
- LEVEL:                                II
- SPONSOR:                            City of Worland, Incorporated Municipality
- LOCATION:                             Washakie County
- PROGRAM:                            Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level II	34	2004	II	\$40,000	2006

**PROJECT DESCRIPTION:**

The City of Worland Well Field (Husky-Worland No. 1 Well and Worland Well No. 3, adjudicated for 1,670 gpm and 6,000 gpm respectively) will soon be tapped to provide source supply to a regional system that will significantly increase demands beyond present City of Worland customer needs. The City feels it is imperative that they know the well field potential will not be overtaxed by regional needs. The recently completed Level II Study (Phases I and II) analyzed the available data and evaluated the condition of the wells. This investigation included video logging of the Worland Well No. 3, and performing a bond log of both wells. Analysis of the data indicated that both wells could be flow tested with little risk to their structural integrity.

The proposed Phase III portion of the project will involve conducting a step-rate test followed by a constant-rate test on each well. The water produced from the flow tests will be discharged into an open channel through irrigation pipe. At the outfall of the discharge piping, significant efforts will be required to prevent erosion of the ground surface during testing. NPDES and BLM permits will be required in this effort.

**RECOMMENDED LEGISLATIVE ACTION:**

The WWDC recommends the project be continued in the Rehabilitation Program at Level II with an appropriation of \$125,000.

- 172. **PROJECT:**                    **Wright Well and Pipeline**
- LEVEL:                                III
- SPONSOR:                            Wright Water & Sewer District
- LOCATION:                             Campbell County
- PROGRAM:                            New Development

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level III	88	2002	I	\$600,000	2007

PROJECT DESCRIPTION:

Because of the influx of people in the region due to energy production and construction of two new power plants, Wright Water and Sewer District anticipates water demand in excess of the capacity of the current system. A man camp will be located in the district, which will house as many as 800 to 1,000 workers. The new well contemplated in this application will be necessary to meet the increased water demand. This application is for completion of the well, pump, controls, well house, and a pipeline connecting the well to the distribution system.

Completion is anticipated for a Fort Union well with a large diameter cased section in the top 1200 feet of the well and a smaller diameter cased section in the lower 1500 feet. This project includes funding for the design and construction of 5,700 feet of transmission pipeline and appurtenances.

The anticipated growth has not occurred as quickly as projected and the Town of Wright has temporarily placed this project on hold.

RECOMMENDED LEGISLATIVE ACTION:

No legislative action required.

## Completed Level I and Level II Projects

Completed Level I and Level II Projects are those projects that have not advanced to Level III, Construction. Level I watershed management plans and municipal master plans are valuable resource documents. These documents help sponsors make decisions regarding, for example, how best to comply with EPA requirements or TMDLs. Also, advancement to Level II generally requires that the sponsor form a legal entity. Watershed plans and master plans often include a host of options that a sponsor may want to consider, and could advance to a higher Level under a specific legislative authorization. Some Level II projects lack the financial and economic feasibility for the sponsor to take on the required level of debt. These projects may have to wait for conditions to change or for other funding sources to become available.

<b>01.</b>	<b><u>PROJECT:</u></b>	<b>Aladdin Water Supply</b>
	<b>SPONSOR:</b>	Aladdin Community Water District
	<b>LOCATION:</b>	Crook County
	<b>PROGRAM:</b>	New Development– Level II
	<b>APPROPRIATION:</b>	\$300,000
	<b>ACTUAL EXPENDITURES:</b>	\$165,620.58

### PROJECT DESCRIPTION:

The WWDC completed a Level I study in 1994 which identified a well site and developed cost estimates and monthly rates that were acceptable to district members. The water district requested that WWDC proceed to Level II to construct a Madison test well and develop conceptual level plans for storage and transmission components.

A Level II study was completed in 1995, that identified the location of a good groundwater supply. During the Level II process the project service area was reduced to the immediate Aladdin area, which included fourteen (14) taps. Conceptual level designs and cost estimates were completed for the downsized system. The total Level III project cost was estimated at \$335,000, which included the Level II well costs (\$80,000), the transmission system (\$235,000), and the distribution and chlorination systems (\$20,000). The distribution and chlorination systems were not eligible for WWDC participation.

The district spent two years investigating funding alternatives, and have since requested only that the WWDC sell them the well with a 60/40-grant loan split. The interest rate will be 7.25% with a term of 10 years. They plan to obtain the balance of their funding from other sources.

The project will be maintained in state ownership and provisions were made to allow sale of water to the district and to the Department of Transportation from the well. Water will be sold to the district for \$1.20 per 1000 gallons and to the Department of Transportation for \$.50 per 1000 gallons. No appropriation is necessary because the well is already in place. This authorization will allow the state to eventually recoup its investment in the well, and the well will be put to beneficial use.

<b>CONSULTANT:</b>	Soda Butte Services; Upton, Wyoming
<b>DRILLING CONTRACTOR:</b>	Weston Engineering; Upton, Wyoming
<b>YEAR COMPLETED:</b>	1995
<b>SESSION LAW YEAR :</b>	1994, 1995

**02. PROJECT:** **Beulah Water Supply**  
**LEVEL:** I  
**SPONSOR:** Beulah Water District  
**LOCATION:** Crook County  
**PROGRAM:** New Development

EXISTING LEGISLATION:

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	I	\$40,000	2004

PROJECT INFORMATION:

Beulah is an unincorporated community located in extreme eastern Crook County along I-90. Residences are supplied by shallow wells along Sand Creek. Septic systems are suspected to be contaminating the alluvial aquifer after over 100 years of use. Most residents do not use their wells for potable supply. The Water District was interested in a central water supply system and a community well. It was hoped that a Madison Formation well could have been developed in this area. The reconnaissance study was completed in November 2003. Due to lack of support within the District coupled with the potential costs of a community system, this project did not advance to a level II cost analysis.

**03. PROJECT:** **Big Horn Regional Water Supply**  
**SPONSOR:** Big Horn Regional Joint Powers Board  
**LOCATION:** Big Horn, Washakie, Hot Springs Counties  
**PROGRAM:** New Development– Level II  
**APPROPRIATION:** \$1,505,000  
**ACTUAL EXPENDITURES:** \$1,500,000

PROJECT DESCRIPTION:

The WWDC Level II Big Horn Regional Water Supply Study, commenced in 2000 and completed late 2004, was a comprehensive feasibility study to determine if a regional water supply system supplying rural and municipal users between Thermopolis and Greybull in the valley of the Big Horn River. The study also completed an investigation of groundwater potential for a municipal water supply in the southern Big Horn Basin. Eight (8) well sites were investigated within the southern Big Horn Basin that could potentially yield abundant (>500gpm), good quality (<500 mg/l TDS) water. These sites were chosen on the basis of geologic structure, drilling depths, geothermal gradient, distance from known geothermal activity, accessibility, and potential groundwater quality. An extensive review of groundwater data within the southern Big Horn Basin reveals that the most likely aquifer to yield abundant, good quality water is from the Paleozoic-age Madison-Big Horn aquifer system. A secondary target aquifer, that is deemed viable in the study, is the Cambrian-age Flathead Sandstone.

The original intent of ground water exploration in Hot Springs County was to establish a southern-basin well field capable of providing yield to match or exceed maximum daily use requirements of potential Hot Springs County users (including the town of Thermopolis) and provide a supplemental supply to joint powers users to the north when needed. One well will not feasibly meet this requirement. For example, other source well field configurations serving the joint powers service area utilize multiple wells, i.e., the Worland well field (2 wells), Manderson well field (2 "Wild Horse" wells), and the Greybull supply wells (2 Trapper Creek wells and Shell Canyon well).

A test well was completed in late 2001 at the Wild Horse Anticline site, about 13 miles ESE of Thermopolis, as a Madison-Big Horn Aquifer completion. Production yield at this site did not meet the requirements of the project. A second test well was drilled and completed at the Buffalo Creek Monocline site, 4½ miles SE of Thermopolis, in early 2004. A 6 foot cavern in the



Madison formation was encountered that hindered advancement of drilling and caused lost circulation of drilling fluids to total depth (1,068 feet below land surface). Subsequent pump testing revealed good potential for a high yielding well. In fact, the 200 hp pump was scarcely stressing the well capacity over a 5-day pump test with only 49 feet of drawdown at an average pumping rate of 615 gpm (end of test specific capacity = 11.9 gpm/ft).

CONSULTANT: BRS, Inc.; Broomfield, CO  
DRILLING CONTRACTOR: DC Drilling; Lusk, WY  
Barnhart Drilling, Riverton, WY  
YEAR COMPLETED: 2004  
SESSION LAW YEAR: 2000, 2001, 2002

04. **PROJECT:** **CBM Aquifer Storage and Retrieval**  
SPONSOR: City of Gillette, Incorporated Municipality  
LOCATION: Campbell County  
PROGRAM: New Development– Level II  
APPROPRIATION: \$510,000  
ACTUAL EXPENDITURES: \$500,368.01

**PROJECT DESCRIPTION:**

This project was envisioned to test the feasibility of re-injecting and retrieving coal bed methane (CBM) water into the Fort Union aquifer and subsequent municipal use at Gillette. A municipal-size test well would also be drilled in an area heavily developed by coal-bed methane which was previously identified as a future Gillette well field. Several CBM producers are currently injecting CBM water as a means of disposal of excess produced water. Determining whether storage of this water and later retrieval is cost effective is one purpose of the project.

An interim report was prepared in September 2003 that compiled data from storage and retrieval pilot tests conducted in the vicinity of Gillette relative to storing produced coal bed methane water. The data is from 11 constant-rate pumping tests from 10 different wells and 7 constant rate injection tests. Also included are water quality analyses of the baseline water quality.

In the area where the Aquifer Storage and Retrieval (ASR) test well was planned, depletion of CBM water occurred more rapidly than anticipated. The ASR segment of the study was abandoned. The secondary objective, exploration test drilling for a new Fort Union Formation well field, was ASR completed in early 2004 south of Gillette.

CONSULTANT: Wester-Wetstein & Associates, Laramie, WY  
DRILLING CONTRACTOR: Weston Engineering, Upton, WY  
YEAR COMPLETED: 2004  
SESSION LAW YEAR: 2002

05. **PROJECT:** **Corner Mountain Test Well**  
LEVEL: II  
SPONSOR: Corner Mountain Water & Sewer District  
LOCATION: Albany County  
PROGRAM: New Development

**PROJECT DESCRIPTION:**

Formation of the Corner Mountain Water and Sewer District was prompted by the 1995 WWDC Level I study, which explored alternatives for providing a common source of water for area residents. The district is located near the community of Centennial in Albany County and encompasses 12 subdivisions and adjacent tracts along Libby Creek and the North Fork of the Little Laramie River. Permanent and summer residents obtain water from shallow alluvial wells

and springs, or from hauling water. Well water is mostly of a quality deemed useful for washing and flushing toilets only. The Level I study ultimately concluded that a groundwater source was the most feasible source supply.

Two test wells drilled in early 1999-revealed valuable subsurface information in the geologically complex terrain which underlies Corner Mountain development. The exploration effort was seeking a deeper ground water source than that presently utilized by Centennial (Casper Formation) or by the town of Elk Mountain (Cloverly Formation).

The Corner Mountain Water No. 3 Test Well was drilled, completed, and tested in late 2000. Sustained yield (200 g.p.m.) from the well meets the supply needs of the district.

- 06.    PROJECT:                                   **Granger Water Supply**  
LEVEL:    II  
SPONSOR:                                        Town of Granger  
LOCATION:   Sweetwater County  
PROGRAM:                                        Rehabilitation**

**PROJECT INFORMATION:**

The purpose of this study was to determine the level of system improvements that may be required to facilitate the negotiation of a long-term contract with FMC-Granger. A new agreement between the Town and FMC should allow for Granger’s permanent use of the pipeline while still allowing FMC to shut off the pipeline for maintenance. The final report was completed in December 2002.

- 07.    PROJECT:                                   **Green River Groundwater Recharge and Alternate Storage**  
LEVEL:    I  
SPONSORS:                                       State of Wyoming  
LOCATION:   Green River Basin, WY  
PROGRAM:                                        New Development**

**PROJECT INFORMATION:**

The 2000 Legislature appropriated \$100,000 for a Level I study in the Green River Basin to investigate groundwater recharge and alternate storage for the basin’s surplus water. Additional funding was requested in 2001 to investigate a reservoir site on the East Fork that was discovered as a part of this project. This study was completed in spring of 2003.

- 08.    PROJECT:                                   **Greybull Raw Water**  
LEVEL:    II  
SPONSOR:                                        Town of Greybull  
LOCATION:   Big Horn  
PROGRAM:                                        New Development**

**PROJECT INFORMATION:**

The purpose of this study was to determine the feasibility and cost of putting in a raw water irrigation system for town parks, greenways and residential lawns. The Town of Greybull holds surface water rights on Shell Creek, which are not currently exercised because of high surface water treatment costs and increasing federal water quality standards. Greybull is currently operating at or near full capacity during summer peak months and during the summer of 2001 had to implement watering restrictions in the town to relieve the pressure on the water system. A raw water system would relieve demand on the town’s potable system and allow for future growth and expansion of Greybull. The final report was completed in the fall of 2002.

09. **PROJECT:** **Hawk Springs Water Supply**  
**LEVEL:** II  
**SPONSOR:** Hawk Springs Water and Sewer District  
**LOCATION:** Goshen County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The population of Hawk Springs is approximately 125, with thirty-one service connections that may be served by construction of a central water supply system. The district requested a study to investigate alternative water sources, storage, and distribution facilities for the area in and around Hawk Springs. Residents currently rely on individual wells. Some wells in the area are contaminated by high levels of dissolved solids, radionuclides, and septic system effluent.

The Level II study was completed in 1995. The exploration program located a suitable groundwater supply west of the community. Preliminary designs, cost estimates, and economic analyses have been prepared for the preferred alternative, with the estimated total project cost at \$2,145,664. The estimated monthly bill for the project is \$45.49/tap.

10. **PROJECT:** **Hot Springs State Park, Big Springs Study**  
**LEVEL:** I  
**SPONSOR:** Wyoming Department of State Parks & Cultural Resources  
Division of State Parks and Historical Sites  
**LOCATION:** Hot Springs County  
**PROGRAM:** Rehabilitation

**PROJECT INFORMATION:**

Many of the Park's concessionaires were dissatisfied with the water distribution problems associated with the Big Spring. Historically the spring produces around 2,500 gallons per minute. The water and its thermal characteristics are important in the formation and maintenance of the park's mineral terraces. The purpose of this study was to determine how best to address system deficiencies and to establish operation and maintenance protocols in the Hot Springs State Park that would satisfy all users to the greatest extent possible. The final report was completed in the fall of 2002.

11. **PROJECT:** **Irrigation Hydro Power**  
**LEVEL:** II  
**SPONSOR:** Shoshone and Willwood Irrigation Districts  
**LOCATION:** Park/Big Horn Counties  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

A Hydro Power study was conducted on the Shoshone River and irrigation ditches located in the Shoshone and Willwood Irrigation Districts. Issues included detailed cost analyses of placing drop structures with hydropower generators in their current irrigation delivery systems. Each system has locations with flow and pressure potential to generate power. The study also included a study of the transmission requirements to get the generated power to power users. The project was initiated July 2001 and was completed May 2003.

12. **PROJECT:** **Lodgepole Creek ASR**  
**LEVEL:** I  
**SPONSOR:** Ground Water Users of Eastern Laramie County  
**LOCATION:** Laramie County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

Eastern Laramie County ranks high as one of the most intensively farmed areas of the state. The area depends on ground water pumping almost exclusively as the irrigation supply source. In 1970, a Ground Water Control Area was formed for extreme eastern Laramie County and expanded in 1982 (to include that portion of the county east of I-25, not inclusive of the city of Cheyenne) in response to declining ground water levels. A Control Area Advisory Board reviews and makes recommendations to the State Engineer concerning any new development of high production ground water wells, enlargement of existing wells, or placing new lands under irrigation.

Since inception of the Control Area, ground water level declines have slowed and in some areas ceased, but have not rebounded. Aquifer storage and retrieval (ASR) is a technology that has been tested in arid western states with varied success. This study would determine if a secondary supply source (e.g., surplus and/or unencumbered city of Cheyenne Stage II supplies) is available and if lands generally underlying Lodgepole Creek drainage in eastern Laramie County are a suitable candidate for ASR techniques or other technologies. The study has been completed, but due to high cost, has not been pursued further by the Sponsor.

- 13. **PROJECT:** Lovell ID Hydro Power
- LEVEL:** II
- SPONSOR:** Lovell Irrigation District
- LOCATION:** Big Horn County
- PROGRAM:** New Development

**PROJECT INFORMATION:**

A Hydro Power study was conducted on the irrigation ditches located in the Lovell Irrigation District. Issues included detailed analyses of placing drop structures with hydropower generators in their current irrigation delivery systems, as well as, converting several problem areas of the current ditch system into pipe drop structure type conveyances to eliminate seepage losses. The system has locations with flow and pressure potential to generate power. The study also included a study of the transmission requirements to get the generated power to power users. The project was initiated July 2001 and was completed May 2003.

- 14. **PROJECT:** North Canal - Grover
- LEVEL:** I
- SPONSOR:** North Canal Irrigation Company
- LOCATION:** Lincoln
- PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	125	2003	II	\$60,000	2004

**PROJECT INFORMATION:**

North Canal Irrigation Company diverts 40.38 cfs out of Swift Creek near Afton. The Company holds a territorial water right to this appropriation but due to an aged infrastructure the Company has difficulty delivering water to its irrigators. The Company wanted a Level I reconnaissance level study of its system to determine all options available to them to improve their system. The study was completed in November 2003. Several problems were identified including unauthorized farm turn-outs.

The Company, at this time, chose not to proceed with formation of an irrigation district which is required for a level II cost analysis. If district formation is done in the future, the company can advance to a level II study.

15. **PROJECT:** Opal Regional Water Supply  
**LEVEL:** II  
**SPONSOR:** Town of Opal  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

In 1999, the town of Opal requested a feasibility study for the costs associated with installing and maintaining a water treatment unit to reduce or eliminate excessive fluoride present in Opal's drinking water. This report was completed in November 2000. The report indicated that installation costs were affordable, but the annual operation and maintenance cost would be approximately \$11,000 per year.

The town of Opal requested an additional study to determine the feasibility of obtaining a new groundwater source, which would be blended with their existing water supply to dilute the fluoride concentrations and thereby addressing the EPA Administrative Order recently issued relative to the Safe Drinking Water Act violations. A groundwater study was completed and the results indicated there was no viable source that would serve to blend with the existing town's supply. The study also investigated "point-of-use" treatment by installation of individual reverse-osmosis units in town residences. The costs associated with this type of treatment were much less than a central treatment facility. The town has elected to pursue "point-of-use" treatment and is presently conferring with EPA-Region VII on implementation.

The project was initially considered as a part of the Oakley Water Supply Project in 1989. It was revisited in 2001 and completed in 2002.

16. **PROJECT:** Pinedale Hydro Power  
**LEVEL:** II  
**SPONSOR:** Town of Pinedale  
**LOCATION:** Sublette County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

A Hydro Power study was conducted on the Town of Pinedale's water system between Fremont Lake and Pinedale. Pinedale has two areas with flow and pressure potential that could provide hydropower. The first area is the Pine Creek Fremont Lake outflow. This area had a power plant years ago. The second area is the supply line from the lake to town. Issues included detailed analyses of placing drop structures with hydropower generators in these two areas. The study also included a study of the transmission requirements to get the generated power to power users. The project was initiated July 2001 and was completed May 2003.

17. **PROJECT:** Popo Agie Watershed Management Plan  
**LEVEL:** I  
**SPONSOR:** Popo Agie Conservation District  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation

**PROJECT DISCRPTION:** A watershed study was conducted on the Popo Agie River drainage from the National Forest boundary to the confluence with the Little Wind River. Issues of concern included consistent water flow, conveyance losses in irrigation ditches, evaluation of potential storage sites, and a study of the fluvial health of the watershed. This study provided baseline information, for the district's watershed planning efforts. The project was initiated July 2001 and was completed July 2003.

18. **PROJECT:** Powder River Water Supply  
**LEVEL:** I  
**SPONSOR:** Town of Powder River, Unincorporated  
**LOCATION:** Natrona County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The Town of Powder River is located 35 miles west of Casper on US HWY 20-26. Powder River was platted as a townsite in 1920 but remains unincorporated. It has a population of 43. Shallow individual domestic-sized wells serve the area.

The “Tumble Inn well” has not been able to comply with “Safe Drinking Water Act” regulations. This well provides service to several users. On September 28, 2001 the EPA issued an *Administrative Order on Consent (AOC)*, Docket No, SDWA-08-2001-39. Water supplied by the well exceeds the maximum contaminant level (MCL) for nitrates (=10 mg/L nitrate) and total coliform (>1 positive sample/month total coliform). The average of samples taken in 1999 from the well is 29.1 mg/L nitrate. Monitoring results for the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 1999 and the 2<sup>nd</sup> and 4<sup>th</sup> quarters of 1997 exceeded the MCL for total coliform.

Additional violations include failure to test well water, failure to notify the public of violations, and failure to report violations to the EPA.

The “Tumble-Inn well” reflects water quality problems found in all wells used at Powder River. Individual domestic wells are not regulated for conformity with the “Safe Drinking Water Act.” Well owners in Powder River have long been aware of the dangers associated with drinking water from town wells and have either hauled water or had purified water delivered. The AOC lists interim measures (staying on imported drinking water and posting public notices) that must be implemented and also requires implementation of long-term corrective measures.

Powder River residents will be given the choice of pursuing the best alternative(s) identified in the 2002 WWDC study. The study concentrated on identifying contaminate sources, evaluate treatment alternatives for exiting wells, locate alternative ground water source supplies (e.g. deep drilling), and provided cost estimates for the various alternatives. The study was delivered to EPA Region 8 Enforcement authorities and as of late 2003, no decision has been handed to Powder river residents.

19. **PROJECT:** Rock Springs East Water Supply  
**LEVEL:** II-Hold  
**SPONSOR:** Green River - Rock Springs - Sweetwater County Joint Powers Water Board  
**LOCATION:** Sweetwater County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

Several areas east of Rock Springs, including the Arrowhead Springs Subdivisions, are interested in constructing a centralized water system. In order to supply water to the area, a new transmission pipeline would be required to transmit water from Rock Springs. SF Industries may be interested in participating in the project. Further, the Sweetwater County Airport, located 7 miles east of Rock Springs, would also like water service.

The Level I study delineated a service area and provided preliminary designs and cost estimates for the pipeline.

The project was initiated in 1995. A Level I evaluation was conducted and completed in 1996. The project was placed on Hold in 1996 and remained on Hold until 2004.

20. **PROJECT:** South Garden Creek Water Supply  
**LEVEL:** II  
**SPONSOR:** Central Wyoming Regional Water System Joint Powers Board  
**LOCATION:** Natrona County  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The Central Wyoming Regional Water System Joint Powers Board in coordination with the City of Casper, sponsored a Level II Feasibility Study to continue the examination of the area south of Casper (and alongside Casper Mountain). This area is populated with approximately 300 residences (of varying age) and each having an individual well. During recent periods of drought, some wells have gone dry, forcing occupants to haul water. The completed Level I Study looked at the potential of adding this area to the City of Casper's public water supply system. Five unique service areas were identified in the Level I Study, including: Squaw Creek/Wolf Creek, South Garden Creek, Elkhorn Valley, Coates Road and Pursel Lands. While the later two areas were advanced to Level III construction status during the 2003 Legislative Session, Squaw Creek/Wolf Creek, South Garden Creek, and Elkhorn Valley required additional study. This project further defined the water supply options of these service areas, refined the entity boundaries, and included an environmental assessment. The final report for this study was completed in August, 2004.

21. **PROJECT:** Tensleep/Hyattville Master Plan  
**LEVEL:** Level I  
**SPONSOR:** Town of Ten Sleep  
Hyattville Water Company  
**LOCATION:** Washakie County and Big Horn County  
**PROGRAM:** Rehabilitation

**PROJECT INFORMATION:**

**Ten Sleep:** The Town of Ten Sleep has two (2) Madison Formation aquifer supply wells that serve its water supply needs. The oldest well was drilled in 1955 and a second well was added in 1978. The total yield from these wells has been more than ample to serve the community. Consumption however, far outstrips demand, with average use estimated at 2500 gallons per day per person. This use rate figure is approximately ten times the recommendation suggested for Wyoming public water supply systems by the Wyoming Department of Environmental Quality. This inefficiency is a central consideration to be addressed by the requested study. The study would include an entire review of their system.

The Level I study will also determine whether the town should provide service to outlying rural areas. Expansion of supply outside of town has occurred to some extent but recent residential development in the county near Ten Sleep has encountered insufficient water supply in their domestic wells from a quantity and quality standpoint.

Therefore, a small-scale regional plan utilizing the existing Ten Sleep ground water supply is an attainable concept worth consideration in a master plan study.

**Hyattville:** In 1968, the residents of Hyattville formed the Hyattville Water Company for the purpose of developing a safe, reliable supply of water for their community. Subsequently, a deep well was drilled into the Madison Formation that flowed 100 g.p.m. at the time of completion. Using the average daily per capita use for Wyoming (Wyoming Dept. of Environmental Quality –

Water Quality Division Rules & Regulations, Chapter XII, Section 8) of 125 gallons per day per person, the well could be expected to provide water for 1152 people. In reality, however, Hyattville's water system has consistently failed to deliver an adequate supply of water to the population (approx. 52) ever since it was brought online.

Throughout the summer months, the town's 25,000 gallon storage tank is drained which results in extremely low water pressure throughout the system. When this occurs, members of the community are forced to curtail water usage by means of restricting watering hours. At least one tap is sometimes without any water at all. The problems with the system are not altogether clear. Problems could be attributable to diminished flow or pressure at the Hyattville No. 1 Well, or leaks in the distribution system, inadequate storage, or a combination thereof. The members of the Hyattville Water Board understand that to proceed past Level I involvement with the WWDC (and other public lending entities), the community must organize a water district.

The 2002 Level I Master Plan for Tensleep recommended that a Level II feasibility study be advanced to evaluate the wells, to determine the need for storage, and to evaluate extending a transmission line south of town provide service to rural users.

<b>22. PROJECT:</b>	<b>Ten Sleep Water Supply</b>
<b>SPONSOR:</b>	Town of Ten Sleep, Incorporated Municipality
<b>LOCATION:</b>	Washakie County
<b>PROGRAM:</b>	New Development– Level II
<b>APPROPRIATION:</b>	\$80,000
<b>ACTUAL EXPENDITURES:</b>	\$76,114.33

**PROJECT DESCRIPTION:**

The Town of Ten Sleep has two (2) Madison Formation aquifer supply wells that serve its water supply needs. The oldest well was drilled in 1955 and the second well was added in 1978. The total yield from these source wells (1350 gpm flowing at surface) has been more than ample to serve the community. Consumption however, far outstrips demand, with average use estimated at 2500 gallons per day per person. This use rate figure is approximately ten times the general design considerations suggested for Wyoming public water supply systems by the Wyoming Department of Environmental Quality – Water Quality Division Rules and Regulations (WDEQ-WQD Chapter XII, Section 8). This inefficiency is a central consideration to be addressed by the requested study. At task in the study would be an entire review of the system from an evaluation of source supply performance (Ten Sleep #1 Well and Ten Sleep #2 Well) to an appraisal of the transmission and distribution system.

The study also will evaluate the feasibility of expanding the system to serve new rural water users. Expansion of supply outside of town has occurred to some extent but recent residential development in the county near Ten Sleep has encountered insufficient water supply in their domestic wells from a quantity and quality standpoint. Installing deep wells is not an option for these residents who are at close proximity (within 2 to 3 miles) to the town.

A Level II Final Report was delivered in January 2004 and the town plans, in the near term, to pursue recommended distribution system upgrades.

<b>CONSULTANT:</b>	Lidstone & Associates, Inc.: Fort Collins, Colorado
<b>YEAR COMPLETED:</b>	2004
<b>SESSION LAW YEAR:</b>	2003



23. **PROJECT:** **Three Horses Watershed Study**  
**LEVEL:** I  
**SPONSOR:** Campbell County and Lake DeSmet Conservation Districts  
**LOCATION:** Campbell, Johnson, and Sheridan Counties  
**PROGRAM:** New Development

**PROJECT INFORMATION:**

The drainages of Spotted Horse Creek, Dead Horse Creek and Wild Horse Creek are located east of the Powder River and are tributary to the Powder River. These three watersheds make up the Three Horses Watershed study area. Due to recent activity involving coalbed methane exploration and extraction, the Conservation Districts are interested in evaluating the cumulative impacts to the watershed due to these activities. This project included an analysis of these impacts as well as estimating costs associated with disposal and treatment of coalbed methane produced water. The final report was completed in the fall of 2001.

24. **PROJECT:** **Upper Wind River Storage**  
**LEVEL:** I  
**SPONSOR:** State/Tribes  
**LOCATION:** Fremont County  
**PROGRAM:** New Development

**PROJECT DISCRPTION:** This study looked at storage potential to alleviate the anticipated future shortages that will occur when the Tribes fully activate their court decreed futures water right award. Over the years numerous storage sites have been identified in the Wind River drainage. This study screened the previously identified sites, evaluated new potential sites, and determined the least environmentally damaging potential reservoir development that would provided the supplemental water needed in the Wind River drainage. The final report was submitted November 30, 2001.

25. **PROJECT:** **York/South Side Ditch Master Plan**  
**LEVEL:** I  
**SPONSOR:** York Ditch Company  
South Side Ditch Company  
**LOCATION:** Sheridan County  
**PROGRAM:** Rehabilitation

**EXISTING LEGISLATION:**

<u>Purpose</u>	<u>Chapter</u>	<u>Session</u>	<u>Account</u>	<u>Appropriation</u>	<u>Due Date</u>
Level I	7	2002	II	\$60,000	2004

**PROJECT INFORMATION:**

The York Ditch and the South Side Ditch both divert from the Tongue River and provide irrigation supply to lands between Dayton and Ranchester. One objective of the study was to identify how best to rehabilitate and repair their conveyance systems that are more than eighty years old. The yearly costs for maintenance and upkeep of systems have risen dramatically over time. Another objective was to provide construction estimates for needed repairs. The level I study was completed in November 2002. Several problems were identified; primarily an aging conveyance system and control structures.

The two Companies, at this time, chose not to proceed with formation of an irrigation district which is required for a level II cost analysis. If district formation is done in the future, the company can advance to a level II study.

## Completed Construction Projects

- |            |   |   |
|------------|---|---|
| <b>01.</b> | <p><b>PROJECT:</b><br/> <b>SPONSOR:</b><br/> <b>LOCATION:</b><br/> <b>PROGRAM:</b><br/> <b>APPROPRIATION:</b><br/> <b>ACTUAL EXPENDITURES:</b><br/> <b>DESCRIPTION:</b></p> <p><b>ENGINEER:</b><br/> <b>CONTRACTOR:</b></p> <p><b>YEAR COMPLETED:</b><br/> <b>SESSION LAW YEAR:</b></p> | <p><b>Afton Springs Water Supply</b><br/> Town of Afton<br/> Lincoln County<br/> Rehabilitation<br/> \$450,000<br/> \$450,000<br/> Renovation of Periodic Springs intake and pipeline to protect from rock fall<br/> BRS, Inc.; Riverton, Wyoming<br/> Roberts Construction; Evanston, Wyoming<br/> Kilroy and Company; Alpine, Wyoming<br/> 2001<br/> 2000</p>             |
| <b>02.</b> | <p><b>PROJECT:</b><br/> <b>SPONSOR:</b><br/> <b>LOCATION:</b><br/> <b>PROGRAM:</b><br/> <b>APPROPRIATION:</b><br/> <b>ACTUAL EXPENDITURES:</b><br/> <b>DESCRIPTION:</b><br/> <b>ENGINEER:</b><br/> <b>CONTRACTOR:</b></p> <p><b>YEAR COMPLETED:</b><br/> <b>SESSION LAW YEAR:</b></p>   | <p><b>Afton Water Supply</b><br/> Town of Afton<br/> Lincoln County<br/> Rehabilitation<br/> \$2,600,000<br/> \$2,518,911<br/> Spring renovation, pipeline, storage tank, well<br/> Sunrise Engineering; Afton, Wyoming<br/> Kilroy Construction; Alpine, Wyoming<br/> Snyder Construction; Lyman, Wyoming<br/> AG SERVICES, Inc.; Blackfoot, Idaho<br/> 1994<br/> 1991</p> |
| <b>03.</b> | <p><b>PROJECT:</b><br/> <b>SPONSOR:</b><br/> <b>LOCATION:</b><br/> <b>PROGRAM:</b><br/> <b>APPROPRIATION:</b><br/> <b>ACTUAL EXPENDITURES:</b><br/> <b>DESCRIPTION:</b><br/> <b>ENGINEER:</b><br/> <b>CONTRACTOR:</b></p>   | <p><b>Airport Bench Water Supply</b><br/> Airport Bench W&amp;S District<br/> Big Horn County (Greybull)<br/> New Development<br/> \$225,000<br/> \$225,000<br/> Pipeline, storage tank<br/> Engineering Associates; Cody, Wyoming<br/> Whitlock Construction; Powell, Wyoming</p>  |
| <b>04.</b> | <p><b>PROJECT:</b><br/> <b>SPONSOR:</b><br/> <b>LOCATION:</b><br/> <b>PROGRAM:</b><br/> <b>APPROPRIATION:</b><br/> <b>ACTUAL EXPENDITURES:</b><br/> <b>DESCRIPTION:</b><br/> <b>ENGINEER:</b><br/> <b>CONTRACTOR:</b></p>   | <p><b>Alpine Water Supply</b><br/> Town of Alpine<br/> Lincoln County<br/> New Development<br/> \$700,000<br/> \$700,000<br/> Pipeline, storage tanks, well<br/> Sunrise Engineering; Afton, Wyoming<br/> Kilroy Construction; Alpine, Wyoming<br/> ABC Tank, Salt Lake City, Utah</p>  |

- 05. PROJECT: American Road Water Supply Project**  
 SPONSOR: American Road Water and Sewer District  
 LOCATION: Campbell County  
 PROGRAM: New Development  
 APPROPRIATION: \$250,000  
 ACTUAL EXPENDITURES: \$132,010  
 DESCRIPTION: New Well  
 ENGINEER: Wester-Wetstein Associates; Laramie, Wyoming  
 CONTRACTOR: Ruby Drilling, Gillette, Wyoming
- 06. PROJECT: Antelope Valley Storage Facility**  
 SPONSOR: Antelope Valley Improvement & Service Dist.  
 LOCATION: Campbell County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$850,000  
 ACTUAL EXPENDITURES: \$378,621  
 DESCRIPTION: Storage Tank  
 ENGINEER: Bruce Engineering Services; Gillette, Wyoming  
 CONTRACTOR: L&T Fabrication; Gillette, Wyoming
- 07. PROJECT: Baggs Water Supply**  
 SPONSOR: Town of Baggs  
 LOCATION: Carbon County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$92,000 & \$28,000 = \$120,000  
 ACTUAL EXPENDITURES: \$114,518.81  
 DESCRIPTION: Construction of stream bed infiltration intake and pipeline to provide for a more reliable raw water source from the river.  
 ENGINEER: A.V.I. Professional Corporation, Cheyenne, Wyoming  
 CONTRACTOR: High Plains Construction, Inc., Mills, Wyoming  
 YEAR COMPLETED: 2003  
 SESSION LAW YEAR: 2001 & 2003
- 08. PROJECT: Basin Water Supply**  
 SPONSOR: Town of Basin  
 LOCATION: Big Horn County  
 PROGRAM: New Development  
 APPROPRIATION: \$1,750,000  
 ACTUAL EXPENDITURES: \$1,152,204  
 DESCRIPTION: Pipeline, reservoirs  
 ENGINEER: Civil Engineering Professionals, Inc.; Casper, Wyoming  
 CONTRACTOR: Larry's Inc.; Gillette, Wyoming
- 09. PROJECT: Bedford Water Supply**  
 SPONSOR: Bedford Water and Sewer District  
 LOCATION: Lincoln County  
 PROGRAM: New Development  
 APPROPRIATION: \$1,300,000  
 ACTUAL EXPENDITURES: \$1,151,230  
 DESCRIPTION: Springs, well, pipeline  
 ENGINEER: Forsgren Associates, Inc.; Evanston, Wyoming  
 CONTRACTOR: Snyder Construction, Inc.; Evanston, Wyoming

10. **PROJECT:** **Big Horn Basin Rural Water Supply**  
**SPONSOR:** Northwest Rural Water District  
**LOCATION:** Park and Big Horn Counties  
**PROGRAM:** New Development  
**APPROPRIATION:** \$11,410,000  
**ACTUAL EXPENDITURES:** \$11,410,000  
**DESCRIPTION:** Rural domestic water supply for rural Park and Big Horn Counties residents  
**ENGINEER:** Engineering Associates; Cody, Wyoming  
**CONTRACTOR:** Several
11. **PROJECT:** **Big Horn Canal Improvements**  
**SPONSOR:** Big Horn Canal Irrigation District  
**LOCATION:** Washakie and Big Horn Counties  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$693,000  
**ACTUAL EXPENDITURES:** \$485,420  
**DESCRIPTION:** Elk Creek Siphon  
**ENGINEER:** Natural Resources Conservation Service  
Donnell & Allred, Inc.; Worland, Wyoming  
**CONTRACTOR:** Big Horn Redi-Mix; Greybull, Wyoming  
**YEAR COMPLETED:** 1998  
**SESSION LAW YEAR:** 1995
12. **PROJECT:** **Big Horn Spillway Improvement**  
**SPONSOR:** Big Horn Canal Irrigation District  
**LOCATION:** Washakie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$120,000  
**ACTUAL EXPENDITURES:** \$120,000  
**DESCRIPTION:** Crooked S Wasteway  
**ENGINEER:** Soil Conservation Service; Worland, Wyoming  
**CONTRACTOR:** Big Horn Redi-Mix; Greybull, Wyoming  
**YEAR COMPLETED:** 1995  
**SESSION LAW YEAR:** 1993
13. **PROJECT:** **Big Piney Water Supply**  
**SPONSOR:** Town of Big Piney  
**LOCATION:** Sublette County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$410,000  
**ACTUAL EXPENDITURES:** \$265,784  
**DESCRIPTION:** Transmission pipeline  
**ENGINEER:** Jorgensen Engineering; Jackson, Wyoming  
**CONTRACTOR:** Eiden's Construction; Marbleton, Wyoming  
**YEAR COMPLETED:** 1998  
**SESSION LAW YEAR:** 1995
14. **PROJECT:** **Boulder Irrigation District**  
**SPONSOR:** Boulder Irrigation District Board  
**LOCATION:** Sublette County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$42,815  
**ACTUAL EXPENDITURES:** \$52,815

	DESCRIPTION:	Repairs to diversion structure
	ENGINEER:	NA
	CONTRACTOR:	NA
<b>15.</b>	<b>PROJECT:</b>	<b>Bridger Valley Pipeline</b>
	SPONSOR:	Bridger Valley Joint Powers Board
	LOCATION:	Uinta County
	PROGRAM:	New Development
	APPROPRIATION:	\$625,000
	ACTUAL EXPENDITURES:	\$577,466
	DESCRIPTION:	Transmission line
	ENGINEER:	Uinta Engineering & Surveying; Evanston, Wyoming
	CONTRACTOR:	Snyder Construction; Lyman, Wyoming
<b>16.</b>	<b>PROJECT:</b>	<b>Brooks Hat Six Water Supply</b>
	SPONSOR:	Town of Evansville
	LOCATION:	Natrona County
	PROGRAM:	New Development
	APPROPRIATION:	\$150,000
	ACTUAL EXPENDITURES:	\$150,000
	DESCRIPTION:	Transmission pipeline
	ENGINEER:	Hibbsman Associates; Casper, Wyoming
	CONTRACTOR:	Hedquist Construction; Casper, Wyoming
<b>17.</b>	<b>PROJECT:</b>	<b>Buffalo Bill Dam and Reservoir</b>
	SPONSOR:	State of Wyoming
	LOCATION:	Park County
	PROGRAM:	New Development
	APPROPRIATION:	\$52,000,000
	ACTUAL EXPENDITURES:	\$52,000,000
	DESCRIPTION:	Dam enlargement and power facilities
	ENGINEER:	Bureau of Reclamation; Cody, Wyoming
	CONTRACTOR:	ASI Moltz; Cody, Wyoming
<b>18.</b>	<b>PROJECT:</b>	<b>Buffalo Hydropower</b>
	SPONSOR:	Town of Buffalo
	LOCATION:	Johnson County
	PROGRAM:	New Development
	APPROPRIATION:	1,075,000
	ACTUAL EXPENDITURES:	\$1,045,033
	DESCRIPTION:	Installation of a hydropower unit
	ENGINEER:	States West Water Resources, Cheyenne, Wyoming
	CONTRACTOR:	Sulzer Canada, Ontario, Canada; Larry's Inc, Gillette, Wyoming; ASI Moltz, Cody, Wyoming
<b>19.</b>	<b>PROJECT:</b>	<b>Buffalo Municipal Reservoir</b>
	SPONSOR:	Town of Buffalo
	LOCATION:	Johnson County
	PROGRAM:	New Development
	APPROPRIATION:	\$13,600,000
	ACTUAL EXPENDITURES:	\$13,232,084

	DESCRIPTION:	Construction of a municipal water supply reservoir
	ENGINEER:	States West Water Resources, Cheyenne, Wyoming
	CONTRACTOR:	ASI Moltz, Cody, Wyoming; Lamax Construction, Inc. Basin, Wyoming; Bartlett Construction, Hanna Wyoming
<b>20.</b>	<b>PROJECT:</b>	<b>Buffalo Raw Water Supply</b>
	SPONSOR:	City of Buffalo
	LOCATION:	Johnson County
	PROGRAM:	New Development
	APPROPRIATION:	\$270,000
	ACTUAL EXPENDITURES:	\$270,000
	DESCRIPTION:	Diversion facilities, pipeline
	ENGINEER:	R.G. Stuckert & Associates; Buffalo, Wyoming
	CONTRACTOR:	Venture Construction; Worland, Wyoming
<b>21.</b>	<b>PROJECT:</b>	<b>Buffalo Water Supply</b>
	SPONSOR:	City of Buffalo
	LOCATION:	Johnson County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,000,000
	ACTUAL EXPENDITURES:	\$1,000,000
	DESCRIPTION:	Diversion dam, pipeline
	ENGINEER:	Grizzly Engineering, Inc.; Buffalo, Wyoming
	CONTRACTOR:	Fletcher Construction; Sheridan, Wyoming
<b>22.</b>	<b>PROJECT:</b>	<b>Burlington Water Supply</b>
	SPONSOR:	Town of Burlington
	LOCATION:	Big Horn County
	PROGRAM:	New Development
	APPROPRIATION:	\$360,000
	ACTUAL EXPENDITURES:	\$316,957
	DESCRIPTION:	Transmission Pipeline and Well Pumps
	ENGINEER:	MSE-HKM, Inc., Sheridan, Wyoming
	CONTRACTOR:	Brandon Construction, Inc., Powell, Wyoming
<b>23.</b>	<b>PROJECT:</b>	<b>Carpenter Water Supply</b>
	SPONSOR:	Carpenter Water and Sewer District
	LOCATION:	Laramie County
	PROGRAM:	New Development
	APPROPRIATION:	\$360,000
	ACTUAL EXPENDITURES:	\$328,620
	DESCRIPTION:	Wells, pumps, controls, disinfection, storage, pipeline
	ENGINEER:	States West Water Resources Corporation; Cheyenne, Wyoming
	CONTRACTOR:	Town & Country Plumbing, Inc.; Burns, Wyoming
	YEAR COMPLETED:	2000
	SESSION LAW YEAR:	1997
<b>24.</b>	<b>PROJECT:</b>	<b>Casper Alcova</b>
	SPONSOR:	Casper Alcova Irrigation District
	LOCATION:	Natrona County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,263,000

ACTUAL EXPENDITURES:	\$1,231,925
DESCRIPTION:	Canal lining
ENGINEER:	Soil Conservation Service
CONTRACTOR:	LaMax Construction; Basin, Wyoming Big Horn Redi-Mix, Greybull, Wyoming Central Contractors, Mills, Wyoming Casper Concrete, Casper, Wyoming Jerry's Irrigation, Powell, Wyoming Hedquist Construction, Casper, Wyoming 71 Construction, Casper, Wyoming
YEAR COMPLETED:	1996
SESSION LAW YEAR:	1985
<b>25. PROJECT:</b>	<b>Casper Effluent Water Supply</b>
SPONSOR:	City of Casper
LOCATION:	Natrona County
PROGRAM:	New Development
APPROPRIATION:	\$600,000
ACTUAL EXPENDITURES:	NONE – Project terminated by Sponsor prior to design.
DESCRIPTION:	Irrigation project for the North Casper Recreation Complex utilizing wastewater treatment plant effluent.
ENGINEER:	N.A.
CONTRACTOR:	N.A.
YEAR COMPLETED:	N.A.
SESSION LAW YEAR:	2000
<b>26. PROJECT:</b>	<b>Casper Raw Water Supply</b>
SPONSOR:	City of Casper
LOCATION:	Natrona County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$1,600,000
ACTUAL EXPENDITURES:	\$1,117,314
DESCRIPTION:	Diversion structure, dam rehabilitation, pipeline
ENGINEER:	Civil Engineering Professionals, Inc.; Casper, Wyoming
CONTRACTOR:	Lamax Construction, Inc.; Basin, Wyoming
<b>27. PROJECT:</b>	<b>Centennial Water Supply</b>
SPONSOR:	Centennial Water and Sewer District
LOCATION:	Albany County
PROGRAM:	New Development
APPROPRIATION:	\$315,000
ACTUAL EXPENDITURES:	\$315,000
DESCRIPTION:	Wells, pumps, pipeline, storage
ENGINEER:	J.M. Montgomery; Laramie, Wyoming
CONTRACTOR:	Pete's Excavating; Torrington, Wyoming
<b>28. PROJECT:</b>	<b>Centennial Water Supply</b>
SPONSOR:	Centennial Water and Sewer District
LOCATION:	Albany County
PROGRAM:	New Development
APPROPRIATION:	\$110,000
ACTUAL EXPENDITURES:	\$110,000
DESCRIPTION:	Buried concrete water storage tank
ENGINEER:	Wester-Wetstein & Associates, Inc.; Laramie, Wyoming

	CONTRACTOR:	Timberline Excavating, LLC; Laramie, Wyoming
	YEAR COMPLETED:	2001
	SESSION LAW YEAR:	1999
<b>29.</b>	<b>PROJECT:</b>	<b>Chamberlain Reservoir</b>
	SPONSOR:	LaPrele Irrigation District
	LOCATION:	Converse County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$150,000
	ACTUAL EXPENDITURES:	\$117,241
	DESCRIPTION:	Dam rehabilitation
	ENGINEER:	Western Water Consultants; Laramie, Wyoming
	CONTRACTOR:	Domino Construction; Laramie, Wyoming
	YEAR COMPLETED:	1993
	SESSION LAW YEAR:	1991
<b>30.</b>	<b>PROJECT:</b>	<b>Cheyenne King II Storage Facility</b>
	SPONSOR:	City of Cheyenne
	LOCATION:	Laramie County
	PROGRAM:	New Development
	APPROPRIATION:	\$1,534,000
	ACTUAL EXPENDITURES:	\$1,510,000 (approx)
	DESCRIPTION:	15 MG storage facility
	ENGINEER:	Black & Veatch; Denver, Colorado
	CONTRACTOR:	TIC; Casper, Wyoming
<b>31.</b>	<b>PROJECT:</b>	<b>Cheyenne Raw Water Supply</b>
	SPONSOR:	City of Cheyenne
	LOCATION:	Laramie County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,800,000
	ACTUAL EXPENDITURES:	\$1,800,000
	DESCRIPTION:	Irrigation of park lands
	ENGINEER:	States West Water Resources Corporation, Cheyenne, Wyoming
	CONTRACTOR:	Excel Construction, Sheridan, Wyoming
<b>32.</b>	<b>PROJECT:</b>	<b>Cheyenne South Crow Dam Water Supply Rehabilitation Project</b>
	SPONSOR:	City of Cheyenne
	LOCATION:	Laramie County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$35,000 + \$715,000 = \$750,000
	ACTUAL EXPENDITURES:	\$554,807.46
	DESCRIPTION:	Rehabilitation to existing dam and controls.
	ENGINEER:	States West Water Resources Corporation, Cheyenne, Wyoming
	CONTRACTOR:	Moltz Constructors, Inc., Cody, Wyoming
	YEAR COMPLETED:	2004
	SESSION LAW YEAR:	2001 & 2002



33. **PROJECT:** **Cheyenne Stage I Rehabilitation**  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Carbon and Albany Counties  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$13,700,000  
**ACTUAL EXPENDITURES:** \$13,307,212  
**DESCRIPTION:** Slip lining existing collection pipe and transmission line improvements  
**ENGINEER:** CH2M Hill, Denver, Colorado  
**CONTRACTOR:** Barcon Wyoming, Sheridan, Wyoming
34. **PROJECT:** **Cheyenne Upper North Crow Reservoir**  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$3,500,000  
**ACTUAL EXPENDITURES:** \$3,070,448  
**DESCRIPTION:** Dam rehabilitation  
**ENGINEER:** States West Water Resources Corporation; Cheyenne, Wyoming  
**CONTRACTOR:** Larry's Inc.; Gillette, Wyoming
35. **PROJECT:** **Cheyenne Water (Stage II)**  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Carbon County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$20,000,000  
**ACTUAL EXPENDITURES:** \$20,000,000  
**DESCRIPTION:** Dams (2), collector pipeline  
**ENGINEER:** Banner Associates, Inc.; Laramie, Wyoming  
**CONTRACTOR:** Several
36. **PROJECT:** **Cheyenne Well Rehabilitation**  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$1,450,000  
**ACTUAL EXPENDITURES:** \$1,450,000  
**DESCRIPTION:** Replace 15 wells in the municipal well field  
**ENGINEER:** Bearlodge Ltd., Sundance, Wyoming  
Wester-Wetstein & Associates, Laramie, Wyoming  
Weston Engineering, Inc, Laramie, Wyoming  
**CONTRACTOR:** Sargent Irrigation, Scottsbluff, Nebraska  
D.C. Drilling Co.; Lusk, Wyoming  
Weston Engineering, Inc, Upton, Wyoming  
Magee Trucking; Cheyenne, Wyoming  
Ward's Well Service; Riverton, Wyoming  
**YEAR COMPLETED:** 1997  
**SESSION LAW YEAR:** 1988 and 1993

37. **PROJECT:** **Chugwater Water Supply**  
**SPONSOR:** Town of Chugwater  
**LOCATION:** Platte County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$103,500  
**ACTUAL EXPENDITURES:** \$101,818  
**DESCRIPTION:** Pipeline  
**ENGINEER:** States West Water Resources Corporation; Cheyenne, Wyoming  
**CONTRACTOR:** 71 Construction; Casper, Wyoming
38. **PROJECT:** **Clearview Water Supply**  
**SPONSOR:** Clearview Improvement and Service District  
**LOCATION:** Sweetwater County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$245,000  
**ACTUAL EXPENDITURES:** \$167,500  
**DESCRIPTION:** Pipeline  
**ENGINEER:** Johnson-Fermelia Company, Inc.; Rock Springs, Wyoming  
**CONTRACTOR:** Lamax Construction; Basin, Wyoming
39. **PROJECT:** **Cody Area Water Supply (Valley View)**  
**SPONSOR:** City of Cody  
**LOCATION:** Park County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$785,000  
**ACTUAL EXPENDITURES:** \$785,000  
**DESCRIPTION:** Potable water service to Valley View  
**ENGINEER:** Engineering Associates, Cody, Wyoming  
**CONTRACTOR:** Harris Trucking, Cody, Wyoming
40. **PROJECT:** **Cody Raw Water**  
**SPONSOR:** City of Cody  
**LOCATION:** Park County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$850,000  
**ACTUAL EXPENDITURES:** \$714,060  
**DESCRIPTION:** Raw Water irrigation system rehabilitation  
**ENGINEER:** Engineering Associates, Cody, Wyoming  
**CONTRACTOR:** Brandon Construction, Inc., Wyoming
41. **PROJECT:** **Cokeville Tri-Diversion Dam**  
**SPONSOR:** Cokeville Watershed Improvement District  
**LOCATION:** Lincoln County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$160,000  
**ACTUAL EXPENDITURES:** \$17,919  
**DESCRIPTION:** Bank realignment, channel stabilization and placement of bank rip rap  
**ENGINEER:** Rio Verde Engineering; Pinedale, Wyoming  
**CONTRACTOR:** Noble Construction; Cora, Wyoming

42. **PROJECT:** **Cokeville Water Supply**  
**SPONSOR:** Town of Cokeville  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$629,000  
**ACTUAL EXPENDITURES:** \$629,000  
**DESCRIPTION:** Wells, pumping station, transmission pipeline and storage tank  
**ENGINEER:** Forsgren Associates; Evanston, Wyoming  
**CONTRACTOR:** JASCO, Inc.,Evanston, Wyoming
43. **PROJECT:** **Collins Heights Water Supply**  
**SPONSOR:** Collins Heights Industrial Park I&S District  
**LOCATION:** Campbell County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$200,000  
**ACTUAL EXPENDITURES:** \$141,182  
**DESCRIPTION:** Transmission pipelines  
**ENGINEER:** Centennial Engineering and Research; Gillette, Wyoming  
**CONTRACTOR:** S & S Builders; Gillette, Wyoming
44. **PROJECT:** **Cook Road Water Supply**  
**SPONSOR:** Cook Road Water District  
**LOCATION:** Campbell County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$1,700,000  
**ACTUAL EXPENDITURES:** \$1,373,487  
**DESCRIPTION:** New tank and transmission pipelines  
**ENGINEER:** Stetson Engineering; Gillette, Wyoming  
**CONTRACTOR:** Larry's Inc.; Gillette, Wyoming
45. **PROJECT:** **Crestview Water Supply**  
**SPONSOR:** Crestview Estates Improvement & Service District  
**LOCATION:** Campbell County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$41,000  
**ACTUAL EXPENDITURES:** \$22,586.80  
**DESCRIPTION:** Connection to Antelope Valley System  
**ENGINEER:** Bruce Engineering; Gillette Wyoming  
**CONTRACTOR:** EXP backhoe; Gillette Wyoming  
**YEAR COMPLETED:** 2004
46. **PROJECT:** **Crystal-Granite Dam Rehabilitation**  
**SPONSOR:** City of Cheyenne  
**LOCATION:** Laramie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$4,100,000  
**ACTUAL EXPENDITURES:** \$4,041,703  
**DESCRIPTION:** Dams (2)  
**ENGINEER:** Harza Engineering Company; Denver, Colorado  
**CONTRACTOR:** Gracon Construction Company; Loveland, Colorado

47. **PROJECT:** Dayton Groundwater  
**LEVEL:** III  
**SPONSOR:** Town of Dayton  
**LOCATION:** Sheridan County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$3000.00  
**ACTUAL EXPENDITURES:** \$2962.00  
**DESCRIPTION:** Sale of the well to the town, and purchase of trees for Right of Way Agreement.  
**ENGINEER:** NA  
**CONTRACTOR:** NA  
**YEAR COMPLETED:** 2004  
**SESSION LAW YEARS:** 2004
48. **PROJECT:** Deaver Canal Rehabilitation  
**SPONSOR:** Town of Deaver and Deaver Irrigation District  
**LOCATION:** Big Horn County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$120,000  
**ACTUAL EXPENDITURES:** \$51,786  
**DESCRIPTION:** Canal conversion to pipeline  
**ENGINEER:** Soil Conservation Service; Worland, Wyoming  
**CONTRACTOR:** Deaver Irrigation District  
**YEAR COMPLETED:** 1990  
**SESSION LAW YEAR:** 1989
49. **PROJECT:** Dixon Water Supply  
**SPONSOR:** Town of Dixon  
**LOCATION:** Carbon County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$215,000  
**ACTUAL EXPENDITURES:** \$215,000  
**DESCRIPTION:** Infiltration gallery and transmission pipeline  
**ENGINEER:** Lidstone and Anderson; Fort Collins, Colorado  
**CONTRACTOR:** Bartlett Construction; Hanna, Wyoming
50. **PROJECT:** Douglas Area Water Supply  
**SPONSOR:** City of Douglas  
**LOCATION:** Converse County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$1,700,000  
**ACTUAL EXPENDITURES:** \$1,676,442  
**DESCRIPTION:** Well, pipeline, storage facility  
**ENGINEER:** CEPI; Casper, Wyoming  
**CONTRACTOR:** Hedquist Construction; Casper, Wyoming
51. **PROJECT:** Douglas Intake Structure  
**SPONSOR:** City of Douglas  
**LOCATION:** Converse County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$400,000  
**ACTUAL EXPENDITURES:** \$307,872

	DESCRIPTION:	Diversion and intake structure
	ENGINEER:	CEPI; Casper, Wyoming
	CONTRACTOR:	Russell Construction; Douglas, Wyoming
<b>52.</b>	<b>PROJECT:</b>	<b>Douglas Water Supply Project</b>
	SPONSOR:	City of Douglas
	LOCATION:	Converse County
	PROGRAM:	New Development
	APPROPRIATION:	\$2,070,000
	ACTUAL EXPENDITURES:	\$2,031,652.28
	DESCRIPTION:	New Roof on spring house and addition of chlorination facilities. Construction of one new tank and removal of two unserviceable tanks. Rehabilitation of two other tanks. Construction of a new pump station for Wyoming Law Enforcement Academy.
	ENGINEER:	Civil Engineering Professionals Inc.; Casper, Wyoming
	CONTRACTOR:	Salt Creek Welding, Casper, Wyoming; High Plains Construction, Casper, Wyoming; Water System Drilling; Gillette Wyoming; Russell Construction, Douglas, Wyoming.
	YEAR COMPLETED:	2004
	SESSION LAW YEAR:	1999,2003
<b>53.</b>	<b>PROJECT:</b>	<b>Downer Neighborhood Water Supply</b>
	SPONSOR:	Downer Neighborhood Improvement and Service District
	LOCATION:	Sheridan County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,198,000
	ACTUAL EXPENDITURES:	\$868,650.05
	DESCRIPTION:	Pipeline rehabilitation
	ENGINEER:	HKM Engineering, Sheridan, WY
	CONTRACTOR:	Hot Iron Construction, Gillette, WY
	YEAR COMPLETED:	2003
	SESSION LAW YEAR:	1999, 2001
<b>54.</b>	<b>PROJECT:</b>	<b>Dubois Water Supply</b>
	SPONSOR:	Town of Dubois
	LOCATION:	Fremont County
	PROGRAM:	New Development
	APPROPRIATION:	\$90,000
	ACTUAL EXPENDITURES:	\$83,108
	DESCRIPTION:	Pump Station
	ENGINEER:	Nelson Engineering; Jackson, Wyoming
	CONTRACTOR:	Wilkinson Construction; Dubois, Wyoming
<b>55.</b>	<b>PROJECT:</b>	<b>Edgerton/Midwest Water Supply</b>
	SPONSOR:	Salt Creek Joint Powers Board
	LOCATION:	Natrona County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$3,750,000
	ACTUAL EXPENDITURES:	\$3,208,580
	DESCRIPTION:	Potable Water Transmission Pipeline

ENGINEER:	Worthington, Lenhart and Carpenter, Inc., Casper, Wyoming
CONTRACTOR:	Larry;s, Inc. Gillette, Wyoming Bartlett, Inc, Hanna, Wyoming
<b>56. PROJECT:</b>	<b>Elk Mountain Water Supply</b>
SPONSOR:	Town of Elk Mountain
LOCATION:	Carbon County
PROGRAM:	New Development
APPROPRIATION:	\$335,000
ACTUAL EXPENDITURES:	\$331,743
DESCRIPTION:	Put Level II well on line
ENGINEER:	PMPC; Saratoga, Wyoming
CONTRACTOR:	Bartlett Construction; Hanna, Wyoming
YEAR COMPLETED:	1999
SESSION LAW YEAR:	1996
<b>57. PROJECT:</b>	<b>Encampment Raw Water Line</b>
SPONSOR:	Town of Encampment
LOCATION:	Carbon County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$60,000 & \$340,000 = \$400,000
ACTUAL EXPENDITURES:	\$268,043.41
DESCRIPTION:	Construction of a raw water pipeline in the Town's open ditch raw water conveyance system. A portion of this ditch was enclosed in a pipeline previously. This project completes this pipeline from the end of the existing pipe to the water treatment plant.
ENGINEER:	PMPC Civil Engineers, Saratoga, Wyoming
CONTRACTOR:	Three Way, Inc., Gillette, Wyoming and Hot Iron, Inc., Gillette, Wyoming, a joint venture
YEAR COMPLETED:	2002
SESSION LAW YEAR:	2001 & 2002
<b>58. PROJECT:</b>	<b>Encampment Water</b>
SPONSOR:	Town of Encampment
LOCATION:	Carbon County
PROGRAM:	New Development
APPROPRIATION:	\$200,000
ACTUAL EXPENDITURES:	\$181,602
DESCRIPTION:	Diversion dam, pipeline
ENGINEER:	Probity Engineering; Cheyenne, Wyoming
CONTRACTOR:	Great Divide Construction; Baggs, Wyoming
<b>59. PROJECT:</b>	<b>Encampment Water Supply</b>
SPONSOR:	Town of Encampment
LOCATION:	Carbon County
PROGRAM:	New Development
APPROPRIATION:	\$137,000
ACTUAL EXPENDITURES:	\$23,800
DESCRIPTION:	Expand municipal raw water irrigation system
ENGINEER:	Westerfield Engineering; Encampment, Wyoming

	CONTRACTOR:	Town of Encampment; Encampment, Wyoming
	YEAR COMPLETED:	2001
	SESSION LAW YEAR:	1998
<b>60.</b>	<b>PROJECT:</b>	<b>Etna Diversion Dam</b>
	SPONSOR:	Etna Irrigation District
	LOCATION:	Lincoln County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$200,000
	ACTUAL EXPENDITURES:	\$152,765
	DESCRIPTION:	Diversion dam replacement
	ENGINEER:	Forsgren Associates; Evanston, Wyoming
	CONTRACTOR:	T.J.G., Inc.; Evanston, Wyoming
<b>61.</b>	<b>PROJECT:</b>	<b>Etna Water Supply</b>
	SPONSOR:	Etna Water and Sewer District
	LOCATION:	Lincoln County
	PROGRAM:	New Development
	APPROPRIATION:	\$690,000
	ACTUAL EXPENDITURES:	\$630,665.55
	DESCRIPTION:	Springs development, well and transmission line
	ENGINEER:	Forsgren Associates Inc.; Evanston, Wyoming
	CONTRACTOR:	Peavler's Mountain Star Inc.; Afton, Wyoming
	YEAR COMPLETED:	2002
	SESSION LAW YEAR:	1994 & 1998
<b>62.</b>	<b>PROJECT:</b>	<b>Evanston Raw Water Supply</b>
	SPONSOR:	City of Evanston
	LOCATION:	Uinta County
	PROGRAM:	New Development
	APPROPRIATION:	\$1,500,000
	ACTUAL EXPENDITURES:	\$1,500,000
	DESCRIPTION:	Irrigation pipeline, pumps and primary filters
	ENGINEER:	Sunrise Engineering, Inc.; Afton, Wyoming
	CONTRACTOR:	Flare Construction; Coalville, Utah
<b>63.</b>	<b>PROJECT:</b>	<b>Evansville Elkhorn Creek Water Supply</b>
	SPONSOR:	Town of Evansville
	LOCATION:	Natrona County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$50,000
	ACTUAL EXPENDITURES:	\$0
	DESCRIPTION:	Infiltration gallery and monitoring facility
	ENGINEER:	Hibsman Associates; Casper, Wyoming
<b>64.</b>	<b>PROJECT:</b>	<b>Evansville Water Supply</b>
	SPONSOR:	Town of Evansville
	LOCATION:	Natrona County
	PROGRAM:	New Development
	APPROPRIATION:	\$750,000
	ACTUAL EXPENDITURES:	\$382,606
	DESCRIPTION:	Water storage tank
	ENGINEER:	Hibsman Associates; Casper, Wyoming
	CONTRACTOR:	Bartlett Construction; Hanna, Wyoming

65. **PROJECT:** **Fairview Water Supply**  
**SPONSOR:** Fairview Water and Sewer District  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$502,000  
**ACTUAL EXPENDITURES:** \$391,640  
**DESCRIPTION:** Well, storage and pipeline  
**ENGINEER:** Forsgren Associates; Evanston, Wyoming  
**CONTRACTOR:** JASCO; Evanston, Wyoming
66. **PROJECT:** **Fairview Water Supply**  
**SPONSOR:** Fairview Irrigation District  
**LOCATION:** Lincoln County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$150,000  
**ACTUAL EXPENDITURES:** \$150,000  
**DESCRIPTION:** Open canal to pipeline design  
**ENGINEER:** ARIX; Riverton, Wyoming  
**CONTRACTOR:** NA
67. **PROJECT:** **Ferris Diversion Dam Rehabilitation**  
**SPONSOR:** Ferris Irrigation District/Town of Torrington  
**LOCATION:** Goshen County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$500,000  
**ACTUAL EXPENDITURES:** \$475,847  
**DESCRIPTION:** Diversion dam, pipeline  
**ENGINEER:** Western Water Consultants; Laramie, Wyoming  
**CONTRACTOR:** Pete's Excavation; Torrington, Wyoming
68. **PROJECT:** **Fontenelle Dam Repair**  
**SPONSOR:** State of Wyoming  
**LOCATION:** Sweetwater County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$3,500,000  
**ACTUAL EXPENDITURES:** \$3,247,283  
**DESCRIPTION:** Dam  
**ENGINEER:** Bureau of Reclamation
69. **PROJECT:** **Freedom Water Supply**  
**SPONSOR:** Freedom Water and Sewer District  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$737,000  
**ACTUAL EXPENDITURES:** \$678,899  
**DESCRIPTION:** Well, storage, pipeline  
**ENGINEER:** Forsgren, Evanston, Wyoming.  
**CONTRACTOR:** Snyder Construction, Lyman, Wyoming.
70. **PROJECT:** **Fremont Lake Reservoir**  
**SPONSOR:** Highland Irrigation District  
**LOCATION:** Sublette County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$457,834



	ACTUAL EXPENDITURES:	\$411,862
	DESCRIPTION:	Dam, headgates
	ENGINEER:	Soil Conservation Service
	CONTRACTOR:	Bartlett Construction; Hanna, Wyoming Noble Construction; Pinedale, Wyoming
<b>71.</b>	<b>PROJECT:</b>	<b>Gillette Central Zone Isolation Project</b>
	SPONSOR:	City of Gillette
	LOCATION:	Campbell County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$759,000
	ACTUAL EXPENDITURES:	\$379,620.86
	DESCRIPTION:	Spring renovation, pipeline, storage tank, well
	ENGINEER:	Stetson Engineering; Gillette Wyoming
	CONTRACTOR:	Hot Iron, Inc. Gillette Wyoming
	YEAR COMPLETED:	2004
<b>72.</b>	<b>PROJECT:</b>	<b>Gillette Fort Union Well Field</b>
	SPONSOR:	City of Gillette
	LOCATION:	Campbell County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,725,000
	ACTUAL EXPENDITURES:	\$1,331,818.25
	DESCRIPTION:	Storage Tank, Pipeline
	ENGINEER:	Stetson Engineering, Gillette, Wyoming; Wester- Wetstein, Laramie, Wyoming
	CONTRACTOR:	DRM Inc, Gillette, Wyoming; Ruby Drilling, Gillette, Wyoming
	SESSION LAWS:	1995,1996,1998
	COMPLETION YEAR:	2000
<b>73.</b>	<b>PROJECT:</b>	<b>Gillette Hidden Valley Storage and Transmission</b>
	SPONSOR:	City of Gillette
	LOCATION:	Campbell County
	PROGRAM:	New Development
	APPROPRIATION:	\$1,350,000
	ACTUAL EXPENDITURES:	\$1,028,531.14
	DESCRIPTION:	Storage Tank, Pipeline
	ENGINEER:	Stetson Engineering, Gillette, Wyoming
	CONTRACTOR:	DRM Inc, Gillette, Wyoming
	SESSION LAWS:	2000
	COMPLETION YEAR:	2002
<b>74.</b>	<b>PROJECT:</b>	<b>Gillette Madison Well Field Expansion</b>
	SPONSOR:	City of Gillette
	LOCATION:	Campbell County
	PROGRAM:	New Development
	APPROPRIATION:	\$1,628,250
	ACTUAL EXPENDITURES:	\$1,619,192
	DESCRIPTION:	Two New Wells, Improvement of another well, pipeline
	ENGINEER:	Wester-Wetstein; Gillette, Wyoming
	CONTRACTOR:	Jim's Water Service; Gillette, Wyoming, Hot Iron; Gillette, Wyoming, Tower Construction, Gillette, Wyoming

75. **PROJECT:** **Gillette Pipeline Project**  
**SPONSOR:** City of Gillette  
**LOCATION:** City of Gillette  
**PROGRAM:** New Development  
**APPROPRIATION:** \$408,700  
**ACTUAL EXPENDITURES:** \$301,684  
**DESCRIPTION:** Pipeline  
**ENGINEER:** Consolidated Engineers and Materials Testing; Gillette, Wyoming  
**CONTRACTOR:** S&S Builders; Gillette, Wyoming
76. **PROJECT:** **Gillette Rehabilitation**  
**LEVEL:** III  
**PROGRAM:** Rehabilitation  
**LOCATION:** Campbell County  
**SPONSOR:** City of Gillette  
**APPROPRIATION:** \$300,000,000  
**ACTUAL EXPENDITURES:** \$300,000,000  
**DESCRIPTION:** Installation of new electrical distribution cable, new transformers, grounding system, new surge arresters, new switch gear, and new electrical controls.  
**ENGINEER:** Cooper Power Systems; Pittsburgh, Pennsylvania, Consolidated Engineering & Material Testing; Gillette, Wyoming  
**CONTRACTOR:** Automation & Electronics; Casper, Wyoming (Numerous suppliers)
77. **PROJECT:** **Gillette Storage & East End Transmission Improvements**  
**SPONSOR:** City of Gillette  
**LOCATION:** Campbell County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$2,040,000.00  
**ACTUAL EXPENDITURES:** \$1,095,729.01  
**ENGINEER:** Stetson Engineering, Gillette, WY. PCA, Gillette, WY.  
**CONTRACTOR:** Larry's Inc. Gillette, WY. DRM, Gillette, WY  
**DATE COMPLETED:** 2001
78. **PROJECT:** **Glenrock Groundwater Supply**  
**SPONSOR:** Town of Glenrock  
**LOCATION:** Converse County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$1,822,000  
**ACTUAL EXPENDITURES:** \$1,639,709.09  
**DESCRIPTION:** New Well, pipeline, controls  
**ENGINEER:** Civil Engineering Professionals Inc., Casper, Wyoming  
**CONTRACTOR:** 71 Construction Casper, Wyoming  
**YEAR COMPLETED:** 2003  
**SESSION LAW YEAR:** 2000,2002

- 79. PROJECT: Glenrock Water Supply**  
 SPONSOR: Town of Glenrock  
 LOCATION: Converse County  
 PROGRAM: New Development  
 APPROPRIATION: \$2,500,000  
 ACTUAL EXPENDITURES: \$1,941,720  
 DESCRIPTION: Wells, pipeline  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Larry's Inc.; Gillette, Wyoming
- 80. PROJECT: Goshen Canal Improvements**  
 SPONSOR: Goshen Irrigation District  
 LOCATION: Goshen County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$24,500  
 ACTUAL EXPENDITURES: \$24,303  
 DESCRIPTION: Automate three canal spillway gates  
 ENGINEER: Lidstone & Anderson; Fort Collins, Colorado  
 CONTRACTOR: Sutron Corporation; Sterling, Virginia  
 YEAR COMPLETED: 1996  
 SESSION LAW YEAR: 1993
- 81. PROJECT: Goshen Irrigation District Rehabilitation**  
 SPONSOR: Goshen Irrigation District  
 LOCATION: Goshen County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$600,000  
 ACTUAL EXPENDITURES: \$437,688  
 DESCRIPTION: Canal conversion to pipeline  
 ENGINEER: Kennedy Engineering; Wheatland, Wyoming  
 CONTRACTOR: Goshen Irrigation District  
 YEAR COMPLETED: 1991  
 SESSION LAW YEAR: 1986
- 82. PROJECT: Goshen Pump Station**  
 SPONSOR: Goshen Irrigation District  
 LOCATION: Goshen County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$330,000  
 ACTUAL EXPENDITURES: \$330,000  
 DESCRIPTION: Pump station  
 ENGINEER: AVI; Cheyenne, Wyoming  
 CONTRACTOR: Lidstone-Anderson; Ft. Collins, Colorado  
 Bartlett Construction; Hanna, Wyoming  
 John's Pump Service; Torrington, Wyoming  
 YEAR COMPLETED: 1997  
 SESSION LAW YEAR: 1992, 1994, 1995, and 1996
- 83. PROJECT: Greybull Rehabilitation**  
 SPONSOR: Town of Greybull  
 LOCATION: Big Horn County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$355,000  
 ACTUAL EXPENDITURES: \$322,764

	DESCRIPTION:	Water system rehabilitation
	ENGINEER:	Crank Companies, Inc., Kemmerer, Wyoming
	CONTRACTORS:	Lamax Construction, Basin, Wyoming Automation Electronics, Casper, Wyoming
<b>84.</b>	<b>PROJECT:</b>	<b>Greybull Shell Water Supply/Greybull Groundwater</b>
	SPONSOR:	Town of Greybull
	LOCATION:	Big Horn County
	PROGRAM:	New Development
	APPROPRIATION:	\$517,000
	ACTUAL EXPENDITURES:	\$517,000
	DESCRIPTION:	Pipeline, storage tank, and disinfection facilities
	ENGINEER:	Crank Companies, Inc., Kemmerer, Wyoming
	CONTRACTOR	LaMax Construction, Inc., Basin, Wyoming
	COMPLETION DATE	2002
	SESSION LAW	1998 & 1999
<b>85.</b>	<b>PROJECT:</b>	<b>Grover Water Supply</b>
	SPONSOR:	Grover Water and Sewer District
	LOCATION:	Lincoln County
	PROGRAM:	New Development
	APPROPRIATION:	\$493,000
	ACTUAL EXPENDITURES:	\$493,000
	DESCRIPTION:	Well storage, pipeline
	ENGINEER:	Forsgren Associates, Evanston, Wyoming
	CONTRACTOR:	JASCO; Evanston, Wyoming
<b>86.</b>	<b>PROJECT:</b>	<b>Guernsey Water Supply</b>
	SPONSOR:	Town of Guernsey
	LOCATION:	Goshen County
	PROGRAM:	New Development
	APPROPRIATION:	\$550,000
	ACTUAL EXPENDITURES:	\$511,995
	DESCRIPTION:	Construction of a new well and a supply pipeline
	ENGINEER:	TST Engineering, Denver, Colorado; Weston Engineering, Laramie Wyoming
	CONTRACTOR:	D. C. Drilling, Wheatland, High Plains Construction, Casper, Wyoming
<b>87.</b>	<b>PROJECT:</b>	<b>Gunbarrel Lateral Rehabilitation</b>
	SPONSOR:	Platte County Resource District
	LOCATION:	Platte County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$250,000
	ACTUAL EXPENDITURES:	\$210,782
	DESCRIPTION:	Replaced an open ditch with a buried pipeline. Provided construction materials only.
	ENGINEER:	Natural Resources Conservation Service
	CONTRACTOR:	Sponsor

88. **PROJECT:** **Hanover Irrigation**  
**SPONSOR:** Hanover Irrigation District  
**LOCATION:** Washakie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$600,000  
**ACTUAL EXPENDITURES:** \$600,000  
**DESCRIPTION:** Moss catcher and structure  
**ENGINEER:** Crank Companies, Inc.; Kemmerer, Wyoming  
**CONTRACTOR:** R-D Construction, Casper, Wyoming  
Magic Valley Heliac, Twin Falls, Idaho
89. **PROJECT:** **Hartville Water Supply**  
**SPONSOR:** Town of Hartville  
**LOCATION:** Platte County  
**PROGRAM:** New Development  
**ACTUAL EXPENDITURES:** \$19,020 (transfer of well to town)  
**DATE COMPLETED:** 2001
90. **PROJECT:** **Hawk Springs**  
**SPONSOR:** Horse Creek Conservation District  
**LOCATION:** Goshen County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$8,871,000  
**ACTUAL EXPENDITURES:** \$8,491,098  
**DESCRIPTION:** Dams, canals  
**ENGINEER:** Soil Conservation Service; Casper, Wyoming  
**CONTRACTOR:** Several
91. **PROJECT:** **Highland Hanover Rehabilitation**  
**SPONSOR:** Highland Hanover Irrigation District  
**LOCATION:** Washakie County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$536,000  
**ACTUAL EXPENDITURES:** \$536,000  
**DESCRIPTION:** Pump station rehab; canal and lateral repairs  
**ENGINEER:** Nelson Engineering; Jackson, Wyoming  
**CONTRACTOR:** Mainline Construction; Billings, Montana  
Big Horn Red-Mix; Worland, Wyoming  
Tesco Electric; Worland, Wyoming
92. **PROJECT:** **Highline Ditch Rehabilitation**  
**SPONSOR:** Highline Irrigation District  
**LOCATION:** Sheridan County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$260,000  
**ACTUAL EXPENDITURES:** \$231,560  
**DESCRIPTION:** Diversion dam, pipeline  
**ENGINEER:** Engineering, Inc.; Sheridan, Wyoming  
**CONTRACTOR:** Fletcher Construction; Sheridan, Wyoming
93. **PROJECT:** **Highline Irrigation Ditch Rehabilitation**  
**SPONSOR:** Highline Watershed Improvement District  
**LOCATION:** Carbon County  
**PROGRAM:** Rehabilitation

	APPROPRIATION:	\$726,000
	ACTUAL EXPENDITURES:	\$726,000
	DESCRIPTION:	Ditch erosion control and renovation
	ENGINEER:	PMPC, Inc.; Saratoga, Wyoming
	CONTRACTOR:	A & D Dozers, Inc.; Rawlins, Wyoming
	YEAR COMPLETED:	2002
	SESSION LAW YEAR:	2000
<b>94.</b>	<b>PROJECT:</b>	<b>Horse Creek Conservation District Rehabilitation</b>
	SPONSOR:	Horse Creek Conservation District
	LOCATION:	Goshen County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$246,600
	ACTUAL EXPENDITURES:	\$190,124
	DESCRIPTION:	Replace ditch with pipe, install structures
	ENGINEER:	PMPC; Saratoga, Wyoming
	CONTRACTOR:	BenchMark Engineering; Torrington, Wyoming Horse Creek Conservation District; Hawk Springs, Wyoming
	MATERIALS:	Shively Hardware Co., Saratoga, Wyoming Vaughn Concrete Products, Inc.; Cheyenne, Wyoming Lanphier, Inc.; Lingle, Wyoming Panhandle Concrete Products, Inc.; Scottsbluff, Nebraska
	DATE COMPLETED:	2001
	SESSION LAW DATE:	1999
<b>96.</b>	<b>PROJECT:</b>	<b>Hugus-Mullison Ditch (Hugus Ditch)</b>
	SPONSOR:	Hugus Watershed improvement District
	LOCATION:	Carbon County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$325,000
	ACTUAL EXPENDITURES:	\$303,107.31
	DESCRIPTION:	Renovation of the existing ditch to improve several street crossings, improve overflow structures, and provide a concrete lining in that portion of the ditch which passes through the Town.
	ENGINEER:	PMPC Civil Engineers, Saratoga, Wyoming
	CONTRACTOR:	Foster Construction Co., Inc., Riverton, Wyoming
	YEAR COMPLETED:	2002
	SESSION LAW YEAR:	2001
<b>97.</b>	<b>PROJECT:</b>	<b>Hulett Water Supply</b>
	SPONSOR:	Town of Hulett
	LOCATION:	Crook County
	PROGRAM:	New Development
	APPROPRIATION:	\$250,000
	ACTUAL EXPENDITURES:	\$246,635
	DESCRIPTION:	Pump, storage tank and pipeline
	ENGINEER:	Weston Engineering; Upton, Wyoming
	CONTRACTOR:	S & S Builders; Gillette, Wyoming

- 98. PROJECT: Hunt Canal Rehabilitation**  
 SPONSOR: Hunt Irrigation District  
 LOCATION: Big Horn County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$650,000  
 ACTUAL EXPENDITURES: \$640,000  
 DESCRIPTION: Diversion dam and headgate replacement, canal repairs  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Nichols and Lewis; Lovell, Wyoming
- 99. PROJECT: Indian Springs Water Supply**  
 SPONSOR: Indian Springs Improvement and Service District  
 LOCATION: Natrona County  
 PROGRAM: New Development  
 APPROPRIATION: \$150,000  
 ACTUAL EXPENDITURES: \$107,713  
 DESCRIPTION: Transmission pipeline  
 ENGINEER: Hibsman Associates; Casper, Wyoming  
 CONTRACTOR: High Plains Construction; Mills, Wyoming
- 100. PROJECT: Iron Creek Rehabilitation**  
 SPONSOR: Shoshone/Deaver Irrigation Districts  
 LOCATION: Park County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,500,000  
 ACTUAL EXPENDITURES: \$1,500,000  
 DESCRIPTION: Tunnel repair  
 ENGINEER: Harza Engineering Company; Denver, Colorado  
 CONTRACTOR: Shoshone Irrigation District
- 101. PROJECT: Jackson Raw Water Supply**  
 SPONSOR: Town of Jackson  
 LOCATION: Teton County  
 PROGRAM: New Development  
 APPROPRIATION: \$450,000  
 ACTUAL EXPENDITURES: \$450,000  
 DESCRIPTION: Irrigation and thaw wells, pipeline, and pumps  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Thomas Drilling; Afton, Wyoming  
 G.M. Stewart Corporation; Evanston, Wyoming
- 102. PROJECT: Jackson Water Supply**  
 SPONSOR: Town of Jackson  
 LOCATION: Teton County  
 PROGRAM: New Development  
 APPROPRIATION: \$2,300,000  
 ACTUAL EXPENDITURES: \$1,952,515  
 DESCRIPTION: Three new wells with control building  
 ENGINEER: Nelson Engineering, Jackson, Wyoming  
 CONTRACTOR: H-K Contractors, Inc., Idaho Falls, ID

- 103. PROJECT: Kemmerer City Dam Rehabilitation**  
 SPONSOR: City of Kemmerer  
 LOCATION: Lincoln County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$940,000  
 ACTUAL EXPENDITURES: \$940,000  
 DESCRIPTION: Dam repair  
 ENGINEER: Woodward-Clyde Consultants; Denver, Colorado  
 CONTRACTOR: Nicholas Construction Company; Denver, Colorado
- 104. PROJECT: Kirby Ditch**  
 SPONSOR: Kirby Ditch Irrigation District  
 LOCATION: Hot Springs County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$60,000  
 ACTUAL EXPENDITURES: \$42,069  
 DESCRIPTION: Siphon and Wasteway  
 ENGINEER: Natural Resources Conservation Service, Wyoming  
 CONTRACTOR: W.A.R., Inc., Thermopolis, Wyoming
- 105. PROJECT: Kirby Ditch**  
 SPONSOR: Kirby Irrigation District  
 LOCATION: Hot Springs County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$141,000  
 ACTUAL EXPENDITURES: \$70,363  
 DESCRIPTION: Siphon, measuring devices  
 ENGINEER: Soil Conservation Service; Worland, Wyoming  
 CONTRACTOR: Big Horn Red Mix; Greybull, Wyoming
- 106. PROJECT: Lake Adelaide Reservoir Enlargement**  
 SPONSOR: Shell Valley Watershed Improvement District  
 LOCATION: Big Horn County  
 PROGRAM: New Development  
 APPROPRIATION: \$2,200,000  
 ACTUAL EXPENDITURES: \$1,840,503  
 DESCRIPTION: Dam enlargement  
 ENGINEER: ESA Consultants, Inc.; Fort Collins, Colorado  
 CONTRACTOR: MRC, Inc.; Casper, Wyoming
- 107. PROJECT: Lake Hattie Dam Rehabilitation**  
 SPONSOR: Pioneer Canal - Lake Hattie Irrigation District  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$360,000  
 ACTUAL EXPENDITURES: \$345,580  
 DESCRIPTION: Dam repair  
 ENGINEER: Western Water Consultants; Laramie, Wyoming  
 CONTRACTOR: Domino Construction; Laramie, Wyoming
- 108. PROJECT: Lake Hattie Supply Canal**  
 SPONSOR: Lake Hattie Irrigation District  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation



	APPROPRIATION:	\$1,400,000
	ACTUAL EXPENDITURES:	\$1,270,195
	DESCRIPTION:	Canal structures and alignment
	ENGINEER:	Western Water Consultants; Laramie, Wyoming
	CONTRACTOR:	Bartlett Construction; Hanna, Wyoming Domson, Inc.; Torrington, Wyoming
<b>109.</b>	<b>PROJECT:</b>	<b>Lakeview Improvement and Service District Water Supply</b>
	SPONSOR:	Lakeview Improvement and Service District
	LOCATION:	Natrona County
	PROGRAM:	New Development
	APPROPRIATION:	\$390,000
	ACTUAL EXPENDITURES:	\$314,184.95
	DESCRIPTION:	Transmission Pipelines
	ENGINEER:	Civil Engineering Professionals, Inc., Casper, Wyoming
	CONTRACTOR:	Hedquest Construction, Inc., Casper, Wyoming
	COMPLETION DATE:	May 2002
	SESSION LAW:	2000
<b>110.</b>	<b>PROJECT:</b>	<b>Lance Creek Water Rehabilitation</b>
	SPONSOR:	Lance Creek Water and Sewer District
	LOCATION:	Niobrara County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$327,900
	ACTUAL EXPENDITURES:	\$327,900
	DESCRIPTION:	Pipeline, backflow prevention
	ENGINEER:	Western Water Consultants; Laramie, Wyoming
	CONTRACTOR:	Excel Construction, Inc.; Sheridan, Wyoming
<b>111.</b>	<b>PROJECT:</b>	<b>Lander Intake Facilities</b>
	SPONSOR:	City of Lander
	LOCATION:	Fremont County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$200,000
	ACTUAL EXPENDITURES:	\$108,642.13
	DESCRIPTION:	Relocate and renovate intake structure
	ENGINEER:	Aspen Engineering, Inc.; Riverton, Wyoming
	CONTRACTOR:	Excel Construction Inc.; Sheridan, Wyoming
	YEAR COMPLETED:	2002
	SESSION LAW YEAR:	1999
<b>112.</b>	<b>PROJECT:</b>	<b>Lander Water Supply Rehabilitation</b>
	SPONSOR:	City of Lander
	LOCATION:	Fremont County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,696,000
	ACTUAL EXPENDITURES:	\$1,016,076.91
	DESCRIPTION:	Raw and treated transmission pipelines
	ENGINEER:	Aspen Engineering Inc.; Riverton, Wyoming
	CONTRACTOR:	Excel Construction Inc.; Sheridan, Wyoming
	YEAR COMPLETED:	2002
	SESSION LAW YEAR:	1999 & 2000

- 113. PROJECT: Lander Worthen Meadows Dam Rehabilitation**  
 SPONSOR: City of Lander  
 LOCATION: Fremont County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,250,000  
 ACTUAL EXPENDITURES: \$811,804  
 DESCRIPTION: Dam repair  
 ENGINEER: Versar; Riverton, Wyoming  
 CONTRACTOR: C.J. Abbot; Casper, Wyoming
- 114. PROJECT: LaPrele Rehabilitation**  
 SPONSOR: LaPrele Irrigation District  
 LOCATION: Converse County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,500,000  
 ACTUAL EXPENDITURES: \$1,476,203  
 DESCRIPTION: Tunnel repair, canals  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Central Contractors, Inc.; Mills, Wyoming
- 115. PROJECT: Laramie Rehabilitation**  
 SPONSOR: City of Laramie  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,750,000  
 ACTUAL EXPENDITURES: \$1,546,216.32  
 DESCRIPTION: Replacement of water supply pipelines; New pumphouse; Reservoir rehabilitation  
 ENGINEER: Western Water Consultants, Laramie, Wyoming; Wester-Wetstein & Associates, Laramie Wyoming  
 CONTRACTOR: Johnson's Pump and Excavating, Wheatland, Wyoming; Domino Construction, Laramie, Wyoming; High Plains Construction, Mills, Wyoming; Bartlett Inc, Hanna, Wyoming  
 YEAR COMPLETED: 1999  
 SESSION LAW YEAR: 1995,1996
- 116. PROJECT: Laramie Rivers**  
 SPONSOR: Pioneer Canal-Lake Hattie Irrigation District  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$165,000  
 ACTUAL EXPENDITURES: \$165,000  
 DESCRIPTION: Refinanced existing loans  
 ENGINEER: NA  
 CONTRACTOR: NA
- 117. PROJECT: Laramie Transmission Pipeline and Pioneer Canal Diversion**  
 SPONSOR: City of Laramie  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$4,945,000  
 ACTUAL EXPENDITURES: \$4,237,768

ENGINEER:	Banner & Associates, Laramie Wyoming; Western Water Consultants, Laramie, Wyoming
CONTRACTOR:	Bartlett Construction, Hanna, Wyoming; TIC, Casper, Wyoming
DATE COMPLETED:	2001
<b>118. PROJECT:</b>	<b>Laramie Water Supply</b>
SPONSOR:	City of Laramie
LOCATION:	Albany County
PROGRAM:	New Development
APPROPRIATION:	\$4,400,000.00
ACTUAL EXPENDITURES:	\$3,124,801.45
ENGINEER:	Western Water Consultants, Laramie Wyoming;
CONTRACTOR:	High Plains Construction, Casper, Wyoming
DATE COMPLETED:	2001
<b>119. PROJECT:</b>	<b>Laramie West Storage</b>
SPONSOR:	City of Laramie
LOCATION:	Albany County
PROGRAM:	New Development
APPROPRIATION:	\$2,950,000.00
ACTUAL EXPENDITURES:	\$2,852,065.26
ENGINEER:	Wester-Wetstein & Associates, Laramie Wyoming;
CONTRACTOR:	High Plains Construction, Casper, Wyoming
DATE COMPLETED:	2001
<b>120. PROJECT:</b>	<b>LeClair Irrigation Rehabilitation</b>
SPONSOR:	LeClair Irrigation District
LOCATION:	Fremont County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$470,000
ACTUAL EXPENDITURES:	\$442,845
DESCRIPTION:	Canal repairs
ENGINEER:	Crank Company, Inc.; Kemmerer, Wyoming
CONTRACTOR:	Foster Construction Company, Inc.; Riverton, Wyoming
<b>121. PROJECT:</b>	<b>LeClair Lateral</b>
SPONSOR:	LeClair Irrigation District
LOCATION:	Fremont County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$750,000
ACTUAL EXPENDITURES:	\$361,342
DESCRIPTION:	Lateral open ditches replacement with pipelines.
ENGINEER:	Apex Surveying - R.D. Connell and Associates, Riverton, Wyoming
CONTRACTOR:	LeClair Irrigation District; Riverton, Wyoming
<b>122. PROJECT:</b>	<b>Lingle Water Supply System Rehabilitation</b>
SPONSOR:	Town of Lingle
LOCATION:	Goshen County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$400,000
ACTUAL EXPENDITURES:	\$312,228
DESCRIPTION:	Upgrade transmission pipelines

ENGINEER:	BenchMark of Torrington, P.C.; Torrington, Wyoming
CONTRACTOR:	Scott and Son, Inc. Torrington, Wyoming
DATE COMPLETED:	2001
SESSION LAW DATE:	1999
<b>123. PROJECT:</b>	<b>Little Snake Rehabilitation</b>
SPONSOR:	Little Snake Conservancy District
LOCATION:	Carbon County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$2,700,000
ACTUAL EXPENDITURES:	\$2,700,000
DESCRIPTION:	Diversion Dam Replacements and Canal Repairs
ENGINEER:	States West Inc., Cheyenne, Wyoming
CONTRACTOR:	Bartlett Construction, Hanna, Wyoming
<b>124. PROJECT:</b>	<b>Little Snake River Small Dams &amp; Reservoirs</b>
SPONSOR:	Little Snake River Conservation District
LOCATION:	Carbon County
PROGRAM:	New Development
APPROPRIATION:	\$265,000
ACTUAL EXPENDITURES:	\$265,000
DESCRIPTION:	Construction of two small dams and reservoirs
ENGINEER:	Rio Verde Engineering; Pinedale, Wyoming
CONTRACTOR:	Willies Dirt Service; Wamsutter, Wyoming
<b>125. PROJECT:</b>	<b>Lovell Irrigation District Rehabilitation</b>
SPONSOR:	Lovell Irrigation District
LOCATION:	Big Horn County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$820,000
ACTUAL EXPENDITURES:	\$749,958
DESCRIPTION:	Canal Repairs
ENGINEER:	Soil Conservation Service; Casper, Wyoming
CONTRACTOR:	Nichols & Lewis, Inc.; Lovely, Wyoming C. A. Wilson Construction Company; Cowley, Wyoming Jerry's Irrigation and Drainage, Inc.; Powell, Wyoming Dale Weaver, Inc.; Worland, Wyoming
<b>126. PROJECT:</b>	<b>Lusk Water Supply</b>
SPONSOR:	Town of Lusk
LOCATION:	Niobrara County
PROGRAM:	New Development
APPROPRIATION:	\$709,000
ACTUAL EXPENDITURES:	\$550,982
DESCRIPTION:	Transmission pipelines, storage tank, pump, controls
ENGINEER:	MK Centennial Engineering, Inc., Cheyenne, Wyoming
CONTRACTOR:	Western Municipal Construction, Inc., Billings, Montana
<b>127. PROJECT:</b>	<b>Lyman Springs Rehabilitation</b>
SPONSOR:	Town of Lyman
LOCATION:	Uinta County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$255,000

	ACTUAL EXPENDITURES:	\$255,000
	DESCRIPTION:	Springs renovation and pumping station
	ENGINEER:	Forsgren Associates, Inc.; Evanston, Wyoming
	CONTRACTOR:	X-it Construction, Inc.; Lyman, Wyoming S.C.I. Inc.; Lyman, Wyoming
<b>128.</b>	<b>PROJECT:</b>	<b>Manville Water Supply</b>
	SPONSOR:	Town of Manville
	LOCATION:	Niobrara County
	PROGRAM:	New Development
	APPROPRIATION:	\$69,000
	ACTUAL EXPENDITURES:	\$67,104
	DESCRIPTION:	New well and supply pipeline
	ENGINEER:	Western Water Consultants, Laramie Wyoming
	CONTRACTOR:	Landkammer Trenching, Lance Creek, Wyoming
<b>129.</b>	<b>PROJECT:</b>	<b>McKenney Water Supply</b>
	SPONSOR:	McKenney I&S District
	LOCATION:	Campbell County
	PROGRAM:	New Development
	APPROPRIATION:	\$140,000
	ACTUAL EXPENDITURES:	\$109,107
	DESCRIPTION:	Transmission pipelines
	ENGINEER:	TSP TWO, Inc.; Gillette, Wyoming
	CONTRACTOR:	Larry's Inc.; Gillette, Wyoming
<b>130.</b>	<b>PROJECT:</b>	<b>McNutt Water Supply</b>
	SPONSOR:	McNutt Improvement and Service District
	LOCATION:	Washakie County
	PROGRAM:	New Development
	APPROPRIATION:	\$25,000
	ACTUAL EXPENDITURES:	\$23,317.28 (Level II)
	DESCRIPTION:	Potable water delivery system.
	ENGINEER:	BRS, Inc., Riverton, Wyoming
	CONTRACTOR:	None
	YEAR COMPLETED:	N.A.
	SESSION LAW YEAR:	1999
<b>131.</b>	<b>PROJECT:</b>	<b>Means Water Supply</b>
	SPONSOR:	Means First Extension W&S District
	LOCATION:	Campbell County
	PROGRAM:	New Development
	APPROPRIATION:	\$225,000
	ACTUAL EXPENDITURES:	\$212,253
	DESCRIPTION:	Pump station improvements, storage tank, and transmission pipeline
	ENGINEER:	Bruce Engineering Services; Gillette, Wyoming
	CONTRACTOR:	DRM, Inc.; Gillette, Wyoming
<b>132.</b>	<b>PROJECT:</b>	<b>Meeteetse Water Supply</b>
	SPONSOR:	Town of Meeteetse
	LOCATION:	Park County
	PROGRAM:	New Development
	APPROPRIATION:	\$333,000

	ACTUAL EXPENDITURES:	\$333,000
	DESCRIPTION:	New intake structure, raw water pipeline, and finished water pipeline
	ENGINEER:	Sear -Brown, Fort Collins, Colorado
	CONTRACTOR:	LAMAX Construction, Basin, Wyoming
	DATE COMPLETED:	2001
<b>133.</b>	<b>PROJECT:</b>	<b>Midvale Sand Mesa Pipeline</b>
	SPONSOR:	Midvale Irrigation District
	LOCATION:	Fremont County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$3,000,000
	ACTUAL EXPENDITURES:	\$2,900,879
	DESCRIPTION:	Gravity pressure irrigation delivery pipeline
	ENGINEER:	Natural Resources Conservation Service
		R. D. Connell & Associates; Riverton, Wyoming
	CONTRACTOR:	Midvale Irrigation District
<b>134.</b>	<b>PROJECT:</b>	<b>Midwest Rehabilitation</b>
	SPONSOR:	Town of Midwest
	LOCATION:	Natrona County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$100,000
	ACTUAL EXPENDITURES:	\$100,000
	DESCRIPTION:	Pipeline
	ENGINEER:	Geocivil Engineers, Inc.; Casper, Wyoming
	CONTRACTOR:	La Max Construction; Basin, Wyoming
<b>135.</b>	<b>PROJECT:</b>	<b>Moorcroft Water Supply</b>
	SPONSOR:	Town of Moorcroft
	LOCATION:	Crook County
	PROGRAM:	New Development
	APPROPRIATION:	\$930,000
	ACTUAL EXPENDITURES:	\$853,767
	DESCRIPTION:	Wells, pipeline, and storage tank
	ENGINEER:	Weston Engineering; Upton, Wyoming
	CONTRACTOR:	Hot Iron, Inc.; Gillette, Wyoming
		Williams Drilling Co.; Gillette, Wyoming
<b>136.</b>	<b>PROJECT:</b>	<b>Muddy Guard</b>
	SPONSOR:	North Fork Irrigation District
	LOCATION:	Johnson County
	PROGRAM:	New Development
	APPROPRIATION:	\$600,000
	ACTUAL EXPENDITURES:	\$600,000
	DESCRIPTION:	Purchase of minimum pool in storage
	ENGINEER:	NA
	CONTRACTOR:	NA
<b>137.</b>	<b>PROJECT:</b>	<b>Natrona County Regional Rehabilitation</b>
	SPONSOR:	Central Wyoming Water System JPB
	LOCATION:	Natrona County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$5,357,000.00

	ACTUAL EXPENDITURES:	\$5,357,000.00
	DESCRIPTION:	Wellfield, pipeline and storage tank rehabilitation,
	ENGINEER:	CH2M Hill, Denver, Colorado
	CONTRACTOR	Lillard & Clark, Denver, Colorado
		Water System Management, Gillette, Wyoming
		Mandros Painting, Inc., Rock Springs, Wyoming
	Completion Date	June 2002
	Session Law	1995-1998
<b>138.</b>	<b>PROJECT:</b>	<b>Natrona County Regional Water Supply</b>
	SPONSOR:	Central Wyoming Regional Water System JPB
	LOCATION:	Natrona County
	PROGRAM:	New Development
	APPROPRIATION:	\$26,750,000.00
	ACTUAL EXPENDITURES:	\$25,421,544.86
	DESCRIPTION:	Transmission Pipelines, storage tanks, pumping stations, disinfection facilities and appurtenances
	ENGINEER:	CH2M Hill, Denver, Colorado
	CONTRACTOR:	Lillard & Clark, Denver, Colorado
		Hedquest Construction, Inc., Casper, Wyoming
		JTL Group, Inc., Casper, Wyoming
		High Plains Construction, Inc., Casper, Wyoming
	COMPLETION DATE	June 2002
	SESSION LAW	1995-1998
<b>139.</b>	<b>PROJECT:</b>	<b>Nine Mile Water Supply</b>
	SPONSOR:	Nine Mile Water and Sewer District
	LOCATION:	Albany County
	PROGRAM:	New Development
	APPROPRIATION:	\$920,000
	ACTUAL EXPENDITURES	\$526,698.70
	DESCRIPTION:	Water main system including taps to City of Laramie transmission lines, control house, a booster pump station, and transmission mains.
	ENGINEER:	WWC Engineering; Laramie, Wyoming
	CONTRACTOR:	Strong Construction; Torrington, Wyoming
	COMPLETION DATE:	February 2003
	SESSION LAW:	2000
<b>140.</b>	<b>PROJECT:</b>	<b>North Fork Crazy Woman Rehabilitation</b>
	SPONSOR:	Crazy Woman Watershed Improvement District
	LOCATION:	Johnson County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$650,000
	ACTUAL EXPENDITURES:	\$471,366
	DESCRIPTION:	Canal improvements, pipeline
	ENGINEER:	HKM Associates; Sheridan, Wyoming
	CONTRACTOR:	S&S Builders; Gillette, Wyoming
		Mollinax Concrete Service Company; Sheridan, Wyoming

- 141. PROJECT: North Platte Gages**  
**SPONSOR:** State Engineer's Office  
**LOCATION:** Carbon, Converse, Goshen and Natrona Counties  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$850,000  
**ACTUAL EXPENDITURES:** \$790,000 (approx)  
**DESCRIPTION:** Six (6) major stream gaging stations on the North Platte River and tributaries  
**ENGINEER:** States West Water Resources; Cheyenne, Wyoming  
**CONTRACTOR:** Bartlett Construction; Hanna, Wyoming  
High County Construction; Casper, Wyoming  
Rieman Construction; Cheyenne, Wyoming  
Structures, Inc.; Riverton, Wyoming
- 142. PROJECT: Oakley Water Supply**  
**SPONSOR:** Oakley Service and Improvement District  
**LOCATION:** Lincoln County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$176,000  
**ACTUAL EXPENDITURES:** \$155,710.92  
**DESCRIPTION:** Water transmission line  
**ENGINEER:** Sunrise Engineering, Inc.; Afton, Wyoming  
**CONTRACTOR:** Peavler's Mountain Star, Inc.; Afton, Wyoming  
**YEAR COMPLETED:** 2001  
**SESSION LAW YEAR:** 2001
- 143. PROJECT: Osage Water Supply**  
**SPONSOR:** Osage Water District  
**LOCATION:** Weston County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$1,205,000  
**ACTUAL EXPENDITURES:** \$954,951  
**DESCRIPTION:** Pipeline, storage, disinfection, pump, controls  
**ENGINEER:** Weston Engineering, Inc.; Upton, Wyoming  
**CONTRACTOR:** DRM, Inc.; Gillette, Wyoming
- 144. PROJECT: Park Reservoir Dam**  
**SPONSOR:** Park Reservoir Company  
**LOCATION:** Sheridan County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$3,750,000  
**ACTUAL EXPENDITURES:** \$3,725,000  
**DESCRIPTION:** Dam  
**ENGINEER:** Woodward Clyde Consultants; Denver, Colorado  
**CONTRACTOR:** McIntyre Construction; Great Falls, Montana
- 145. PROJECT: Pavillion Water Supply**  
**SPONSOR:** Town of Pavillion  
**LOCATION:** Fremont County  
**PROGRAM:** New Development  
**APPROPRIATION:** \$400,000  
**ACTUAL EXPENDITURES:** \$300,000  
**DESCRIPTION:** Well, storage tank, and pipeline



ENGINEER:	Rolly Connell & Associates; Riverton, Wyoming
CONTRACTOR:	Rieman Construction; Cheyenne, Wyoming Rawhide Mechanical; Riverton, Wyoming
<b>146. PROJECT:</b>	<b>Pine Bluffs Well Rehabilitation</b>
SPONSOR:	Town of Pine Bluffs
LOCATION:	Laramie County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$155,000
ACTUAL EXPENDITURES:	\$132,723
DESCRIPTION:	Well rehabilitation
ENGINEER:	Lidstone & Associates, Inc.; Fort Collins, Colorado
CONTRACTOR:	Sargent Irrigation Company; Scottsbluff, Nebraska
<b>147. PROJECT:</b>	<b>Pinedale Intake Project</b>
SPONSOR:	Town of Pinedale
LOCATION:	Sublette County
PROGRAM:	New Development
APPROPRIATION:	\$193,000
ACTUAL EXPENDITURES:	\$ 63,050.54
DESCRIPTION:	Rock cover over existing lake intake
ENGINEER:	Rio Verde Engineering.; Pinedale, Wyoming
CONTRACTOR:	Noble Construction; Pinedale, Wyoming
SESSION LAWS:	2002
COMPLETION DATE:	2003
<b>148. PROJECT:</b>	<b>Pinedale Pipeline</b>
SPONSOR:	Town of Pinedale
LOCATION:	Sublette County
PROGRAM:	New Development
APPROPRIATION:	\$320,000
ACTUAL EXPENDITURES:	\$202,974
DESCRIPTION:	Transmission pipeline
ENGINEER:	Rio Verde; Pinedale, Wyoming
CONTRACTOR:	Snyder Construction; Lyman, Wyoming
<b>149. PROJECT:</b>	<b>Pinedale Transmission Line</b>
SPONSOR:	Town of Pinedale
LOCATION:	Sublette County
PROGRAM:	New Development
APPROPRIATION:	\$3,550,000
ACTUAL EXPENDITURES:	\$2,974,131
DESCRIPTION:	Transmission pipeline
ENGINEER:	Rio Verde Engineering; Pinedale, Wyoming
CONTRACTOR:	Snyder Construction, Inc.; Lyman, Wyoming
<b>150. PROJECT:</b>	<b>Pine Haven Pipeline Rehabilitation</b>
SPONSOR:	Town of Pine Haven
LOCATION:	Crook County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$235,000
ACTUAL EXPENDITURES:	\$235,000
DESCRIPTION:	Upgrade transmission pipelines replumb storage
ENGINEER:	Stetson Engineering, Inc. Gillette, Wyoming

	CONTRACTOR:	Hot Iron, Inc. Gillette, Wyoming
	DATE COMPLETED:	2002
	SESSION LAW DATE:	2001
<b>151.</b>	<b>PROJECT:</b>	<b>Pine Haven Water Supply</b>
	SPONSOR:	Town of Pine Haven
	LOCATION:	Crook County
	PROGRAM:	New Development
	APPROPRIATION:	\$165,000
	ACTUAL EXPENDITURES:	\$97,162
	DESCRIPTION:	Pipeline, storage tank
	ENGINEER:	Bearlodge Engineering; Sundance, Wyoming
	CONTRACTOR:	Sundance Construction; Newcastle, Wyoming
<b>152.</b>	<b>PROJECT:</b>	<b>Pioneer Canal</b>
	SPONSOR:	Pioneer Canal-Lake Hattie Irrigation District
	LOCATION:	Albany County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$1,400,000
	ACTUAL EXPENDITURES:	\$1,270,195
	DESCRIPTION:	Repairs to canal structures and diversion on Little Laramie
	ENGINEER:	Western Water Consultants; Laramie, Wyoming
	CONTRACTOR:	Barlett Inc.; Hanna, Wyoming Domson Inc.; Torrington, Wyoming
<b>153.</b>	<b>PROJECT:</b>	<b>Poison Spider Water Supply</b>
	SPONSOR:	Poison Spider Improvement & Service Dist.
	LOCATION:	Natrona County
	PROGRAM:	New Development
	APPROPRIATION:	\$640,000
	ACTUAL EXPENDITURES:	\$538,076
	DESCRIPTION:	Pipelines, metering, chlorination
	ENGINEER:	Civil Engineering Professionals, Casper
	CONTRACTOR:	Hedquist Construction, Inc., Casper, Wyoming
<b>154.</b>	<b>PROJECT:</b>	<b>Porto Canal</b>
	SPONSOR:	Porto Canal Irrigation District
	LOCATION:	Lincoln County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$808,000
	ACTUAL EXPENDITURES:	\$681,040
	DESCRIPTION:	Converting open ditch to pipeline
	ENGINEER:	Sunrise Engineering; Afton, Wyoming Laramie, Wyoming
	CONTRACTOR:	H-K Construction; Idaho Falls, Idaho
<b>155.</b>	<b>PROJECT:</b>	<b>Rawlins Groundwater Supply</b>
	SPONSOR:	City of Rawlins
	LOCATION:	Carbon County
	PROGRAM:	New Development
	APPROPRIATION:	\$8,200,000
	ACTUAL EXPENDITURES:	\$7,505,939
	DESCRIPTION:	Wells, pipeline

	ENGINEER:	J.M. Montgomery; Laramie, Wyoming
	CONTRACTOR:	Several
<b>156.</b>	<b>PROJECT:</b>	<b>Rawlins Springs Rehabilitation</b>
	SPONSOR:	City of Rawlins
	LOCATION:	Carbon County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$220,000
	ACTUAL EXPENDITURES:	\$55,722
	DESCRIPTION:	Springs enhancement
	ENGINEER:	J.M. Montgomery; Laramie, Wyoming
	CONTRACTOR:	City of Rawlins
<b>157.</b>	<b>PROJECT:</b>	<b>Riverside</b>
	SPONSOR:	Sierra Madre Water & Sewer Joint Powers Board
	LOCATION:	Carbon County
	PROGRAM:	New Development
	APPROPRIATION:	\$1,225,000
	ACTUAL EXPENDITURES:	\$834,574
	DESCRIPTION:	Municipal water supply
	ENGINEER:	PMPC; Saratoga, Wyoming
	CONTRACTOR:	Bartlett Construction; Hanna, Wyoming
<b>158.</b>	<b>PROJECT:</b>	<b>Riverton Valley</b>
	SPONSOR:	City of Riverton/Riverton Valley Irrigation District
	LOCATION:	Fremont County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$5,750,000
	ACTUAL EXPENDITURES:	\$5,743,436
	DESCRIPTION:	Canal, pipeline
	ENGINEER:	R.D. Connell and Associates; Riverton, Wyoming
	CONTRACTOR:	Larry's Inc.; Gillette, Wyoming
<b>159.</b>	<b>PROJECT:</b>	<b>Riverton Valley Laterals</b>
	SPONSOR:	City of Riverton/Riverton Valley Irrigation District
	LOCATION:	Fremont County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$350,000
	ACTUAL EXPENDITURES:	\$348,544
	DESCRIPTION:	Canal, pipeline
	ENGINEER:	R.D. Connell and Associates; Riverton, Wyoming
	CONTRACTOR:	City of Riverton/Riverton Valley Irrigation District; Riverton, Wyoming
<b>160.</b>	<b>PROJECT:</b>	<b>Riverton Water Supply</b>
	SPONSOR:	City of Riverton
	LOCATION:	Fremont County
	PROGRAM:	New Construction
	APPROPRIATION:	\$312,000
	ACTUAL EXPENDITURES:	\$283,106
	DESCRIPTION:	Well and Transmission Pipeline
	ENGINEER:	Wester-Wetstein & Assoc., Inc., Laramie, Wyoming
	CONTRACTOR:	Patrick Construction

- 161. PROJECT: Rock River Transmission Pipeline**  
 SPONSOR: Town of Rock River  
 LOCATION: Albany County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$670,000  
 ACTUAL EXPENDITURES: \$495,246  
 DESCRIPTION: Intake Structure and Raw Water Transmission Line  
 ENGINEER: Banner Associates; Laramie, Wyoming  
 CONTRACTOR: Bartlett, Inc.; Hanna, Wyoming  
 Moltz Constructors, Inc.; Cody, Wyoming  
 DATE COMPLETED: 2001
- 162. PROJECT: Rock Springs/Green River Area Supply**  
 SPONSOR: GR-RS-SC JPWB  
 LOCATION: Sweetwater County  
 PROGRAM: New Development  
 APPROPRIATION: \$27,000,000  
 ACTUAL EXPENDITURES: \$27,000,000  
 DESCRIPTION: Transmission Line, Storage, Pumping, Controls  
 ENGINEER: Forsgren Engineering, Evanston, Wyoming  
 Crank Companies, Kemmerer, Wyoming  
 CONTRACTOR: DeBernardi Construction, Rock Springs, Wyoming  
 Snyder Construction, Lyman, Wyoming  
 H-K Construction, Idaho Falls, Idaho  
 High Pains Construction, Casper, Wyoming  
 Resource Engineering, Rock Springs, Wyoming  
 C M E, Green River, Wyoming  
 ENGINEER: Forsgren Engineering, Evanston, Wyoming  
 Crank Companies, Kemmerer, Wyoming  
 CONTRACTOR: DeBernardi Construction, Rock Springs, Wyoming  
 Snyder Construction, Lyman, Wyoming  
 H-K Construction, Idaho Falls, Idaho  
 High Pains Construction, Casper, Wyoming  
 Resource Engineering, Rock Springs, Wyoming  
 C M E, Green River, Wyoming
- 163. PROJECT: Rolling Hills Water Supply**  
 SPONSOR: Town of Rolling Hills  
 LOCATION: Converse  
 PROGRAM: New Development  
 APPROPRIATION: \$282,000  
 ACTUAL EXPENDITURES: \$221,878  
 DESCRIPTION: New Tank and Transmission Lines  
 ENGINEER: R. C. H and Associates, Glenrock, Wyoming  
 CONTRACTOR: CVIC, Casper; Phipps, Glenrock; D.C. Drilling, Lusk,  
 Wyoming; Bartlett, Hanna, Wyoming  
 DATE COMPLETED: 2001
- 164. PROJECT: Sahara Rehabilitation**  
 SPONSOR: Powder River Irrigation District  
 LOCATION: Johnson County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$900,000  
 ACTUAL EXPENDITURES: \$900,000

<p>DESCRIPTION: ENGINEER: CONTRACTOR:</p>	<p>Diversion structure, canal improvements Western Water Consultants; Sheridan, Wyoming Foster Construction; Riverton, Wyoming</p>
<p><b>165. PROJECT:</b> SPONSOR: LOCATION: PROGRAM: APPROPRIATION: ACTUAL EXPENDITURES: DESCRIPTION: ENGINEER: CONTRACTOR: DATE COMPLETED: SESSION LAW DATE:</p>	<p><b>Salt Creek Water Supply</b> Salt Creek Water &amp; Sewer District Weston County New Development \$690,000 \$690,000 Upgrade transmission pipeline, put new well on line Wester-Wetstein &amp; Associates, Inc. Laramie, Wyoming Hawley, Inc., Torrington, Wyoming 2003 2000</p>
<p><b>166. PROJECT:</b> SPONSOR: LOCATION: PROGRAM: APPROPRIATION: ACTUAL EXPENDITURES: DESCRIPTION: ENGINEER: CONTRACTOR:</p>	<p><b>Shell Canal</b> Shell Valley Watershed Improvement District Big Horn County Rehabilitation \$190,000 \$190,000 Canal repairs Soil Conservation Service; Worland, Wyoming Big Horn Ready Mix, Inc; Greybull, Wyoming</p>
<p><b>167. PROJECT:</b> SPONSOR: LOCATION: PROGRAM: APPROPRIATION: ACTUAL EXPENDITURES: DESCRIPTION: ENGINEER: CONTRACTOR:</p>	<p><b>Shell Valley/Greybull Water Supply</b> Town of Greybull Big Horn County New Development \$666,400 \$521,291 Wells, pipeline Crank Company; Kemmerer, Wyoming Continental Construction; Jackson, Wyoming</p>
<p><b>168. PROJECT:</b> LEVEL: PROGRAM: SPONSOR: LOCATION: PROGRAM: APPROPRIATION: ACTUAL EXPENDITURES: DESCRIPTION:  ENGINEER: CONTRACTOR:</p>	<p><b>Sheridan Area Water Supply</b> III New Development Sheridan Area Water Supply Joint Powers Board Sheridan County New Development \$37,206,000 \$37,206,000 Enlargement of Twin Lakes Reservoir, Water transmission facilities, Water treatment plant in Big Goose Valley, Raw water transmission pipeline, Several Several (21 separate contracts)</p>
<p><b>169. PROJECT:</b> SPONSOR: LOCATION: PROGRAM:</p>	<p><b>Sheridan Big Goose Water Supply</b> City of Sheridan Sheridan County New Development</p>

	APPROPRIATION:	\$2,291,000
	ACTUAL EXPENDITURES:	\$2,184,261
	DESCRIPTION:	Update and improve the Sheridan Big Goose Water Supply Intake
	ENGINEER:	HKM, Sheridan, WY
	CONTRACTOR	Larry's, Gillette, WY
	YEAR COMPLETED:	2004
	SESSION LAW YEARS:	2000, 2002, and 2003
<b>170.</b>	<b>PROJECT:</b>	<b>Sheridan Intake Structure</b>
	SPONSOR:	City of Sheridan
	LOCATION:	Sheridan County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$200,000
	ACTUAL EXPENDITURES:	\$200,000
	DESCRIPTION:	Diversion dam
	ENGINEER:	TSP; Sheridan, Wyoming
	CONTRACTOR:	Husman Construction; Sheridan, Wyoming
<b>171.</b>	<b>PROJECT:</b>	<b>Sheridan Raw Water Supply</b>
	SPONSOR:	City of Sheridan
	LOCATION:	Sheridan County
	PROGRAM:	New Development
	APPROPRIATION:	\$796,000
	ACTUAL EXPENDITURES:	\$796,000
	ENGINEER:	MSE-HKM, Sheridan, Wyoming.
	CONTRACTOR:	Larry's Inc, Gillette, Wyoming
	DATE COMPLETED:	2001
<b>172.</b>	<b>PROJECT:</b>	<b>Sheridan Raw Water Supply Rehabilitation Project</b>
	SPONSOR:	City of Sheridan
	LOCATION:	Sheridan County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$50,000
	ACTUAL EXPENDITURES:	\$42,289.66
	DESCRIPTION:	Raw water transmission to Kendrick Golf Course, engineering design of pump station.
	ENGINEER:	HKM Engineering, Sheridan, WY
	CONTRACTOR:	NA, design only
	YEAR COMPLETED	2003
	SESSION LAW YEAR	2001
<b>173.</b>	<b>PROJECT:</b>	<b>Shoshone Municipal Pipeline</b>
	SPONSOR:	Shoshone Municipal Water Supply Joint Powers Board
	LOCATION:	Park and Big Horn Counties
	PROGRAM:	New Development
	APPROPRIATION:	\$38,750,000
	ACTUAL EXPENDITURES:	\$38,451,942
	DESCRIPTION:	Pipeline, storage tanks, controls
	ENGINEER:	Banner Associates; Laramie, Wyoming
	CONTRACTOR:	Barcon; Sheridan, Wyoming
		TIC; Casper, Wyoming
		ASI Moltz; Cody, Wyoming

- 174. PROJECT: Shoshone Rehabilitation**  
**SPONSOR:** Shoshone Irrigation Project Joint Powers Board  
**LOCATION:** Park/Big Horn Counties  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$7,500,000  
**ACTUAL EXPENDITURES:** \$7,448,171  
**DESCRIPTION:** Pipelines, canal structures, tunnel grouting, siphon coating, headgate repair  
**ENGINEER:** Graham, Dietz & Associates, Powell, Wyoming  
Engineering Associates, Cody, Wyoming  
Inberg-Miller Engineers, Powell, Wyoming  
ESA, Bozeman, Montana  
Engineering Science, Inc., Salt Lake City, Utah  
Water Resources Engineers, Powell, Wyoming  
**CONTRACTOR:** LaMax Construction, Basin, Wyoming  
Miller Fabrication, Lovell, Wyoming  
Advanced American Diving, Oregon City, Oregon  
Elkhorn Construction, Powell, Wyoming  
Moltz Construction, Cody, Wyoming  
Williams Plumbing & Heating, Bozeman, Montana  
Excel Construction., Sheridan, Wyoming  
Big Horn Ready-Mix, Greybull, Wyoming  
**MATERIALS:** Elk River Concrete, Helena, Montana  
A-C Supply, Basin, Wyoming  
Boomers Irrigation, Powell, Wyoming  
J&E, Inc., Greybull, Wyoming  
TNT Irrigation, Inc., Powell, Wyoming  
**DATE COMPLETED:** 2001  
**SESSSION LAW DATE:** 1992
- 175. PROJECT: Shoshoni Water Supply**  
**SPONSOR:** Town of Shoshoni  
**LOCATION:** Fremont County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$740,000  
**ACTUAL EXPENDITURES:** \$660,066  
**DESCRIPTION:** Well replacement, water storage improvements  
**ENGINEER:** Civil Engineering Professionals, Inc.; Casper, Wyoming  
**CONTRACTOR:** 71 Construction, Inc.; Casper, Wyoming
- 176. PROJECT: Sidon Bitter Creek Crossing Rehabilitation**  
**SPONSOR:** Sidon Irrigation District  
**LOCATION:** Big Horn County  
**PROGRAM:** Rehabilitation  
**APPROPRIATION:** \$217,000  
**ACTUAL EXPENDITURES:** \$217,000  
**DESCRIPTION:** Replace concrete structure passing Bitter Creek over Sidon Canal  
**ENGINEER:** Engineering Associates, Inc., Cody, Wyoming  
**CONTRACTOR:** Wilson Brothers Construction, Cowley, Wyoming  
**YEAR COMPLETED:** 2004  
**SESSION LAW YEAR:** 2002

- 177. PROJECT: Sidon Canal Rehabilitation**  
 SPONSOR: Sidon Irrigation District  
 LOCATION: Big Horn County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,060,000  
 ACTUAL EXPENDITURES: \$730,260  
 DESCRIPTION: Diversion Headgate, Inverted Siphons  
 ENGINEER: Inberg Miller Engineers, Riverton, Wyoming  
 CONTRACTOR: Excel Construction, Inc., Sheridan, Wyoming
- 178. PROJECT: Sinclair Water Supply Project**  
 SPONSOR: Town of Sinclair  
 LOCATION: Carbon County  
 PROGRAM: New Development  
 APPROPRIATION: \$672,500 (50% Grant)  
 ACTUAL EXPENDITURES: \$433,915.35  
 DESCRIPTION: New potable water storage tank, connecting pipeline and appurtenances.  
 ENGINEER: PMPC Consulting Engineers, Saratoga, Wyoming  
 CONTRACTOR: Hot Iron Construction, Inc., Gillette, Wyoming  
 YEAR COMPLETED: 2004  
 SESSION LAW YEAR: 2002
- 179. PROJECT: Sinnard Dam**  
 SPONSOR: Horse Creek Conservation District  
 LOCATION: Goshen County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,100,000  
 ACTUAL EXPENDITURES: \$918,814  
 DESCRIPTION: Dam and outlet works  
 ENGINEER: ECI; Englewood, Colorado  
 CONTRACTOR: Domino Construction; Laramie, Wyoming
- 180. PROJECT: Sleepy Hollow Well Replacement**  
 SPONSOR: Central Campbell County I&S District  
 LOCATION: Campbell County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$375,000  
 ACTUAL EXPENDITURES: \$227,811  
 DESCRIPTION: Replacement of well, pump, controls, pipe  
 ENGINEER: Soda Butte Services; Upton, Wyoming  
 CONTRACTOR: Williams Drilling; Gillette, Wyoming  
 Hladky Construction; Gillette, Wyoming
- 181. PROJECT: Smiths Fork Water Supply**  
 SPONSOR: Smiths Fork Irrigation District  
 LOCATION: Lincoln County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$340,000  
 ACTUAL EXPENDITURES: \$307,027  
 DESCRIPTION: Diversion structure, headgate replacement and siphon  
 ENGINEER: Versar; Denver, Colorado  
 CONTRACTOR: Reiman Construction; Cheyenne, Wyoming



- 182. PROJECT: Smoot Water Supply**  
 SPONSOR: Greater Smoot Water and Sewer District  
 LOCATION: Lincoln County  
 PROGRAM: New Development  
 APPROPRIATION: \$1,100,000  
 ACTUAL EXPENDITURES: \$1,040,298  
 DESCRIPTION: Well, storage tank, spring improvements, pipeline  
 ENGINEER: Forsgren Associates; Evanston, Wyoming  
 CONTRACTOR: JASCO; Evanston, Wyoming
- 183. PROJECT: South of Laramie Water Supply**  
 SPONSOR: South of Laramie Water and Sewer District  
 LOCATION: Albany County  
 PROGRAM: New Development  
 APPROPRIATION: \$3,146,400  
 ACTUAL EXPENDITURES: \$1,771,887  
 DESCRIPTION: Storage tank, city connection, pipeline, controls  
 ENGINEER: Banner Associates; Laramie, Wyoming  
 CONTRACTOR: Hedquist Construction; Casper, Wyoming
- 184. PROJECT: Southwest Casper Water Supply**  
 SPONSOR: City of Casper  
 LOCATION: Natrona County  
 PROGRAM: New Development  
 APPROPRIATION: \$1,000,000  
 ACTUAL EXPENDITURES: \$1,000,000  
 DESCRIPTION: Storage Tank and Pipeline  
 ENGINEER: Worthington Lenhart, Carpenter, Inc.  
 CONTRACTOR: Lobo, Inc., Casper, Wyoming
- 185. PROJECT: Spring Draw Ditch**  
 SPONSOR: Spring Draw Irrigation District  
 LOCATION: Sheridan County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$350,000  
 ACTUAL EXPENDITURES: \$282,924  
 DESCRIPTION: Ditch reclamation, and pipeline installation  
 ENGINEER: Pilch Engineering, Sheridan, Wyoming  
 CONTRACTOR: Larry's Inc, Gillette, Wyoming
- 186. PROJECT: Squaw Creek Water Supply**  
 SPONSOR: Squaw Creek Water District  
 LOCATION: Teton County  
 PROGRAM: New Development  
 APPROPRIATION: \$580,000  
 ACTUAL EXPENDITURES: \$530,297  
 DESCRIPTION: Wells, pipeline, storage  
 ENGINEER: AVI, Cheyenne, Wyoming  
 CONTRACTOR: G. M. Stewart Construction, Evanston, Wyoming  
 Thomas Brothers Drilling, Afton, Wyoming

- 187. PROJECT: Stage II Pipeline**  
 SPONSOR: City of Cheyenne  
 LOCATION: Carbon, Albany, Laramie Counties  
 PROGRAM: New Development  
 APPROPRIATION: \$48,200,000  
 ACTUAL EXPENDITURES: \$47,713,214  
 DESCRIPTION: Pipeline  
 ENGINEER: Banner Associates, Inc.; Laramie, Wyoming  
 CONTRACTOR: Guernsey Stone; Sheridan, Wyoming
- 188. PROJECT: Sulphur Creek**  
 SPONSOR: City of Evanston  
 LOCATION: Uinta County  
 PROGRAM: New Development  
 APPROPRIATION: \$25,000,000  
 ACTUAL EXPENDITURES: \$19,758,207  
 DESCRIPTION: Dam, pipelines (2)  
 ENGINEER: Several  
 CONTRACTOR: Several
- 189. PROJECT: Sundance Tank**  
 SPONSOR: Town of Sundance  
 LOCATION: Crook County  
 PROGRAM: New Development  
 APPROPRIATION: \$325,000  
 ACTUAL EXPENDITURES: \$307,210  
 DESCRIPTION: Water storage tank  
 ENGINEER: Bearlodge Ltd., Inc.; Sundance, Wyoming  
 CONTRACTOR: DRM, Inc.; Gillette, Wyoming  
 DATE COMPLETED: 2001  
 SESSION LAW DATE: 2000
- 190. PROJECT: Superior Water Supply**  
 SPONSOR: Town of Superior  
 LOCATION: Sweetwater County  
 PROGRAM: New Development  
 APPROPRIATION: \$40,000  
 ACTUAL EXPENDITURES: \$30,880  
 DESCRIPTION: Groundwater well, pump station  
 ENGINEER: Wester-Wetstein & Associates; Laramie, Wyoming  
 CONTRACTOR: Ward's Well Service; Riverton, Wyoming
- 191. PROJECT: Teton Village Water Supply**  
 SPONSOR: Teton Village Water and Sewer District  
 LOCATION: Teton County  
 PROGRAM: New Development  
 APPROPRIATION: \$700,000  
 ACTUAL EXPENDITURES: \$700,000  
 DESCRIPTION: Two wells, pipeline  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Thomas Drilling; Afton, Wyoming  
 H-K Construction; Idaho Falls, Idaho

- 192. PROJECT: Thayne Water Supply**  
 SPONSOR: Town of Thayne  
 LOCATION: Lincoln County  
 PROGRAM: New Development  
 APPROPRIATION: \$850,000  
 ACTUAL EXPENDITURES: \$726,221.99  
 DESCRIPTION: Springs development, well and transmission line  
 ENGINEER: Forsgren Associates Inc.; Evanston, Wyoming  
 CONTRACTOR: Peavler's Mountain Star, Inc.; Afton, Wyoming  
 YEAR COMPLETED: 2002  
 SESSION LAW YEAR: 1998
- 193. PROJECT: Thirty Three Mile Water Supply**  
 SPONSOR: Thirty Three Mile Road Improvement & Service District  
 LOCATION: Natrona County  
 PROGRAM: New Development  
 APPROPRIATION: \$1,044,486  
 ACTUAL EXPENDITURES: \$955,712.02  
 DESCRIPTION: Construction of a water transmission system for the District  
 ENGINEER: Civil Engineering Professionals, Inc., Casper, Wyoming  
 CONTRACTOR: Andreen Hunt Construction, Inc., Casper, Wyoming  
 YEAR COMPLETED: 2003  
 SESSION LAW YEAR: 2000
- 194. PROJECT: Torrington Raw Water**  
 SPONSOR: City of Torrington  
 LOCATION: Goshen County  
 PROGRAM: New Development  
 APPROPRIATION: \$96,000  
 ACTUAL EXPENDITURES: \$96,000  
 DESCRIPTION: Two irrigation wells, pumps, pipelines, controls  
 ENGINEER: Baker & Associates, Inc., Scottsbluff, Nebraska  
 CONTRACTOR: Scott & Son, Inc., Torrington, Wyoming  
 YEAR COMPLETED: 2004  
 SESSION LAW YEAR: 2002
- 195. PROJECT: Upper Bluff Rehabilitation**  
 SPONSOR: Upper Bluff Irrigation District  
 LOCATION: Washakie County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$436,000  
 ACTUAL EXPENDITURES: \$399,913  
 DESCRIPTION: Pump stations (2), measuring devices, canal repairs  
 ENGINEER: Nelson Engineering; Jackson, Wyoming  
 CONTRACTOR: Big Horn Red-Mix; Greybull, Wyoming
- 196. PROJECT: Upper Hanover Water Supply**  
 SPONSOR: Hanover Irrigation District  
 LOCATION: Washakie County  
 PROGRAM: Rehabilitation  
 APPROPRIATION: \$1,200,000  
 ACTUAL EXPENDITURES: \$1,086,100  
 DESCRIPTION: Wasteways, flumes, canal lining

ENGINEER:	Donnell & Associates; Worland, Wyoming
CONTRACTOR:	Big Horn Red-Mix; Greybull, Wyoming Pope Construction; Casper, Wyoming
<b>197. PROJECT:</b>	<b>Upper Little Warm Springs Water Supply</b>
SPONSOR:	Warm Springs Water District
LOCATION:	Fremont County
PROGRAM:	New Development
APPROPRIATION:	\$1,600,000
ACTUAL EXPENDITURES:	\$1,426,485
DESCRIPTION:	Pipelines, pumps, storage tank, controls
ENGINEER:	Jorgensen Engineering, Jackson, Wyoming
CONTRACTOR:	Foster Construction, Riverton, Wyoming
<b>198. PROJECT:</b>	<b>Upton Tank Replacement</b>
SPONSOR:	Town of Upton
LOCATION:	Weston County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$158,800
ACTUAL EXPENDITURES:	\$158,800
DESCRIPTION:	Water storage standpipe
ENGINEER:	Wester-Wetstein & Associates, Inc. Laramie, Wyoming
CONTRACTOR:	Salt Creek Welding, Inc. Mills, Wyoming
DATE COMPLETED:	2002
SESSION LAW DATE:	2002
<b>199. PROJECT:</b>	<b>Upton Water Supply</b>
SPONSOR:	Town of Upton
LOCATION:	Weston County
PROGRAM:	New Development
APPROPRIATION:	\$365,000
ACTUAL EXPENDITURES:	\$328,375
DESCRIPTION:	Well and pipeline
ENGINEER:	Weston Engineering; Upton, Wyoming High Plains Engineering; Newcastle, Wyoming
CONTRACTOR:	Cyclone Drilling; Gillette, Wyoming Sundance P&H; Sundance, Wyoming
<b>200. PROJECT:</b>	<b>Vista West Water Supply</b>
SPONSOR:	Vista West Water and Sewer District
LOCATION:	Crook County
PROGRAM:	New Development
APPROPRIATION:	\$540,000
ACTUAL EXPENDITURES:	\$523,135
DESCRIPTION:	Wells, pipeline, storage
ENGINEER:	Weston Engineering, Upton, Wyoming
CONTRACTOR:	Dan Hart Patrol, Upton, Wyoming Water System Management, Gillette, Wyoming
<b>201. PROJECT:</b>	<b>Wamsutter Water Supply</b>
SPONSOR:	Town of Wamsutter
LOCATION:	Sweetwater County
PROGRAM:	Rehabilitation
APPROPRIATION:	\$140,000

	ACTUAL EXPENDITURES:	\$125,353.59
	DESCRIPTION:	Transmission Pipeline
	ENGINEER:	PMPC, Saratoga, Wyoming
	CONTRACTOR:	Jackman Construction, Inc., Green River, Wyoming
	COMPLETION DATE	June 2002
	SESSION LAW	2001
<b>202.</b>	<b>PROJECT:</b>	<b>Westside/Rock Springs Water Supply</b>
	SPONSOR:	City of Green River/City of Rock Springs/Sweetwater County Joint powers Water Board
	LOCATION:	Sweetwater County
	PROGRAM:	New Development & Rehabilitation
	APPROPRIATION:	\$450,000 – New Development \$625,000 Rehabilitation
	ACTUAL EXPENDITURES:	\$450,000 – New Development \$600,390.11- Rehabilitation
	DESCRIPTION:	Transmission mains
	ENGINEER:	Nelson Engineering Inc.; Jackson, Wyoming
	CONTRACTOR:	Patrick Construction Inc.; Lander, Wyoming
	YEAR COMPLETED:	2001
	SESSION LAW YEAR:	1998
<b>203.</b>	<b>PROJECT</b>	<b>Wheatland Irrigation District Laramie River Diversion Improvements</b>
	SPONSOR:	Wheatland Irrigation District
	LOCATION:	Platte County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$456,500
	ACTUAL EXPENDITURES:	\$384,638
	DESCRIPTION:	Headgate structure replacement, automation
	ENGINEER:	Kennedy Engineering; Wheatland, Wyoming
	CONTRACTOR:	Foster Construction; Riverton, Wyoming Sutron Corporation; Sterling, Virginia
	DATE COMPLETED:	2001
<b>204.</b>	<b>PROJECT:</b>	<b>Wheatland Reservoir No. 1</b>
	SPONSOR:	Wheatland Irrigation District
	LOCATION:	Platte County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$392,000
	ACTUAL EXPENDITURES:	\$80,288
	DESCRIPTION:	Dam rehabilitation
	ENGINEER:	States West Water Resources Corporation; Cheyenne, Wyoming
	CONTRACTOR:	Lamax Construction; Basin, Wyoming
<b>205.</b>	<b>PROJECT:</b>	<b>Wheatland Sand Lake Dam/Cañon Canal Rehab</b>
	SPONSOR:	Wheatland Irrigation District
	LOCATION:	Platte County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$632,000
	ACTUAL EXPENDITURES:	\$525,448
	DESCRIPTION:	Canal lining, new outlet, spillway on Sand Lake Dam
	ENGINEER:	Inberg-Miller Engineers, Inc. Casper, Wyoming

	CONTRACTOR:	Three Sons, LLC, Hanna, Wyoming
	DATE COMPLETED:	2003
	SESSION LAW DATE:	1998
<b>206.</b>	<b>PROJECT:</b>	<b>Wheatland Water Supply</b>
	SPONSOR:	Town of Wheatland
	LOCATION:	Platte County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$222,000
	ACTUAL EXPENDITURES:	\$203,915.47
	DESCRIPTION:	Construction of a new well, installation of new storage facilities and piping to connect the improvements to the Town's water system.
	ENGINEER:	Kennedy Engineering, Wheatland, Wyoming
	CONTRACTOR:	Scott & Son, Inc., Torrington, Wyoming
	YEAR COMPLETED:	2003
	SESSION LAW YEAR:	2001
<b>207.</b>	<b>PROJECT:</b>	<b>Wild Rose Water Supply</b>
	SPONSOR:	Wild Rose Service and Improvement District
	LOCATION:	Sheridan County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$126,000
	ACTUAL EXPENDITURES:	\$126,000
	DESCRIPTION:	Canal, pipeline, reservoir
	ENGINEER:	Centennial Engineering; Sheridan, Wyoming
	CONTRACTOR:	Fletcher Construction; Sheridan, Wyoming
<b>208.</b>	<b>PROJECT:</b>	<b>Willwood Dam Rehabilitation</b>
	SPONSOR:	Willwood Irrigation District
	LOCATION:	Park County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$480,000
	ACTUAL EXPENDITURES:	\$305,111
	DESCRIPTION:	Dam repairs
	ENGINEER:	Engineering Associates, Cody, Wyoming
	CONTRACTOR:	Cop Construction, Billings, Montana
<b>209.</b>	<b>PROJECT:</b>	<b>Wright Water Supply</b>
	SPONSOR:	Town of Wright
	LOCATION:	Campbell County
	PROGRAM:	New Development
	APPROPRIATION:	\$450,000
	ACTUAL EXPENDITURES:	\$231,591
	DESCRIPTION:	Well, pipeline
	ENGINEER:	J.M. Montgomery; Laramie, Wyoming
	CONTRACTOR:	Larry's Inc.; Gillette, Wyoming
<b>210.</b>	<b>PROJECT:</b>	<b>Wright Water Supply</b>
	SPONSOR:	Wright Water and Sewer District
	LOCATION:	Campbell County
	PROGRAM:	Rehabilitation
	APPROPRIATION:	\$50,000
	ACTUAL EXPENDITURES:	\$50,000

DESCRIPTION: Well and pipe rehabilitation  
ENGINEER: Bruce Engineering, Gillette, Wyoming  
CONTRACTOR: Weston Groundwater Engineering, Upton, Wyoming

**211. PROJECT: Yoder Water Supply**  
SPONSOR: Town of Yoder  
LOCATION: Goshen County  
PROGRAM: New Development  
APPROPRIATION: \$577,200  
ACTUAL EXPENDITURES: \$433,391  
DESCRIPTION: Pump facilities and transmission pipeline  
ENGINEER: Banner Associates; Laramie, Wyoming  
CONTRACTOR: Interstate Irrigation; Yuma, Colorado

**212. PROJECT: Yoder Water Well**  
SPONSOR: Town of Yoder  
LOCATION: Goshen County  
PROGRAM: New Development  
APPROPRIATION: \$30,000  
ACTUAL EXPENDITURES: \$14,722  
DESCRIPTION: Drilled a well  
ENGINEER: Wells Engineering; Lusk, Wyoming  
CONTRACTOR: Midwest Farm Service; Scottsbluff, Nebraska