

WYOMING WATER DEVELOPMENT PROGRAM STRATEGIC PLAN

NAME OF DEPARTMENT/PROGRAM:

The Wyoming Water Development Office (WWDO) administers the Wyoming Water Development Program with oversight from the Wyoming Water Development Commission (WWDC).

PLAN PERIOD: FY 2021-FY 2024 (July 1, 2020 through June 30, 2024)

QUALITY OF LIFE RESULT:

Wyoming natural resources are managed to maximize the economic, environmental and social prosperity of current and future generations.

CONTRIBUTION TO WYOMING QUALITY OF LIFE:

This agency contributes to the quality of life by addressing the water resource needs of our citizens through the construction of new water supply projects and the rehabilitation of existing water supply projects. As a result, Wyoming's water resources are managed, developed, and maintained for the enjoyment and beneficial use of current and future generations of Wyoming citizens. For example, the Wyoming Water Development Program serves over 260 municipalities, counties, and special districts. In serving these entities, the program benefits the entire population, as well as all visitors to the state, by providing and maintaining adequate water supplies and planning for future needs.

BASIC FACTS

The agency is staffed by the Director and twenty-four (24) full time employees. In addition, there is a ten-member commission appointed by the Governor. The agency's FY2019/2020 Biennium Budget is \$7,966,528 from Water Development Account I [W.S. 41-2-124(a)(i)]. The agency budget does not include any federal funds or appropriations from the General Fund.

There are three primary programs within the Water Development Program that address water supply projects:

1. New Development – This program provides the necessary planning and construction funds for the infrastructure needed 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 potable storage tanks, small dams, diversion structures, groundwater wells and transmission pipelines are eligible for consideration under the New Development Program.
2. Rehabilitation – This program provides the necessary planning and construction funds for the improvement of water projects that have been in place for at least fifteen (15) years. Improvements to ensure dam safety, decrease operation and maintenance costs and provide a more efficient means of using existing water supplies can be considered for the Rehabilitation Program. The efficient maintenance of the state's water related infrastructure provides assurances Wyoming will continue to benefit from its water related investments.
3. Dams and Reservoirs Program - In 2005, the Governor and Wyoming Legislature affirmed their commitment in the construction of large dams and reservoirs by creating a new division within the

Wyoming Water Development Program for the specific purpose of developing storage projects in Wyoming. In order to qualify for this program, new dams must impound a minimum of 2,000 acre-feet and dam enlargements must increase impoundments by a minimum of 1,000 acre-feet.

Applications for technical and financial assistance are submitted by legal subdivisions of the State of Wyoming such as irrigation districts, drainage districts, water conservancy districts, watershed improvement districts, conservation districts, municipalities, water and sewer districts, joint powers boards, improvement and service districts, counties, Indian tribes, state agencies, and other water users experiencing water supply problems. Each application is reviewed by the WWDO staff. If the project meets the requirements of the Program Operating Criteria, and sufficient funding is available, the Director will recommend to the Wyoming Water Development Commission (WWDC) that the project be incorporated into the New Development, Rehabilitation, or Dam and Reservoir Program for a Level I reconnaissance evaluation or a Level II feasibility study. If the WWDC agrees with the recommendation, it is provided to the Legislative Select Water Committee for approval. The approval of the Committee is documented by its willingness to sponsor legislation which will provide funding through the Omnibus Water Bill-Planning. If the Legislature approves the funding, the project evaluations are completed. The WWDC procures the engineering and other technical services necessary to complete the project evaluations. The contracts are administered by the Planning or Dam and Reservoir Division of the WWDO.

Before a project may be considered a candidate for construction, it must be economically, technically and legally feasible as determined by the project evaluation. If the project is deemed feasible by the project sponsor and the WWDO, the project sponsor may request the project be moved to a Level III construction status. This request is processed in the same manner as project evaluations, except the funding is provided by the Legislature through the Omnibus Water Bill-Construction. The Legislation establishes the financing plan for the construction projects. The Level III construction process includes land and easement acquisition, state and federal permitting, preparation of plans and specifications, construction bidding process, construction, and final completion. The relationship between the WWDC and the project sponsor is documented in a construction project agreement. The Construction Division of the WWDO administers the project agreements on behalf of the WWDC.

The WWDO is also responsible for the following additional programs:

1. River Basin Planning Program – This program serves to provide a basin wide and state wide perspective of the status of Wyoming’s water resources and identify water development opportunities. The program promotes interest from potential project sponsors. In addition, the program provides water availability and use data that support project evaluations.
2. Water Investment Management – This program administers the state’s investments in Buffalo Bill Reservoir, Fontenelle Reservoir, Seminoe Reservoir, High Savary Reservoir, Palisades Reservoir, Glendo Reservoir, Pathfinder Reservoir, Lake DeSmet/Healy Reservoir, and Middle Piney Reservoir. The WWDO ensures that the state’s annual loan payments and operation and maintenance obligations are met on each of these Reservoirs. The WWDO serves as the owner and operator of High Savary Dam and Reservoir, as well as Healy Reservoir. In addition, the WWDO collects payments against outstanding project loans and monitors potential water sales from those completed projects in which the state retained limited partnerships with the project sponsor. The WWDC holds all instream flow water rights in the name of the state.

3. Groundwater Exploration Program – This program provides grant assistance for municipalities wanting to expand their potable water supplies by drilling new water wells.

4. Small Water Project Program – This program provides grant assistance to small water development projects. These projects typically improve watershed condition and function through the new development or rehabilitation of small reservoirs, pipelines, wells, windmills, springs, wetland developments, solar platforms, as well as environmental, rural community fire suppression, recreation, and irrigation facilities.

The New Development Program and the River Basin Planning Program are funded by Water Development Account No. I [W.S. 41-2-124(a)(i)]. The Rehabilitation Program is funded by Water Development Account No. II [W.S. 41-2-124(a)(ii)]. The Dam and Reservoir Program is funded by Water Development Account No. III [W.S. 41-2-124(a)(iii)]. All three accounts receive funds through direct appropriations earmarked for the respective Program, revenues from the severance tax distribution account, interest on the accounts' unspent balance, and payments from outstanding project loans. The obligations for the state's water investments are funded through debt service accounts provided by W.S. 99-99-1001.

PERFORMANCE MEASURES:

The first two (2) performance measures are based on expectations of the Governor and Wyoming Legislature that the WWDO is being responsible in the manner in which it is seeking project appropriations and that it is being a good steward of the appropriated funds. The third performance measure relates to development of dams and reservoirs; while the fourth measure addresses the public's use of the recently developed river basin plans.

1. Project Budgets-Planning Studies

Project specific planning studies include Level I Reconnaissance studies and Level II Feasibility Studies. Level I studies are preliminary analyses and comparison of development alternatives. However, the designation of a Level I study is also used for master plans and watershed studies. Level I studies shall be performed in sufficient detail to identify projects or project options, if any, that should be pursued. The typical Level II process consists of two phases, which serve first to address project feasibility and then, if the project is determined feasible, to refine the project to the status necessary for a Level III funding request.

Budgets for planning studies need to be large enough to complete the work while assuring that limited funds will not be unnecessarily earmarked to a project in which they are not needed. In addition, planning studies need to be completed on time to avoid delays in projects progressing to construction.

The performance measure for planning studies during the FY2021/2024 bienniums is the completion of the 90% of the planning studies within or under the contract amount as well as before the contract end date.

Story Behind the Performance Measure:

Budgets for each study are based on individual tasks to be completed, the types of consultants to best complete the studies, an estimate of consultant hours to be expended to complete the study, and estimates of the hourly rates and reimbursable expenses to be charged by the consultants. Budgets must also include contingencies to address unforeseen changes that are beyond the control of the WWDO and the selected consultants, but must be addressed to complete the study in an efficient, timely and thorough manner.

Proposed Performance Improvements:

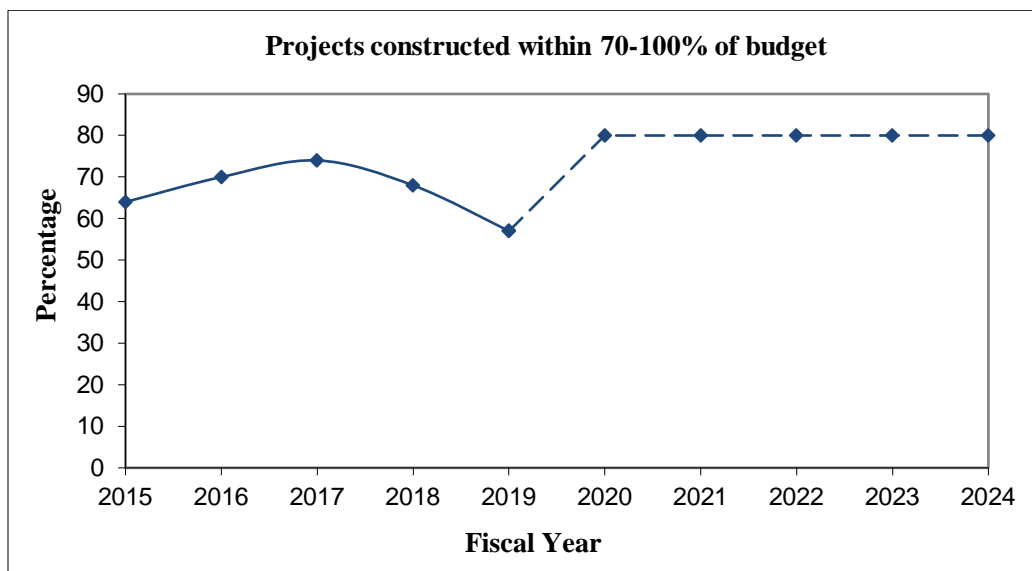
Continue to refine scopes of services to better respond to sponsor needs within budgets and timelines.

2. Project Budgets-Construction Projects

Before projects progress to the construction status, planning studies are completed and a project sponsor is identified. The WWDO develops construction budgets used to seek construction funding from the Legislature through project specific appropriations.

As with the budgets for planning studies, construction budgets need to be large enough to build the projects while assuring that limited funds will not be unnecessarily earmarked to a project in which they are not needed. The following graph depicts the percentage of construction projects completed in FY15 through FY19 that were completed within 70% to 100% of the budget. The budgets completed for less than 70% of the budget may indicate excessive budgets, a favorable bidding environment, cost savings realized with value engineering and good contractors during the project or any combination of these factors.

The performance measure for the budgeting of construction projects during the FY2021/2024 bienniums is the completion of the 80% of the construction projects within 70% to 100% of the budget.



Story Behind the Performance Measure:

Given the complexity of the construction process, it is not realistic to expect a perfect budget on every project. Budgets for construction include the costs of permitting (state and federal), final design (plans and specifications), land acquisition, construction, and construction supervision. Project construction has become more time consuming over recent years due to more stringent federal permitting requirements. Construction cost estimates are based on the engineer's estimate of the bid prices that will be received from contractors during the construction bidding process. The engineer's estimate and contractor's bids are based on the materials and manpower needed to construct the project. The fluctuations in the economy make the development of budgets for construction projects difficult. Budgets must also include contingencies to address conditions beyond the control of the WWD, engineers, and project sponsors. Delays caused by insufficient funds only increase the ultimate cost of the projects.

Proposed Performance Improvements:

Improved construction budgets will provide a better representation of the work to be completed and will not unnecessarily encumber limited funds.

3. Dams and Reservoirs

Through the establishment of Water Development Account III, the Wyoming Legislature has documented their commitment to the construction of dams.

The performance measure for dams and reservoirs is to initiate the federal permitting process on one dam and reservoir project per year during the FY2021/2024 bienniums.

Story Behind the Performance Measure:

Since 1982, the Wyoming Water Development program has developed new or expanded existing dam and reservoir storage facilities by approximately 445,000 acre-feet of water.

The projects are as follows:

<u>Project</u>	<u>Storage (acre-feet)</u>
Buffalo Bill Enlargement	250,000
Cheyenne Stage II – Hog Park	22,656
Fremont Lake Reservoir Enlargement	10,292
Greybull Valley Reservoir	33,000
High Savery Reservoir	22,432
Lake Adelaide Reservoir Enlargement	3,314
Park Reservoir Enlargement	885
Pathfinder Modification	53,493
Rob Roy Reservoir Enlargement	29,944
Sulphur Creek Reservoir	13,361
Tie Hack Reservoir	2,435
Twin Lakes Enlargement	3,410
Total	445,222

The project evaluations, permitting and construction processes for dam and reservoir projects are more complex, costly and time consuming than typical new development and rehabilitation projects. In today's permitting and legal environment, it can take ten years or more to complete a dam from inception through construction. Applications relating to dam and reservoir projects are subjected to the same review and approval process as new development projects.

Proposed Performance Improvements:

Dams store water during times of surplus for use later, when needed. Dams also re-regulate existing water supplies to meet the demands of the water users in a more efficient manner. Reservoirs can provide secondary benefits in the form of recreation and environmental enhancement.

4. River Basin Planning

The seven (7) initial river basin plans have been completed. The WWDO is systematically updating and improving the original river basin plans. The Wyoming Framework Water Plan which provides a state wide perspective of our water resources was completed in 2007.

The performance measure is to continue the river basin planning process and maintain public use of the river basin plans as evidenced by 75,000 per year, or more, contacts by unique visitors on the river basin and agency websites during the FY2021/2024 bienniums.

For FY 2019 the WWDC website managed by the Water Resources Data System at the University of Wyoming recorded 83,622 contacts by unique individuals.

Story Behind the Performance Measure:

River basin planning serves as a tool for Wyoming citizens to better understand Wyoming water issues. Water users, students, teachers, consultants, state and federal agencies, and the general public may access the river basin plans through our websites managed by the Water Resources Data System within the University of Wyoming. There is a presentation tool on the website for each river basin. The presentation tool allows the user to "bore down" through layers of information depending on the detail of the information desired.

Proposed Performance Improvements:

The availability of water related information will assist in the support of project evaluations, education of the public on the importance of water management to the future of Wyoming, and will communicate information about the Wyoming Water Development Program.