

Water Conservation and Supply Enhancement

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Theme: National Resources and Environment

Overview

Goal Statement

- Increase the available water supply in the Western States through conservation-related programs to help provide a more sustainable and secure water supply, reducing the impact of drought for the benefit of the public and the economy. By September 30, 2019, the Bureau of Reclamation will facilitate water conservation capacity of 53,800 acre-feet to help reduce the impact of drought.

Challenge

- The Nation faces an increasing set of water resource challenges: aging water-related infrastructure, rapid population growth, and depletion of groundwater resources.
- Water issues and challenges are especially increasing in the West due to prolonged drought.
- The primary challenges and risks that influence achievement of the Priority Goal include the availability of water measurement data, the projects proposed from year-to-year, state water laws, the ability to complete environmental compliance, and local cost-sharing ability.

Opportunity

- A sustainable water supply is critical to address current and future water shortages, degraded water quality, and increased demands for water and energy from growing populations, recognition of environmental water requirements, and water inequity for Indian tribes and rural communities disadvantaged by financial need or geographic isolation.

Goal Structure & Strategies

Implementation strategy overview

In facilitating water conservation, Reclamation will negotiate formal agreements or provide cost-shared grants on a competitive basis for the following types of on-the-ground projects:

- Projects that line or pipe canals, resulting in conserved water.
- Projects that improve irrigation flow measurement accuracy and result in reduced spills and over-deliveries.
- Projects that include the installation of automated systems, such as components that allow for remote operation of gates or remote monitoring of delivery system conditions to increase efficiency.
- Other similar water efficiency and conservation projects that save water; mitigate conflict risk in areas at a high risk of water conflict; and accomplish other benefits to increase the reliability of existing supplies.

All pending agreements and grant proposals will be evaluated using criteria that give priority to projects that save the most water, that address how water savings will help to address water supply sustainability, that complement on-farm irrigation improvements, that implement improvements connected to existing Reclamation activities, and exceed the minimum 50 percent non-Federal cost share requirement.

Summary of Progress – FY 18 Q1

With the new Administration, the FY 2018-2019 Priority Goal Cycle for the Water Conservation effort has been reset and the planned achievement as follows:

By September 30, 2019, the Bureau of Reclamation will facilitate water conservation capacity of 53,800 acre-feet to reduce the impact of drought by awarding cost share funding to its partners.

This goal is on target for accomplishment by September 30, 2019.

Key Milestones

Key milestones are tracked in terms of water conservation capacity facilitated through grants and contracts in acre-feet of water to be available for other uses. Projects selected for funding provide the estimated water saving data for the key indicator, “Estimated acre-feet of water savings.” WaterSMART Grants, Title XVI, and CALFED, projects are selected on an annual basis through a competitive process. Since project funding is awarded once a year, the number of projects awarded funding and the estimated water savings will be reported on an annual basis once funding has been obligated. Estimated water savings from YRBWEP will be reported at the time additional funding is awarded.

Milestone Summary					
Key Milestone	Milestone Due Date <i>Q2, FY 2018</i>	Milestone Due Date <i>Q3, FY 2018</i>	Milestone Due Date <i>Q4, FY 2018</i>	Milestone Status	Comments
WaterSMART Grants					
Funding Opportunity Announcement released	3/31/2018			On-Track	
First level review of proposals complete		6/30/2018			
Final selection of projects		6/30/2018			
Funding awarded			9/30/2018		
Title XVI					
Funding Opportunity Announcement released	3/31/2018				
First level review of proposals complete	3/31/2018				
Final selection of projects			9/30/2018		
Funding awarded			9/30/2018		
CALFED					
Funding Opportunity Announcement released	3/31/2018				
First level review of proposals complete		6/30/2018			
Final selection of projects			9/30/2018		
Funding awarded			9/30/2018		
Yakima River Basin Water Enhancement Project					
Award FY 2018 funding for Phase II construction			9/30/2018		

Key Indicators

Agency Priority Goal Water Conservation Supply and Enhancement

Estimated Acre-feet of Water Savings
(As of January 19, 2018)

	FY 2018		FY 2019		Cumulative through FY 2019	
	Planned	Actual	Planned	Actual	Planned	Actual
WaterSMART Grants	37,000		8,000			
Title XVI	4,823		0			
CALFED	1,800		1,350			
YRBWEP	192		635			
Completed Agreements						
Total	43,815		9,985		53,800	

Data Accuracy and Reliability

Means used to verify and validate measured values: Reclamation developed an application review committee (ARC) comprised of technical experts from across Reclamation to review proposals for funding. ARC members read and evaluate applications individually, using a pre-determined evaluation criteria. During these “consensus sessions” ARC members are encouraged to reach a general agreement on scores for each individual criterion and on the amount of water savings for which an applicant is given credit.

Sources for the data: Each fiscal year, Reclamation reports the water savings expected from water conservation activities funded that year toward the Department of the Interior’s Priority Goal for Water Conservation. Water savings for each funded project are based on estimates of the number of acre-feet expected to be conserved each year once that project becomes operational. The estimates are provided by non-Federal project sponsors and are based on water measurement and accounting records, calculations by the project sponsor’s engineering sources, hydrologic modeling, statistical analysis of historic climatic data, and other information.

Level of accuracy required for the intended use of the data: Reclamation requires documentation on how a water savings estimate provided in an application was derived. Each year’s funding opportunity announcement describes in detail the types of data / documentation necessary for an applicant’s water savings estimate to be accepted. The ARC determines the additional data / documentation supporting the estimate that is necessary; the ARC assesses and determines viability of the additional information provided and if inadequate documentation is provided for a particular project, Reclamation does not include water savings from the project in Priority Goal reporting.

Limitations to the data at the required level of accuracy: Since water savings estimates are provided by non-Federal project sponsors prior to undertaking the actual project, it is still possible that, despite a rigorous application review, that the actual water savings might vary from the estimate.

How the agency has compensated for such limitations if needed to reach the required level of accuracy: In order to improve on the accuracy of water savings estimates on the front end, Reclamation makes a concerted effort to improve the application and review each year. Applicants are required to include performance measures or methods of quantifying project benefits.

Additional Information

Contributing Programs: The following programs assist Reclamation in accomplishing its goal to enable capability to increase available water supply for agricultural, municipal, industrial, and environmental uses in the western United States:

- *WaterSMART Grants* (<http://www.usbr.gov/WaterSMART>): Reclamation provides competitive WaterSMART Grants that provide up to 50% of the cost of on-the-ground projects to save water, increase energy efficiency and the use of renewable energy in water management, address environmental issues, recover endangered species, and facilitate transfers to new uses.
- *Title XVI Program* (<http://www.usbr.gov/watersmart/title/index.html>): Through the Title XVI Water Reclamation and Reuse Program, authorized by P.L.102-575 in 1992, Reclamation provides financial and technical assistance to local water agencies for the planning, design, and construction of water recycling and reuse projects, thereby improving efficiency, providing flexibility during water shortages, and diversifying the water supply.
- *CALFED Water Conservation Grants* (<http://www.usbr.gov/watersmart/weeg/index.html>): CALFED is a combined State of California and Federal program focused on the restoration of the Sacramento-San Joaquin Delta's ecosystem while improving water supply reliability for urban and agricultural water users. The goal of CALFED is to accelerate the implementation of cost-effective water conservation actions that provide state-wide benefits.
- *Yakima River Basin Water Enhancement Project (YRBWEP)* (<http://www.usbr.gov/projects/Project.jsp>): The YRBWEP is to evaluate and implement structural and nonstructural measures to increase the reliability of the irrigation water supply and enhance streamflows and fish passage in the Yakima River basin.

Stakeholder / Congressional Consultations: Reclamation works collaboratively with non-federal, state, local and tribal governments, water districts, and other entities on a cost-shared basis to implement water management and conservation projects in the 17 Western states.

- Through the water conservation program oversight and through stakeholder engagement, Reclamation utilizes feedback into its conservation efforts to implement enhanced methodologies during program formulation. For example, based on applicant feedback, Reclamation revised the Title XVI funding opportunity to make it easier for applicants to request funding for ongoing work without having to break it into project phases. Similarly, Reclamation published the WaterSMART Strategic Implementation Plan in the Federal Register in March 2011 (http://www.usbr.gov/watersmart/docs/FedRegister_WaterSMART_Implementation_plan_FINAL.PDF) and incorporated comments into the final document.