


RECLAMATION

Managing Water in the West

Reclamation's WaterSMART Program

October 23, 2018
Wenatchee, Washington

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U.S. Department of the Interior
Bureau of Reclamation

Reclamation's Mission

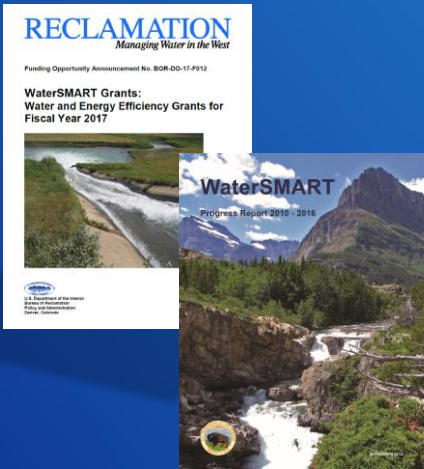
The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.



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WaterSMART Program: Overview of Program and Tips for Applying

- What is WaterSMART?
- Overview of WaterSMART Funding Opportunities.
- Tips for Applying



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WaterSMART

WaterSMART:

- Increase water supply reliability through investments and attention to local water conflicts
- Supports water conservation and water management improvements to help meet competing demands for water
- Leverages Federal and non-Federal funding
- Relies on collaboration with stakeholders to develop local solutions to water supply problems



Growing
Populations



Environmental
Water Needs



Drought

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WaterSMART Program

Helps implement Reclamation’s mission by working to increase water supply reliability through investments and attention to local water conflicts in order to meet our Nation’s water needs.



Basin Study Program

Collaborative Planning



Title XVI Program

Water Reclamation and Reuse




WaterSMART Grants

Water Conservation and Efficiency



Water Conservation Field Services Program

Water Conservation Planning and Design



Drought Response Program

Planning and Building Resiliency



Cooperative Watershed Management Program

Watershed Management and Restoration

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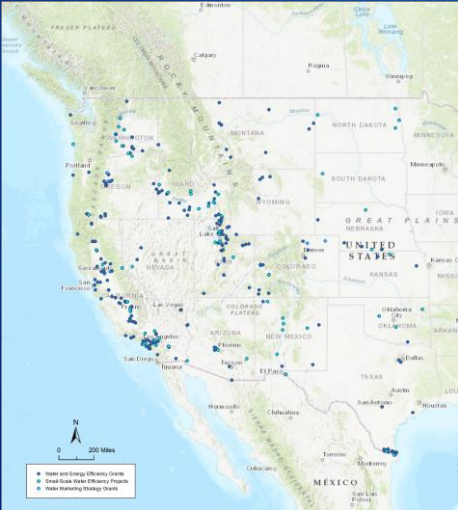
WaterSMART Program: Overview of Program and Tips for Applying


- What is WaterSMART?
- Overview of WaterSMART Funding Opportunities
 - WaterSMART Grants
 - Drought Response Program
 - Title XVI and Desalination
 - Cooperative Watershed Management Program
- Tips for Applying




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WaterSMART – A closer look at of the WaterSMART opportunities







WaterSMART Grants



Drought Response Program



Title XVI



Cooperative Watershed Management Program

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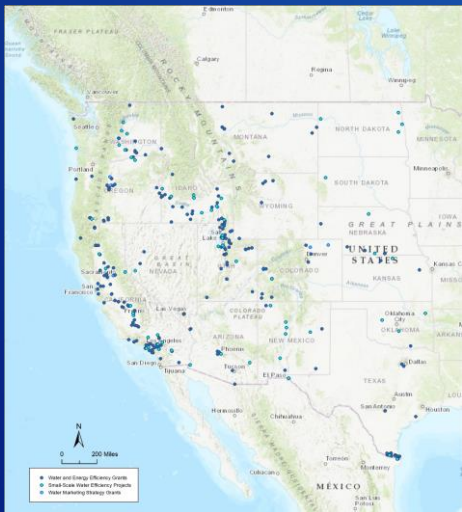
WaterSMART Funding Opportunities

Eligible Applicants	<ul style="list-style-type: none">States, Indian Tribes, Irrigation Districts, Water Districts, Other organizations with water and power delivery authority.
Cost Share	<ul style="list-style-type: none">50% non-Federal cost-share requirement (in kind contributions are allowed)
Time Frame for Completion	<ul style="list-style-type: none">2-3 years depending on the program and funding group
Funding Amounts	<ul style="list-style-type: none">Amount of Federal funding that may be requested per project varies, ranging from \$75k to \$1 million
Prioritization Criteria	<ul style="list-style-type: none">Criteria vary by program, but generally include project benefits, stakeholder support and/or planning, project implementation, and nexus to BOR.

****Note: A few exceptions that I will point out during my presentation****

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WaterSMART Grants (FY19 Appropriations \$34 M)



Water and Energy
Efficiency Grants



Small-Scale
Water Efficiency
Projects



Water Marketing

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WaterSMART Grants Water and Energy Efficiency Grants (approx. \$25M)



- Water and Energy Efficiency
- Canal lining/piping
- Municipal metering
- Irrigation flow measurement
- SCADA
- Landscape irrigation measures
- Hydropower
- 50/50 cost share –
 - Funding Group I: Up to \$300k in two years;
 - Funding Group II: Up to \$1 Million in 3 years
- Criteria: Quantify water savings

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2015 Three Sisters Irrigation District, Oregon

- Piping 14,000 ft of open canal
- Expected 1,900 ac-ft/yr of water savings
- Expedite on-farm irrigation improvements
- Collaboration with Deschutes River Conservancy to dedicate to in-stream flows



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WaterSMART Grants

Small-Scale Water Efficiency Projects (approx. \$3M)



- Small-scale on-the-ground projects
 - Canal lining/piping
 - Automation
 - Metering and flow measurement
 - Landscape irrigation measures
- 50/50 cost share - up to \$75K in Federal funds
- Total project construction cost of under \$200,000
- Streamlined Application Process
 - Simplified Evaluation Criteria
 - Clarified necessary budget documentation

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Quincy-Columbia Basin Irrigation District

- Automation of a lateral turnout on the West Canal.
- Significant flow changes in the canal result in surplus deliveries being lost as operational spills
- Will correct the elevation changes, maintain a constant flow, and reduce spills.
- The project will meet a goal of the District's Water Conservation Plan.

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2017 Helendale Community Services District, Southern California

- Installation of 400 Advanced Metering Infrastructure (AMI) Smart Meters, 400 AMI radios, a radio tower, and all necessary hardware to upgrade their outdated meters.
- AMI technology will assist the District in water planning, water conservation efforts, and enhance customer service.
- The project is part of the District's Capital Improvement Plan.



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WaterSMART Grants

Water Marketing Strategy Grants (approx. \$3M)

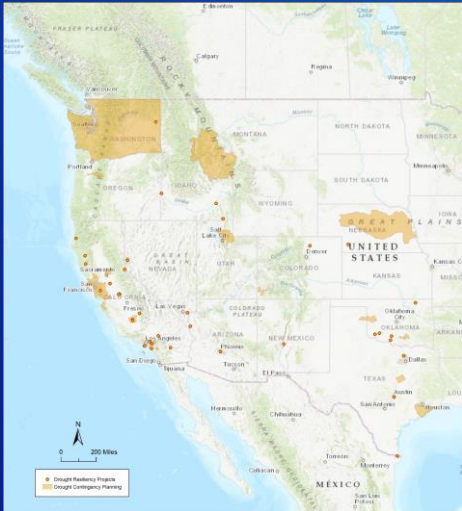


- Strategies to establish or expand water markets or water marketing activities
- 50/50 cost share
- Funding Group I – Up to \$200k for a 2-year project
- Funding Group II – Up to \$400k for a 3-year project
- Funding may be used for planning activities, including:
 - Outreach and partnership building
 - Scoping and planning activities
 - Development of a framework (processes, approach, agreements, etc) for implementation

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Drought Response Program

(FY19 appropriations \$4 million)



Drought Contingency Planning



Drought Resiliency Projects

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Drought Response Program- Drought Resiliency Projects

Eligible Projects Include:

- Infrastructure Improvements
 - Modifying surface water intakes
 - New conveyance system components
 - Additional water storage
 - Recharge facilities
 - Capture and treat alternative supplies
- Decision Support Tools & Modeling
 - Tools to support water marketing
 - Tools to convey water supply information
 - Measurement
- Environmental Protection
 - Improve habitat
 - Install fish screens and ladders

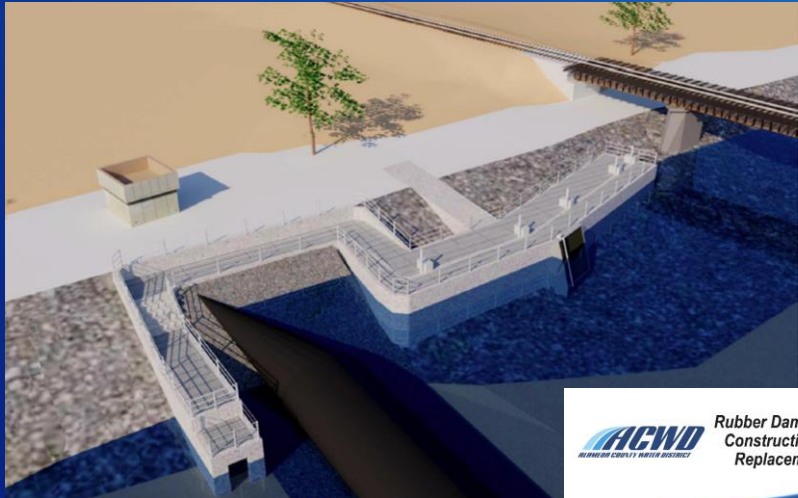
Projects build resilience to drought


Projects supported by a drought plan are more competitive

Funding Level I: \$300k
Funding Level II: \$750k

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Alameda County Water District





Rubber Dam No. 3 Fishway
Construction and Fabric
Replacement Project

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Map of the Merced River Subbasin showing the Merced River, its tributaries, and various reservoirs. The map is color-coded by elevation, with green representing lower elevations and brown representing higher elevations. Key locations labeled include Yosemite Valley, Sentinel Bridge, Happy Isles Bridge, Echo, Merced Lake, Maricopa, Yosemite Dam, Yosemite Falls, El Portal, Firestone, Lower SF Merced, and various other reservoirs and bridges. A scale bar indicates 0 to 10 miles, and a north arrow is present.

The diagram illustrates the six steps of a Drought Contingency Plan, arranged in a circular flow around a central hub. The central hub is a light yellow hexagon labeled "Drought Contingency Plan". Surrounding it are six orange hexagons, each containing a step number and description, connected by a blue circular arrow indicating a clockwise sequence.

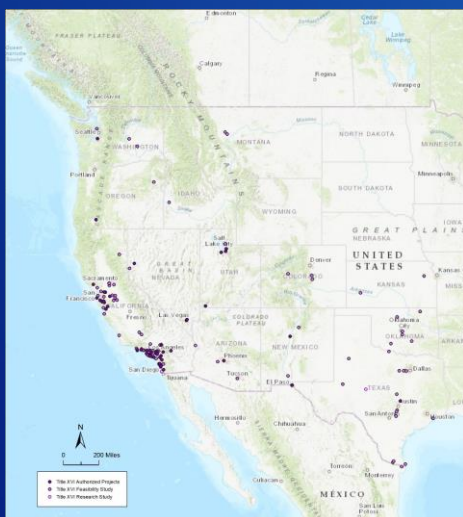
- 1. Establish Diverse Task Force and Objectives
- 2. Develop Monitoring Plan
- 3. Conduct Vulnerability Assessment
- 4. Identify Mitigation and Response Actions
- 5. Develop Administrative Framework
- 6. Identify Plan Update Process

Drought Contingency Planning Steps

- Establishment of a Drought Planning Task Force
- Development of a Detailed Work Plan
- Development of a Communication and Outreach Plan

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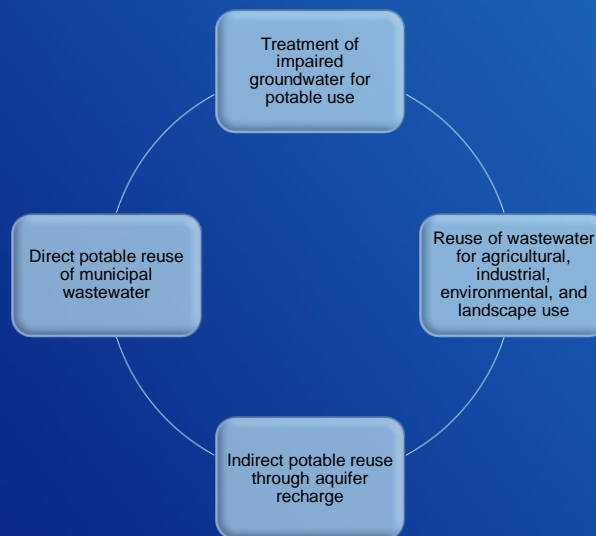
Title XVI Program



- Planning, design, and/or construction of:
 - Congressionally authorized Title XVI projects
 - New projects eligible under section 4009(c) of WIIN
- FY 2019 Appropriations include \$58.6 million for the Title XVI Program

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Examples of Types of Projects



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Title XVI Funding Opportunity

- **Maximum federal cost share – 25%**
 - Can request up to 25% of the cost of work that will be completed over the next two years
 - Can reapply each year until Federal share reaches 25% of total project cost, up to \$20 million
- **Pre-award costs are allowed**
 - Authorized projects = date of congressional authorization
 - WIIN projects = date feasibility study findings are transmitted to Congress
- **NEPA must be complete prior to the commencement of ground disturbing activities**

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WIIN Process

Submit Feasibility Study for Reclamation Review

Feasibility Study Review in Accordance with Reclamation Manual Release WTR 11-01

Transmittal of Feasibility Study Review Findings to Congress

Apply for Funding Through the Competitive Process

Results of Competitive Process Transmitted to Congress for inclusion in Enacted Appropriation Legislation

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Desalination Projects



- Section 4009(a) of the WIIN Act includes amendments to the Water Desalination Act of 1996 (P.L. 104-298)
- WIIN Section 4009(a) amendments provide a path for ocean or brackish water desalination projects to receive Federal funding

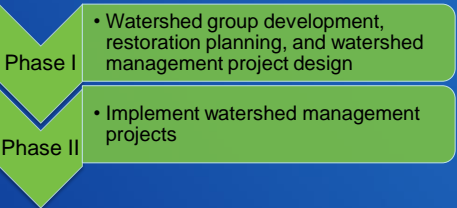
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Desalination Projects – Current Status

- In FY 2019 Congress appropriated \$12 million for projects under Section 4009(a) of the WIIN Act
- Reclamation anticipates posting the FY 2019 funding opportunity announcement for WIIN Desalination Projects in January 2019

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WaterSMART Cooperative Watershed Management Program (FY19 Appropriations \$2.25 million)



Note: Applicant eligibility differs from other programs

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WaterSMART - What's New

Cooperative Watershed Management Program

Phase II

• Implement watershed management projects

Improving stream channel structure and complexity

Enhance riparian vegetation

Invasive species control

Increase in-stream flows

Providing fish passage

Improving water delivery systems

Example Projects

Funding opportunity is currently open! Applications are due January 30, 2019.

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WaterSMART

Cooperative Watershed Management Program

The Boise River Enhancement Network

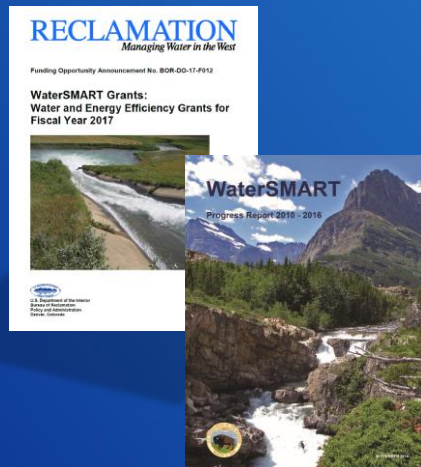
- Through a 2014 **CWMP Phase I** grant, the Network developed the Boise River Enhancement Plan, focusing on stream channel function, fisheries and aquatic habitat, wetland and riparian habitat, and water quality concerns.
- The Network is currently working on a 2017 **CWMP Phase II** project to 'daylight' a previously buried section of Cottonwood Creek, which will improve habitat for Rainbow and Brown Trout. This project was identified as a priority in the Enhancement Plan.



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Check Applicant Eligibility

- Under P.L. 111-11, Section 9502, an eligible applicant is a state, Indian tribe, irrigation district, water district, **or other organization with water or power delivery authority.**

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Federal Funding Amount and Eligible Project Types

- Check the eligible project types to ensure you are applying under the appropriate funding opportunity.
- Check the Funding Opportunity to see how much Federal funding you can request.

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Non-Federal Cost Share Contribution

- **Check the non-Federal cost share requirement:** For most programs, recipients must contribute at least 50% of the total project costs from a non-Federal source.
- **State grant funds and loans** may be relied on to meet the non-Federal cost share contribution (some exceptions if from a Federal source), and you do not need to have received the state grant at the time you submit your application.
- **Third Party “In-kind” contribution and applicant expenses:**
 - third-party labor
 - donation of materials
 - equipment use
 - Applicant expenses (e.g., allocable salaries and wages)

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Addressing the Evaluation Criteria

- Copy the evaluation criterion verbatim and address each, in detail, within the proposal.
 - Try to address all evaluation criterion, even those that the proposed project may only have ancillary benefits.
 - Provide support for your statements wherever possible (e.g., cite to reports, research or other sources of information)

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Addressing the Evaluation Criteria

- Be sure to provide DETAILED SUPPORT for all claims in your proposal. For example:

Canal Lining/Piping: Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address the following:

a) *How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.*

Two inflow/outflow tests were done in August 2016. The first tests were done at intervals of approximately one mile along the entire length and a more detailed follow up study was done in the high flow loss areas. The canal diversion gates were closed during the tests. More details about the tests are given in the following section.

The water savings were determined for each of the canal segments by finding the difference in flow through a segment of canal, measured in cubic feet per second. These flows were then converted to an acre feet per year volume assuming a six-month irrigation season. The following equation shows how the total savings for the Project were calculated.

Overall project annual acre-feet savings per mile equation:

$$\left(\frac{(35cfs - 27cfs) + (14cfs - 11cfs)}{(41450ft - 39020ft) + (52600ft - 50630ft)} \right) * \frac{60sec}{min} * \frac{60min}{hr} * \frac{24hr}{day} * \frac{30day}{mo} * \frac{6mo}{yr} * \frac{1ac}{43560ft^2} * \frac{5280ft}{1mile}$$

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Addressing the Evaluation Criteria

- **Unsupported claims will not receive a high score from the ARC:**

During the summer of 2016, staff estimated flows at all Main Canal lining drain exits. This was done by visual inspection and estimation of the amount of water flowing by an experienced Watermaster and engineering staff.

Over the years, staff has gained considerable experience in estimating flows by sight when comparing visual estimates to measured flow at lining drain exits where weir blades could be installed relatively easily. Staff also gained considerable confidence estimating these flows during the 2015 drought when looking for the best sites to install diesel powered pumps to pump the exiting water back to the Main Canal.

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Addressing the Evaluation Criteria

- **The Application Review Committee is required to evaluate only the information that has been provided in the 4 corners of your proposal and may not use outside knowledge of the area, issues or project.**
- **Therefore, it is important to provide sufficient background and detail even regarding things that may seem obvious.**
 - E.g., if the facilities in question are part of a Reclamation project, explicitly state that in your proposal.

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Proposed Activities and Milestones

- Provide a clear, detailed description of the proposed project activities and proposed milestones.
- Ensure that the activities described in the technical project description line up with the budget
- If the project is a phase of a larger project, only address discuss the benefits and include milestones for the activites that will be funded as part of the WaterSMART project.

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Environmental Compliance

- Contact your local Reclamation office to discuss the necessary environmental and cultural resource compliance required for your project under NEPA, especially when developing your budget and schedule.

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Application Submission

- Make sure to submit *at least* a couple of days in advance of the due date, regardless of whether submitting via Grants.gov or via hard-copy submission.
 - Late proposals, unless it is due to government mishandling (which is very rare) are not accepted and evaluated.
- Do not include application preparation costs in project budget.

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Award Preparation

- Start necessary registrations early – processes take time
 - DUNS (Data Universal Number System) Number – used to establish a business credit file and required to register in SAM.gov
 - SAM.gov (System for Award Management) – required to receive a Federal grant or cooperative agreement
 - ASAP.gov (Automated Standard Application for Payments) – required to access awarded Federal funds

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Contact the Program Coordinator with Questions

- **Reach out to the Policy office when preparing your proposal.**
 - We can help answer questions about which WaterSMART opportunity fits best with your proposed project.
 - We can also answer questions about how to interpret the criteria and the proposal requirements.
 - And, we will refer you to the financial assistance experts to answer questions about requirements under the FAR.

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WaterSMART Program Tentative Schedule

Program	Opportunity	Post Date	Close Date
Title XVI	Authorized Projects/WIIN	January 2019	March 2019
WIIN Desalination Construction	WIIN Desalination Construction	January 2019	March 2019
Drought Response Program	Drought Contingency Planning	November 2018	January 2019
	Drought Resiliency Projects	November 2018	January 2019
WaterSMART Grants	Water and Energy Efficiency Grants	December 2018	February 2019
	Small-Scale Water Efficiency Projects	December 2018	April 2019
	Water Marketing	January 2019	March 2019
Cooperative Watershed Management Program (CWMP)	Phase I (Watershed group development and restoration planning)	Spring 2019	Summer 2019
	Phase II (Watershed Management Projects)	October 10, 2018	January 30, 2019

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WaterSMART Data Visualization Tool

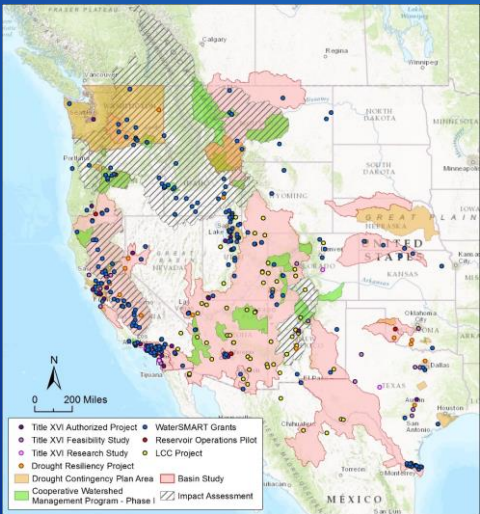
Reclamation Programs

Data visualization site is an interactive companion to this report:

- Interactive maps
- Featured project tours
- Program growth over time

<https://www.usbr.gov/watersmart/>

Data Visualization Tool:
arcg.is/1TcT68S



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WaterSMART Program – Website Links

Title XVI	https://www.usbr.gov/watersmart/title/index.html
WaterSMART Grants	Water and Energy Efficiency Grants – https://www.usbr.gov/watersmart/weeg/index.html Small-Scale Water Efficiency Grants - https://www.usbr.gov/watersmart/weeg/ssweg.html Water Marketing Grants - https://www.usbr.gov/watersmart/weeg/watermarketing.html
Drought	https://www.usbr.gov/drought/
CWMP	https://www.usbr.gov/watersmart/cwmp/index.html

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Who to Contact

WaterSMART Program Coordinators

Water and Energy Efficiency Grants
Josh German
(303) 445-2839
jgerman@usbr.gov

Small-Scale Water Efficiency Projects
Robin Graber
(303) 445-2764
rgraber@usbr.gov

Water Marketing Strategy Grants
Avra Morgan
(303) 445-2906
aomorgan@usbr.gov

Drought Response Program
Darion Mayhorn
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dmayhorn@usbr.gov

Title XVI and Desalination
Amanda Erath
(303) 445-2766
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Cooperative Watershed Management Program
Avra Morgan or Robin Graber
(303) 445-2906
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Thank you!

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