



— BUREAU OF —  
RECLAMATION

# Reclamation Funding Opportunities for Water Reuse & Desalination Construction and Water Treatment Research

Maribeth Menendez - Water Resources and Planning Office

Andrew Tiffenbach – Research and Development Office

2024 Multi-State Salinity Coalition Annual Summit

February 29, 2024

# Agenda Overview

---

- **Desalination and Water Purification Research**
  - DWPR Research
  - DWPR Pitch to Pilot
- **WaterSMART**
  - Title XVI Water Reclamation and Reuse
  - WIIN Act Desalination
  - Large Scale Water Recycling
  - Water Recycling and Desalination Planning



# DWPR Program Overview

- The Desalination and Water Purification Research (DWPR) Program provides financial assistance for water treatment research and development
- DWPR seeks broadly applicable technologies or approaches to reduce costs, energy requirements, and environmental impacts of water treatment
- Projects are selected through competitive funding opportunities open to a broad range of non-federal applicants
- Program leverages federal funding with non-federal cost share provided by project recipients



# DWPR Research Funding Opportunity

- Open to non-federal domestic entities such as academic institutions, municipalities, state and local government, private sector companies
- 50% non-federal cost share required for non-academic institutions, not required (but highly incentivized) for academic institutions
- Two project categories
  - Laboratory scale: up to \$250,000 in federal funds for 2-year projects
  - Pilot scale: up to \$800,000 in federal funds for 3-year projects
- Next funding opportunity release estimated for Fall 2024
- Search “DWPR” on Grants.gov ([FY23 opportunity](#))



# Recently Selected DWPR Research Projects

- Freese and Nichols: *Strategies for Gaining Pathogen Removal Credit for Reverse Osmosis in Potable Reuse in Texas (and Beyond)*
- University of Colorado: *Concentrate Minimization: Pilot Testing of Improved Static Mixer Crystallizers*
- Tufts University: *New Fouling-Resistant, Anti-Microbial Membranes for Pretreatment*
- Mickley & Associates: *Brine Mining*

[www.usbr.gov/research/dwpr](http://www.usbr.gov/research/dwpr) for more recently selected projects



# Pitch to Pilot Funding Opportunity

- Seeking pilot-ready technologies for rapid field deployment
- Open to non-federal domestic entities such as academic institutions, municipalities, state and local government, private sector companies
- No non-federal cost share required for any entity, but highly incentivized for all
- Up to \$300,000 in federal funding for 18-month projects
- Next funding opportunity release estimated for Spring 2024
- Search “DWPR” on Grants.gov ([FY23 opportunity](#))



# Recently Selected Pitch to Pilot Projects

- Widefield Water and Sanitation District: *Comprehensive Evaluation of PFAS Treatment on an Impaired Groundwater Source with High Hardness and TDS: Ion Exchange, Hollow Fiber Nanofiltration, Electrocoagulation, and Treatment Interactions*
- Pure Blue Tech Inc.: *Nanopatterned Ultrasonic Reverse Osmosis (NURO) for Anti-Fouling, Efficient, and High Recovery Desalination and Water Purification*
- Orange County Water District: *Separation and Destruction of Per- and Polyfluoroalkyl Substances (PFAS) in Potable Reuse RO Concentrate*



# WaterSMART Program Overview

- WaterSMART Program is an umbrella program composed of multiple Federal financial assistance opportunities.
- Increases 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 issues





# Title XVI

## *Water Reclamation and Reuse Projects*

---

### Eligible Project Types

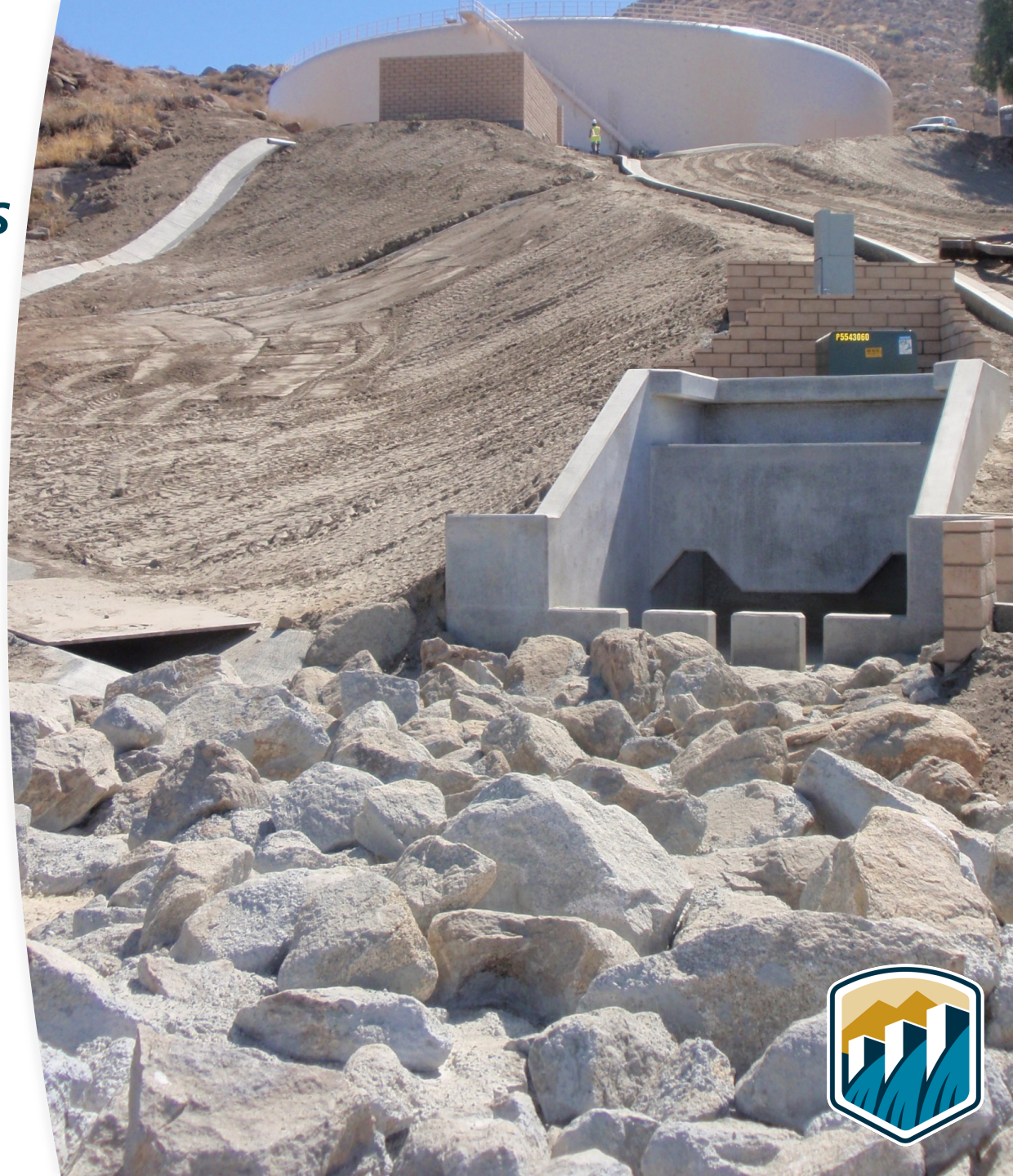
- Projects that reclaim and reuse municipal, industrial, and agricultural wastewater; or impaired ground and surface waters

### Funding

- 75% non-Federal cost share required
- Up to \$30 million in Federal funding per project.

*\*\$550 million in Bipartisan Infrastructure Law funding over five years*

*\*Currently open on [grants.gov](https://www.grants.gov). Next application submission deadline is September 30, 2024*



# WIIN Act Desalination Projects

## Eligible Project Types

- Ocean or brackish water desalination projects that meet the requirements of Section 4009(a) of the WIIN Act amendments to the Desalination Act

## Funding

- 75% non-Federal cost share required
- Up to \$30 million in Federal funding per project

*\*\$250 million in Bipartisan Infrastructure Law funding over five years*

*\*Currently open on grants.gov. Next application submission deadline is September 30, 2024*



# Large-Scale Water Recycling

---

## Eligible Entities

States, Indian Tribes, municipalities, irrigation districts, wastewater districts, or other organizations with water or power delivery authority

## Eligible Projects

- Reclaim and reuse municipal, industrial, domestic, or agricultural wastewater; or impaired groundwater or surface water
- Total project cost of \$500 million or more
- Located in a Reclamation state

## Funding

- 75% non-Federal cost share required

*\*\$450 million in Bipartisan Infrastructure Law funding over five years*

*\*Currently open on [grants.gov](https://www.grants.gov). Next application submission deadlines are March 29 and September 30, 2024*



# Water Recycling and Desalination Planning:

- Funding available for potential new Title XVI projects, Desalination Construction projects, and Large-Scale Water Recycling projects
- Eligible Applicants:
  - Local water agencies that are sponsors of water recycling or desalination projects
  - Located in a Reclamation state, or Hawaii
- Eligible Project Activities:
  - Development of new water recycling and desalination feasibility studies
  - Preparation of preliminary project cost estimates
  - Design activities
  - Environmental and cultural resource compliance activities



— BUREAU OF —  
RECLAMATION

Notice of Funding Opportunity No. R23AS00076

## WaterSMART: Water Recycling and Desalination Planning



U.S. Department of the Interior

December



# How to Become Eligible:

---

A completed feasibility study must be submitted and found to meet all requirements of Reclamation's Directives and Standards

- [WTR 11-01 Title XVI Water Reclamation and Reuse Program and Desalination Construction Program Feasibility Study Review Process](#)
- [WTR TRMR-128: Additional requirements for Large-Scale Water Recycling](#)



WATERSMART

WaterSMART

Contacts

Water and Energy Efficiency Grants

Water Marketing Strategy Grants

Small-Scale Water Efficiency Projects

Environmental Water Resources Projects

Title XVI

Desalination

Basin Studies

Baseline Assessments and Pilots

Reservoir Operation Pilots

Applied Science Grants

Cooperative Watershed Management Program

## WaterSMART

The American West faces serious water challenges. Wide-spread drought, increased populations, aging infrastructure, and environmental requirements all strain existing water and hydropower resources. Adequate and safe water supplies are fundamental to the health, economy, and security of the country. Through WaterSMART, Reclamation will continue to work cooperatively with states, tribes and local entities as they plan for and implement actions to increase water supply through investments to modernize existing infrastructure and avoid potential water conflicts.

### Join the WaterSMART Mailing List

You may complete this [form](#) to receive WaterSMART program notification from the Bureau of Reclamation.

### WaterSMART Project Selections Overview

Since January 2021, Reclamation has selected 255 projects to be funded with \$500 million in WaterSMART funding, in conjunction with \$314.3 million in non-Federal funding, across the western states.



### OPEN FUNDING OPPORTUNITIES

None at this time

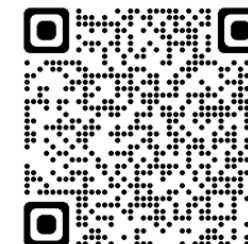
### FUNDING OPPORTUNITY CALENDAR



Click [here](#) to view a detailed status of all current and upcoming WaterSMART funding opportunities.



Reclamation partnered with grants.gov to host a [webinar](#) to help familiarize you with the site and to provide an opportunity to submit a grant [view the Powerpoint](#)



# Thank you!

Maribeth Menendez  
Program Coordinator  
Title XVI Water Recycling  
[mmenendez@usbr.gov](mailto:mmenendez@usbr.gov)

Andrew Tiffenbach  
Program Coordinator  
Desalination and Water Purification Research  
[atiffenbach@usbr.gov](mailto:atiffenbach@usbr.gov)



— BUREAU OF —  
RECLAMATION