

National Drought Resilience Partnership

Federal Water Resources and Resilience Investment Centers

Jim Gebhardt: EPA, Water Infrastructure and Resiliency Finance Center

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National Drought Resilience Partnership

Goal 5: Market-Based Approaches for Infrastructure & Efficiency

- **Objective:** Agencies shall support the advancement of innovative investment models and market-based approaches to increase resilience, flexibility, and efficiency of water use and water-supply systems.
- **Action 1:** Explore Innovate Financing Options for Drought Resilience
- EPA, DOI and USDA have been working through their existing authorities to promote additional investment in water infrastructure and efficiency projects by the private sector and other non-Federal sources of capital. Additionally, these agencies have begun to focus efforts on projects and investments that have specific application to the arid West.

Water Infrastructure and Resiliency Finance Center



Jim Gebhardt

Director, Water Finance Center

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Water Infrastructure and Resiliency Finance Center

The Water Finance Center is an **information and assistance center**, helping communities make informed decisions for **drinking water, wastewater, and stormwater infrastructure** to protect human health and the environment.



1

Research: SRF Drought Investments

Purpose of the Project:

- Why focus on State Revolving Funds (SRFs)?
 - EPA's largest infrastructure program
 - Each state administers them differently
- Purpose
 - Identify how states are addressing drought related investments
 - Quantify amount of assistance provided through SRFs
 - Disseminate SRF successes, case studies, and highlight opportunities to better market SRF drought-related capabilities

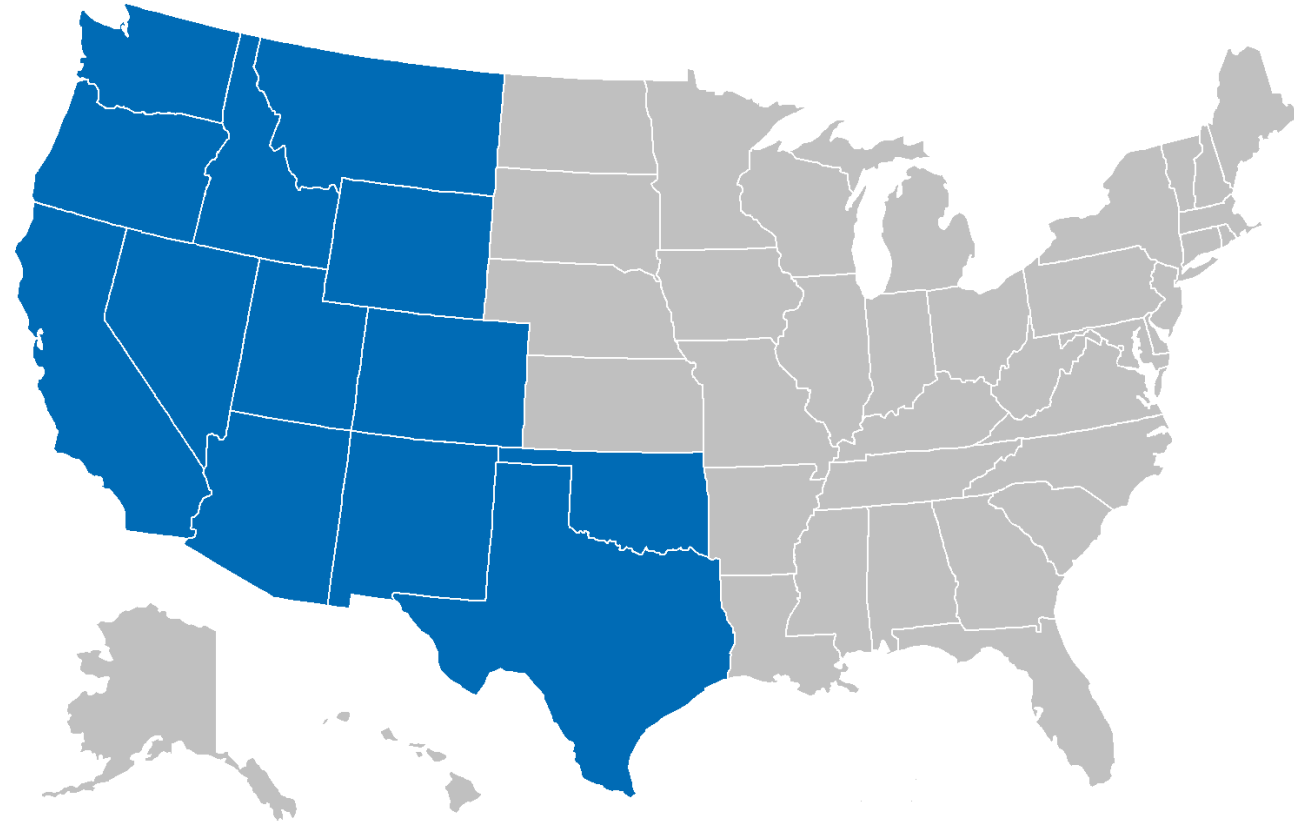


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Research: SRF Drought Investments

Methodology:

- Geography: 13 western states often affected by drought
 - AZ, CA, CO, ID, MT, NV, NM, OK, OR, TX, UT, WA, WY
- Timeframe: 2011 – 2015
- Projects Funded: number and value of assistance provided in certain categories:
 - Water efficiency, water reuse, irrigation modernization, groundwater recharge, etc.
- Identifying SRF drought-related program priorities and ranking criteria



1

Research: SRF Drought Investments

Preliminary Findings:

- Clean Water SRF
 - \$612M for Water efficiency investments
 - \$235M for Recycled water distribution
 - \$50M for Agriculture efficiencies/irrigation modernization
- Drinking Water SRF – **TBD**
- Target Release: December 2016



EPA Region 10/Oregon DEQ, Farmers Irrigation District Project

2

Advise: Public-Private-Partnerships

The Water Finance Center, in conjunction with UNC Environmental Finance Center, is examining previously closed P3s to understand the:

- Proposed benefits
- Processes involved in closing a transaction
- Realized benefits
- Performance of the agreement over the useful life of the assets

Report Release Date: Fall 2016



3

Innovate: Water Financing Mechanisms

SRF: Promoting SRF capabilities to support market based infrastructure solutions using all available financial assistance tools:

- Lending supported by both program equity and SRF secured bond financing where practicable;
- SRFs have \$billions in guarantee capacity and market investment capacity to support solutions for water and energy efficiency investment, source water protection, forest fire resilience and habitat restoration.

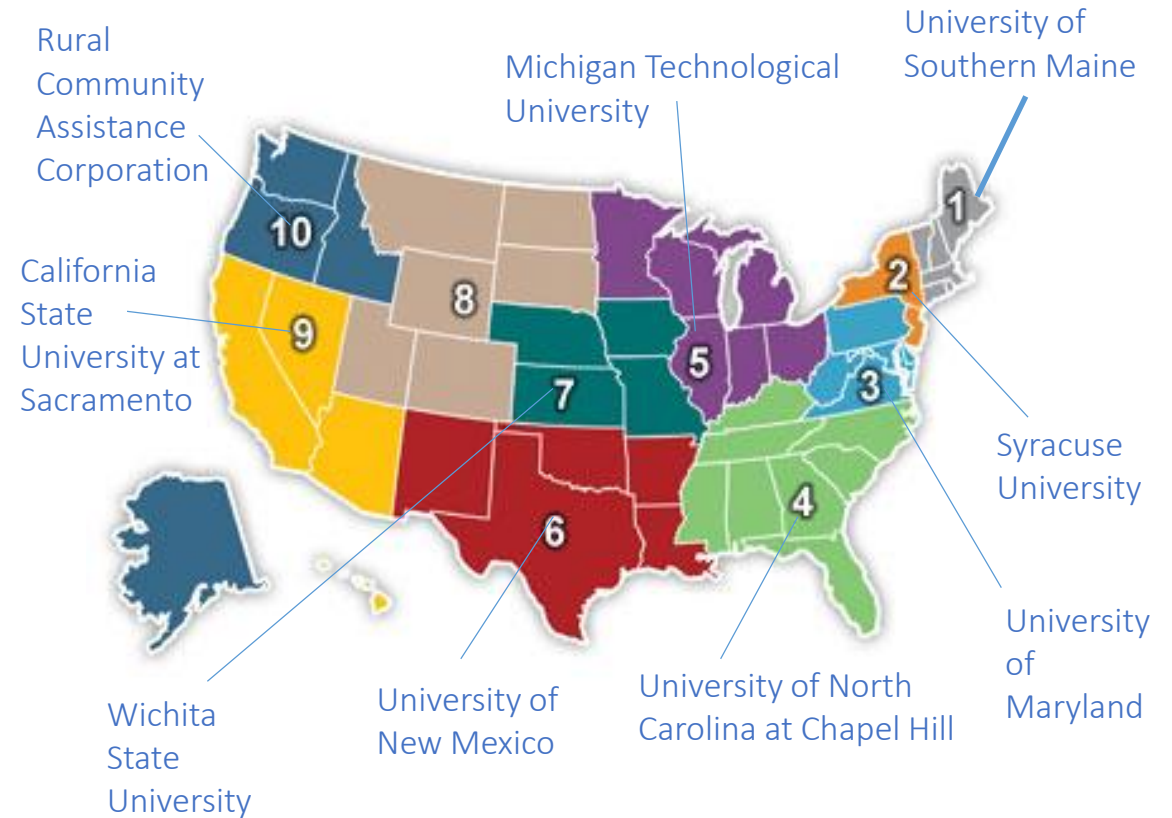
WIFIA: EPA loan program, pending appropriations, that will support large water infrastructure projects.

Pay for Success: a new market driven financing vehicle that shares risk of infrastructure delivery and performance with private investors. It can help pilot new infrastructure solutions where performance outcomes are untested.

4

Network: Environmental Finance Centers

- The EFCs deliver targeted technical assistance to, and partner with states, tribes, local governments, and the private sector in providing innovative solutions to help manage the costs of environmental financing and program management



Network: Regional Finance Forums

- Bring together communities with water infrastructure financing needs in an interactive **peer-to-peer networking** format.
- Forum Themes:
 - Meet the Funders
 - Technical Assistance Providers & Tools
 - Innovative Funding Strategies
 - Community Case Studies
- Attendees include: municipal administrators, public works officials, planners, and community leaders.
- **Region 9 Finance Forum:** February 2017 in California.



www.epa.gov/waterfinancecenter



Jim Gebhardt

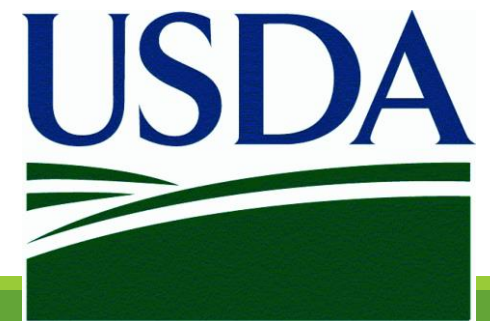
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NDRP and the Rural Opportunity Investment Initiative

THE UNITED STATES DEPARTMENT OF AGRICULTURE

OCTOBER 2016



Rural Opportunity Investment Initiative



- Launched in 2014
- Build America Investment Initiative
- Expand private sector investment in rural and agricultural economies
- Rural infrastructure projects, businesses, and community facilities
- ROI Conferences: Debt, Equity, and Impact

Drought in Western states is a clear threat to USDA's mission.



- Agricultural production
- Food safety and nutrition
- Rural development and infrastructure
- Conservation practices on public and private lands
- Research and development

Opportunity 1: USDA Water Program

- Provides financing to rural areas with fewer than 10,000 people for drinking, waste, and storm water systems
- Since 1957, originated \$27 billion across 40,000 loans
- Current portfolio of \$12 billion across 13,000 loans



Opportunity 2: Partnership with Capital Peak and CoBank

- Public-private partnership launched in 2014
- CoBank committed \$10 billion of its balance sheet to lend and co-lend in support of rural infrastructure
- Since inception, the fund has financed \$3 billion across 400 water, power, and community facilities projects



Opportunity 3: Rural Water Fund Pilot



- Target rural communities with populations greater than 10,000, but fewer than 50,000
- A sale of a participation interest in USDA water loans to seed a fund that would make a forward commitment of \$1 billion in rural water lending
- Opportunity to bundle rural projects for institutional scale per Build America recommendations

Opportunity 4:

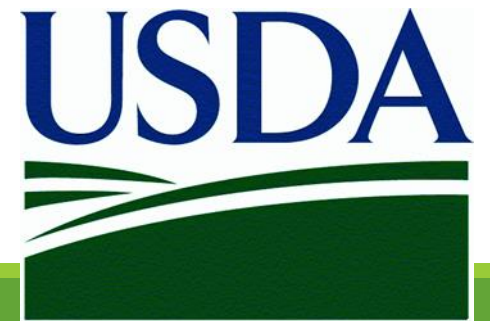
NRCS Conservation Innovation Grants

- Promote the emerging market for conservation finance, emphasis on water-related issues
- Since 2004, more than 600 grants for approximately \$230 million
- In 2016, 45 for approximately \$20 million
- Some Examples in Western States:
 - Forest Resilience Bond on Private Forest Lands (California, Colorado, and Arizona)
 - Scaling Pay-for-Success Opportunities (California's Central Valley)
 - Catalyzing Private Capital for Conservation (Oregon Forest Land)



Other ROI Activities

- Rural Business Investment Companies
 - For example, Advantage Capital investment in Hortau
- Promoting regional efforts such as the West Coast and Intermountain infrastructure exchanges
- Interagency dialogue facilitated by Harvard Kennedy School's Ash Center on federally-owned infrastructure.
 - Project prioritization, budget scoring, revenue generation, and flexible contracting tools





Department of the Interior's Natural Resource Investment Center

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Species and Habitat

Foster private impact investments and support well-structured markets that advance efficient permitting and conservation of species, habitats, and other natural resources.



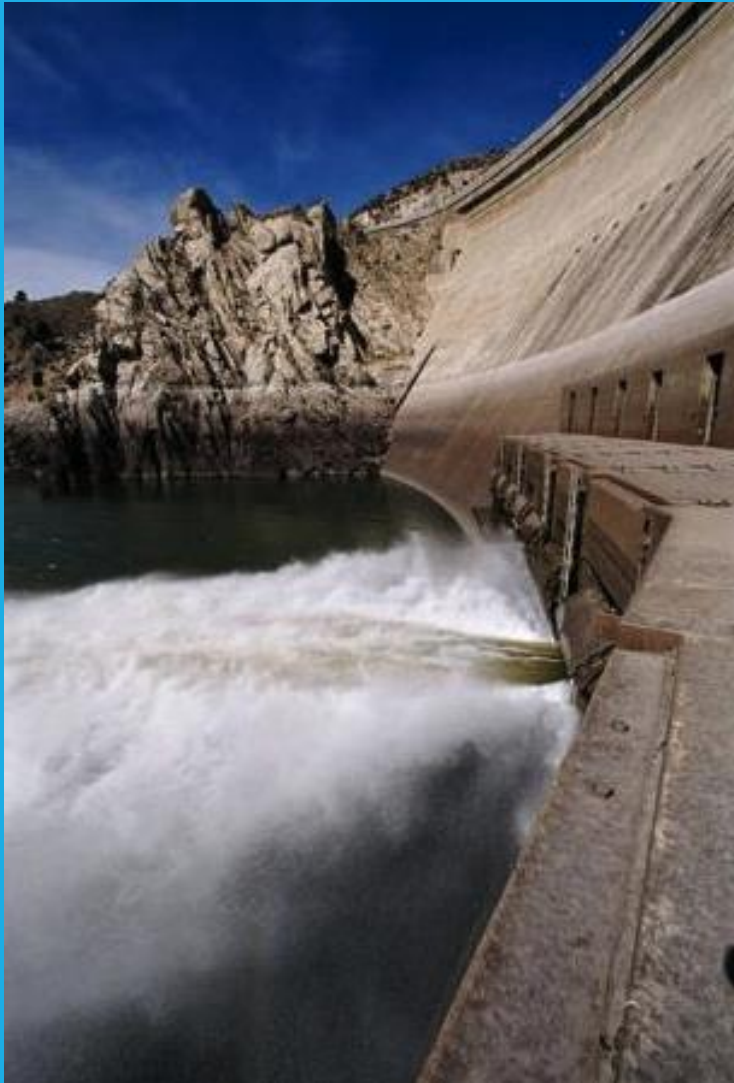
Water Markets



Increase investment in water conservation and build up water supply resilience by facilitating water transfers in the western United States in partnership with local, state, and tribal governments



Infrastructure Investment



Increase investment in critical water infrastructure, both major rehabilitation and replacement of existing infrastructure and construction of new infrastructure, for water supply resilience.



NRIC

What we do

- Educate
- Advise
- Convene
- Advocate
- Structure



NRIC

Who We Work With

- DOI Leadership and its Bureaus
- Irrigation Districts
- Investors
- Federal Family
- Non-Profits
- Government Entities
- Policy Makers
- Academia



NRIC

Examples of Projects

- Yakima Integrated Plan
- Work to Establish Loan Programs for Irrigation Districts
- System Conservation Initiatives
- Water Reuse Project (Title XVI)
- Irrigation District Modernization Program

NDRP Related Activities

- **Joint Initiatives**
 - Harvard Kennedy School's Ash Center Forum
 - Various WaterSMART Program Modifications
- **Individual**
 - Virtually all of our projects have a water conservation/drought resilience component