

How to use the State Revolving Fund (SRF) and American Recovery and Reinvestment Act (ARRA) for your green project



Outline of Today's Presentation

- What is SRF
- What is ARRA
- Overview of ARRA Green Project Reserve
- Region 9 Status
- Future of Green Projects. . . FY 2010 appropriation

The State Revolving Fund Programs

- Clean Water and Drinking Water State Revolving Funds (CWSRF & DWSRF)
- 51 state-state run independent SRF programs (Puerto Rico also has a program)
 - States are responsible for implementing program priorities
 - States make final decisions on which projects to fund
- EPA provides annual capitalization, support and oversight to state programs

“Assistance Recipients”

- Many different types of organizations are eligible for SRF financing, including:
 - Municipalities
 - Publicly owned wastewater treatment works
 - Privately owned wastewater treatment works (in national estuary areas)
 - State agencies
 - Nonprofit organizations
 - Homeowners
 - Farmers
 - Indian Tribes

CWSRF Project Types

- Planning and design
- Wastewater Treatment facilities
 - Primary treatment
 - Secondary treatment
 - Advanced treatment
- Sewer systems
 - New sewer construction
 - Sanitary sewer overflow
 - Combined sewer overflow
- Water Reuse Projects
- Urban stormwater management
- Nonpoint source
 - Onsite sewage treatment/ decentralized systems
 - Hydromodification
 - Agricultural BMPs
 - Silviculture
 - Brownfields/Underground storage tanks
 - Leachate control
- Estuary projects

DWSRF Project Types

- Planning and design
- Treatment facilities
 - Primary standard compliance
 - Secondary standard compliance
- Transmission and distribution
- Drinking water sources
- Source water protection
- Storage capacity costs
- Project related costs
 - Creation of new systems
 - Consolidation of existing systems
 - Restructuring costs
 - Land acquisition

How Do the SRF Programs Work?

- SRF programs provide assistance on a reimbursement basis
 - Assistance recipients submit reimbursement requests with invoices for work completed
 - SRF program disburses funds to assistance recipients
 - Assistance recipients provide funds to contractors and vendors for work completed or services provided

General SRF Requirements

- Funding Application
- Priority List ranking
- Planning, design, and permitting
- Financial and technical review
- Environmental review
- Crosscutter review
- Disadvantaged Business Enterprise (DBE) participation

The American Recovery and Reinvestment Act of 2009

“A-R-R-A”

“ĀRRĀ”

“ǺRRĀ”

“Stimulus”

“Recovery Act”

“Cha-Ching!”

- \$6B for water supply and water quality through the CW/DWSRF programs

ARRA and the SRF

- Special requirements for the use of ARRA funding:
 - Abbreviated funding cycle
 - Projects under contract February 17, 2010
 - Creation of a Green Project Reserve (GPR)
 - Grant/loan forgiveness/negative interest required
 - Buy American provision
 - Davis-Bacon provision
 - Reporting requirements
 - Increased oversight
- EPA guidance for ARRA can be found at
www.epa.gov/water/eparecovery

Prior to ARRA: SRF and sustainability

- Most SRF projects have water or energy efficiency benefits
- Prior to ARRA many states incorporated Sustainability in their SRF base program project prioritization process
- This was voluntarily and not a requirement

Overview of ARRA and the Green Project Reserve

- The American Recovery and Reinvestment Act of 2009 awarded \$4 billion to the CWSRF and \$2 billion to the DWSRF
- New rules attached to ARRA included
 - 20% reserved for “green projects”
- For ARRA, the green benefits must be a *primary driver* for the project
 - The water/energy savings are a primary reason for undertaking the project, not a byproduct

What is the Green Project Reserve?

- ARRA legislation:

“That, to the extent there are sufficient eligible project applications, not less than 20 percent of the funds appropriated herein for the Revolving Funds shall be for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities”

- 4 categories of projects:

- Water efficiency
- Energy efficiency
- Green (stormwater) infrastructure
- Environmentally innovative

What is Eligible?

- Planning, design and building activities
- Portions of a project – or the entire project – may be green
- EPA has determined that some projects automatically apply – *categorical projects*
 - No business case required in most cases
- In other projects, the green components are not as clear – *require a business case*
- Only the “green” portion of the project can count towards the 20% reserve

Projects Not Eligible

- No ARRA funds can be used for projects at a casino, aquarium, zoo, golf course, or swimming pool
 - However, if one of these elements is a small part of a larger project, it could be eligible for funding
 - For example, installation of a gray water distribution system that serves one golf course among numerous large, eligible facilities
 - Golf course-specific portion could not be funded with ARRA
- ARRA funds cannot be used to purchase land

1. Water Efficiency

- The use of improved technologies and practices to deliver equal or better services with less water
- Categorical projects are:
 - Installation of water meters (previously unmetered system)
 - Reclamation, recycling and reuse and existing rainwater, condensate, degraded water, stormwater and/or wastewater streams
 - Retrofit or replacement of water using fixtures, fittings, equipment or appliances
 - Efficient landscape or irrigation equipment
 - Systems to recycle gray water
 - Collection system leak detection equipment



2. Energy Efficiency

- The use of improved technologies and practices to reduce the energy consumption of water quality projects
- Categorical projects are:
 - Energy efficient retrofits and upgrades to pumps and treatment processes (including aeration systems)
 - Leak detection equipment for treatment works
 - Producing clean power for treatment works on site (solar, wind, hydroelectric, etc.)
 - Solids treatment (e.g., sludge dryers and incinerators, improved anaerobic digestion systems) and handling (e.g., fly ash, lime)
 - Variable frequency drives
- If energy savings are less than 20%, a compelling argument will be needed in the business case to get a green determination



3. Green Infrastructure

- No clear definition of “green infrastructure”. Here, generally means stormwater projects
- Includes a wide range of practices that:
 - Manage and treat stormwater
 - Maintain and restore natural hydrology by infiltrating, evapotranspiring and capturing and using stormwater
- Help maintain pre-development hydrology for discharge rates, frequencies, durations, temperatures etc.
- Can be large or small scale (e.g., wetland restoration to green roofs)
- EPA Green Infrastructure Website:

http://cfpub.epa.gov/npdes/home.cfm?program_id=29

[8](#)



3. Green Infrastructure, cont'd

- Categorical projects are:
 - Green streets
 - Water harvesting and reuse programs or projects
 - Wet weather management systems for parking areas (e.g., incremental cost of porous pavement, bioretention, green roofs, constructed wetlands)
 - Hydromodification to establish or restore riparian buffers, floodplains, wetlands and other natural features
 - Downspout disconnection to remove stormwater from combined sewers and storm sewers
 - Comprehensive retrofit programs designed to keep wet weather out of all types of sewer systems using green infrastructure technologies and approaches
 - Implementation of comprehensive street tree or urban forestry programs, including planter boxes
 - Green roofs (entire cost is eligible, including necessary structural changes to the building)

4. Environmentally Innovative Projects

- Projects that demonstrate new and/or innovative approaches to managing water resources in a more sustainable way.

Includes:

- Projects that achieve pollution prevention or pollutant removal at the lowest life cycle cost
 - Projects that foster adaptation of water protection programs and practices to climate change
- A business case will always be needed to explain the environmentally innovative approaches

4. Environmentally Innovative Projects, cont'd



- Eligible projects are:
 - Green infrastructure/low impact development
 - Wetland restoration and constructed wetlands
 - Decentralized wastewater treatment solutions to existing deficient/failing on-site systems
 - Water reuse projects that reduce energy or water use and treatment costs
 - (Re)development practices that preserve or restore site hydrologic processes through sustainable landscaping and site design
 - Solid waste composting
 - Implement EPA Green Building practices (<http://www.epa.gov/greenbuilding/>)

4. Environmentally Innovative Projects, cont'd

- Categorical projects, continued
 - Projects that use water balance approaches (water budgets) at the project, local, or state level that preserve site, local or regional hydrology
 - Projects that facilitate adaptation of clean water programs and practices to climate change
 - Projects that incorporate differential uses of water, based on the level of treatment to reduce the costs of treating all water to potable water standards
 - Projects that identify and quantify the benefits of using integrated water resources management approaches

Region 9 ARRA Award Amounts

- R 9 is slated to meet all ARRA requirements.
- All states have projects in stages of funding that will meet and exceed the 20% value.

	Grant Award (\$M)	20% GPR (\$M)
Arizona		
CW	\$26.4	\$5.28
DW	\$55.3	\$11.06
Total	\$81.7	\$16.34
California		
CW	\$280.0	\$56.00
DW	\$159.0	\$31.80
Total	\$439.0	\$87.80
Hawaii		
CW	\$30.3	\$6.06
DW	\$19.5	\$3.90
Total	\$49.8	\$9.96
Nevada		
CW	\$19.2	\$3.84
DW	\$19.5	\$3.90
Total	\$38.7	\$7.74

Example Projects: State of California

- DW
 - 10 projects as of 11/2 totaling \$49.3 Million. All metering projects
- CW
 - 31 projects at \$80.9 Million as of 11/2
 - Multiple Restoration Projects: riparian corridors, wetlands, floodplains, erosion control and exotic plant removal to protect water quality
 - Large number of water re-use infrastructure projects
 - Increased efficiency of bio-solid waste treatment and processing before composting

Example Projects: State of Arizona

- DW
 - 8 projects at \$12.9 Million as of 11/2
 - Multiple meter installation projects
 - Multiple SCADA application projects
 - Sustainable energy generation
- CW
 - 6 projects at \$10.7 Million as of 11/2
 - Storm water diversion and retention
 - Multiple Variable flow drive installations
 - Solar energy generation on site
 - Water reclamation and reuse infrastructure

Region 9 GPR Contract

- Set aside a sum of money in a contract with flexible scope of work to assist recipients with any hiccups that may come up
- Potential uses
 - Help write or review business cases
 - Conduct energy audits
 - Help implement findings
 - Create planning worksheets to incorporate green into projects
 - Workshops on energy auditing and benchmarking
 - Where meters were installed support in implementing water conservation plans or tiered rates
 - Anything else that may come up

SRF FY 2010 Appropriation

- Is requiring a 20% Green project Reserve
- Uses the same criteria and language as ARRA
- ARRA implementation was **1 year** whereas FY 2010 appropriations are on a **3 year** implementation schedule
- This allows for green concepts and ideas to be incorporated in planning and design of projects
- **OPPORTUNITIES!!!**

Approximate FY 2010 Appropriation

Arizona

CW \$13.7

DW \$29.5

Total \$43.2

California

CW \$145.7

DW \$137.3

Total \$283.0

Hawaii

CW \$15.8

DW \$14.7

Total \$30.5

Nevada

CW \$10.0

DW \$14.7

Total \$24.7

- The values to the left are the *projected* capitalization levels by state for FY 2010
- These are the funds that will also carry a 20% GPR requirement
- The lessons learned in ARRA should benefit the process and application of these funds going forward

Financial summary of SRF programs

- As of June 30, 2009 The state revolving funds provided these dollar amounts as loans

- These figures do not include ARRA funding

	Cumulative	Cumulative
	\$\$\$ (millions)	# of Loans
Arizona		
CW	\$1,135.6	129
DW	\$479.8	154
Total	\$1,615.4	283
California		
CW	\$4,771.2	432
DW	\$699.9	145
Total	\$5,471.1	577
Hawaii		
CW	\$460.2	62
DW	\$93.0	30
Total	\$553.2	92
Nevada		
CW	\$315.1	53
DW	\$96.8	30
Total	\$411.9	83