

US EPA ARCHIVE DOCUMENT

# Arizona Water Infrastructure Finance Authority (WIFA) ARRA Green Project Reserve Case Study



Advancing sustainable water infrastructure project initiatives through ARRA's Green Project Reserve.

## BACKGROUND

Across the United States, drinking water and wastewater systems are facing a series of daunting challenges, including water scarcity, increasing population, energy uncertainty, and aging infrastructure. In the state of Arizona, the Water Infrastructure Finance Authority (WIFA) is a prime example of how these challenges can be overcome through more efficient operations, saving operating costs, and improving environmental protection.

WIFA finances the construction, rehabilitation, and improvement of drinking water, wastewater, wastewater reclamation, and other water quality facilities and projects. The agency's Design & Planning Technical Assistance (TA) program assists drinking water and wastewater systems with non-construction related activities that include pre-design, design, and managerial and financial capacity building projects.

The purpose of the TA program is to help systems prepare for project construction through pre-design or design. This results in a project that is ready to proceed with a WIFA design or construction loan. WIFA anticipates that utilizing the TA program to fund the pre-design and design of green projects will result in more robust green construction loan projects in the future.

In 2009, federal stimulus funding became available under the American Recovery and Reinvestment Act (ARRA) which positively influenced WIFA's efforts to advocate green projects that address water conservation, energy efficiency, green stormwater infrastructure, and environmentally innovative projects for drinking water and wastewater systems. ARRA Green Project Reserve funding also helped facilitate an enhancement of WIFA's traditional TA program offerings and advanced new green project eligibilities.

## ADVANCEMENT THROUGH STIMULUS FUNDING

ARRA brought \$55.3 million in Drinking Water and \$26.5 million in Clean Water project funds to the state of Arizona.

The ARRA Green Project Reserve required that at least 20% of these funds be used for a variety of qualifying projects within the categories of:

- Energy efficiency
- Water efficiency
- Green stormwater infrastructure
- Other environmentally innovative projects which incorporate green or sustainable concepts

WIFA set aside approximately \$1 million of those funds to be included in the Fiscal Year 2010 Design & Planning TA funding cycle. Pre-design and design related projects that incorporate elements of water efficiency, energy efficiency, renewable energy use and/or production, and green stormwater infrastructure were considered green and received awards up to \$35,000 with no required local match.

## DEVELOPING SUSTAINABLE WATER SYSTEMS

### STEP ONE: IDENTIFY AREAS FOR IMPROVEMENT

**Operational Technical Assistance** (*only available to public drinking water systems serving a population of less than 10,000*)

For many drinking water systems, identifying areas for improvement is the first step in achieving greater efficiency and management overall. To encourage these systems to take this critical step, WIFA funds the following services FREE of charge to public drinking water systems through the Arizona Department of Environmental Quality (ADEQ) Capacity Development Program:

- System Evaluations
- Operations & Maintenance Packages
- Vulnerability Assessments
- Energy Audits

**Energy Audits** (*available to both drinking water and wastewater systems*)

In 2009, ARRA funding enabled WIFA to expand their traditional TA package to include energy audits as part of promoting EPA's Sustainable Infrastructure Initiative. General Energy Audits, performed by a consultant under contract

with ADEQ, serve to collect information about drinking water facility operations by performing a detailed evaluation of facility operations and opportunities for energy conservation improvements. The audits will also identify energy conservation measures appropriate for the facility based on its operating parameters.

A total of seven General Energy Audits are scheduled for completion by December 31, 2009. Facilities will receive a list of prioritized recommendations for achieving greater efficiency. Although there is no obligation under the ADEQ program that facilities must commit to planning or execution of these recommendations, WIFA's TA program offers assistance for facilities to take the next steps in realizing site improvements.

## DEVELOPING SUSTAINABLE WATER SYSTEMS

CONT.

### STEP TWO: DEVELOP A PRE-DESIGN OR DESIGN PLAN

#### Technical Assistance Program (*available to both drinking water and wastewater systems*)

WIFA assists drinking water and wastewater systems with pre-design and design projects, in preparation for applying for a WIFA design or construction loan.

Through utilization of ARRA funding, WIFA was also able offer a compelling incentive for projects demonstrating commitment toward green design. For these projects, WIFA waived the local match component required for traditional projects.

All applications were evaluated and scored based on how the project:

- Corrects current conditions that contribute to surface water pollution, run-off, and groundwater pollution
- Contributes to water quality improvement
- Promotes sustainable/green infrastructure design
- Promotes renewable energy and energy conservation
- Improves technical, managerial, and financial capability

### FY2010 ALLOCATION

	Traditional & Green Projects	Green Projects Only
Drinking Water Systems	\$500,000 (for population served less than or equal to 10,000)	\$200,000 (no population restrictions)
Wastewater Systems	\$150,000 (no population restrictions)	\$150,000 (no population restrictions)



## DEVELOPING SUSTAINABLE WATER SYSTEMS

CONT.

### STEP THREE: APPLY FOR IMPLEMENTATION FUNDING Design & Construction Loans (available to both drinking water and wastewater systems)

WIFA has historically offered three-year design loans and twenty-year construction loans to drinking water and wastewater systems.



## Results

The 2009 American Recovery and Reinvestment Act Green Project Reserve funding played a key role in advancing WIFA's efforts to encourage sustainable and green project initiatives within drinking water and wastewater systems across the entire state of Arizona, including:

- Waived local match for green TA projects which received an award of up to \$35,000
- Free of charge energy audits for drinking water systems
- To date, seven facilities have requested free energy audits

For more information on the Water Infrastructure Finance Authority of Arizona's Design and Planning Technical Assistance Program, please visit: [www.azwifa.gov](http://www.azwifa.gov). Or contact Sandy Sutton, Chief Financial Officer, at (602) 364-1314 or email: [ssutton@azwifa.gov](mailto:ssutton@azwifa.gov)