Reduce, Reuse, Recycle: Smart Investments with WIFA

Water Reuse Symposium
July 25, 2016
Infrastructure makes this all possible
Traditional Infrastructure Projects
State agency
- Manage Arizona’s State Revolving Funds

Funding to improve water infrastructure
- Low-interest loans
- Planning and design TA (grants)

Purpose
- Save Money
- Protect public health
- Ensure safe drinking water
- Proper wastewater treatment
- Improve water quality
- Lakes and streams clean

25-year history - invested over $2 billion in Arizona’s communities
History of State Revolving Fund Eligibilities

1987
- Construction of publicly owned treatment works
- State nonpoint source management program
- National Estuary Program

Amendments to the CWA
CWSRF established with three project eligibilities

1987

Funding Framework
Established a process for prioritizing “nontraditional” projects

1996

White Paper
Compilation of “nontraditional” CWSRF eligibilities

2007

ARRA
Established the Green Project Reserve

2009

WRRDA
Expanded CWSRF eligibilities from Three to eleven

2014
American Recovery and Reinvestment Act (ARRA) created the Green Project Reserve

- Green infrastructure, water and energy efficiency, and environmentally innovative projects
2014

Water Resources Reform and Development Act (WRRDA)

- Further expanded the program’s eligibilities and made 2009 focus on “green” and efficiency permanent.
Water Reuse and Precipitation Harvesting

- Collection and treatment systems (e.g., wastewater, stormwater, and subsurface drainage water collection and treatment)
- Distribution lines to support water reuse and the use of harvested precipitation
- Transmission lines, injection wells, and green infrastructure infiltration systems for groundwater recharge
- Equipment to reuse reclaimed water
- Direct potable reuse
Water Efficiency

- Water meters
- Plumbing fixture retrofits or replacement
- Water efficient appliances
- Water efficient irrigation equipment (e.g., moisture and rain sensing equipment)
- Education programs
- Incentive programs (e.g., rebates for installing rain barrels or permeable surfaces)
Eligible Borrowers

- Cities, towns, tribal entities and special districts:
  - Own a public water system
  - Own a wastewater facility
  - Manage stormwater (permitted MS4s and unpermitted)
- Private ACC-regulated drinking water systems

County, state and federal entities are NOT eligible

(Pima County Exception)
Early SRF Reuse Projects

2000
Town of Kearny Wastewater Reclamation Facility
Reclaimed water to wetland area, golf course, and Kearny’s ball fields

2004
City of Tucson Reclaimed Transmission Main
Reclaimed water to rodeo, park, 10 schools
New(ish) Incentives for Green Projects

- Lower interest rate loans

- eligible for Forgivable principal
  
  Up to 20% of eligible project costs

- Local match waived for planning projects for technical assistance (grants)

Additional incentives for disadvantaged communities
Types of Reuse Projects

- New water reclamation facilities
- Facility upgrades
- Reclaimed water transmission and distribution

**SRF Dollars since 2009:**

$203M included Reclamation/Reuse out of $390M total wastewater loans

WWTP Expansion and Upgrades
City of Buckeye
New 0.75 MGD Water Reclamation Facility
- Administration building, four miles of sewage collection system, four miles of effluent return line
- Decommissioning and dismantling of the existing wastewater treatment plant
- A+ effluent
- Effluent conveyed to storage ponds and used for irrigation

Loan Amount
$22.9 million
City of Prescott – Airport WWTP Upgrades

- Expanded from 1.2 to 3.75 mgd capacity
- Upgraded from B+ to A+ effluent
- Aeration system, blower building, tertiary filtration, disinfection, and effluent pump station
- Increased volume of reclaimed water produced by the WWTP
- Irrigating sports fields, golf courses, and commercial landscapes, restoring riparian habitats and recharging groundwater aquifers

Loan Amount
$45.8 million
City of Surprise – Reclaimed Water Booster Station

- Modified the Reclaimed Booster Station
- Pressurized reclaimed water to the City Stadium, ball fields, green belts and landscaping
- Estimated amount of groundwater that will not be pumped: approximately 2,000 acre feet/year

Loan Amount
$1.5 million
City of Buckeye –
Reclaimed Water System Improvements

- Irrigation of Sundance Park - ball fields and dog parks
- School and subdivision landscaping

Improvements:
- 6.25 miles of reclaimed water line with additional turnouts and PRV
- Electrical, instrumentation and operational modifications

Reclaimed water not used for irrigation is recharged at local irrigation district Groundwater Savings Facilities

Loan Amount
$7.37 million
“Expanded Eligibilities”

- Energy Conservation
- Water Conservation
- Stormwater
- Agricultural Best Management Practices
- Remediation/prevention of water contamination from:
  - Resource Extraction
  - Contaminated Sites
  - Landfills
- Habitat Restoration
- Desalination
- Groundwater Protection and Restoration
- Surface Water Protection and Restoration
- Planning/Assessments and Monitoring
“Expanded Eligibilities”

- Stormwater management including green infrastructure, Low Impact Development and flood control
- Watershed management of wet weather discharge
- Watershed partnerships
- Integrated water resources planning
- Weather/climate-related resilience planning
- Forest restoration
- Riparian improvements
- Stream channel restoration
- Streambank stabilization
Benefits of Choosing WIFA:

- Low interest rates (WIFA is rated AAA)
- Financing available year-round
- No application deadlines
- No competition
- No application fees or closing costs
- No min or max loan amount
- Money is recycled in Arizona

<table>
<thead>
<tr>
<th>WIFA’s Most Recent Loans</th>
<th>Amount</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Clarkdale</td>
<td>$7.9M</td>
<td>1.70%</td>
</tr>
<tr>
<td>City of Cottonwood</td>
<td>$16M</td>
<td>1.70%</td>
</tr>
<tr>
<td>City of Peoria</td>
<td>$14M</td>
<td>2.39%</td>
</tr>
<tr>
<td>City of Somerton</td>
<td>$550,000</td>
<td>2.11% (15-yr)</td>
</tr>
<tr>
<td>City of Cottonwood</td>
<td>$11.2M</td>
<td>2.20%</td>
</tr>
<tr>
<td>Town of Payson</td>
<td>$11M</td>
<td>2.20%</td>
</tr>
<tr>
<td>City of Eloy</td>
<td>$4.5M</td>
<td>2.03%</td>
</tr>
</tbody>
</table>

Average interest rate last year for public entities was **2.04%** (20-year term).
Forgivable Principal

Lower interest rate

Match waived for grants

INCENTIVES
Action Items

- Visit WIFA’s website
- Like us on
- Join our listserv
- Tell people about WIFA
- Tell people WIFA can fund more projects!
- Tell your people to call our people
- Find out how much $$$ you can save on a project
Get Connected

E-mail distribution list: www.azwifa.gov/sign-up/

Check out website: www.azwifa.gov
• BACK UP SLIDES
WIFA’s Loan Process

**Step 1:** Applicant submits an online application (Project Priority List application)

**Step 2:** Applicant obtains debt authorization

**Step 3:** Applicant completes a project finance application

**Step 4:** WIFA Board approves project

**Step 5:** WIFA issues loan

Go from completing an online application to closing on your loan in just a few months!
www.azwifa.gov
WIFA Planning and Design Technical Assistance

- For **planning and design** only
- Drinking water, wastewater and stormwater
- Funds help get an infrastructure project started
- Feasibility studies, capital improvement plans, preliminary engineering reports, final design
- Funds used to contract with engineer or other consultant
- Next cycle anticipated July 2016
Water Efficiency

Challenges for financing water conservation plans and programs:

- Taking on debt

Possible solutions:

- Roll into larger loan for capital improvements, especially if forgivable principal is available
- Technical assistance grants
Replaced 14,000 meters and added AMI
Reduced non-revenue water from 9.8% to 2.9%
Daily monitoring and customer notification of high water use
Customer web portal
User thresholds and alerts

**Loan Amount**

$5M
Green Infrastructure

- Porous pavement
- Green roofs
- Harvesting
- Bioretention
- Curb cuts
- Replace gray with green infrastructure
- Xeriscape or drought resistant landscaping
- Landscape conversion programs
Green Infrastructure

Challenges:
- Taking on debt
- Revenue source for repayment of loan

Possible solutions:
- Roll into larger loan
- Stormwater utility
- Wastewater or drinking water revenues?
- Fees?
Assess feasibility of rainwater harvesting system for irrigation of athletic fields and other landscaping
  - Quantify potential rainwater harvesting volumes
  - Evaluate costs
  - Evaluate conversion to rainwater harvesting system

Will use with city drainage master study to address drainage citywide

Quantification of LID benefits will assist in financial programming for streetscape programs

Grant amount | City funded
---|---
$34,996 |
WIFA Loan: What To Expect

- 20 year repayment term
- Fixed payments
- Interest calculated only on funds drawn
- Construction completed within 3 years (project may be phased)
- Dedicated source of repayment
Make it happen for your community

Repayment Sources

- Water and sewer rates (typical)
- Stormwater utility, watershed protection, environmental fees
  
  Borrower must have legal ability to use fees to repay long-term debt for purpose of project (stormwater or watershed protection, etc.)

- Excise taxes
  - Sales tax & state shared revenues

- General obligation (always requires a vote)
  - Property taxes

- Other sources????
  
  Legal ability to repay long-term debt and provide security for the loan