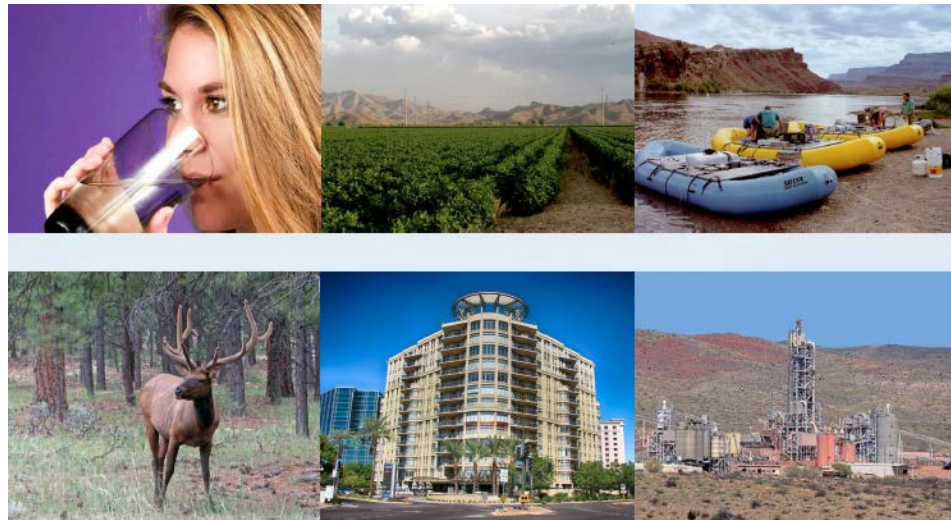


WATER INFRASTRUCTURE FINANCE AUTHORITY



FY 2016

Annual Report



The *Mission* of the **Water Infrastructure Finance Authority** is to maintain and improve water quality in Arizona by providing financial assistance and technical assistance for water infrastructure.

Water Infrastructure Finance Authority

ANNUAL REPORT

OVERVIEW OF WIFA

The Arizona Legislature established the Water Infrastructure Finance Authority of Arizona (WIFA) in 1989. WIFA works to maintain and improve water quality in the state by financing the construction, rehabilitation and improvement of drinking water and wastewater facilities and nonpoint source pollution projects.

Maintaining water quality in Arizona requires communities to make large investments in drinking water and wastewater infrastructure. State revolving funds are the primary resources for helping communities meet their continuing and significant water infrastructure needs. WIFA maintains Arizona's revolving loan fund programs, capitalized by the Environmental Protection Agency (EPA), to provide low cost financing for water infrastructure projects.



AS OF AUGUST 6, 2016, WIFA BECAME PART OF THE NEW ARIZONA FINANCE AUTHORITY, A ONE-STOP SHOP FOR FINANCING THAT SUPPORTS EXPANDING AND RELOCATING BUSINESSES, COMMUNITIES' INFRASTRUCTURE NEEDS AND FIRST-TIME HOMEBUYERS.

Sustainable Infrastructure

The effective management of water infrastructure is one of the main challenges faced by water systems across the nation and in Arizona. Sustainable infrastructure and systems are essential to ensuring the environmental and economic sustainability of communities.

Sustainability can be achieved through strong infrastructure planning and management practices. To help communities in Arizona, WIFA provides low-interest loans and planning and design technical assistance funding for drinking water and wastewater projects designed to ensure safe, reliable drinking water and proper wastewater treatment. Most of WIFA's funding is directed toward its loan program which can assist with design, improvement, construction and acquisition. WIFA's technical assistance program is available for the planning and design phase of an infrastructure project. A wide variety of drinking water and wastewater projects can be funded through WIFA.

- 38 WIFA-funded projects were completed in FY 2016 for Arizona's communities (27 drinking water projects and 11 wastewater projects totaling nearly \$108 million) (See FY 2016 Completed Projects list at the end of report for a summary of each project)

FY 2016 Highlights

- **38 WIFA-funded projects were completed in FY 2016** for Arizona's communities (27 drinking water projects and 11 wastewater projects totaling nearly \$108 million) (See FY 2016 Completed Projects list at the end of report for a summary of each project)
 - **25% increase** in the number of projects completed and almost **double** the amount of money provided to help communities with their infrastructure needs
- Approved **15 new loans** and provided nearly **\$118 million** in financial assistance to cities, towns, and private water companies
- Maintained "AAA" credit ratings (the highest level of ratings) due to demonstrated commitment to responsible fiscal fund management
- Continued efficiency in procurement processes - for a needed purchase on statewide contract or small purchase with state registered vendor, WIFA can process and award a purchase order within half an hour
- Co-financed four projects with contributions from other agencies and local entities
- Processed loan documents, on average, in less than one week - from Board action (loan resolution approval) to distribution of loan documents
- Processed nearly **\$133 million** in disbursements and processed disbursement requests, on average, in five business days
- Provided \$52 million in funding to maintain or achieve compliance to protect public water quality
- Assisted **disadvantaged communities** by providing over **\$40 million** in financing for eight projects and **\$3 million** in forgivable principal.
- Provided outreach and assistance to small and rural communities – Nearly 75% of drinking water loans were provided to small systems serving less than 10,000 people. For wastewater projects, 75% of new clean water loans were provided to communities serving fewer than 50,000 people



Example projects include storage tanks, meters, wells and booster pumps, arsenic treatment systems, water and sewer distribution line replacement, solar, new wastewater facilities, plant upgrades, and reclaimed water projects. WIFA can also fund watershed restoration, stormwater management and green infrastructure projects.

Organization

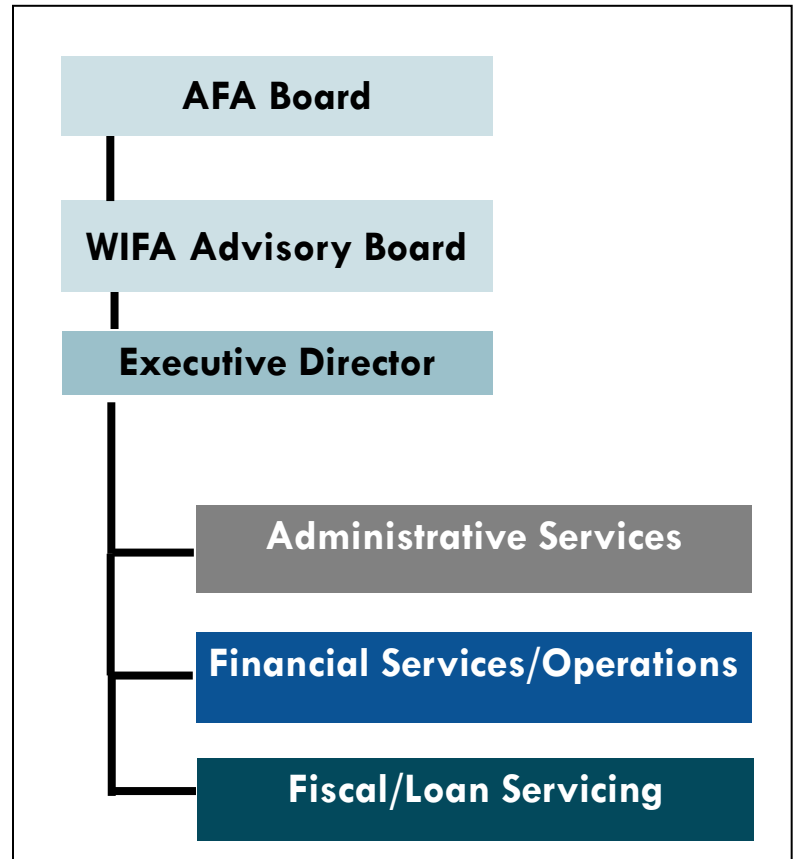
As of August 6, 2016, WIFA became part of the new Arizona Finance Authority, a one-stop shop for financing that supports expanding and relocating businesses, communities' infrastructure needs and first-time homebuyers.

AFA Board

The Arizona Finance Authority is governed by a five-member board appointed by the Governor:

- Victor Riches, Chairman
- Marcos Garay
- Jim Keeley
- Lea Marquez Peterson
- Doug Yonko

The Board's business-focused approach gets borrowers to deal-closing and ground-breaking more quickly.



WIFA Advisory Board

WIFA's Advisory Board provides expertise and leadership on WIFA's policies, loan approvals and various other actions. The Advisory Board makes recommendations to the newly formed Arizona Finance Authority (AFA) Board of Directors. The AFA Board of Directors meets approximately one week after the WIFA Advisory Board to take action on their recommendations.

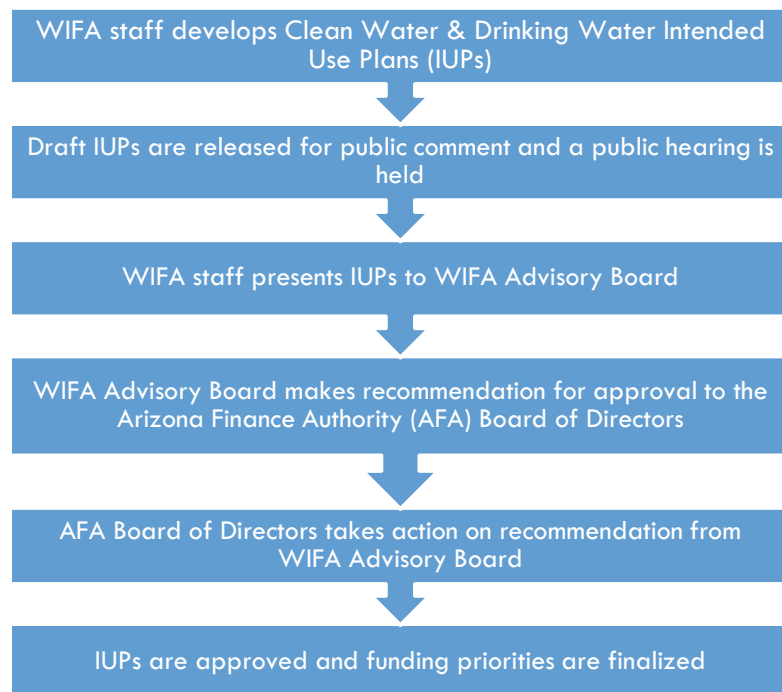
- **Misael Cabrera, Chairman** - Arizona Department of Environmental Quality
- **Paul Gardner, Vice Chairman** - Water systems which serve more than 500 people
- Keith Watkins - Arizona Commerce Authority
- Alan Baker - Municipalities of more than 50,000 residents
- Sean Dollman - Office of State Treasurer
- William Garfield - Water systems which serve less than 500 people
- Stanley Gibson - Municipalities with population less than 50,000 and Counties less than 500,000
- Mark Heberer - Sanitary Districts from Counties with population less than 500,000
- Ray Montoya - Counties with population more than 500,000
- Del Smith- Arizona Corporation Commission
- Lynne Smith- Arizona Department of Water Resources

WIFA's Advisory Board

WIFA is administered by Executive Director, Trish Incognito; Controller, Mike Clark, and a strong team of 14 staff. WIFA's friendly and helpful staff has broad state and local government experience as well as private sector business and finance experience. WIFA's staff is committed to providing exceptional service to Arizona's communities.

Trish Incognito	Executive Director
Mike Clark	Controller
Susan Craig	Communications Director
Stephanie Faltermeier	Administrative Assistant
Julie Flores	Accounting Supervisor
Melanie Ford	Technical Program Supervisor
Rebecca Gomez	Accountant
Rodney Held	Senior Loan Officer
Ruby Hernandez	Loan Processing Coordinator
Sara Konrad	Environmental Program Supervisor
James Manalac	Database Administrator
Yolanda Mendoza	Business Manager
Angelica Romero	Accountant
Andrew Smith	Environmental Program Specialist
Chris Unnewehr	Network Administrator
Angie Valenzuela	Senior Loan Officer

New Process for Setting Priorities



WIFA's Credit Profile

WIFA maintained “AAA” credit ratings (the highest level of ratings) from Moody’s, Standard and Poor’s, and Fitch. The ratings are based on:

- Program structure that provides significant over-collateralization to the bonds
- Strong credit quality of the local borrowers
- Loan portfolio and investments with the ability to withstand substantial losses to revenue
- Large size and diversity of loan portfolio
- Strong management practices and policies

“I think it (2016 Audited Financial Statement) is a testament to the great work of the staff that does the heavy lifting.”

Keith Watkins | Arizona Commerce Authority and WIFA Advisory Board

These ratings support WIFA’s low cost of borrowing from investors when WIFA issues bonds. In turn, this allows WIFA to pass on the benefit to its borrowers and the citizens of Arizona in the form of low interest loans. In FY 2016, WIFA’s average interest rate for public entities was **2.04%**.

At the close of the fiscal year, WIFA had **\$387.7 million** invested. The significant increase over FY 2015 is primarily due to the prepayment of various loans by Lake Havasu City of approximately \$211 million. Dollars invested are primarily used to originate loans to WIFA borrowers and provide security for WIFA’s bond portfolio. Interest generated from the invested funds helps subsidize WIFA borrower rates.

WIFA is able to maintain a diverse portfolio of borrowers by balancing the needs of low-credit borrowers with high-credit borrowers. The presence of strongly rated borrowers within the portfolio benefits all program participants.

Another indicator of WIFA’s responsible fiscal fund management is the annual audit performed by Henry & Horne, LLP. WIFA’s 2016 Audited Financial Statements are attached and available on WIFA’s website - www.azwifa.gov/publications. In FY 2016, WIFA’s net position increased by \$26.6 million, primarily due to the reduction in outstanding bonds. WIFA continues to keep administrative expenses as low as possible while still performing its mission.

LOW-INTEREST LOAN PROGRAM

WIFA operates as a “bond bank” and is able to issue water quality bonds on behalf of communities for water and wastewater infrastructure. Through an active portfolio and sound financial management, WIFA provides significant savings to borrowers by offering loans with below market interest rates.

WIFA’s means for providing low interest financial assistance are the Clean Water Revolving Fund (for publicly-held wastewater treatment facilities) and the Drinking Water Revolving Fund (for both publicly and privately-held drinking water systems). Both funds were established by the EPA and are funded by federal capitalization grants, state matching funds, loan repayments and WIFA bond proceeds.

WIFA is making a difference in Arizona. Over \$2 billion has been invested in the state since WIFA’s inception in 1989, and WIFA has funded more than 400 projects across the state. Each project results in the creation of construction and engineering jobs.



WIFA Makes Cents

"WIFA demonstrated great compassion for our difficult situation after the Aspen Fire and supported our efforts to restore and improve the newly evolving community. Every improvement that has been made since the fire was only possible with WIFA's funding."

- Michael Stanley, Mount Lemmon Water District

"We love working with WIFA and it is a great deal for our rate payers."

- Belinda Oden, Tucson Water

"Investments in infrastructure are essential to our quality of life and the state's economic vitality, and we hope the movement will continue to grow and increase awareness."

- WIFA Team

Loan Agreements Executed in FY 2016



WIFA provides funds for both rural and urban communities, and has financed projects all over the state. In FY 2016, WIFA executed 15 new loans, including 11 drinking water loans for a total of **\$65,744,432** and four wastewater loans for a total of **\$52,190,579**.

Wastewater



Drinking Water



The following water and wastewater service providers obtained financing through WIFA in FY 2016:

Borrower	Project Title	Amount
Drinking Water Loans		
Town of Clarkdale	Upper Town Water Main Replacement/Refinance Project	\$7,872,000
Clear Springs Utility Company	Capital Improvements (Storage, Electric and Waterline)	\$154,794
City of Cottonwood	SR 260 Well Site and Waterline Construction and Refinance	\$16,000,000
East Slope Water Company	System Improvements (Storage, Water Main and Booster Station Improvements)	\$1,001,944
Lake Verde Water Company	Arsenic Treatment and Storage Tank Repair	\$150,000
Town of Payson	CC Cragin Water Supply Project	\$11,000,000
City of Peoria	New River Utility Acquisition	\$14,000,000
City of Somerton	Purchase of Orange Grove Water Company	\$550,000
Tierra Buena Water Company Inc.	Arsenic Remediation Projects 1 and 2	\$210,891
Truxton Canyon Water Company	Arsenic Treatment	\$350,950
City of Williams	Supplement to Water Supply Project	\$900,000
Wastewater Loans		
Buckskin Sanitary District	Buckskin Sanitary District Area 5-6 Wastewater Conveyance & Treatment	\$915,000
Town of Chino Valley	Center Street Sewer from Highway 89 to Molly Rae and Refinance	\$4,509,646
Town of Chino Valley	Design - Center Street Sewer from Highway 89 to Molly Rae	\$50,354
*Lake Havasu City	Mulberry Effluent Basin Expansion and Refinance	\$60,269,432
Drinking Water Total		\$52,190,579
Wastewater Total		\$65,744,432
TOTAL		\$117,935,011

* Green project

Projects of the Year

Awards are presented in recognition of exemplary project management and commitment to public health protection through the improvement of drinking water and wastewater infrastructure.

City of Bisbee | San Jose Wastewater Treatment Plant Solar Addition | \$1.6 Million

Realizing the environmental and economic benefits of using a renewable energy source like solar power, Bisbee officials decided to install a 400kW solar system to produce electricity to run their wastewater treatment plant. According to the City, the solar panel array that was designed exceeded expectations, producing 87% of the electricity required to run the plant and saving the City of Bisbee nearly \$110,000 per year.

Sunrise Water Co. | Arsenic Treatment, Booster Pumps & Storage Tank Project | \$755,000

In addition to providing better quality water for their customers by improving production and storage, this project also protected customers from water outages during the summer peak season. The project was selected based on the advances made to ensure system reliability, as well as the Company's excellent project management and commitment to protecting public health through water infrastructure improvement.



"We were extremely impressed with the level of professionalism and attention to detail by Sunrise's system manager, Marvin Collins. Mr. Collins was responsible for all of the various aspects of project management from procurement, to serving as the construction manager and site inspector, and more."

- Andrew Smith, WIFA Project Manager

TECHNICAL ASSISTANCE PROGRAM

In addition to loans, WIFA also offers planning and design technical assistance funding. Once a year, funding awards are made to eligible wastewater and drinking water systems for the planning or design phase of a project. The purpose of the program is to help prepare water and wastewater facilities for the construction of a capital improvement project.

Funding for Planning and Design

WIFA provides planning and design technical assistance funding to cities, towns, special districts, tribal communities and Arizona Corporation Commission-regulated private water companies to help prepare water and wastewater facilities for capital improvement project construction. Awards are targeted toward communities with limited resources that need assistance in completing the planning and/or design phase of an infrastructure project. Funding is provided to employ the services of an engineer or other consultant to complete these activities. Awards are capped at \$35,000 per project. Project examples include:

- Feasibility Studies
- Rate Studies/Financial Audits
- District Formation
- Capital Improvement Plans
- Preliminary Engineering Reports
- Environmental Assessments
- Engineering Plans and Specifications

The following planning and design technical assistance awards were made in FY 2016:

Awardee	Project Title	Amount
Drinking Water Technical Assistance		
Arizona Water Company	Bisbee/Naco Booster Pump Station Efficiency Study	\$35,000
*Cordes Lakes Water Company	Water Loss Analysis and Leak Detection Survey	\$35,000
Town of Eagar	12th Street Water Tank Rehabilitation	\$21,000
Horizon Six Improvement District	Booster Station Analysis and Design	\$35,000
Navajo Water Company	Summer Pines Storage Tank Replacement Design & Permitting	\$15,000
Kachina Village Improvement District	Water Master Plan	\$35,000
White Horse Ranch Owners Association, Inc.	Well No. 5 Siting and Design	\$25,580
Wastewater Technical Assistance		
City of Bisbee	Tintown Drainage and Green Infrastructure Study	\$35,000
Town of Camp Verde	SR 260 Sewer Collection System Expansion Master Plan	\$35,000
Town of Wellton	Collection System Feasibility Study & Preliminary Engineering Report	\$33,000
Drinking Water Total		\$201,580
Wastewater Total		\$103,000
TOTAL		\$304,580

* Green project

RURAL WATER INFRASTRUCTURE COMMITTEE (RWIC)

WIFA has continued its leadership of the Rural Water Infrastructure Committee (RWIC), an informal partnership of various federal and state agencies that provides loans, grants and technical assistance to Arizona's rural communities. RWIC serves as a "One-Stop Shop" for rural communities with a population of less than 10,000. WIFA continues to utilize the meeting format and resources established two years ago to assist Arizona's small rural communities.

RWIC core members include:

- WIFA
- Arizona Department of Environmental Quality (ADEQ)
- Arizona Department of Water Resource (ADWR)*
- US Environmental Protection Agency (EPA)
- USDA Rural Development (USDA-RD)
- North American Development Bank (NADBank)
- Border Environment Cooperation Commission (BECC)
- Rural Water Association of Arizona (RWAA)
- Rural Community Assistance Corporation (RCAC)
- Bureau of Reclamation (BOR)
- Department of Housing and Urban Development (HUD)
- Arizona Department of Housing (ADOH)

*New member joined in FY 2016

RWIC: One-Stop Shopping in Arizona

- A resource for applicants to locate federal, state and local financial assistance programs
- Affordable funding solutions and technical assistance to small, rural communities throughout Arizona



In FY 2016, RWIC held regular quarterly meetings to provide a platform for small communities to present about their project needs. Executive Committee members then discuss and follow-up with available assistance options. The following RWIC meetings were held in FY 2016:

- RWIC meeting, September 2015 - During the first half of the meeting, one small wastewater system representative presented to the group. The presentation was followed by a brief discussion on potential assistance partners could provide and the follow-up that would be provided. The second half of the meeting was for Executive Committee members only.
- RWIC meeting, December 2015 - There were no project presentations during this meeting. Executive Committee members met to discuss projects, improvements to project coordination and provide partner updates on upcoming training and funding opportunities.
- RWIC meeting, March 2016 (held during the Rural Water Association of Arizona Conference) - During the first half of the meeting, representatives from one small drinking water provider presented to the group. The presentation was followed by a brief discussion on potential assistance partners could provide and the follow-up that would be provided. The second half of the meeting was for Executive Committee members only.
- RWIC meeting, June 2016 - There were no project presentations, only a meeting of the Executive Committee members.

MARKETING AND OUTREACH

The following is a summary of WIFA's outreach and marketing efforts for FY 2016:

Conferences & Outreach Events

WIFA presented at numerous conferences and outreach events throughout the year. Some highlights, new conferences or opportunities outside of WIFA's typical presence, include:

- Arizona Public Works Association luncheon
- American Concrete Pressure Pipe Association Annual Meeting
- American Society of Civil Engineers and American Council of Engineering Consultants
- American Public Works Association National Conference - *An Insider's Look at Arizona's Water Infrastructure and WIFA-Funded Projects*
- Healthy Forests, Vibrant Economy Conference - *Capitalizing on the Water Infrastructure Finance Authority*
- Arizona Hydrologic Society Dinner presentation
- Arizona Water Association - *Innovative Financing for Your Not-So-Traditional Infrastructure Projects*
- ASU Sustainable Cities Network Green Infrastructure Workgroup Meeting
- Conservation InfoShare Statewide Meeting - *Reduce, Reuse, Recycle: Smart Investments with WIFA*

Newsletters & Publications

WIFA was featured in many press releases, newsletters and publications throughout the year. Some highlights, new publications or opportunities outside of WIFA's typical outreach, include:

- Arizona Commerce Authority Newsletter - *WIFA Awarded \$25 Million*
- Arizona Municipal Water Users Association Blog - *WIFA: Little Agency of Big Government Protects Arizona's Water*
- ADWR Communication/Newsletter - *An Arizona Agency Takes on the Challenge of Upgrading Drinking-Water Systems around the State*
- Arizona Forward - *New Member Spotlight*

Social Media & E-mails

- New Twitter Account - interested individuals and entities can now follow WIFA on Twitter [@WIFAfunding](#).
- WIFA is active on Facebook and uses it to communicate important events or happenings and share relevant water infrastructure articles.
- Earth Day Article - *WIFA Cares about the Earth & Arizona's Communities: Protecting the Earth and Water*
WIFA used Earth Day as an opportunity to pay tribute to the good work happening in Arizona's communities to protect the environment and public health. Communities are investing in infrastructure to improve water quality and WIFA is able to help keep costs affordable.
- WIFA sent out numerous e-mails throughout the year to WIFA's distribution list, containing information about upcoming events, trainings, resources and funding opportunities.

Value of Water Week

- In support of the Value of Water Coalition's *Imagine a Day without Water* campaign, WIFA partnered with the Arizona Department of Water Resources, Arizona Department of Environmental Quality, Arizona Commerce Authority, University of Arizona Water Resources Research Center and Arizona Municipal Water Users Association to develop a proclamation. Several Arizona Corporation Commissioners also provided their support.
- Governor Ducey proclaimed the week of October 5-9 as the Value of Water Week and invited utilities, schools, local governments, and businesses to communicate the importance of water and investments in infrastructure. The proclamation was presented at the Healthy Forests, Vibrant Economy Conference, hosted by SRP, on October 7, 2015.
- WIFA also put together a press release and sent out an e-mail to customers and partners, encouraging them to participate in the campaign.



FY 2016 COMPLETED PROJECTS

MAKING A DIFFERENCE IN ARIZONA

Below is a summary of the projects that have been completed during the year, through construction loans and planning and design technical assistance funding.

38 projects completed

- **Total dollar amount: \$107,810,852**
 - 18 loans totaling \$107,324,058
 - 20 planning and design technical assistance projects totaling \$486,794
- 27 drinking water projects
 - 20 completed by small/rural communities (less than 10,000 population)
- 11 clean water (wastewater) projects
 - 4 completed by small/rural communities (less than 10,000 population)

Completed Loans

East Slope Water Company

Population: 3,787

System Improvements (Storage, Booster Pumps, Well Improvements, Main Replacement)

Loan Amount: \$135,221

Project Results: East Slope's design loan provided funds to conduct a complete system evaluation, identify priorities, and complete design on several important water main, storage tank and booster station improvement projects.

Town of Payson

Population: 15,500

Payson Cragin Project Phase II

Loan Amount: \$6,250,000

Project Results: This loan to the Town of Payson was the second in a series of five loans to realize much needed renewable surface water supplies from C.C. Cragin Reservoir. This phase also included improvements to several sections of waterline within the Town. The Town has executed a third loan with WIFA to continue the design and construction of various project components.



Holiday Water Company

Population: 550

Water System Upgrades - Well, Storage & Distribution

Loan Amount: \$225,000

Project Results: Holiday Water Company received funding to resolve storage and production deficiencies identified by ADEQ as well as pressure problems that had been occurring for many years. The Company drilled a replacement well, purchased a second well, and installed new storage tanks and pressure sustaining valves. They also received planning and design technical assistance from WIFA in 2013 to get the projects started.



Sunrise Water Co.

Population: 4,350

Arsenic Treatment, Booster Pumps & Storage Tank

Loan Amount: \$755,000

Project Results: This loan to Sunrise Water Company allowed for the construction of an arsenic treatment system, storage tank and installation of two variable frequency drive pumps. The Company is now able to meet production and storage shortfalls.

City of Somerton

Population: 1,121

Purchase of Orange Grove Water Company

Loan Amount: \$550,000

Project Results: The City received financing to purchase a neighboring small water system and improve the quality of service to its residents. The Orange Grove system had minimal upgrades in the last 40 years and was in poor condition, with more than 300 septic tanks located near the community well. Now that the City has purchased the system, they will use an awarded Community Development Block Grant to build an interconnection from the City to the Orange Grove system.

Town of Chino Valley

Population: 4,277

Purchase of WWTP and installation of screen

Loan Amount: \$3,442,500

Project Results: The Town used the loan funds to refinance the outstanding obligation for the construction of the Town's wastewater treatment plant (WWTP) which had been constructed and managed by a private entity. The second component of the project was to replace the influent screen at the WWTP.



City of Casa Grande

Population: 38,445

Water Reclamation Facility Expansion

Loan Amount: \$25,000,000

Project Results: The City expanded its Water Reclamation Facility and improved effluent quality from B+ to A+ to allow for open-access irrigation uses. The project included significant improvements to all stages of the treatment process. Completion of the facility expansion is part of the City's long term planning goal to maximize use of its reclaimed water.

Parker Springs Water Company

Population: 126

Replacement Well, Storage and Water Line Renovation

Loan Amount: \$271,000

Project Results: Parker Springs drilled a new well to replace an existing well that was subject to surface water influence from Parker Canyon Lake. The project also included a new well building, solar power for the well site, a replacement storage tank, and leak detection and line replacement.



City of Show Low

Population: 12,000

Private Water Companies Acquisition

Loan Amount: \$2,000,000

Project Results: The City acquired the Park Valley Water Company and Fools Hollow Water Company, two small private water systems within the City’s municipal boundaries. The consolidation of the systems provided increased flow and improved efficiencies and consistency of service.

Big Park Domestic Wastewater Improvement District

Population: 2,500

New WWTP

Loan Amount: \$5,505,900

Project Results: In 1995 when the District’s previous plant was constructed, the County chose to keep costs as low as possible to stay within budget. As a result, the plant was constructed with no redundancy. The plant had been constantly in service and had never been drained for routine maintenance and repair. With this loan, the District has installed a biological nutrient removal (BNR) system that can be fully maintained without taking the system offline.

City of Prescott

Population: 39,843

Zone 12, 19 and 27 Water Infrastructure Improvements

Loan Amount: \$15,921,582

Project Results: The City of Prescott implemented numerous projects to resolve capacity deficiencies within three pressure zones. An additional benefit of these projects was increased fire flow. Projects included three new reservoirs, totaling six millions gallons in storage capacity, 6,500 linear feet of pipeline, and two new pump stations.

Humboldt Water System

Population: 690

Water Treatment Facility

Loan Amount: \$301,528

Project Results: The Company installed an arsenic and nitrate treatment system to treat the water to below the required MCL. A new booster station and isolation valves were also installed as part of this project that allows for redundancy and minimal disruption of service in the event that a repair is needed due to a line break.



Granite Mountain Water Company

Population: 308

Well #5 Replacements & Tank #3 Addition

Loan Amount: \$181,320

Project Results: The Company was struggling to keep up with the demand for water in the summer months and suffered from high nitrate levels. The Company identified an existing private well that met water quality standards. This loan allowed Granite Mountain to purchase the well and connect it to the distribution system. A 50,000 gallon storage tank was also installed to meet existing demand.

Town of Sahuarita

Population: 8,537

Wastewater Capacity Upgrades

Loan Amount: \$31,866,528

Project Results: This project increased the Town's treatment plant capacity to meet growing demand, upgraded the plant to produce Class A+ effluent for recharge, and helped the facility meet odor control and aesthetic requirements.

Town of Miami

Population: 1,778

Wastewater Collection System Replacement Project Development

Loan Amount: \$3,250,000

Project Results: To address its failing 80-year-old sewage collection system, the Town has completed its design loan with WIFA and has received funding from USDA Rural Development to begin the extensive repairs and replacements.

City of Douglas

Population: 17,378

WWTP Compliance and Facility Improvements

Loan Amount: \$5,368,479

Project Results: This project allowed the City to make the necessary facility improvements to fully comply with its Aquifer Protection Permit and achieve full environmental compliance.



City of Douglas

Population: 17,378

Douglas WWTP Solar Power Generation System

Loan Amount: \$1,300,000

Project Results: The City was able to install a solar panel array that is expected to reduce their APS power consumption and save approximately \$35,000 annually.

Town of Oro Valley

Population: 33,648

Advanced Metering Infrastructure & Meter Replacement Program

Loan Amount: \$5,000,000

Project Results: Advanced Metering Infrastructure technology now allows the Town to monitor all water use on a daily basis and notify customers of unusual or high water use alerts flagged by the system. The technology also interfaces with a web portal that gives customers the same opportunity to view and manage their own water use. In addition, meter replacements have reduced non-revenue water from 9.8% to 2.9%.

Completed Technical Assistance Projects

Elfrida Water Improvement District

Population: 800

Distribution System Improvements PER and Environmental Report

TA Amount: \$24,600

Project Results: The District completed a Preliminary Engineering Report and Environmental Report to prepare to apply for funding of water main replacement, looping and valve installation projects.

City of Globe

Population: 7,495

Water Distribution System Improvements

TA Amount: \$35,000

Project Results: The funding was used to develop a Preliminary Engineering Report which will provide a roadmap for the City to plan its water capital improvement projects for the next decade. It will also be used by the City to apply for federal and state funding to complete the improvements. Lastly, it will be used to educate staff, Council, and citizens and to provide justification for rate adjustments and the pursuit of funding to improve the water system.

City of Nogales

Population: 21,830

Extreme West Pressure Zone (EWPZ) Storage Tank

TA Amount: \$13,386

Project Results: The City used the technical assistance funds to prepare a design report for a new storage tank, booster station and water main replacement. The new storage tank will be more reliable than pumped capacity and ensure adequate flows and pressure now that the system has expanded. It will also provide redundancy to allow for improvements to the system's other tanks, and will allow the City to stop pumping its wells during peak daytime hours. The City is financing construction through a WIFA loan.

Pima County Regional Wastewater Reclamation Department

Population: 992,394

Wastewater Reclamation Facility Energy Audits

TA Amount: \$35,000

Project Results: The funding was used to conduct detailed energy audits on four wastewater reclamation facilities. The audits evaluated energy consumption at each plant and developed potential energy conservations measures that could be carried out. The County will use the audit to implement measures to conserve energy and lower utility costs.

Alpine Domestic Water Improvement District

Population: 1,002

San Francisco River Waterline Relocation Project

TA Amount: \$15,900

Project Results: This District was able to complete the required Preliminary Engineering Report and Environmental Review in order to move forward with funding through USDA Rural Development for a new waterline that replaces one damaged in the 2011 Wallow Fire.

Clay Springs Domestic Water Improvement District

Population: 429

Clay Springs Water Loss Remediation Project

TA Amount: \$14,612

Project Results: The District was able to complete a Preliminary Engineering Report to reduce water loss and identify current deficiencies in the system. The District has already implemented some of the recommendations from the report and is working on a plan to implement others as well.

Town of Fredonia**Population: 1,314****Fredonia Filtration Plant Backwash Basin Re-Engineering****TA Amount: \$18,602**

Project Results: The Town completed the design of a backwash recovery basin that will improve the operations of their system and reduce chemical costs.

Picacho Water Improvement Corporation**Population: 270****Design of Replacement Water System Campus****TA Amount: \$17,100**

Project Results: Picacho's current storage tank is over 50 years old and failing. This project provided engineering and design for a replacement storage tank, booster pump, hydropneumatic tank and chlorination system.

Town of Snowflake**Population: 5,697****Citywide Water Distribution Leak Detection****TA Amount: \$19,266**

Project Results: The Town completed a leak detection survey that identified leaks within the distribution system. Elimination of the leaks will save money and reduce water loss.

Mayer Domestic Water Improvement District**Population: 1,517****Production Well Aquifer Study, Energy Efficiency Analysis & SCADA Preliminary Design****TA Amount: \$34,816**

Project Results: The District is in a severe water shortage and applied for TA funds to prepare a new production well aquifer study, an energy efficiency analysis and a Supervisory Control and Data Acquisition (SCADA) planning and preliminary design. These projects address the system's most immediate needs as well as consider long-term solutions, including an evaluation of areas where Mayer DWID could potentially develop a long term, sustainable groundwater supply sufficient to meet water demands of current and committed customers.

Town of Patagonia**Population: 913****Drinking Water Aquifer Delineation****TA Amount: \$8,810**

Project Results: Patagonia's water supply has been threatened by potential mining projects in its watershed and by ongoing drought conditions, with well levels dropping by nearly 20 feet in the past few years. The aquifer study provides the Town with a basis for making decisions about how best to continue to provide a reliable water supply for its residents.

Ponderosa Utility Corporation**Population: 1,250****Water Distribution System Study and Energy Evaluation****TA Amount: \$20,520**

Project Results: Ponderosa Utility Corporation completed an asset management based water distribution study to address undersized and rapidly deteriorating water mains, above grade assets and the energy efficiency of the pumping system. The report developed a prioritized replacement schedule that will address the most pressing needs of the system. Ponderosa Utility now knows where to allocate spending for improvements and upgrades to the system.

Villa Grande Domestic Water Improvement District

Population: 330

Nitrate Mitigation

TA Amount: \$15,877

Project Results: Two of the District's wells suffer from elevated levels of nitrates. The Nitrate Mitigation Study allowed the District to evaluate the remediation and treatment alternatives to estimate probable costs and make a recommendation on the most feasible solution.

City of Yuma

Population: 91,923

Figueroa Ave Water Pollution Control Facility Feasibility Study

TA Amount: \$28,260

Project Results: Yuma's Figueroa wastewater treatment facility may be facing more stringent nutrient standards in the near future. This study provided alternatives for meeting these standards so that the City can plan and budget for needed improvements and/or upgrades. The City will be incorporating these improvements into its upcoming Capital Improvement Program.

City of Buckeye

Population: 26,425

Distribution Leak Survey Phase I

TA Amount: \$22,000

Project Results: The City's leak survey located and identified leaking locations within the distribution systems of the Historic Buckeye and Sundance service areas.

Town of Kearny

Population: 2,249

Water System Infrastructure Master Plan, Rate Study, and PER

TA Amount: \$32,900

Project Results: The Town completed a Preliminary Engineering Report to address aging storage tanks and other system upgrades.

Lake Havasu City

Population: 49,050

Lake Havasu City Water Audit

TA Amount: \$35,000

Project Results: This project verified accuracy of the City's water meters, identified unauthorized consumption and determined apparent and real water loss. The City will use the water audit results to update their meter replacement schedule and reduce water loss.

Payson Water Company

Population: 383

East Verde Park Supply Study

TA Amount: \$30,000

Project Results: This project created a water system map and storage analysis for the Company. They also identified groundwater pumping specifications and evaluated well fields. The Company will use this information to rehabilitate one of its wells and install timers on its pumps to improve efficiency.

City of San Luis**Population: 30,607****San Luis Lift Station & Force Main Design****TA Amount: \$30,150**

Project Results: The City of San Luis has two wastewater treatment plants, with one operating at about 95% of design capacity and the other at 7% of design capacity. This project completed design to divert about 500,000 gallons of wastewater from the plant nearing capacity and allow both plants to operate at about 60% capacity.

City of Tempe**Population: 175,000****Loma Vista Flood Mitigation and Stormwater Re-Use Project****TA Amount: \$34,995**

Project Results: The City was able to study low impact development techniques as a mitigation measure for flooding and storm water quality issues particularly for streetscape capital projects. The City will use this study in conjunction with its Drainage Master Study being conducted by Maricopa County Flood Control District to evaluate drainage concerns city wide. This project will also assist in financial analysis of future projects by quantifying the benefit of LID practices.