

# WATER INFRASTRUCTURE FINANCE AUTHORITY

FY 2017

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

## FY 2017 Highlights

- **23 WIFA-funded projects were completed in FY 2017** for Arizona’s communities (17 drinking water projects and 6 wastewater projects totaling over \$143 million in infrastructure projects) (See FY 2017 Completed Projects list at the end of report for a summary of each project)
- Approved **eight new loans** and provided **\$68 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
- Co-financed five 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
- Provided \$14 million in funding to maintain or achieve compliance to protect public water quality
- Assisted **disadvantaged communities** by providing **\$17,964,500** in financing for six projects and nearly **\$3 million** in forgivable principal
- Provided outreach and assistance to small and rural communities – 60% of drinking water loans were provided to small systems serving less than 10,000 people. For wastewater projects, 100% of new clean water loans were provided to communities serving fewer than 50,000 people

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.



**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

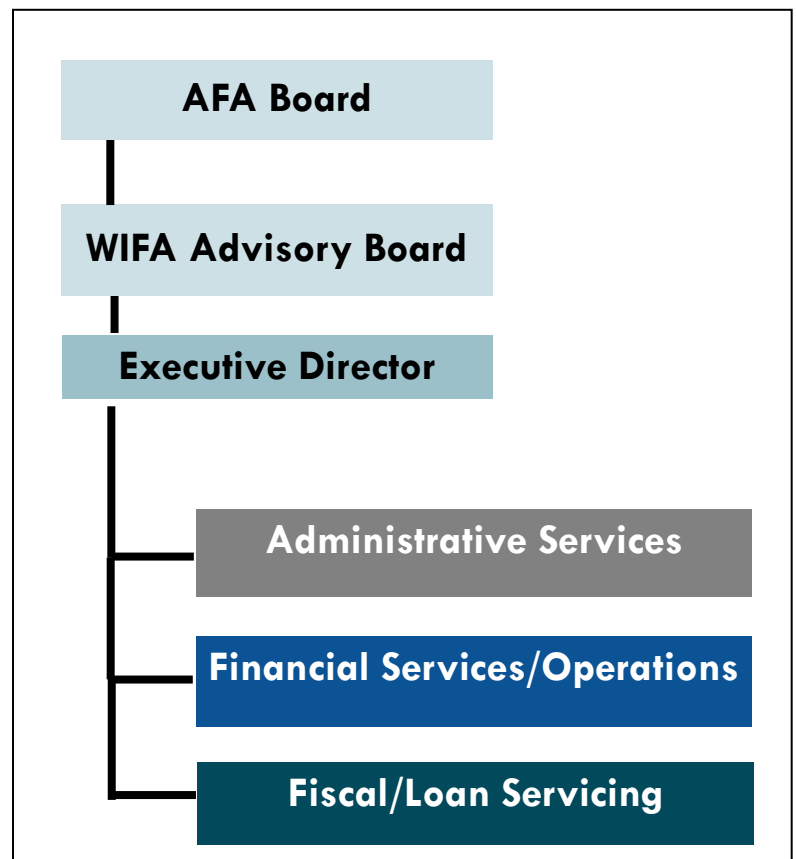
As of August 6, 2016, WIFA became part of the new Arizona Finance Authority, a one-stop shop for financing that supports expanding and relocating businesses, communities' infrastructure needs and first-time homebuyers.

### AFA Board

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

- Victor Riches, Chairman
- Michael Godbehere
- 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
- **Stanley Gibson, Vice Chairman** - Municipalities with population less than 50,000 and counties less than 500,000
- Alan Baker - Municipalities of more than 50,000 residents
- Paul Gardner - Water systems which serve more than 500 customers
- William Garfield - Water systems which serve less than 500 customers
- 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
- Keith Watkins - Arizona Commerce Authority

## WIFA's Advisory Board

WIFA is administered by Executive Director, Trish Incognito; Controller, Jane Thompson; and Chief Financial Officer, Dan Dialessi, and a strong team of 11 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.

<b>Trish Incognito</b>	<b>Executive Director</b>
<b>Jane Thompson</b>	<b>Controller</b>
<b>Dan Dialessi</b>	<b>Chief Financial Officer</b>
Susan Craig	Communications Director
Julie Flores	Accounting Supervisor
Rebecca Gomez	Accountant
Ruby Hernandez	Administrative Service Officer I
Sara Konrad	Senior Program Administrator
Yolanda Mendoza	Business Manager
Brandon Nguyen	Environmental Program Specialist
Nicole Petker	Environmental Engineer
Angelica Romero	Accountant
Chris Unnewehr	Network Administrator
Angie Valenzuela	Senior Loan Officer

## 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

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 2017, WIFA’s average interest rate for public entities was **2.28%**.

At the close of the fiscal year, WIFA had **\$456.9 million** invested. The increase over FY 2016 is primarily due to additional prepayments of various loans. In FY 2015, WIFA’s total amount had increased significantly due to the prepayment of multiple 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 2017 Audited Financial Statements are attached and available on WIFA's website - [www.azwifa.gov/publications](http://www.azwifa.gov/publications). In FY 2017, WIFA's net position increased by \$14.7 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.

### Loan Agreements Executed in FY 2017

WIFA provides funds for both rural and urban communities, and has financed projects all over the state. In FY 2017, WIFA executed eight new loans, including five drinking water loans for a total of **\$63,338,233** and three wastewater loans for a total of **\$4,640,000**.





The following water and wastewater service providers obtained financing through WIFA in FY 2017:

Borrower	Project Title	Amount
<b>Drinking Water Loans</b>		
Ash Fork Water Service	Arsenic Treatment AF #2	\$150,000
Eagletail Water Company, LLC	Storage Tank Replacement	\$174,500
City of Globe	2017 Water System Improvements	\$3,000,000
Town of Payson	CC Cragin Water Supply Project	\$11,000,000

<b>Borrower</b>	<b>Project Title</b>	<b>Amount</b>
<b>City of Peoria</b>	Pyramid Peak Water Treatment Plant Expansion	<b>\$49,013,733</b>
<b>Wastewater Loans</b>		
<b>Town of Chino Valley</b>	Center Street Sewer from Highway 89 to Molly Rae - Continuation Loan	<b>\$640,000</b>
<b>City of Douglas</b>	Wastewater Treatment Plant Facility Improvements	<b>\$3,000,000</b>
<b>Town of Wickenburg</b>	Mariposa Drive and Kerkes/Hassayampa School Stormwater Drainage Improvements	<b>\$1,000,000</b>
<b>Drinking Water Total</b>		<b>\$63,338,233</b>
<b>Wastewater Total</b>		<b>\$4,640,000</b>
<b>TOTAL</b>		<b>\$67,978,233</b>

## 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 2017:

<b>Awardee</b>	<b>Project Title</b>	<b>Amount</b>
<b>Drinking Water Technical Assistance</b>		
*City of Williams	Water Resource Recovery Evaluation	\$35,000
*City of El Mirage	Original Town Site Water Loss and Leak Detection Analysis	\$35,000
Rancheros Bonitos Water Company	Rancheros Bonitos Water Company	\$10,000
Centennial Park Domestic Water Improvement District	Well #8	\$25,200
City of Nogales	Camino del Sol Water System Improvements Design	\$16,431
<b>Wastewater Technical Assistance</b>		
*City of Flagstaff	Green Stormwater Infrastructure Watershed Planning and Design	\$35,000
*Town of Marana	El Rio Riparian Restoration Project	\$35,000
City of Apache Junction	Public Works Stormwater Basin	\$29,924
*City of Sierra Vista	Environmental Operations Park Energy Audits	\$34,400
<b>Drinking Water Total</b>		<b>\$121,631</b>
<b>Wastewater Total</b>		<b>\$134,324</b>
<b>TOTAL</b>		<b>\$255,955</b>

\* 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.*

### **Apache Junction Water Utilities Community Facilities District | Superstition Area Water Plant | \$9 Million**

With the completion of this project, the District designed and built a 1.5 million gallons per day water treatment facility and is able to more fully utilize their primary source of water, Central Arizona Project. As a result, they were able to reduce their reliance on groundwater supplies and the cost of water deliveries. When the District started providing water service to their customers, over 90 percent of its supply came from groundwater. Today, over 90 percent of the District's supply comes from surface water. The District's employees and consultants demonstrated exemplary teamwork and organization in the construction of the facility.



*Award presentation at WIFA Advisory Board meeting 2-15-2017*



### **Town of Springerville | Sewer Rehabilitation Project | \$696,000**

This construction project allowed Springerville to replace a lift station, rehabilitate wastewater collection lines, and repair two backup generators. Overall functioning and cost-effectiveness of the sewer system has improved as a result of the project. According to the Town's Public Works Director, Tim Rasmussen, customer sewer problem complaints have dropped by 85 percent. In addition to excellent project management, the project was selected based on advances made to ensure system reliability and commitment to protecting public health through investments in water infrastructure.



*Award presentation at Town Council Meeting 3-1-2017*

"Customer service problem complaints have dropped by 85 percent."

- Tim Rasmussen, *Town of Springerville Public Works Director*

## 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.

RWIC core members include:

- WIFA
- Arizona Corporation Commission (ACC)\*
- 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 2017

### 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 2017, 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 2017:

- RWIC meeting, September 2016 - Executive Committee members met to discuss projects, improvements to project coordination and provide partner updates on upcoming training and funding opportunities. There were no project presentations during this meeting.
- RWIC meeting, December 2016 - During the first half of the meeting, one small private water co-op 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, March 2017 – During the first half of the meeting, representatives from three small water systems, including one tribal utility, 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 2017 – There were no project presentations, only a meeting of the Executive Committee members.

## MARKETING AND OUTREACH

### Outreach Efforts:

- WIFA presented at 21 conferences and outreach events throughout the year and reached nearly 700 people and potential borrowers. Highlights include:
  - Sponsored Financing Sustainable Water Workshop hosted by Arizona Municipal Water Users Association Alliance for Water Efficiency (September 2016)
  - Presented to 15 elected officials on Water Infrastructure & How to Pay for It at Kyl Center for Water Policy Leaders Roundtable (September 2016)
  - Hosted and partnered with EPA on three Drought Response and Water Loss Control Workshops (November 2016)
  - Presented to the Governor’s Water Augmentation Council – Recycled Water Committee (December 2016)
  - Presented to the Governor’s Water Augmentation Council – Finance Committee (May 2017)
  - Presented at the Arizona Corporation Commission’s Water Workshop (June 2017)
  - Presented at the Environmental Finance Center Navigating Water Infrastructure Funding Programs Workshop for Small Water Systems (June 2017)

### Marketing Highlights:

- E-mail distribution: WIFA Takes the Gold in Financing e-mailed to WIFA’s distribution list (approximately 700 recipients) (August 2016)
- Arizona Water Association Kachina News publication: New Initiatives – New Project: Town of Wickenburg – WIFA provides \$200,000 in forgivable principal for stormwater management projects (Fall 2016)
- E-mail distribution: WIFA Invests \$118 Million in Water Infrastructure Projects to announce and present WIFA’s 2016 Annual Report (December 2016)
- EPA Publication: Arizona Uses the Water Infrastructure Finance Authority to Provide Funding for Infrastructure Projects that Address Climate Impacts (January 2017)
- E-mail distribution: WIFA wishes you a Happy Earth Day and Water Awareness Month to spotlight WIFA’s Projects of the Year (April 2017)
- Arizona Water Association Kachina News publication: Kw (h2O) – Using Sunshine to Power Arizona’s Water Future - A Survey of Arizona Water Operators with Solar (Spring 2017)

## FY 2017 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.*

#### 23 projects completed

- **Total dollar amount: \$143,406,379**
  - 14 loans totaling \$143,154,677
  - 9 planning and design technical assistance projects totaling \$251,702
- 17 drinking water projects
  - 10 completed by small/rural communities (less than 10,000 population)
- 6 clean water (wastewater) projects
  - 2 completed by small/rural communities (less than 10,000 population)

#### Completed Loans

##### Q3 2016

###### **City of Prescott**

**Population: 12,965**

###### **Airport WWTP Upgrades**

**Loan Amount: \$43,202,549**

**Project Results:** The Airport WWTP will be expanded to a treatment capacity of 3.75 mgd to accommodate current flows and account for growth in the area since the previous upgrade in 1998 (brought capacity to 2.25 mgd). This capacity allows the City of Prescott to meet current and near-term needs from a flow and regulatory standpoint and results in an increased ability to reliably treat the City of Prescott's current and future wastewater flows and reliably produce Class A+ reclaimed water.



**City of Buckeye**

**Population: 25,000**

**Downtown to Sundance 16" Waterline Interconnect**

**Loan Amount: \$5,065,000**

**Project Results:** WIFA financing allowed the City of Buckeye to construct approximately six miles of 16" waterline. As a result of the project, Buckeye is now able to blend two water sources thereby improving the water quality to the downtown area and eliminating the need for treatment.

**Apache Junction Water Utilities Community Facilities District**

**Population: 13,657**

**Water Treatment Facility**

**Loan Amount: \$9,077,296**

**Project Results:** The WIFA loan allowed Apache Junction Water Utilities Community Facilities District to build another treatment facility and reduce costs of water deliveries. The District designed and constructed an additional water treatment plant to treat 1.5 million gallons of water per day.



**Truxton Canyon Water Company**

**Population: 2,132**

**Arsenic Treatment**

**Loan Amount: \$350,950**

**Project Results:** WIFA financing was used for critical infrastructure improvements including the installation of a centralized arsenic treatment system and a structure to house the treatment facility. Truxton Canyon Water Company resolved arsenic exceedances and is now able to provide water to customers that meets drinking water quality standards.

**Lake Havasu City**

**Population: 52,844**

**Mulberry Effluent Basin Expansion and Refinance**

**Loan Amount: \$60,269,432 (\$58M refinance of the City's 2005 Greater Arizona Development Authority loan; \$1.2M project construction)**

**Project Results:** As a result of the project, Lake Havasu City modified the existing effluent basin and suction line to allow for the reuse pump station to pull sufficient effluent from the Mulberry Wastewater Treatment Plant to supply reuse. The effluent will be used to expand the City's effort to reduce potable water use at city parks.

## **Q4 2016**

### **Picacho Peak Water Company**

**Population: 300**

#### **Nitrate Treatment Project**

**Loan Amount: \$150,000**

**Project Results:** The Company installed reverse osmosis point of use devices to treat for nitrates inside the homes where drinking water is most likely dispensed. For the residential customers, these treatment units are under the kitchen sink, while the larger commercial customers received point of entry devices.

### **City of Tucson**

**Population: 529,770**

#### **Well Equipping and Upgrade Program**

**Loan Amount: \$2,750,000**

**Project Results:** This project enhanced the productivity and extended the life of numerous potable wells by replacing column pipes, line shafts, and pumps. The project also included Phase I equipping of several recently drilled Southern Avra Valley Storage and Recovery Project (SAVSARP) wells. Equipping the production wells provided an additional renewable potable resource to the community's water system. Upgrading existing wells improved production and reliability, and enabled the City to meet customer demand.

### **City of Somerton**

**Population: 14,287**

#### **Water Meter/MXU Retrofit**

**Loan Amount: \$912,000**

**Project Results:** The City replaced 2,000 meters and equipped them with meter transceiver units to eliminate the monthly meter read time and accurately measure water use. The cost of the labor savings is estimated at more than \$60,000 per year. The new meters also measure water use more accurately so that the utility's revenues are reflective of actual water consumption.

### **Town of Chino Valley**

**Population: 4,277**

#### **Design - Center Street Sewer from Highway 89 to Molly Rae**

**Loan Amount: \$50,354**

**Project Results:** This loan was used to design approximately one mile of sewer line from an existing trunk line to a subdivision. The ultimate result is that all future construction within the subdivision will be tied into the Town's sewer system. A second WIFA loan has been issued for the construction of the sewer line.

## **Q1 2017**

### **City of Buckeye**

**Population: 25,000**

#### **Airport Well Project**

**Loan Amount: \$3,617,450**

**Project Results:** The City rehabilitated Well #2 to restore optimal service conditions and provide better quality water to historic downtown Buckeye, the airport, and redundancy to the Hopeville water system. Rehabilitation of Well #2 included replacing the well casing, deepening the well from 305 feet to approximately 850 feet, and installing a new well pump. A transmission main was installed to connect to the Hopeville well and historic Buckeye water supply. Included in the site design is a 1,000,000 gallon steel storage tank and booster pump station. These major water distribution improvements have brought reliability and efficiency to the City of Buckeye water system while reducing operating costs.



**City of Williams**

**Population: 3,145**

**Supplement to Water Supply Project**

**Loan Amount: \$900,000**

**Project Results:** This loan provided funds for cost overruns from the City’s previous WIFA loan. Included in these costs was the rehabilitation of both the Dogtown 1 Well and the Rodeo Well to working status. The overall project resulted in water supply improvements needed to address critical shortage in water supply to meet current demand.



## Q2 2017

### **Town of Florence**

**Population: 15,306**

#### **Tertiary Treatment of South Plant and Engineering for System Expansion**

**Loan Amount: \$1,300,000**

**Project Results:** The Town expanded its wastewater treatment plant capacity including design and installation of a UV disinfection system with membrane bioreactor (MBR) filtration. For increased solids handling, the Town installed a new belt filter press. The expansions allowed the plant to increase capacity while minimizing the impact of its footprint.



### **Town of Payson**

**Population: 17,682**

#### **CC Cragin Water Supply Project**

**Loan Amount: \$11,000,000**

**Project Results:** Funding provided through this loan was for the C.C. Cragin Project, a multi-phase regional project which will ensure a source of high quality water for Payson and its neighboring communities. This third loan funded constructing the upper section of the Raw Water Penstock Pipeline and two sections of treated transmission/distribution water line, equipping the Aquifer Storage and Recovery (ASR) wells, purchasing a hydroelectric generator, and installing SCADA equipment. The overall project is expected to continue through 2019.



**Town of Chino Valley**

**Population: 4,722**

**Center Street Sewer from Highway 89 to Molly Rae and Refinance**

**Loan Amount: \$4,509,646**

**Project Results:** The Town used \$3,925,000 to refinance a United States Department of Agriculture – Rural Development (USDA-RD) loan. The refinance provided a significant cost savings through WIFA’s lower interest rate. The Town used the remaining funding to extend the sewer collection to areas previously served by septic. Areas include a housing development, Mollie Rae Estates subdivision, located on West Center Street, and Mountain View Mobile Home Park and Serenity Court subdivision located on South Road 1 West. The decommissioning of these residential septic systems is estimated to result in almost 200 new connections.



**Completed Technical Assistance Projects**

**Q3 2016**

**Town of Oro Valley**

**Population: 41,388**

**Green Stormwater Infrastructure Action Plan**

**TA Amount: \$35,000**

**Project Results:** Technical Assistance funding was used to produce a written Green Stormwater Infrastructure Action Plan report. This report included training materials, conceptual designs for parks with green stormwater infrastructure features and documentation showing the cost/benefit analysis for the Town parks.

**Q4 2016**

**City of Goodyear**

**Population: 45,067**

**Demonstration Concentrate Management Wetlands**

**TA Amount: \$19,760**

**Project Results:** The City utilized WIFA’s TA funding, as well as City and Bureau of Reclamation (BOR) funding, to create a Design Concept Report for the Goodyear Brine Management Wetlands Demonstration project. A pilot project has been operated at Goodyear’s RO facility since 2010 to evaluate using vertical flow wetlands to remove regulated constituents, such as arsenic and selenium, from the concentrate. The City has worked with BOR on an innovative approach to manage the concentrate discharge from the City’s RO facility.

The study results from this TA project provided pros/cons for using three different water sources as a blending supply for the treated brine concentrate. Goodyear now has a sustainable solution for disposing of brine concentrate. Wetlands will be added to the Estrella Mountain Regional Park, saving potable water that would otherwise be needed to create green space and water will be provided to the El Rio River Restoration project.

#### **Q Mountain Mobile Home Park**

**Population: 400**

#### **Pipeline Replacement and Upgrade**

**TA Amount: \$30,000**

**Project Results:** The Mobile Home Park retained an engineering firm for hydraulic modeling, water loss calculations, and rate analysis. In addition, the firm completed a design and cost estimate for the replacement of distribution and metering systems for 245 consumers. The final work product was a Preliminary Engineering Report and development of a program for a complete meter replacement.

### **Q1 2017**

#### **Town of Clarkdale**

**Population: 4,097**

#### **Upper Town Water Main Replacement Project**

**TA Amount: \$35,000**

**Project Results:** The Town utilized WIFA's TA funding to create construction design plans for Water Main improvements in Upper Town, including expansions to 8 inch and 12 inch water mains. With these plans the Town of Clarkdale has received an Approval to Construct from Yavapai County Developmental Services. The Town utilized a WIFA loan to fund the construction of the water main replacement project. The construction is nearly complete, allowing the Town to improve efficiency and reliability to the water distribution system.

#### **Monte Vista Water Company**

**Population: 85**

#### **Arsenic Removal System Design, Permitting, and Training**

**TA Amount: \$30,865**

**Project Results:** With this technical assistance award, Monte Vista Water Company created an arsenic treatment system and tank design plan to address arsenic MCL exceedances. With the deliverables, the Company plans to install an arsenic treatment system to reduce arsenic to acceptable levels, providing safe and reliable drinking water to the community.

### **Q2 2017**

#### **Town of Eagar**

**Population: 4,885**

#### **12<sup>th</sup> Street Water and Tank Rehabilitation**

**TA Amount: \$20,997.60**

**Project Results:** Three of the Town's water tanks are in a dilapidated condition and in need of rehabilitation. Technical Assistance funding was used to create a Basis of Design Report to evaluate the water storage evaluation options, produce a Tank Inspection Report for the current tank conditions, and develop specifications for rehabilitation. The Town will use these deliverables to make much-needed rehabilitation and repairs to three of their water tanks.

**Horizon Six Improvement District****Population: 593****Horizon Six Booster Station Analysis and Design****TA Amount: \$34,280**

**Project Results:** The water system, including the booster station, is over 40 years old and at the end of its service life. Due to its age, the District has seen a sharp increase in the amount of maintenance and repairs required to the booster station, including leaking pipes, pressure tank deterioration and pump and check valve failures. Technical Assistance funding was used to create a technical memorandum of the water system's current conditions and to recommend improvements. The primary recommended improvement is a new booster pump station to replace the deteriorated one which, in its deteriorated condition, no longer allows permanent repairs.

**Kachina Village Improvement District****Population: 2,622****Kachina Village Improvement District Water Master Plan****TA Amount: \$35,000**

**Project Results:** By supplementing WIFA's Technical Assistance award, the Kachina Village Improvement District created a Water Master Plan. This Master Plan details the current quality of existing infrastructure, demand projections, and a recommended timeline for capital improvements. The District will use this Master Plan to develop a long-term strategy for success, especially as it relates to increased efficiency and financial responsibility.

**Harrisburg Utility Company, Inc.****Population: 959****Planning and Design for Replacement of Failing Water Storage Tank****TA Amount: \$10,800**

**Project Results:** One of the utility's three water tanks is seriously deteriorated and is leaking. This tank has been taken out of service but needs to be replaced so the utility has sufficient storage capacity. With the deliverables, the Company plans to install a new storage tank to replace the old one that is no longer in use. Reliable storage will reduce the frequency of water outages.