

## Current Projects 1-16-18

### **Cities of Clearfield & Prescott Water System Upgrades**

The SIRWA Board of Directors, at their December 21, 2016 Board meeting, approved the funding package from the United States Department of Agriculture – Rural Development (USDA-RD). Below is the proposed schedule for the project.

• File Engineering Report with the IDNR and USDA-RD	November 2016 (Completed)
• Obtain Funding Agreement from USDA-Rd	December 2016 (Completed)
• Enter into Engineering Service Agreement	March 2017 (Completed)
• Complete Geotechnical Exploration at Tower Sites	August 2017 (Completed)
• Complete Engineering Design	December 2017 (Completed)
• Apply for Construction Permits from IDNR	December 2017 (Completed)
• Conduct Bid Letting for Project Construction	March or April of 2018
• Begin Construction of Improvements	June 2018
• Complete Construction of Project	May 2019
• Project Closeout	July 2019

SIRWA has received a funding package from Rural Development that will allow us to replace the entire distribution system including the water mains, hydrants, valves, etc., as well as constructing a new water tower in both of these cities.

For the City of Prescott, we will construct a new 50,000 gallon water tower that will be located in the NW corner of the city. A new pumping station will be located just north of the railroad crossing. The new tower will serve a small portion of the rural area.

For the City of Clearfield, we will be constructing a new 200,000 gallon water tower located by our existing pumping station in the NW corner of the city on land donated by Iowa Cage Free, LLLP. A large portion of the rural area will be switched over to the Platte service area and tower and a section SE Taylor service area will be moved to the new Clearfield tower.

Both cities and surrounding rural areas should benefit from being on larger water towers where they will have more water pressure as well as more storage capacity. The telemetry system for both systems will be upgraded as well.

## Completed Projects

### **Spaulding Pressure Zone and System Wide Updates**

The SIRWA Board of Directors has taken action to accept the Rural Development funding package of \$10,070,000 to pay for this project. The project consists of a new pressure zone located in Union County, northwest of Creston. The new Spaulding pressure zone will require construction of a new 250,000-gallon water tower, along with a pump station and several miles of distribution main. When this part of the project is completed, it will take the stress off of the three other pressure zones that currently have very high usage during peak periods.

We will also be strengthening several other pressure zones throughout our distribution system with this project. This will be done by paralleling water mains and/or interconnecting the water mains in different pressure zones. Our policy is not to add any additional customer(s) that may cause pressure issues for existing customers. SIRWA currently has several areas where we have difficulty with even adding another household service because there would not be enough pressure. With the proposed upgrades, we should have ample capacity throughout our distribution system for additional services.

Bidding for this project happened on April 28<sup>th</sup>. The divisions are listed below:

○ Division 1 – New Water Tower NW of Creston	\$ 669,000.00
○ Division 2 – Pump Station at the Office & Generators	\$ 732,392.00
○ Division 3	
○ A – New Piping Improvements (West)	\$ 2,233,588.75
○ B – New Piping Improvements (East)	\$ 2,699,736.35
○ Division 4 – Seventeen (17) Monitor Meter Install and/or Replacement of Meters & Meter Pits	\$ 250,000.00

All water mains are now installed throughout the entire original project. The pumping station at the SIRWA office is now completed. The 250,000 gallon water tower is now complete and in use.

Because the bids came in under the engineers estimate SIRWA used the extra money to fund a project in Adair County we called 3C. This project is replacing some of the original Adair Project water lines north of Highway 92, just east of Greenfield. Eatherly

Constructors has completed installation of the water mains and service lines. This project is completed other than some seeding that will take place in the spring of 2018.

### **Cities of Bridgewater and Blockton Water System Upgrades**

Over the last several winters SIRWA had numerous water leaks in the cities of Bridgewater and Blockton as both of their water systems were installed in the 1940's. SIRWA has received a funding package from Rural Development that will allow us to replace the entire distribution system including the water mains, hydrants, valves, etc., as well as constructing a new water tower in both of these cities. Garden and Associates engineering firm has completed the plans and bid documents.

Bids were taken on June 16<sup>th</sup> and the SIRWA Board of Directors approved the contractors at their June 17<sup>th</sup> Board meeting. The divisions are listed below.

- Division 1 – New 50,000 gallon water towers in Bridgewater and Blockton – Phoenix Fabricators, Inc. - \$622,510
- Division 2 – New water distribution system piping in the City of Bridgewater – Max Smith Construction - \$645,746
- Division 3 – New water distribution system piping in the City of Blockton – Great Plains Contractors - \$748,134
- Division 4 – Removal of the existing water towers in Blockton and Bridgewater – Iseler Demolition, Inc. - \$41,100

Both projects in each city are now completed.

Total cost of the project is projected to be \$2,822,000 with loan and grant funds from USDA-RD being used to fund the project.

### **Fixed Based Meter Reading/Telemetry Upgrade Project**

With this project, SIRWA installed an Automatic Meter Reading (AMR) system throughout our entire service area. All water meters were outfitted with a radio transmitter called an "End Point". Each meter now sends its reading to a series of water towers where a "TGB" is installed. The TGB relays this information back to the SIRWA office. We can now read almost every meter, at least once per day.

We also upgraded our telemetry system to coincide with the fixed based meter reading system. The original telemetry system was installed in 1994 and is no longer supported with today's technology. The telemetry system allows SIRWA personnel to monitor the water level in each of our forty water towers, remotely control pump station settings, monitor pressures and flows throughout our distribution system, and provides the ability to access information that is essential in day-to-day operations of the water system.

This project is now complete.

### **Corning/Creston Interconnect:**

#### **Transmission Line between Water Sources of Corning Municipal Utilities and Creston City Water Works**

With this interconnect in place, we can now flow water from an alternate source if we have a problem with one system. This will help keep our customers in water service in the event of major leaks, etc. This project will also help strengthen the pressure in our distribution system for our Adams County zone. This project is now complete.

### **Creston Water Treatment Plant Upgrade**

The Creston Water Treatment Plant provides approximately 80% of the water SIRWA sells to its customers. The Creston Water Works (CWW) and SIRWA partnered to upgrade the treatment system from sand filters to membranes and have upgraded the treatment plant capacity from 6 million gallons per day (MGD) to a maximum of 9.2 MGD. Since SIRWA will have roughly 79% of the capacity in the new treatment plant, we provided the funding for 79% of the treatment upgrade costs and 100% of the capacity upgrade costs. The project is now complete.

### **Southwest Ringgold County – Sanitary Sewer System for the Communities of Redding, Delphos, Benton & Maloy**

SIRWA installed a low-pressure sewer system in southwest Ringgold County which consists of individual grinder pumps at each home. The individual grinder pumps then move the waste to a centrally located lagoon system that was also part of the project. Any residents along the route of the forced sewer main were also given the opportunity to connect to the sewer system. The project was bid in early 2012. All construction has been completed and the residents of Redding, Delphos, Benton and Maloy are now connected to sewer service provided by SIRWA.

### **City of Ellston Sanitary Sewer System**

SIRWA has installed a low-pressure sewer system which consists of individual grinder pumps at each residence. These pumps will force the waste thru small diameter PVC pipes to the existing wastewater lagoon system which is owned and operated by the Sun Valley Lake Sanitary District. Construction has been completed with 32 wastewater services installed.