



# THE Pipeline

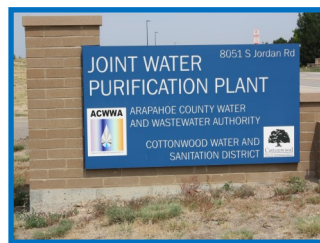
YOUR CURRENT WATER INFO SOURCE

**FALL 2016**

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## ENHANCING WATER QUALITY



**ACWWA's  
JWPP**



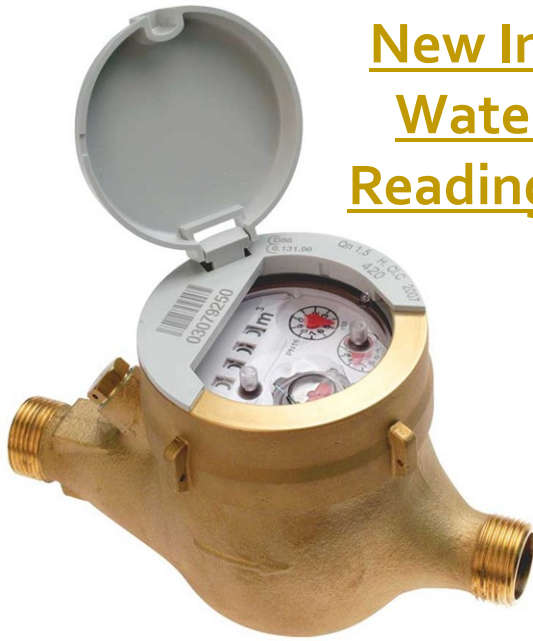
The **Joint Water Purification Plant (JWPP)**, located at 8051 S. Jordan Rd., is a cooperative facility owned by ACWWA and Cottonwood Water and Sanitation District (CWSD). The plant was originally designed and built with an advanced technology filtration process called Reverse Osmosis or "RO." The RO process provides a high quality drinking water by filtering virtually everything in the original water source. This rejected water is discharged back to the stream. In order to protect the environment, the Colorado Department of Public Health and Environment (CDPHE) requires a Discharge permit to monitor and limit constituents in this discharge. Unfortunately, the concentrate from the JWPP exceeded the allowable level for selenium. Selenium is limited to protect fish and other aquatic invertebrates in the stream.

Because ACWWA and CWSD could not operate the RO filtration system without meeting the limit for selenium, the water treatment process at the JWPP was changed to bypass the RO units and only utilize microfiltration in 2012. This required some minor modifications as the microfiltration units were already a part of the original treatment process. Microfiltration is an approved CDPHE process that treats water to meet all drinking water standards. While it meets all drinking water standards, ACWWA desires to continue to improve the water quality coming from this treatment plant to reduce the hardness levels in the water that can be noticeable by our customers.



In order to improve water quality, ACWWA and CWSD have been researching solutions that would allow substantial use of the RO process once again. For that to happen, the selenium in the reject water must be lowered before it can be discharged into the stream. One of the proposed solutions to reduce selenium concentrations is a biological treatment process which is made of materials commonly used in yard landscaping. This project has received a substantial grant from the Colorado Water Conservation Board. Currently a pilot unit to test the process is operating at the JWPP. Once the results confirm the predicted selenium removal, a meeting with CDPHE will be scheduled to discuss the possibility of issuing a new permit which would comply with State and Federal standards. We are dedicated to providing quality water supply and as more information becomes available, we will keep our customers informed.

## New Improved Water Meter Reading Process



ACWWA is undertaking the conversion of approximately 4,000 of our existing water meters from an older technology "touch-read" type meter to the newer electronic "radio-read" type water meters. This is an ongoing improvement for ACWWA to provide a faster, better method of reading water meters.

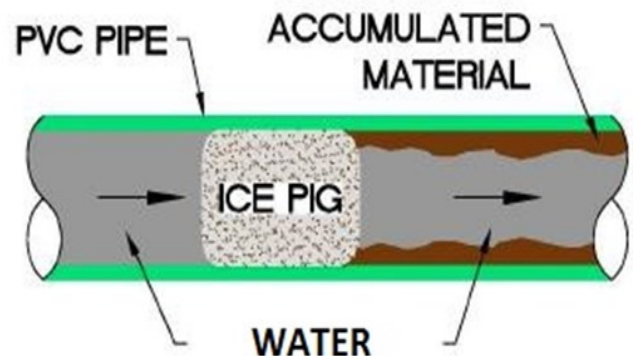
All of ACWWA's customers have a water meter installed which measures the quantity of water used at each home or business. These water meters are read every month to determine the amount of water used by each customer. The reading of the water meter is one step in preparing the consumptive use portion of the water bill for each and every customer. When the original water meters were installed, the technology of the day was to use what is termed a "touch read" register. This type of meter requires the ACWWA water technician to touch the top of the meter pit to transfer the collected data to an electronic recording device. While this was a vast improvement

over the manual reading of numbers off the old style water meter, it can be difficult during the winter months when there is snow and ice covering the meter pit. The new method will enable the water technician to drive by the meter, and a vehicle mounted computer will send a signal to "wake up" the meter. That electronic signal then collects the data from the water meter. Not only is this efficient, it is less time consuming to collect the same data as before. ACWWA's goal is to convert the entire service area to this type of data collection for all water meters. ACWWA is converting meters over time, and as funds permit. In the end, the "radio-read" type meter will provide very high quality information, will be much more efficient, and will take much less time for the ACWWA water technicians to complete their task.

## **Update** on the **Enhanced Water Main Cleaning Process**

ACWWA embarked on new method of cleaning a portion of the water mains in our distribution system during May and June. ACWWA contracted with the Utility Service Group (USG) to provide an enhanced water main cleaning process termed "Ice Pigging" to thoroughly clean the inside of 65,000 feet of water main piping in selected areas of our distribution system. This process was developed in Europe and has been available in the United States for a few years. ACWWA provided the logistics and support to use this highly effective cleaning process.

The water supply for ACWWA consists in part of groundwater wells which supply our customers with safe, reliable water. This type of water, used extensively in the South Metro area of Denver contains trace particles of iron and manganese. The water supply complies with all requirements of the Colorado Department of Public Health and Environment for public water supplies, but because there are trace levels of minerals in the water, over time these minerals tend to settle out in the water mains and require removal periodically. ACWWA normally flushes this material out of the pipelines on an annual basis, but the normal flushing process does not fully remove these particles. This new process, "Ice Pigging", consists of inserting an icy slush into the water main in a controlled manner, and extracting the icy slush after it has travelled through the pipelines. The icy slush traps the particles in the ice mix and the ice particles scour the walls of the pipe to provide the enhanced cleaning that is needed for certain areas of the distribution system. The ice material is then discharged into the sanitary sewer system and is treated at the Lone Tree Creek Wastewater Treatment Facility.





In 2015, the ACWWA Board of Directors commissioned a cost of service study to review our rates and rate structure. Cost of service studies are utilized to develop the appropriate rates required to generate adequate revenue for maintenance of our infrastructure, and to fund future capital needs and debt obligations. ACWWA worked with Carollo Engineers to develop rates and a financial plan based on our 20-year capital plan to help ensure that ACWWA is properly positioned to continue to provide reliable water and wastewater service to current and future customers. This study was completed in early 2016 and can be found in its entirety on our website, [acwwa.com](http://acwwa.com) under the Customer Service tab.



ACWWA reads every customer's meter during the third/fourth weeks of each month. The reads are then uploaded to our billing system and bills are generated and mailed during the first week of the subsequent month. Property owners can opt to receive invoices via U.S. Mail, email or both. To change your delivery method, please email your requests to [billpay@acwwa.com](mailto:billpay@acwwa.com) and please include the address and account number.

To include a tenant on the billing statement, as an owner you need to complete an Account Authorization form. ACWWA will provide an e-invoice to the tenant at no charge. If a paper copy of the bill sent via U.S. Mail is necessary, ACWWA charges a \$1.00 Duplicate Bill Fee, which will be added to the bill each month.

**All bills are due upon receipt and are considered late if received after the 25<sup>th</sup> of the month.** Any amount on your account will be assessed a late payment penalty of 25% up to a maximum of \$15/month.

You can pay your bills any number of ways as follows:

You may come to our office at 13031 E. Caley Ave., Centennial, CO 80111, where ACWWA accepts:  
Cash, Personal Checks, Money Order or Credit Card payments.\*

You may mail your Personal Check payment, using the return envelope that comes with the bill to:



You can also sign up for Automatic Payments. An automatic payment is made on the 20<sup>th</sup> of each month (or the closest business day after) through **Electronic Funds Transfer (EFT)**. You first need to complete an EFT Form and return it to our office along with a voided check.

Please visit our website at [acwwa.com](http://acwwa.com) to access the forms you may need.

\*There is a 2.75% convenience fee assessed on all credit card payments made to ACWWA, which is charged by Point and Pay Payment Processing Solutions. ACWWA in no way benefits from this fee.





## How to prepare your irrigation system for winter weather

The sprinkler system is the one part of the landscape that can be totally destroyed by a lack of preparation before winter. Irrigation pipes can burst and sprinkler heads shatter if there is water left in the system to freeze. Landscapers offer a fall blowout service to prevent problems.

### ◇ Fall winterization steps

In fall, the main goal for the sprinklers is to make sure there is no water left in the system, and that any complex moving parts have been removed or protected, from potential freeze.

### ◇ Unplug the timer

All of your hard work will be for naught if your timer comes on the next day. The timer can be damaged by power surges in winter if left plugged in.

### ◇ Vacation homes, turn off the main water valves

If your landscapers are preparing the property for winter, they should turn off the main water valve.

### ◇ Remove backflow preventer

The backflow preventer is above ground, so this needs to be removed every winter. The tiniest bit of water can break the moving parts inside the backflow.

### ◇ Protect your pump

On systems where the water is taken from a well using a pump, you'll need to take steps to protect the pump.

### ◇ Blow out the water

Sprinkler systems in cold climates are installed with outlets so your landscaper can use a commercial compressor to blow every bit of water out of the system. It is important to completely drain the system to protect your investment.

