PINERY PIPELINE



From your board of directors

One of the advantages to being on the Board of Directors of the Pinery Water and Wastewater District (PWWD) is to see the inner workings of the Board of Directors and PWWD employees and how everyone is working together. The District is constantly working to give our customers an **education on water** (where we get our water), provide high **water quality** (disinfection), maintain a reasonable **water rate and fee schedule** (update regularly), keep **water conservation** relevant (Conservation task force and BEACON Eye On Water), provide information regarding **watering your yard** (winter watering, winter kill, sprinkler system care), **plan for future water requirements** (the Wise Project) etc. The goal has been to provide water at the lowest possible rate without sacrificing quality, dependability or service. These are some of the savings that the District has made in the past year.

<u>Wise Project</u>: By partnering with Parker Water and Sanitation District and surrounding developments, the District has saved the cost of building a new pipeline (budged at \$1.5M) from Stroh Road to the Chapman Pump Station.

<u>Chapman Pump Station</u>: The District saved over \$2M from the estimated cost of construction of the pump station. The money has been put to a new project (that would have needed to be funded by water rates) to replace the oldest pipelines in the District that have had several main line breaks in the past 10 years.

<u>Water Conservation Master Plan</u>: Many Districts hire a consultant to prepare master plans for their organization, costing the organization upwards of \$200K. This update to the Water Conservation Plan was done by in-house staff with the help of a Conservation Task Force comprised of our District residents.

<u>Bill Printing</u>: Over the past couple of years the staff has refined the billing process. It used to cost the District over \$4,000 each month to print and mail bills. With the new billing software in place and a careful selection of our printer, it now costs the District \$1300 / month to print and mail all 4,400 customer bills.

Negotiating Equipment Cost by Staff: Many times the staff will budget for a particular piece of equipment only to find that the current price is steeper than expected. Just recently, a quote for a critical piece of equipment came in too high and District staff negotiated with the contractor to reduce the cost by \$9K. The staff has worked hard to reduce costs. The money that is saved on a project goes to (1) other projects (current or planned) or (2) goes back into the fund balance to reduce the amount of potential future water rate increase.

Russell Hokanson,

Board Member, Pinery Water and Wastewater District Board of Directors

Please join us at our District Office for our regularly held Board Meetings at 6:30pm on the 3rd Wednesday of each month.

Our next Board Meeting will be held at 6:30pm on Wednesday, May 16, 2018

Outdoor watering season is here! Visit pinerywater.com/conservation for the 2018 Voluntary Watering Restriction Schedule!

2018 WATERING SCHEDULE

PINERY RESIDENTIAL & COMMERCIAL CUSTOMERS

Sunday

EVEN Numbered Addresses

Monday

ODD Numbered Addresses

Tuesday

EVEN Numbered Addresses

Wednesday

ODD Numbered Addresses

Thursday

EVEN Numbered Addresses

Friday

NO WATERING

Saturday

ODD Numbered Addresses

No watering between 10 AM & 6 PM

* Hand watering allowed anytime



The Grand Tour

Have any of you ever heard the term "Bardenpho"? No, it's not a new online search engine, it's a process that Pinery wastewater undergoes before it's returned to the environment. It's also one of several fascinating aspects of water treatment which we members of the Water Conservation Task Force learned in our recent tour of our water treatment facilities.

Providing clean water to our homes is only half the battle. The water we use must be cleaned up when we're finished with it, which requires a separate set of infrastructure. This task is accomplished by a state-of-the-art treatment facility. For example, the process to remove phosphorus from wastewater is among the most stringent in the U.S.

One of the biggest surprises of the tour of this facility was learning that the heart of the clean-up process was accomplished biologically rather chemically. Bugs do the



work! Some 36,000 pounds of microbes are used to breakdown waste during the six stage Bardenpho process.

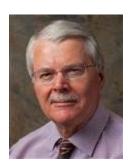
One of the most attractive aspects of this process is environmental. The byproduct of the Bardenpho process is nitrogen, which comprises about 80% of the air we breathe. In addition, all the bacteria used in the process occur naturally in the environment. In the words of Kevin, the facility manager, "Wastewater treatment is an inaccurate term. We're more of a water recycling facility."

Do you ever wonder where our water comes from? We turn on a water faucet in our homes, and out flows fresh, clean water whenever we want it - Magic! Well, not exactly. Water comes to us via a series of complex processes that become ever more challenging as our water requirements increase over time.

Unlike a large city such as Denver, which gets water largely from the West Slope and the South Platte River, all our Pinery water is sourced from wells that tap into subsurface aquafers. Some of you may have noticed small sheds along the roads through our neighborhoods. Many of those sheds house pumps that provide water to the Pinery through an extensive complex of fresh water lines.

And we must share! For example, the volume of water we take from the Cherry Creek alluvial aquafer is limited by the state of Colorado because other municipalities depend on that water as well. Our water use is closely monitored and reported to regulatory agencies.

By the way, did you ever wonder why there are no water towers in the Pinery? Water pressure is created in water towers by the height of their tanks, which is why they're so common in the flat terrain of eastern Colorado. In the Pinery, water is stored in underground reservoirs located on our hills. Water pressure is created by simply letting water flow downhill. But it's not that simple at all. Due to our variable terrain, Pinery Water monitors ten separate pressure zones and 16 active pressure reducing valves to maintain uniform water pressure to our homes.



In conclusion, the facilities tour is not only educational, but eye opening as well. The scope of operations the staff undertake is much broader, complex and technically demanding than I would have imagined. Tours are open to the public and I invite you all to go see for yourselves. As Star Trek's Mr. Spock might say – "Fascinating!"

Many thanks to Russ, Dan, Kevin, Shannon and Heather at Pinery Water.

Chuck Hinson,
Water Conservation Task Force Member

Pinery Water and Wastewater District Contact Information: