



Fall 2016 News

Drinking Water Distribution Systems

Our water systems have hundreds of miles of transmission, distribution and service lines. Hundreds of valves and fire hydrants, reservoirs and pumping stations which move water from our treatment plants to homes, offices and industries in our service areas. These systems allow us to provide an uninterrupted supply of pressurized safe drinking water to our consumers.

As these systems age, deterioration can occur due to corrosion, materials erosion, and external pressures that result in water main breaks, storage tank leaks, water pressure fluctuation, and other situations that can pose intermittent or persistent health risks.

Therefore, these systems need to be maintained year-round to ensure that we are able to deliver high quality drinking water to our customers. This is largely done through the conscientious operation and maintenance of the system facilities and includes both preventive and corrective maintenance.

Preventive maintenance is maintenance that is specifically scheduled, while corrective maintenance is not scheduled but is done when a problem, such as a main break, must be corrected to continue satisfactory operation.

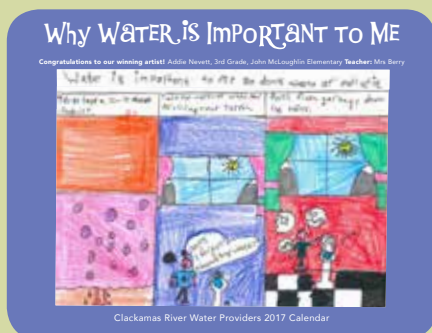
Some examples of ongoing operation and maintenance programs include: Water Main Flushing programs, Leak Detection programs, and Meter Maintenance programs. For more information about "How Our Water Systems Work" Visit our website at www.clackamasproviders.org.

What's Inside:

Distribution Systems	P1
Water Calendar	P1
Watershed Tour	P2
Preparedness	P2
Day Without Water	P3
Closing Irrigation	P4
Interview	P5



CRWP 2017 Annual Water Conservation Calendar



2017 Calendar Cover Winner
Addie Nevett, 3rd grade,
John McLoughlin Elementary

2017 Water Calendars are available! Each year the Clackamas River Water Providers hold a coloring contest with local elementary schools in our service areas to create an annual Water Conservation Calendar. This year we had 17 classes from 8 different schools participate in the contest with close to 600 entries for the 2017 Calendar.

The theme for the 2017 calendar was "Why Water Is Important To Me". Thirteen pictures were chosen from all the entries submitted and were used to create the calendar. Students were encouraged to create pictures depicting what they had learned about water.

Each school that participated in the contest receives a box of calendars to give away to students and families or to use as school fundraisers.

The 2017 calendars are available at CRWP member offices, libraries, and city halls, or by calling us at **(503) 723-3511**.

2016 Annual Watershed Tour

Each year the Clackamas River Water Providers host a tour of the Clackamas River watershed for elected officials from CRWP member agencies, interested citizens, and the citizens in CPO's and Neighborhood Associations in the CRWP service area. The purpose of the tour is to connect our citizens and policy makers with a direct experience in the Clackamas River watershed (our source of drinking water), and to introduce them to some of the CRWP partners and stakeholders.

This year's tour was held on Saturday, October 1st, 2016 and focused on the lower portion of the Clackamas Watershed. The day began with a tour of the new and nearly finished Lake Oswego/Tigard Partnership water treatment plant and intake structure. We went on to a Water Environment Services

restoration project along Carli Creek. Lunch was served and a presentation from the Clackamas Fire District #1 took place on their Hazardous Material Spill Response truck and equipment. A site visit with Cheryl McGinnis from Clackamas River Basin Council at Fisher's Bend showcased their restoration project along the Clackamas River. The final stop was at Sycamore Lane to show what the Clackamas Soil and Water District has done to help them effectively manage their manure.

All transportation, meals, snacks and beverages were provided by the Clackamas River Water Providers. Next year we will be touring the upper portion of the Clackamas River watershed, if you are interested in joining us please contact the Water Resource Manger at **(503) 723-3510**.



A Partnership to Cultivate

a Culture of Preparedness

There are several emergencies that could result in a water supply shortage: seismic event, drought, forest fire in our watershed, severe flood, a chemical spill into the Clackamas River, or a system/facility failure. In an effort to help our customers **Be Water Ready** and promote a culture of



preparedness, the Clackamas River Water Providers in partnership with the American Red Cross gave away Free 3 gallon BPA-free plastic storage containers to CRWP member water customers. These bottles will allow our customers to be able to store water in the event of an emergency.

Due to a limited supply customers were required to pre-register for bottles until supplies were depleted. Do to an overwhelming interest in the program we ran out of bottles within a week. At the end of September a Distribution Event was held at Riverside Park allowing people to come pick up the bottles they ordered. Over two days we gave out almost 1,000 water bottles.



For every bottle given away the Clackamas River Water Providers donated \$1 to the American Red Cross. This gift enables the Red Cross to prepare for, respond to, and help people recover from disasters big and small.

If you would like to be put on the notification list if we implement this program again in the future please contact Kim Swan at kims@clackamasproviders.org.

Conservation ~Tips~

**From Addie Nevett, 2017
Winner of the Calendar Contest**

*Teacher: Mrs. Berry, 3rd Grade,
McLoughlin Elementary*

Addie's 3 Water Saving Tips:

- A.** Take a 10-15 minute shower.
- B.** Turn water off when brushing your teeth.
- C.** Don't flush garbage down the toilet.

Imagine a Day Without Water

Taken from 'Value of Water Coalition',
Day Without Water, September 15th, 2016

The Value of Water Coalition declared September 15th to be a national day of action through their National Imagine a Day Without Water Campaign which aimed to raise awareness about the essential role water plays in our lives, and the threat that aging and underfunded water infrastructure poses to our communities and economy.

Most of us take water, and the systems that bring it to our homes and businesses for granted. We turn on the tap, and safe reliably drinking water comes out, 24/7, 365 days a year.

Can you imagine a day without water?

A day without water means no water comes out of the tap to brush our teeth. When we flush the toilet, nothing happens. It means firefighters have no water to put out fires, and doctors couldn't wash their hands before they treat patients.

A day without water is nothing short of a crisis. While unimaginable for most of us, there are communities that have lived without water, without the essential systems that bring water to their homes and businesses. The tragedy in Flint, Michigan has dominated news coverage for months. Epic drought in California has dried up water sources causing some residents to relocate because they can't live in a community without water. Flooding and other natural disasters have knocked out water and wastewater service in communities from Texas to South Carolina to West Virginia.

We Can Do Better. The problems that face our drinking water systems today are multi-faceted. Systems have been underfunded for too long. Our infrastructure is aging and in need of investment, while drought, flooding, and climate change all place extra pressure on our water systems. Different

regions face different water challenges, so the solutions to strengthen our drinking water systems must be locally driven. But reinvestment in our water must be a priority.

The good news is while the challenges are great, our capacity for innovation is greater. Public officials at the local, state, and national levels must prioritize investment in our drinking water. Investing in our drinking water systems secures a bright and prosperous future for generations to come.

None of this will be easy work, and nothing can be taken for granted. But water is too essential to ignore the crisis that is in front of us. We need to prioritize building stronger water systems now so none of our communities have to imagine living a day without water.



Fall Quiz:

Answers - Can be found on page 4.

1. In what month does the Clackamas River Water Providers annual watershed tour take place?

- A. September
- B. October
- C. August
- D. November

2. In September, what was the CRWP giving away for Emergency Preparedness?

- A. A booklet
- B. A back pack
- C. A water voucher
- D. 3-gallon water bottle

3. Which is NOT a method of draining water out of a lawn irrigation system?

- A. Using manual valves
- B. Using automatic valves
- C. Have the backflow assembly tested
- D. Mechanically blowing the water out of the system

4. What is the theme of the 2017 CRWP Water Calendar?

- A. "What Do You Know About H2O?"
- B. "How Do You Conserve Your Drinking Water?"
- C. "Why Water is Important to Me?"

Putting your irrigation system to bed for the winter

Water left in the pipes of your irrigation system can freeze over winter, causing damage to the entire system. You owe it to yourself to make an annual habit of winterizing your irrigation system when you're done watering for the year. That means removing the remaining water from the pipes so there's nothing to expand when temperatures dip down below freezing.

There are three basic methods for draining leftover water from your irrigation system. Which method you should use will depend on the type of irrigation system you have in place.

MANUAL VALVES

Some irrigation systems are equipped with manual drainage that allows you to empty excess water from the system by simply opening a valve. If you have such a system, shut off the supply of water to the system, look for the manual valves at the ends and low points of the piping. Open all of the valves and drain the water from the system, including the backflow assembly.

AUTOMATIC VALVES

Other irrigation systems are equipped with valves that will automatically drain water out of the pipes if pressure falls below a certain number of pounds per square inch. These can be activated by turning off the water supply and briefly running one of the sprinkler heads to relieve the water pressure in the system. You may still need to drain the water between the shut off valve and the backflow assembly. If the sprinkler heads are equipped with check valves, you will need to empty those separately.

BLOW-OUT

The final method is to force compressed air through the irrigation system to discharge excess water through the sprinkler heads. This method is potentially hazardous, both

to the wrong types of irrigation systems and to anyone who attempts it without taking the proper safety precautions. If you've never worked with compressed air or blown out an irrigation system we highly recommend you hire a licensed landscape professional.

For this method you'll need:

- an air compressor rated at 80-100 CFM
- a coupler fitting your system
- safety glasses

Shut down the water supply and connect the air compressor to the irrigation system using the coupler. Be careful to avoid blowing compressed air directly through the backflow device. Find the sprinkler station highest and farther from the compressor and turn it on. Close the backflow valves. Then slowly open the valve on the compressor, adding more air pressure gradually so that you can cut off the air supply quickly if needed. Do not exceed 80PSI and do not stand near an active head when blowing out your irrigation system.

You should see a spray of water from the active irrigation head. Starting with the furthest and working your way closer to the compressor, activate each irrigation head in turn, shutting them off again when the spray of water ends. When you've finished all of the irrigation heads, disconnect the compressor and release any remaining air pressure from the system. Open and close the valves on the backflow device to release any pent up air pressure there as well.

Winterizing your irrigation system is a critical part of annual irrigation system maintenance. It can save you from having to pay for the repair of costly leaks and water line breaks later in the spring.



Again, if you're not sure, or don't feel comfortable winterizing your irrigation system yourself, it is highly recommended you hire a licensed landscape professional for assistance.

Fall Quiz:

Answers

Question 1 - Answer is B

Question 2 - Answer is D

Question 3 - Answer is C

Question 4 - Answer is C

Faces of Drinking Water

An Interview with
John Collins - South Fork Water Board

Delivering safe reliable drinking water to our customers is our number one priority. Many different people from many different walks of life work hard every day to ensure the safe delivery of reliable drinking water to our homes, schools and business. Recently we visited with John Collins, the General Manager of South Fork Water Board, a drinking water treatment plant owned by both West Linn and Oregon City. We talked to John about his career in drinking water and what it means to him to be a part of the drinking water industry.

How long have you been working in the drinking water industry? I have worked in the water industry for the past 35 years, and in February 2017 I will be celebrating my 32nd anniversary with South Fork. I've been the General Manager at South Fork for the past 13 years.

What is your background prior to working in drinking water? In 1982 I went to work for the City of Forest Grove in the Public Works Department and I had the opportunity to work in the water treatment plant as a relief plant operator. I knew right away I wanted to be a drinking water treatment professional. When a position opened up at South Fork Water Board I jumped at the chance to work here and have never looked back.

What is your favorite part of your job? I really enjoy giving people an opportunity to have a career in the drinking water industry.

Do you plan on retiring with South Fork Water Board? Most definitely, but I still have a few years to go and a few more things we would like to accomplish before I retire.

What accomplishments are you most proud of in your career? The one thing that really stands out in my mind and what I always feel most proud of was our ability to keep the treatment plant running during the 1996 flood. Even with all that was going on with the river we were able to continue providing our cities with drinking water. Ninety-five percent of a treatment plant operator's time is spent with general day to day tasks and normal operations of the plant, but during that 5% of the time when the forces of nature drive what we do we are reminded of the importance of making safe, clean and reliable drinking



water. As the General Manager of a treatment plant it is satisfying to give others the tools and training to answer those kinds of challenges.

What advice would you give to someone starting out in this field? If you have an interest in being a treatment plant operator you need to do some soul searching. Being an Operator means you will have to work when most people are off, you will have to give up some holidays, birthdays, and sometimes evenings with your family. Providing drinking water is a 24/7 365 day a year job. People always need drinking water.

How has the industry changed since you started? Years ago operator certification was voluntary, not mandatory like it is now. Today water operators need a minimum of 2 years in college to apply for the highest level of certification. This change has brought credibility and professionalism to the drinking water industry.

What do you feel is most important about your job? To me the most important thing about my job is educating the public about their drinking water. The average person doesn't think twice about the water they use every day. I enjoy being in a position that allows me the opportunity to work with the other Clackamas River water providers on supporting a public education program that teaches our customers about the watershed, the river, the treatment process, and how important their role is in helping us keep their drinking water abundant and safe.

What would you like the public to know about their drinking water? I would like the public to know their drinking water is safe and we consistently meet all of the federal and state drinking water standards. My role is to facilitate the treatment and delivery of the public's drinking water.

What's the most significant project you have been involved in during your career? The creation of the Clackamas River Water Providers is a big accomplishment and I'm proud to be one of the people who created and supports this group.

What's the one thing you can't live without at work? Oh, most definitely my staff. They are hard working and wonderful people. They make my job as general manager much easier.

What would you say H2O is to you? Water has been a passion and force in my life for over 30 years. Water is what makes me tick, I do what I love and this career provides me with a vehicle to reach and connect with people.

What are the top priorities for your agency over the next few years? We are looking ahead and actively planning for our future needs and making sure our critical infrastructure is up to standards so when emergencies happen we can continue to provide water to our customers.

What is the biggest challenge facing your organization in the next couple of years? I would say that protecting our water rights and responsibly planning for the future needs of our Cities.

Many utilities are struggling with the need to raise rates for their services. How is South Fork approaching this? **What are the keys to your success?** We are really fortunate in that by the end of this fiscal year, South Fork will be a debt free utility. Over the years we have raised wholesale rates by small increments based on our projected capital needs. While we can't predict energy and chemical costs, we work hard to control what we can through responsible fiscal management.

If you could change one thing about state and federal regulatory programs, what would that be? I would like to see the State have sufficient resources to effectively manage their primacy program. As drinking water regulations have increased, the funding and tools to effectively implement and manage these

(Continued on next page)

Faces of Drinking Water (Continued)

What is something people might be surprised to know about your agency? West Linn is a city in part because of South Fork Water Board. Their community needed to incorporate in order to get the funding they needed to obtain their drinking water in partnership with Oregon City.

What is on your "To Do" list? Right now one of the things I'm working on is succession planning. In addition to myself, nearly half of my staff are planning retirement in the next five years. I want to leave South Fork in good hands so it can continue to successfully move forward and meet the demands of the future.

What do you do for fun when you're not working? I really enjoy spending time with my wife and family. Over the past few

years Tara and I have had the opportunity to share some great travel experiences. I also will always make time for steelhead fishing, one of my long time passions.

John would like to express his appreciation of Dan Bradley for believing in him and encouraging him in this professional journey. He would also like to recognize the amazing public officials he has had the opportunity and honor to work with over his tenure as General Manager of South Fork Water Board.

We would like to thank John Collins for taking time out of his busy day to interview with us. We would also like to recognize his hard work in creating the Clackamas River Water Providers and the continued support of our organization. Thank you John!



Our Members:



www.cwater.com



www.cityofestacada.org



www.ci.gladstone.or.us



www.ci.oswego.or.us



www.oaklodgewater.org



www.sfwb.org



www.sunrisewater.com



www.tigard-or.gov

Christine Hollenbeck Public Education and Conservation Program Coordinator (503) 723-3511 christine@clackamasproviders.org
Kim Swan Water Resource Manager (503) 723-3510 kims@clackamasproviders.org