ODW Now

NOVEMBER 2023

Highlights

Notable Dates

DW Week Nominations Open 11/1

UW-ODW Climate Survey Closes 11/22

DWSRF Construction and LSL Inventory Loan Cycles Close 11/30

Next DWAG meeting 12/4

DWSRF DAC Definition Rule Making Listening Session 12/6

WFI Updates Due 12/15

LSL Inventory Must be Submitted by 10/16/24

Connections

The Office of Drinking Water Newsletter SIGN UP to get this in your inbox!

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Drinking Water Home Page

Waterworks Certification Renewal

The holiday season means three things for every certified waterworks operator:

1. Pay your annual renewal fee and get a new validation card.
2. Verify and update your contact information.
3. Check your professional growth report.

Fortunately for everyone, you can complete all three tasks quickly and easily on the Washington Certification Services (WCS) webpage!

WCS is excited to announce that they're launching a new website! The new site has better readability, functionality, and navigability. The certification renewal cycle will open with the new website on Monday, November 27. The final deadline for renewal is still Thursday, February 29 and any non-renewed certifications will expire Friday, March 1. Because of the late start to the renewal process, we will not apply any late fees this cycle.

Thank you for your patience and for protecting public health and our infrastructure investments.

Cybersecurity

The Cybersecurity and Infrastructure Security Agency (CISA) helps drinking water systems identify and address cybersecurity vulnerabilities with a no-cost vulnerability scanning service subscription. The scanning service helps you identify and address cybersecurity weaknesses in your water system's public-facing website or devices. CISA uses automated tools to look for vulnerabilities on your external networks. The scanning does not reach your private network. CISA then sends you weekly report cards with information about vulnerabilities found on your internet accessible assets. They send urgent findings immediately. Recommendations include mitigations for vulnerabilities. Find out more about this free service and how to sign up through CISA's Free Cyber Vulnerability Scanning for Water Utilities fact sheet.

Another no cost tool for public, non-profit water systems of all sizes is the Environmental Protection Agency's (EPA) EPA's Water Sector Cybersecurity Evaluation Program. This assessment generates a report that highlights cybersecurity deficiencies, potential gaps, and risk mitigation strategies for the assessed public water system.

UW-ODW Climate Impact Survey

Happy 2024 Water Year! The University of Washington Climate Impacts Group and Office of the Washington State Climatologist, in collaboration with the NOAA National Integrated Drought Information System, is asking for your participation in helping us document weather and climate impacts of the 2023 water year (October 1, 2022–September 30, 2023), for the Northwest (Washington, Oregon, and Idaho).

This short survey asks about impacts and response actions that were implemented during the 2023 Water Year due to either abnormally dry or abnormally wet conditions.

The survey takes about 15 minutes to complete and is open through Wednesday, November 22.

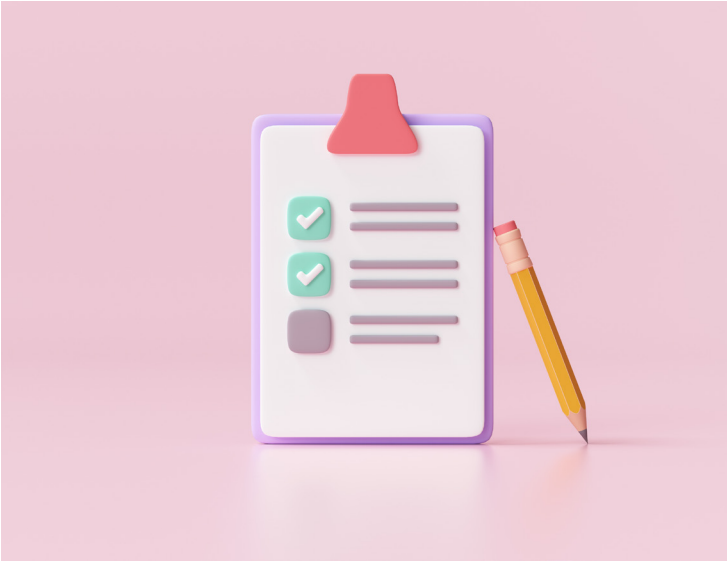
Your responses are vital for informing the PNW Water Year Impacts Assessment and we greatly appreciate your contributions!

Updated WFI Guidance—New Tools to Help Calculate Visitors and Regular Non-Residential Users

It's time to update your Water Facilities Inventory (WFI) for the largest systems in the state: Group A community systems with more than 500 connections. **Your update is due by December 15, 2023**, so please set aside time in the next six weeks to review, update, and send it to us. Updates for NW and SW should be emailed to wfi@doh.wa.gov. Updates for Eastern should be emailed to wfi.ero@doh.wa.gov.

Population Updates

We understand that non-residential populations—employees, students, and visitors—are difficult to quantify and time consuming for water systems to research. We're here to help! We have a couple of new tools we're developing that water systems can use to better estimate their population. In 2023, we'll work with the 15 largest systems in the state and solicit feedback so that we can improve the process and share lessons learned with everyone else.



- You can use the **State Average** to estimate visitors (Box 31 on the WFI). We've reviewed population data for every Group A system that is reporting it and calculated the average number of users per connection. Using the state average is a quick, easy way to calculate visitors so systems can focus on other priorities.
- You can use **Census Data** to estimate regular non-residential users (Box 32 on the WFI). We downloaded census data for 653 cities, towns, and census-designated places in the state that systems can use to estimate the number of workers that commute into the water system. No more hunting for census data tables, we'll deliver them to you.

If you already have a process in place for calculating these numbers, we'd love to hear about it and share it with other systems! The more tools in the toolbox, the easier it is for everyone. Please reach out to the emails listed below.

In the coming years, we'll ask you to re-evaluate the values you provided on the WFI form and compare them to the various data sets that are available. We'll work with you to determine a value for the WFI that makes sense for your system based on the data. Keep an eye out for the annual *Time to Update your WFI* email reminder for more details.

If you have any questions, please contact Brian Wilson at wfi@doh.wa.gov or your regional WFI Coordinator.

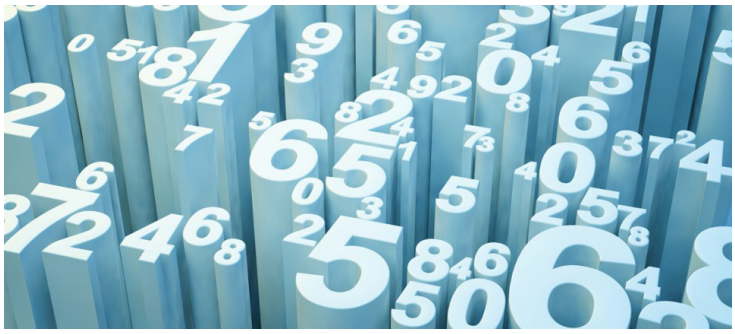
- Northwest—wfi.nwro@doh.wa.gov
- Southwest—wfi.swro@doh.wa.gov
- Eastern—wfi.ero@doh.wa.gov

Fun With Numbers

Every year we provide several reports to the Environmental Protection Agency. These reports cover a wide range of topics describing how we implement our mission, vision, and values. Some data points include:

Certified Operators

- 3,798 certified operators in Washington State and 2,262 with more than one type of certification.
- 1,545 certified Backflow Assembly Testers (BAT).
- 1,422 certification exam applications received and reviewed.
- 384 training courses approved for CEU that certified operators can apply to for operator professional growth requirements.
- 3,236 Group A public drinking water systems are required to have a certified operator in responsible charge of their operations.
- 99 percent valid email addresses for certified operators and BAT.



DWSRF

- $1.2 billion provided through over 750 loans since 1996.
- $80.9 million provided in principal forgiveness between 2011 and 2021.
- $117,844,094 provided to 24 infrastructure projects in 2022 Loan Cycle.

Sanitary Surveys

- 942 Sanitary Surveys completed in 2022.
- 478 Significant Deficiencies identified in 2022.
- 465 Significant Findings identified in 2022.
- 1,301 Observations and Recommendations made in 2022.

Publications and Required Document Reviews

- 309 engineering documents reviewed and approved.
- 86 Water System Planning documents reviewed and approved.
- 22 new publications developed.
- 35 publications updated or revised.

Samples and Violations

- 679 systems issued chemical monitoring and reporting violations Issues.
- 89 *E.coli* positive samples in 2022.
- 1,992 total coliform positive sample in 2022.
- 126,142 coliform samples results submitted in 2022.

New Alternative Drinking Water Program

Earlier this year, the Legislature included funding in the state's operating budget for the Office of Drinking Water (ODW) to assist with access to safe drinking water for homes and businesses with individual wells or small water systems that are contaminated. We requested the funds because aquifers in Washington are becoming more widely contaminated from both natural and manmade impacts like PFAS; nitrate; and industrial, commercial, or agricultural influences; as well as arsenic and uranium. The new Alternative Drinking Water program supports private water wells and Group B public water suppliers that address regional contamination events.

We are developing the new program and will have an open application period soon. The program provides opportunities for local health jurisdictions and communities to propose funding projects that will help provide safe and reliable drinking water for a short time while state and federal agencies seek long-term solutions through studies and remediation efforts. Our staff will provide technical assistance. Program activities may include water quality sampling, water delivery, lab analysis, or point-of-use filtration installation.

For more information, email odw-adwp@doh.wa.gov.

PFAS Conference Recording

If you were unable to attend the 9/19 & 9/20 PFAS conference, you can **watch the recorded Zoom video**. Click on session titles to watch individual parts.

Interview With an Operator

In 1996, Brian McDaniel earned his first operator certification in the state of Washington as a cross-connection control specialist (CCS). By serving various water utilities throughout the state, McDaniel continued to gain experience through wastewater and water operations. Experience and certification course work helped him earn certificates as a water distribution specialist (June 2001), basic treatment operator (BTO) (June 2001), water distribution manager 4 (Feb 2009), and water treatment plant operator 4 (June 2022). Currently on staff at the City of Anacortes water treatment plant, McDaniel spoke about his work and provided his thoughts about operator certification.

Like many operators, McDaniel initially worked for a small utility where he supported wastewater and water operations plus served as city dog catcher. That is, he did many tasks beyond water operations and maintenance. He found himself in friendly competition with a buddy where they challenged each other to seek higher certification testing. He always found on-the-job experience critical to his success. Certification testing held value, while learning on the job provided training that prepared him for passing the tests.

Currently in management, McDaniel finds himself updating operator job descriptions, creating policy, and writing procedures to help coworkers succeed in operations. One strategy for helping promote successful employees is by rewarding higher level operators with higher level pay. He offers rewards to those who improve their skills rather than simply rewarding longevity at the job. By rewarding skill achievement, McDaniel seeks to build a culture of success and hard work that avoids stagnation. He actively promotes a workplace where staff want to learn and progress upward in their job achievement. Internal candidates who successfully complete certifications are featured in the local utility newsletter McDaniel created.

The utility creates clear goals and milestones for each operator to achieve that next higher-level job. With on-the job training and support, operators can achieve these higher-level positions.

McDaniel suggests that utilities could also work with labor unions to allow apprenticeships to create more entry level positions.

McDaniel thinks that we are experiencing a new type of workplace culture—the electronic world of work. The older "fix it" model built on mechanical systems is being replaced with a newer, electronic model. Fixing electronic based systems requires a different set of skills than the older, mechanical, tool-based work world.

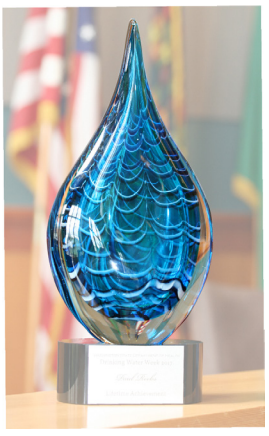
Brian McDaniel enjoys the drinking water world of operations and actively promotes success through his strong associations. He looks forward to bringing new certified operators into the fold.

2024 Drinking Water Week Nominations Open!

Is there a water system you're proud of? Do you know an outstanding waterworks operator? Nominate them for an award!

Anyone can nominate someone in the drinking water industry for an award, just fill out this nomination form. Some of the categories we use are below. We also adjust categories to fit special situations. We collect nominations November through February 16, 2024.

- **Above and Beyond**. Recognition for going above the normal call of duty and/or to provide assistance to neighboring water systems.
- **Commitment to Excellence**. For those who continuously strive for excellence in providing safe and reliable drinking water.
- **Grace Under Pressure/Perseverance Under Adversity**. For handling a crisis well or persevering under consistent challenges.
- **Lifetime Achievement**. Reserved for those who are retiring.
- **Most Improved**. Typically presented to water systems that overcome a bad situation and now provide excellent service.
- **Operator of the Year**. To recognize an operator for their dedication and commitment. They also help educate and mentor others in the water industry, lending help and knowledge where needed.
- **Most Innovative**. Presented to water operators/systems/organizations that come up with innovative solutions for challenges they face.



Read about Past Drinking Water Week Award Winners (PDF). For ideas about how to celebrate with your community, visit the American Water Works Association website.

Coliform Lessons Learned

If a water system is not disinfected, it is vulnerable to contamination. Water system boards and owners are vulnerable to a sudden public health threat, unforeseen costs, public notice requirement, customer distress, and staff stress.

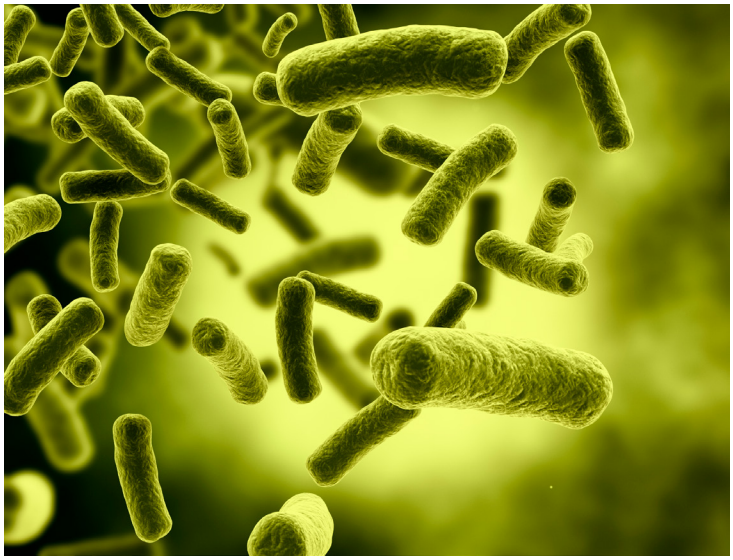
Receiving an unsatisfactory coliform bacteria sample can be nerve wracking. You immediately wonder, what is the problem and what do we need to do?

LESSONS LEARNED THAT MIGHT SAVE YOU TIME AND MONEY

Water systems caught unprepared for poor water quality events or facility failures are not set up for success. For non-disinfected water systems, an *E.coli* event will disrupt operations, staff time, finances, reputation, and planning.

Recently, a large, urban, non-disinfected water system had an *E.coli* maximum contaminant level (MCL) violation during Juneteenth Day weekend. This non-disinfected system lacked an important barrier to contamination. Closure of restaurants during festivities created a huge stress for operations and office staff, as well as political ramifications for management. As the system also has high manganese, its chance of distribution bacterial growth escalated as manganese buildup increased over the years. We directed the water system to either install treatment or purchase another source of clean drinking water. Fortunately, a neighboring water system had available water for the system to purchase. After a week of purchased water, the system was able to lift the advisory, rather than enduring months of a boil water notice while designing and installing treatment.

If a water system's governing body historically opposes disinfection treatment, they also face challenges in now describing their treatment requirement. Boards need to prepare for emerging contaminants, changing rules, and aging infrastructure.



Keep in mind that all systems are just two positive samples away from an *E.coli* MCL violation. We often require that systems provide disinfection treatment when they incur *E.coli* in sample results—or increase disinfection treatment to meet a higher standard.

Recent experience shows us that known conditions can lead to emergencies. A small camp facility had an old wood-stave storage tank. During the sanitary survey, this aging asset was mentioned as needing replacement. As the water system incurred an *E.coli* MCL violation, we could not rule out the storage tank as the source of contamination. The camp plans to replace the tank, but now must provide interim disinfection treatment.

Even with vigilant operations, water systems without disinfection remain vulnerable without the added treatment barrier. A long-term operator for a remote water system died suddenly. While he had dedicated himself to the operational and maintenance success of the system, coliform bacteria in the source and distribution now remain persistent. The community faces the high cost of designing system improvements, including adding disinfection to meet 4-log virus inactivation.

It is never too late to save for the future. For non-disinfected water systems or those with aging infrastructure, we recommend setting money aside for the design, installation, operation, and maintenance of disinfection treatment and facilities upgrades.

Please share this newsletter with anyone who might be interested. Sign up for future issues.

Read ODW Now online.

Washington State Department of HEALTH

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.