



# WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

## It's not 'if' but 'when' an emergency will happen to you

King County Water District 54 staff were stunned when they received lab notification that a routine coliform monitoring sample had tested positive for *E. coli*. They were so confident the lab result was due to a sampling error that they decided to wait for results of repeat samples instead of issuing a boil-water advisory right away.

On Sept. 21, the results were in. One of the repeat samples tested positive for total coliform. The water district had an acute violation on its hands – on a Saturday. It had 24 hours to get the word out to the 2,015 homes and 160 businesses within the district's boundaries.

As boil-water advisories go, this wasn't a pretty one. It required 39 food service establishments to shut down for five days, leading to lost income and upset customers. It caused the water district to add disinfection to its formerly unchlorinated system, an unpopular decision for some. And, perhaps most difficult of all for the water district, it generated an intense storm of news media coverage.

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Volume 28, #4 - December 2013

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Office of Drinking Water  
PO Box 47822  
Olympia, WA 98504-7822  
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<http://www.doh.wa.gov/drinkingwater>

**Nominations for Drinking Water Week**

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## Priority for 2014: Charge fees consistent with our rules

In the [September Water Tap](#), you learned that our fee structure for sanitary surveys would change in January. To date we've always charged a fixed fee for our surveys. However, our fee rule requires us to charge by the hour when we perform sanitary surveys. Our move to an hourly fee for the sanitary surveys we perform is part of a larger effort to charge fees consistent with our fee rule.

Our fee rule ([WAC 246-290-990](#)) requires us to charge for each applicable fee-for-service activity. The rule describes how we must charge for reviewing various engineering design and

*(Continued on Page 4)*



MEET OUR NEW DIRECTOR - PAGE 2

# THE DIRECTOR'S COLUMN

BY CLARK HALVORSON



Greetings,

I am excited to be writing to you in my new role as director of the Office of Drinking Water. After being a part of the drinking water community for the last 20-plus years, it's an honor and a pleasure to again be part of such a talented team and to work in partnership with the drinking water community here in Washington State.

I want to start this message by wishing our past director, Denise Clifford, the very best in her new endeavors. We are grateful for all that she accomplished in her nine years leading the office. Denise has been a wonderful steward of the program; she enhanced its strengths and expanded its reach and influence on a national level.

As I make this transition, I am aware of the anticipation and often fear that accompanies new leadership. I know that change can provoke both excitement and anxiety. We are in a time when you don't have to look far to find an article or report that shares the significant new challenges the water sector faces. Aging infrastructure, increasing operating costs, shrinking funding sources, the effects of climate change, and new more stringent regulations are just a few that come to mind.

These challenges, while daunting, present us with exciting opportunities. They will require new approaches to management and regulatory oversight, strong local health programs, skilled operators, informed and engaged customers and purveyors, and a topnotch team here at the Department of Health.

I will be spending much of my first few months talking with our team at the Department of Health as well as our partners across the state. I eagerly anticipate learning more about your current challenges as well as your ideas on how we can continue to build upon our successes. I am excited and energized to get started!

In Gratitude,

Drinking Water Week 2014

## Celebrating 40 years of the Safe Drinking Water Act

Drinking Water Week is fast approaching and we are looking for water systems and operators who deserve recognition. Do you know of a drinking water success in your area? Tell us about it. Just fill out the online [nomination form](#) and send it to us. The deadline is January 31, 2014.

This year we will also celebrate 40 years of the Safe Drinking Water Act. Congress passed the act that allows EPA to regulate the quality of public drinking water on Dec. 16, 1974. EPA's national drinking water standards went into effect on June 25, 1977. For the first time, the act required all public water suppliers to routinely test their water and notify their customers if water was not up to EPA standards. This is a great opportunity for public water systems to promote the value of drinking water.



## Using new formulations of household bleach

If you use store-bought household bleach in your water system, we want you to know that the concentration of chlorine available in household bleach has increased.

For many years, the standard concentration of chlorine in a gallon of store-bought household bleach was 5.25 percent. That changed a few years ago with the introduction of 6 percent bleach, and a smaller volume container. Recently, we've seen a shift toward even higher strength bleach. You'll find 8.25 percent bleach in the marketplace in even smaller containers.

**It is important to know the concentration of chlorine in the bleach you buy.** The concentration relates directly to the quantity of bleach you need to use. For example, you'll want to know how much bleach you need to arrive at a given concentration in your chlorine solution tank or to disinfect water system facilities (such as your well, reservoir, or pipelines).

The concentration is usually in small print in a lower corner of the front label (under "active ingredients" or similar statement).

If you plan to use household bleach that has a different concentration than you were accustomed to using, then compensate for the change by adjusting the volume of bleach you use. For example:

*In the past, I used 5.25 percent bleach, and added one gallon of bleach for every three gallons of water in mixing up my chlorine solution tank. Now I want to use 8.25 percent bleach. How much of the 8.25 percent bleach should I use to produce the same level of chlorine in my solution tank?*

Divide the old strength bleach (5.25 percent) by the new strength bleach (8.25 percent) to determine how much of the new strength bleach to use to produce the same level of chlorine in your solution tank.

$$\frac{5.25\%}{8.25\%} = 0.64 \text{ gallons (About 82 fluid ounces of 8.25 percent bleach contains the same amount of chlorine as 1 gallon of 5.25 percent bleach.)}$$

Whatever strength household bleach you buy, make sure it doesn't contain any fragrance, dyes, detergent or any compound other than sodium hypochlorite (the "active ingredient" in chlorine bleach). You don't want to put these things into your system's drinking water supply.

Store your household bleach supply out of direct sunlight, and in as cool a place as possible. Sunlight and high temperature will lower the concentration of chlorine in the bleach.

## It's operator certification renewal time

### Do we have your most current address and employer?

We mailed annual waterworks operator certification renewals in November. If you didn't get yours, it could mean we don't have your current home mailing address. Call Larry Granish right away at 800-525-2536, Ext. 1, or email [larry.granish@doh.wa.gov](mailto:larry.granish@doh.wa.gov)

**Your renewal must be postmarked by January 20, 2014, or you will be assessed a \$35 late fee. If you fail to renew by February 28, 2014, you will lose your certification. Remember, you can't appeal if you lose your certification because you failed to renew by the deadline. You will have to reapply and retake your certification exam to get certified again.**

It is very important to notify us in writing if you move or change jobs. You can do so by:

- Sending an email to Larry Granish at [larry.granish@doh.wa.gov](mailto:larry.granish@doh.wa.gov) or [dwopecert@doh.wa.gov](mailto:dwopecert@doh.wa.gov)
- Submitting an address change online at <https://fortress.wa.gov/doh/opinio//s?s=5861>
- Faxing your notice to 360-236-2252
- Mailing a letter to: Waterworks Operator Certification  
PO Box 47822  
Olympia WA 98504-7822

Be sure to include your certification number on your correspondence. If you have questions about your renewal, call 800-525-2536, Ext. 1 or 360-236-3141.





# Want better sanitary survey results?

## Conduct regular self-inspections

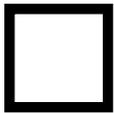
When a sanitary surveyor conducts a sanitary survey of your water system, he or she looks for “significant deficiencies” and “significant findings.” You must fix these things right away. If not, a significant deficiency creates a public health risk and a significant finding creates a risk to the physical safety, security, or reliability of your drinking water system.



You should always be on the lookout for significant deficiencies and significant findings—and fix them in a timely manner. We recommend that water system personnel conduct self-inspections at least once a year. Use the [Third-Party Sanitary Survey Checklist](#) to guide your self-inspection.



Be sure to pay special attention to the highlighted items on the checklist. They represent significant deficiencies and significant findings. If the inspector finds any of these during the sanitary survey, you will be required to address them in a short time frame.



Regularly inspecting your water system and fixing deficiencies that create a public health risk are an important part of providing safe and reliable drinking water. Don't wait for us to find deficiencies during our survey and then require you to address them in a short time frame. Stay ahead of the game. Regular self-inspections will lead to better public health protection and survey results.

To prepare for your next sanitary survey, see the article on page 5.

## Significant deficiencies and significant findings

### A significant deficiency is:

Something that is allowing, or could allow, contamination into the water delivered to consumers. Significant deficiencies include, but aren't limited to:

- Defects in design, operation, or maintenance.
- A failure or malfunction of the sources, treatment, storage, or distribution system.

If not addressed, a significant deficiency creates a significant public health risk.

### A significant finding is:

- Lack of access or information that interferes with the surveyor's ability to assess whether a significant deficiency, defect, or problem actually exists.
- A defect or problem which, if not addressed, creates a significant risk to the physical safety, security, or reliability of the public drinking water system.

## Fees... (Continued from Page 1)



planning documents that water systems and consultants submit to us. Many of the fees are fixed, and independent of the time it takes to complete document review. Other fees are hourly, and the final cost depends on the amount of time it takes to complete the work.

For example, to implement the fee rule correctly, we must charge separate fees for reviewing a project report and construction documents, even when a consultant submits these documents at the same time.



Our efforts to charge fees consistent with our fee rule may increase the amount we charge a water system for performing sanitary surveys and reviewing engineering and planning documents. The increase is not the result of changes to our rules. Any increase is the result of correctly applying the rules we have in place.

Recognizing how important this change could be, we wanted to help water systems and consultants understand and plan for these changes. To help water systems and consultants estimate the cost of our fixed-fee for service activities we recently developed an online estimator tool. The tool also identifies the tasks that we will charge for by the hour. The online tool is on our [water system design](#) webpage.

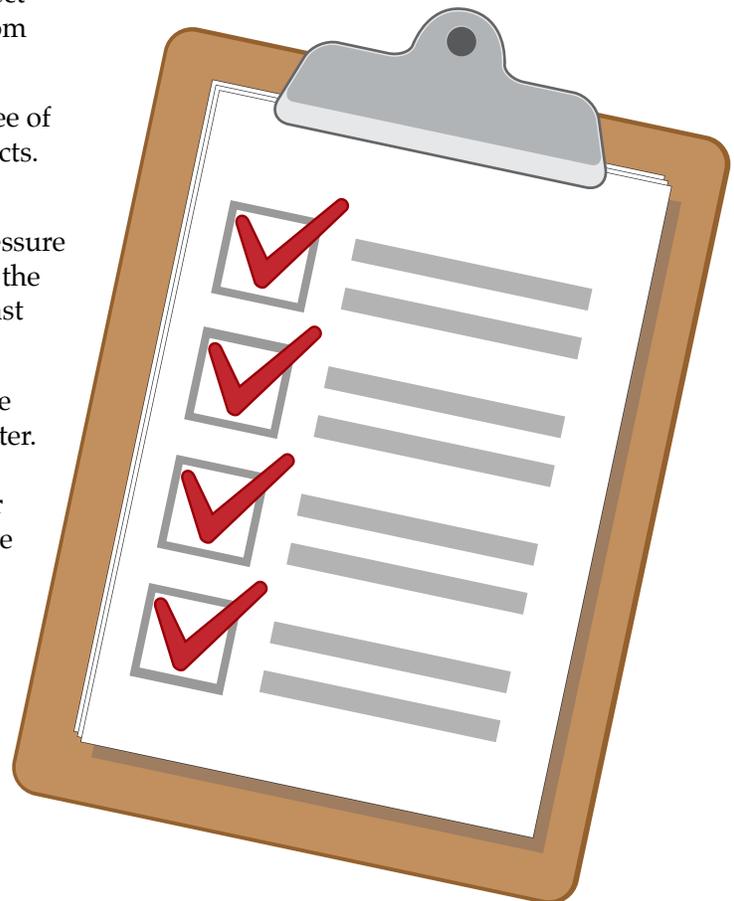


If you have questions or want to provide feedback on the [online estimator tool](#), contact [Scott Torpie](#) at 360-236-3131.

# How to prepare for your next sanitary survey

We expect you to attend to the following items before the survey, and fix as necessary

- Complete a thorough inventory of the structures and material residing within 100 feet of your well(s) and 200 feet of your spring(s). Identify all microbial and chemical contaminant threats, and prepare to review your plan to eliminate or mitigate the threat(s) with the surveyor during the survey. For guidance, see *Sanitary Control Area Protection (331-453)*.\*
- Look carefully at your well, spring, and storage tank facilities. Verify the integrity of seals or screens over any possible pathway for contaminants to enter the well casing, spring box, or tank interior. For guidance, see *Sanitary Control Area Protection (331-453)*, *Sanitary Protection of Reservoirs – Vents (331-250)*, *Sanitary Protection of Reservoirs: Hatches (331-249)*, and *Simple Fixes of Wellhead Openings (331-232)*.\*
- Physically disconnect any treatment process or source not listed on your water facilities inventory. We will let you know when you may reconnect it.
- Photograph the condition of any part of your water system we may not be able to access, and make the pictures available during the survey. For example, photograph the roof or overflow of reservoirs that must be climbed. Pictures should verify that all seals and screens on the storage tank roof vents, access hatches (open and closed), overflows, and access points where the level gauge wire enters each tank are in excellent condition.
- Make sure your storage tank overflow pipe outlet is constructed with an air gap and screen.
- Make sure there is a raw source water sample tap on each source of supply.
- Make sure reasonable measures are in place to protect your well house, pump station, and storage tank from unauthorized access and vandalism.
- Make sure the pump or well house structures are free of any openings to allow the entry of animals and insects.
- If your water system includes an RV sewage dump station, make sure there is an approved reduced pressure backflow assembly installed on the water supply to the dump station. Make sure it was tested within the past year.
- If your water system injects any chemical, make sure the chemical is NSF-approved for use in potable water. Also, make sure that any hard-piped water supply into the chemical solution tank was built with an air gap or equipped with an approved reduced pressure backflow assembly.
- If your water system has a turbine pump, make sure the outlet pipe for the pump control valve or vacuum relief valve is constructed with an air gap and screen.
- Make sure your pump and pump controls are operational and adequate to prevent chronic water outages or premature pump failure.



\*Our publications are online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

# Understanding your system's water rights and how they relate to water system planning

By Jennifer Kropack, northwest regional planner

All water system board members and lead operators should know the legal limitations on their system's water rights. There are two very important volume limitations:

- **The amount of water you can legally use in one year.** The annual water quantity parameter is called  $Q_a$  (described in acre feet per year (AFY)).
- **The amount of water you can legally use on a daily basis.** The daily water quantity is called  $Q_i$  (described as gallons per minute from your well or cubic feet per second from your surface water source).

One of your jobs is to understand which of the legal water right parameters is more limiting to your system capacity.

Physical system limits are defined by your water system design and infrastructure (source, storage and distribution) and how everything works together.

After evaluating many elements, including legal and physical factors, your engineer defines your water system capacity and we approve it. The other elements the engineer looks at are your service area and system development history.

In summary, within your approved design, your engineer considers your legal water right use limits of annual quantity and daily flow quantity and lets you know which one is your limiting factor.

If you have questions, call our regional office, and ask for the planner overseeing your county.

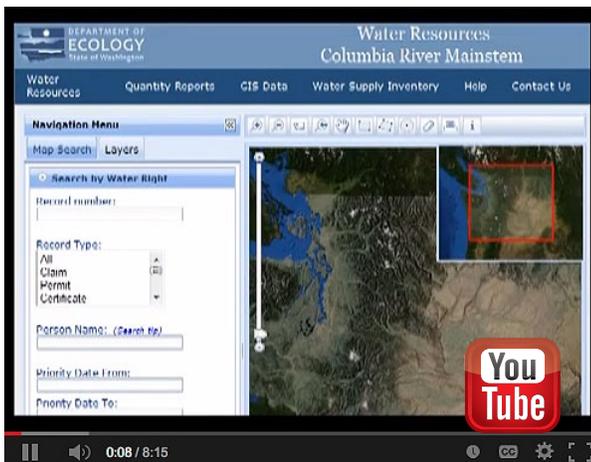
Learn more about your water rights on Department of Ecology's Water Resources Explorer (see article below).

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## Water Resources Explorer

Ecology's Web tool answers the age-old question: "What are my water rights?"

By John Rose, Department of Ecology



Every year, hundreds of utilities, cities, businesses, farmers and citizens ask the state Department of Ecology Water Resources Program questions about their water rights. There are many reasons people need this information. Some people want to drill and use a well; others want to purchase property in an area where access to an existing adequate water supply is not available.

Due to the potential effects on adjacent property owners and the environment, water use can be a very contentious subject and land users need to know whether they have legal access to water. However, documentation for water rights issued decades ago is often no longer in the landowner's possession. Citizens and organizations often are unaware of or even misinformed about their water rights.

*(Continued on Page 13)*

### Test your water system development knowledge:

1. Do you know the service area boundary set by your original land use approval and water right documents? In your water right documents this is called "place of use."
2. Do you know the original maximum number of lots identified in your development?
3. Do you know if there has been any land use (zoning) changes?
4. Do you know if there has been any change in service area over the years?\*

*\* The law requires you to make service area changes through a water system plan amendment. DOH must approve these changes. Ecology reviews the changes, too.*

## Disease outbreaks associated with drinking water

Public health officials from 17 states reported 33 drinking water outbreaks during 2009–2010, according to a report the Centers for Disease Control and Prevention (CDC) released in September. The outbreaks resulted in 1,040 illnesses, 85 hospitalizations (8.2 percent of cases), and 9 deaths. Officials identified at least one causative agent in all but one drinking water outbreak.

The report covers waterborne disease outbreaks in drinking water and nonrecreational waters. CDC collects data on waterborne disease outbreaks submitted from all states and territories through the Waterborne Disease and Outbreak Surveillance System.

*Legionella* accounted for 58 percent of outbreaks and 7 percent of illnesses, and *Campylobacter* accounted for 12 percent of outbreaks and 78 percent of illnesses.

The most commonly identified deficiencies in drinking water-associated outbreaks were *Legionella* in plumbing systems (57.6 percent), untreated groundwater (24.2 percent) and distribution system deficiencies (12.1 percent).

Here are some highlights of the report:

- 75.8 percent of the outbreaks and 79.4 percent of the outbreak-associated illnesses were linked to community water systems.
- 51.5 percent of outbreaks and 97.3 percent of illnesses occurred in systems that used groundwater sources.
- 57.6 percent of outbreaks involved acute respiratory illness.
- 92.6 percent of illnesses were acute gastrointestinal illness.

For more details, including a data table on each reported outbreak, see the [CDC's full report](#).

You can also view our four-page publication on the [Top Ten Reasons for Health Advisories \(331-348\)](#) in Washington State.

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## Water Quality Monitoring Report: A change is coming

A big change is coming to the Water Quality Monitoring Report (WQMR) that most community and nontransient noncommunity water systems receive each year. In 2014, the WQMR will become the Water Quality Monitoring Schedule (WQMS).

The WQMS will be in electronic format, so you will be able to access your system's monitoring requirements from your office, home, smart phone, tablet or other electronic device. We expect the WQMS to be available online in March 2014.

The online WQMS allows us to provide some new features:

- Dates of and links to the last samples collected.
- Up-to-date monitoring requirements.
- Information on monitoring waivers.
- Most distribution monitoring requirements for systems that purchase all their water.

Don't worry if you don't have access to the Internet. We will continue to make paper copies available to those who need them. We will send reminders annually of your WQMS, so those of you without Internet access can ask us to mail a paper copy to you.

# Who has the best taste on tap? Maple Falls Water Co-Op

Officials at Evergreen Rural Water of Washington (ERWoW) have found the best-tasting water in Washington. On August 27, 2013, at ERWoW's fall conference, they announced that Maple Falls Water Co-Op has the tastiest water in the state and, participants hope, in the nation.



Water utilities from around the state submitted samples of their water, straight from the tap. This year's entries were going up against the 2012 national winner of the Great American Water Taste Test, Mt. View-Edgewood Water, and City of Sumas, ERWoW's 2012 winner, so the stakes were high.

The judges tasted samples from nine different water systems, and then selected Maple Falls Water Co-Op, a 90-connection, untreated groundwater system in Whatcom County, as the winner of the statewide competition.

"We're pretty happy about it," says Gary Grinde, the operator of Maple Falls Water Co-Op. "Being a small town...it's pretty exciting!"

"We have great-tasting water in our state, which has been proven multiple times at the National Rural Water Great American Water Taste Test," said Tracey Hunter, executive director of ERWoW. "I have confidence that Maple Falls Water Co-Op will let the nation know once again that Washington's water reigns supreme."

The competition is part of a Quality on Tap! campaign to emphasize the high quality, standards and, consequently, *taste* of rural water. Winners of the state taste test will compete in a national contest in Washington, D.C. on February 12, 2014. This event is part of the Rural Water Rally, an annual legislative event for the 48 state affiliates of National Rural Water Association.



And the winner is... The Maple Falls Water Board. From left, Gary Grinde, water operator; Dave Halliday, president; Joan Thompsen, vice president; and Kim Parmer, administrative specialist.



Judges savor the taste of Washington's winning tap water. From left are Kelly Williquette, public works director at Airway Heights, Katrina Nellenbach, finance manager at ERWoW, and Don Van Veldhuizen, USA Bluebook.

## First Lady gives tap water a boost

First Lady Michelle Obama gave the drinking water community a big boost this fall when she launched her [“Drink Up”](#) campaign.

She chose the aptly named Watertown, Wis., as the site for the campaign launch.

“Since we started the Let’s Move! initiative, I’ve been looking for as many ways as possible to help families and kids lead healthier lives,” Mrs. Obama said. “And I’ve come to realize that if we were going to take just one step to make ourselves and our families healthier, probably the single best thing we could do is to simply drink more water. It’s as simple as that. Drink more water.”

She didn’t stop there. She advocated the virtues of “plain old tap water.”

What could your utility do with an endorsement from that kind of star power?

You may recall that the Office of Drinking Water launched a campaign in 2007 to promote tap water. The [“Tap Into Goodness”](#) campaign included a number of bill stuffers and other items you can still download from our website.

Many of the ideas in the two campaigns are similar. They’re there for you to use.

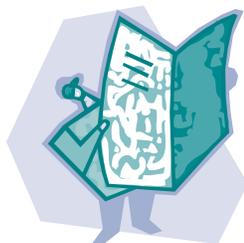
You’re proud of the water you serve your customers, so encourage them to “Drink Up”!



First Lady Michelle Obama proposes a toast during a “Let’s Move!” Drink Up festival at Watertown High School in Watertown, Wis., Sept. 12, 2013. (Official White House Photo by Amanda Lucidon)



## New & Revised Publications



**Sanitary Survey Field Guide (331-486).** New! December 2013. This field guide provides information and guidance on our expectations for our sanitary survey program participants. For use with the [Third-Party Sanitary Survey Checklist](#).

**Appropriate planning for a nonexpanding water system (331-479).** New! October 2013. Two-page factsheet for water systems developing a small water system management program. Covers objectives, considerations, and preplanning.

**Appropriate planning for expanding community water systems (331-478).** New! October 2013. Two-page fact sheet for water systems developing or updating a water system plan. Explains objectives, processes, and considerations involved in developing a plan.

**Sanitary Survey Fee Change (331-477).** New! October 2013. Two pages of questions and answers describe the January 2014 changes to sanitary survey fees.

**Top 10 Reasons for Health Advisories (331-348).** Revised October 2013. Four-page publication on the top 10 reasons Washington water systems issued health advisories.

**Drinking Water State Revolving Fund (331-233).** Revised October 2013. Four-page fact sheet on the Drinking Water State Revolving Fund Program, loan requirements, and systems that have received loans.

**Follow-up to an Unsatisfactory Coliform Sample (331-187).** Revised July 2013. Two-page fact sheet describes actions for water systems to take when coliform bacteria are detected in a drinking water sample.

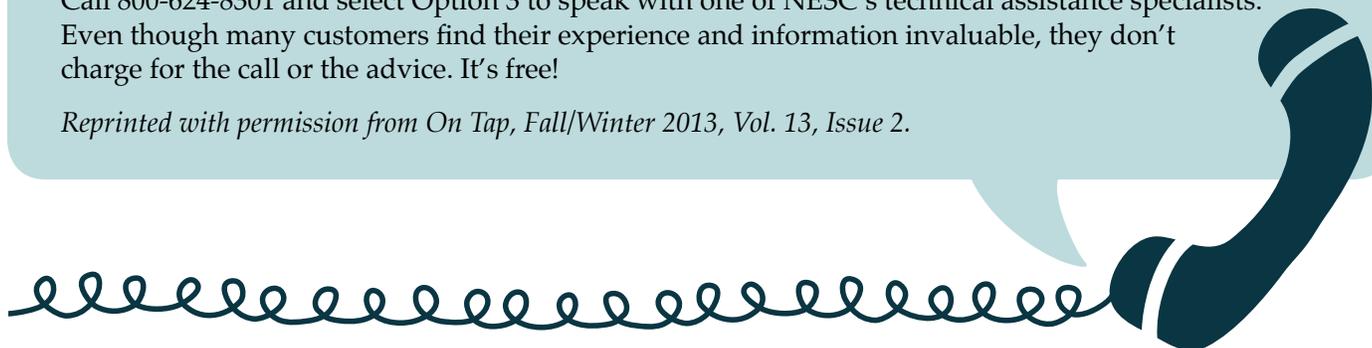
Our publications are online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

## NESC offers free technical assistance Just a phone call away!

Operating a water or wastewater utility has never been easy. Moreover, with new technologies and increasing regulations, the job just keeps getting more difficult. If you have questions about a particular technology or about other aspects of running your system, the National Environmental Services Center's (NESC) technical staff have decades of experience working with small drinking water and wastewater systems.

Call 800-624-8301 and select Option 3 to speak with one of NESC's technical assistance specialists. Even though many customers find their experience and information invaluable, they don't charge for the call or the advice. It's free!

*Reprinted with permission from On Tap, Fall/Winter 2013, Vol. 13, Issue 2.*



## RULE MAKING

### Rule adoption: Waterworks Operator Certification, chapter 246-292 WAC

We held a public hearing on proposed changes to the Waterworks Operator Certification Rule on September 27, 2013. We plan to adopt the proposed changes in December and have the rule go into effect in January 2014.

We made many of the rule changes to include existing program guidance in rule, so you may not see significant changes to the program. We based the revisions on comments and feedback received from our partners and stakeholders over several years of rule making. They address industry needs of operators and water systems and strengthen our authority to take enforcement action when needed.

Visit our [rule-making activities webpage](#) for information about this rule.

We will update implementation guidance early in 2014. If you have questions about the new rule requirements, contact [Deni Gray](#) at 360-236-3140.

#### Other rule-making information

To learn more about our rule-making activities, please visit our [rule-making activities webpage](#) and subscribe to our [drinking water rules email list](#).

We also discuss rule-making activities at our [Drinking Water Advisory Group](#) (DWAG) meetings, which are open to all interested parties. Please visit the [DWAG webpage](#) to learn more about these meetings.

#### Questions?

Contact [Brad Burnham](#), rules coordinator, at 360-236-3158.



## Attention, water treatment plant operators

It's time to renew your wastewater discharge permit. The general permit for discharges of wastewater from water treatment plants will expire on August 31, 2014, according to the Department of Ecology. Current permit holders must reapply by March 4, 2014, to avoid a potential break in coverage.

Current permit holders should already have letters from Ecology reminding them of this requirement. [Ecology's website](#) provides a walk-through of the process and copies of the reapplication forms.

The law requires Ecology to use the five-year life cycle of this general permit as an opportunity to adjust the requirements specified in the permit to reflect the accumulation of new legislation, the latest science and technology, and changed conditions.

This general permit can cover water treatment plants that:

- Produce potable or industrial water, where water treatment and distribution are the primary functions of the facility.
- Have maximum production capacity (of finished water) of at least 50,000 gallons per day.
- Produce wastewater from treatment filtration processes.
- Discharge backwash effluent to surface water.

For more details, see Chapter 173-226 of the Washington Administrative Code.

If you have questions about the re-issuance of the permit, please contact [Jim Maroncelli](#) at Ecology 360-407-6588.

## Turbidity data integrity

The Treatment Optimization Program (TOP) implemented turbidity data-integrity activities on a statewide basis through our regional office staff. These efforts engage water system operators in assessing the accuracy and consistency of the turbidity data maintained at their facilities over the entire life cycle of the data (sample collection through reporting).

Operators appreciate these state activities, often making immediate adjustments to improve the integrity of the data being generated. The program plans to prepare a report of its findings in an upcoming issue of *Water Tap*.

TOP is an effort to improve the performance of surface water treatment facilities. TOP focuses on particle removal and disinfection to maximize public health protection from microbial contaminants.

We award certificates to systems the first time they meet the turbidity goals for 3-, 5-, and 10-consecutive years. This year, Island View Local Utility District 9 earned a bronze award for three years of continually optimized performance.



Mark Hess, operator, Island View LUD 9 water system recently received his Optimization Award from Virpi Salo-Zieman, regional engineer for Clallam County.



## Need water system data? Visit Sentry Internet.

Sentry is an online database where anyone can get information about public water systems in Washington State. We offer this tool so citizens can get the information they need to make wise decisions about drinking water. It's a great way to learn about all the work that goes into providing drinking water to consumers in a safe reliable manner.

Users can get specific information about one water system or general data about groups of water systems. For example, you can search by location, water system type, source type, or population to see all the drinking water systems that meet those criteria.

Users must agree not to use the information for commercial purposes. Visit Sentry Internet at <http://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/DrinkingWaterSystemData/SentryInternet.aspx>.

### Always current

Data from our internal database constantly refreshes Sentry Internet. Every week, the database stores water quality sample results submitted by labs, water system information updated by operators, operator certification requirements, and water system operational requirements to determine a water system's compliance with federal and state drinking water regulations. Staff check this information continually to ensure it's accurate.

### System-specific information

To get information about a specific water system, you will need the drinking water system name or ID number. You can get this information from a water bill, homeowner's association, or the water system. If you don't have the number, try using search criteria such as city name.

If you have questions or need help with Sentry Internet, please contact [Chris Cooper](#) at 360-236-3115.

#### Sentry Internet displays water information on the following screens:

- **Compliance Actions:** Compliance actions against the water system.
- **Operating Permits:** Status of the water system's operating permit.
- **Operators:** Information about the designated water system operator.
- **Reports:** Water Facilities Inventory and Pre-Adequacy reports.
- **Water Use Efficiency:** Annual water use efficiency reports.
- **General Information:** Water system type, contact information, location, population, connections, capacity, and so on.
- **Source Information:** Source type (well, spring, surface water), well depth, intertie information, usage, well tag number, treatment information, and so on.
- **Samples:** History of samples taken and results.
- **Exceedances:** Samples that violate state water quality standards.

## King County emergency... (Continued from Page 1)

If the water district received the same water sample results today, chances are the response would be different.

Water district staff and commissioners recently took part in a debrief meeting with the Office of Drinking Water, the City of Des Moines, Highline School District, and Public Health: Seattle & King County to discuss what went well during the advisory, what didn't go so well, and lessons learned.

One of the most important take-aways the water district identified was sharing what they learned with the wider drinking water community (this article is a start).

Another was the need for all entities involved in the emergency response to have consistent messages about what happened, the public health risk, what residents and businesses needed to do, and when the advisory might end. At one point, a Seattle television station reported the water district was skeptical about the *E. coli* finding and questioned whether there was a public health risk. That was not helpful.

Some of the other lessons learned (some may sound familiar to you):

- The water district plans to develop an emergency response package in advance for responding to acute coliform events (door hangers, walking lists, and so on).
- The district identified the need to have clarity about incident command structure and to have one point of contact for media response.
- In the future, the district will assume that they need to do door-to-door notifications.
- The water district staff and commissioners need to better understand the effect a boil-water advisory will have on the communities they serve and be prepared to address it.
- The district will look to develop interlocal agreements with neighboring water systems and water districts for assistance in emergencies.
- The district plans to ask customers how they want to be informed about boil-water advisories.
- The district will contact drinking water labs to prepare for future emergencies so they'll know who to contact, which labs offer 18-hour tests for coliform, and gain a clearer understanding of when to expect water sample results.

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## Water resource explorer... (Continued from Page 6)

Because the documentation for such water rights is stored at Ecology offices, finding this information once required lengthy and tedious efforts of both land users and Ecology staff. Now, an online resource known as [Water Resources Explorer](#) provides convenient access to water right information throughout Washington State.

Released in 2011, [Water Resources Explorer](#) is the culmination of work that started in 1993, when the Water Resources Program initiated a statewide historical water right mapping project. Staff used geographic information systems software to digitally map the boundaries and sources of water rights and claims, then combined that work with scanned images of the water right documents.

The introductory webpage for this tool includes a [video tutorial](#) that explains how to use the Web map, and the available functions and map layers.

While historical water right mapping efforts are ongoing, anyone with an Internet connection can learn more about the water rights associated with their property. This drastically decreases the need for a lengthy, staff-facilitated research process, saving state citizens time and tax dollars. Explorer provides this information in an online map-based environment where users can search by parcel numbers, water right record numbers, or even visually on the Web map.

To date, Ecology staff has digitally mapped about half of the roughly 230,000 water rights and water right claims on record, and expects to complete mapping by 2017. Explorer displays unmapped water right documents as a dot near their actual location on a separate map layer.

People can also use [Water Resources Explorer](#) with Ecology's Well Log database, a tool used to view construction details on individual wells.

If you have questions about Explorer, please contact [John Rose](#) at 425-649-7230

# Funding opportunity available to increase water conservation or improve water supply sustainability

Funding is available for new water and energy efficiency grant projects through the federal Bureau of Reclamation's WaterSMART program. Irrigation districts, water districts, tribes, and other organizations are eligible to apply if the projects increase water conservation or result in other improvements that address water supply sustainability.

The funding opportunity announcement is available at [www.grants.gov](http://www.grants.gov) – use funding opportunity number R14AS00001 in the search.

You can submit your application to one of these funding groups:

## Funding Group I:

Up to \$300,000 will be available for smaller projects that may take up to two years to complete. It is expected that a majority of awards will be made in this funding group.

## Funding Group II:

Up to \$1,000,000 will be available for larger, phased projects that will take up to three years to complete. The bureau will provide a maximum of \$500,000 in federal funds within a fiscal year to complete each phase. This will provide an opportunity for larger, multiple-year projects to receive some funding in the first year without having to compete for funding in the second and third years.

Proposals must seek to conserve and use water more efficiently, increase the use of renewable energy, improve energy efficiency, benefit endangered and threatened species, facilitate water markets, carry out activities to address climate-related impacts on water or prevent any water-related crisis or conflict.

To view examples of previous successful applications, including projects with a wide-range of eligible activities, please visit [www.usbr.gov/watersmart/weeg](http://www.usbr.gov/watersmart/weeg)

In 2013, the bureau awarded more than \$20 million for 44 water and energy efficiency grants. These projects saved about 100,000 acre-feet of water per year—enough water to serve a population of 400,000 people.

The WaterSMART Program focuses on improving water conservation, sustainability, and helping water resource managers make sound decisions about water use. It identifies strategies to ensure that this and future generations will have sufficient supplies of clean water for drinking, economic activities, recreation and ecosystem health. The program also identifies adaptive measures to address climate change and its impact on future water demands.

The deadline to submit proposals is January 23, 2014. Awards will be made in the spring.

## In This Issue

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