



the Pipeline

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Oregon Drinking Water News

Drinking water fees and the 2015 Legislature

by Dave Leland

Many of you know that four activity areas in Drinking Water Services are funded by fees-for-services: operator certification, backflow tester and specialist certification, water system survey inspections and plan review. The program work we do and the service level we provide in these areas has been constant for years, carried out by the equivalent of nine full-time staff. The current fee levels date back to 2008, 2006 and 1995 respectively. Since then, operating costs have increased over time, and the current fee revenues now support less than half of the current level of effort by program staff. Since the current fees do not support the work, fee activities have increasingly been funded through our federal program grants, but those also have not increased in more than a decade.

The Public Health Division budget for 2015–17 was heard by the Ways and Means Human Services Subcommittee on March 31 and April 1. As part of that presentation, the Division noted that a redesign of fee-based revenue structures across Division programs was necessary for 2015–17 based on current workload demands. The current drinking

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Revised Total Coliform Rule coming to Oregon in 2016

by Brad Daniels

On April 1, 2016, the Oregon Health Authority, Drinking Water Services will begin implementing provisions of the Revised Total Coliform Rule. The new and revised regulations will better protect water users against waterborne illness due to the presence of *E. coli* bacteria while doing away with some of the provisions related to the presence of total coliform bacteria.

The most notable change may be the repeal of the maximum contaminant level for total coliform. Without this standard, violations will not be generated nor public notice required due to the presence of total coliform alone. A maximum contaminant level for *E. coli* replaces the standard, which will be exceeded if the presence of *E. coli* is confirmed, repeat samples are not collected or when a total coliform-positive sample is not analyzed for *E. coli*.

A formal coliform investigation is now required when total coliform or *E. coli* is confirmed at a water system or when repeat samples are not collected. There will be two types of investigations; the first conducted by water system operators, and the second, a more

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Visit Oregon Drinking Water Services at <http://healthoregon.org/dwp>

water fee structure was mentioned as an example. A more detailed discussion with the subcommittee about fee revenue is planned during the last two weeks of April.



We know that increased fees influence water system finances and rates. Based on legislative direction we receive, we will open discussions with you about the details of fee schedules to support the needed program revenue after the legislative session ends in June.

Dave Leland is manager of Drinking Water Services / 971-673-0415 or david.e.leland@state.or.us

Staff update

Molly Keller has joined Drinking Water Services as the new cross connection and backflow prevention program coordinator for Drinking Water Services. She has a bachelor's degree in environmental planning and policy with a minor in sustainable design and planning from Western Washington University. Molly has worked for the state X-ray and Tanning programs for the past 8 years as an inspector. She enjoys gardening, trips to the coast, watching "Doctor Who" and spending time with her dog, Wanda. She will be working with Mike Perry until his retirement later this year.

detailed investigation conducted by state or county personnel whenever *E. coli* is confirmed or if total coliform is confirmed multiple times within a year.

A few potentially significant changes to monitoring requirements in Oregon include:

- Reducing the number of repeat samples from four to three.
- Rolling back the requirement for additional routine samples the month after total coliform is detected. These additional samples will be eliminated for water suppliers sampling monthly and the number of samples will be reduced from five to three for water suppliers sampling quarterly.
- Increasing sampling from quarterly to monthly at seasonally operated water systems that are depressurized during the off-season.
- Increasing sampling from quarterly to monthly at noncommunity water systems after exceeding the MCL for *E. coli*, when multiple coliform investigations have been triggered or after certain violations at the water system.

You will need to complete an authorized start-up procedure if you operate a seasonal water system that depressurizes during the off-season.

You may need to revise your coliform sampling plan.

Be sure to watch for articles in the fall with more detail about each of these topics along with the notice of rulemaking and public hearing.

Brad Daniels is the rules and enforcement coordinator for Drinking Water Services / 971-673-0407 or bradley.k.daniels@state.or.us

Update on harmful algae blooms and drinking water

by Casey Lyon

The U.S. EPA has quickly been making progress on harmful algae blooms (HABs) and drinking water since Toledo, Ohio issued a “Do Not Drink” public notice to nearly 500,000 people last August. The anticipated health advisory (HA) and related documents will be released before this summer’s bloom season. The HA is an estimate of acceptable drinking water levels for a chemical substance based on health effects information. An HA is not a legally enforceable federal standard, but serves as technical guidance to help federal, state and local officials. EPA plans to set HA values for microcystin and cylindrospermopsin. (There is currently not enough data available to move forward with an HA for anatoxin-a and saxitoxin.) These HAs may be for a 10-day exposure period. EPA defines a 10-day HA as, “The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to 10 days of exposure. The 10-day HA is also intended to protect a 10-kg child consuming 1 liter of water per day.” EPA is hosting a public webinar in early May to discuss the HA, treatment technologies, and analytical methods and tools. To stay up-to-date on the latest EPA news, see EPA’s cyanoHABs website here: <http://www2.epa.gov/nutrient-policy-data/cyanohabs-news-2014>



In Oregon, we are continuing to provide free cyanotoxin testing and shipping services in 2015 to all PWS affected by a HAB. Please contact your regulator to find out about testing the water if you have concerns your water system may be affected by a HAB. Testing the water is the only way to know if the water is safe to drink. We continue to contract with Lake Superior State University for HAB analytical services. We have changed our analytical methods for raw and finished water using ELISA (enzyme-linked immunosorbent assay) to closely align our monitoring program with EPA’s. We also plan to change our procedure so raw and finished water sample collection is done on the same day and sent to the lab. The finished water sample will not be analyzed unless the raw water sample detected a toxin.

Here are some interesting findings from the last four years of Oregon’s PWS toxin results. An average of 22% of all PWS samples collected had a detection for at least one toxin. The majority of these were detected in raw water only. Microcystin congeners are the most common toxins detected followed by anatoxin-a. Cylindrospermopsin and saxitoxin are rarely detected but have been found in PWS raw water samples. In summary, the toxin detections we have seen are fairly low in Oregon’s source waters (0.02 – 5.24 µg/L), and finished water detections have all been below our acute health threshold values indicating most optimized treatment systems are capable of removing the toxins. Please see our HABs and drinking water website for several resources including BMPs, treatment information, a response flow chart, algae maps and other helpful links. Go to healthoregon.org/hab, and click “Algae and Drinking Water.”

Casey Lyon is the unit manager for the region 2 technical services unit / 541-726-2587 ext. 31 or casey.lyon@state.or.us

Aging infrastructure? Compliance issues? We've got you covered!

by Adam DeSemple

Oregon's Drinking Water State Revolving Fund (DWSRF) Letter of Interest (LOI) process has changed. In April 2013, Oregon's Drinking Water Services (DWS) along with their partners at Infrastructure Finance Authority (IFA) removed the long-standing deadline date for LOI submittals. This is a result of Oregon's newly developed open process improvement strategy that increases the efficiency and flexibility of Oregon's DWSRF program. Submit an LOI today!

Who is eligible for the DWSRF?

Public water systems classified as "community" and/or legally recognized as a "nonprofit noncommunity" (e.g., schools or parks) are eligible to receive funding for eligible infrastructure projects necessary to comply with public drinking water standards specified in the 1996 Safe Drinking Water Act (SDWA) amendments. A portion of the DWSRF targets systems serving fewer than 10,000 individuals.

Program highlights and what is offered?

- State fiscal year 2014 committed / executed loans to seven systems totaling over \$20 million;
 - Provided over \$3.5 million in additional subsidies (i.e., principal forgiveness);
- Since 1998, we have committed funds to 142 systems for more than \$290 million covering eligible project related costs associated to planning, engineering, and construction;
- Loan rates from 1% to 4% depending on water system type and status, plus repayment terms from 20 to 30 years;
- Additional subsidies (i.e., principal forgiveness), which are subject to change annually, can be up to 50% of the total

award, not to exceed \$500,000 with an emphasis on "disadvantaged communities" and water systems that need to maintain or achieve compliance and/or that pose health risks set forth by the SDWA;

- Additional subsidies also are offered to disadvantaged systems and/or systems with <300 connections of 100% of costs that do not exceed \$20,000 for feasibility studies and \$15,000 for Davis-Bacon Labor Standards Compliance and Review;
- Loans that meet the specific funding and affordability repayment requirements of the water systems and their communities; and
- Free Circuit Rider Technical Assistance for community and some nonprofit noncommunity water systems with populations under 10,000.

For more detailed information, visit the DWSRF Web page at <http://healthoregon.org/srf>

What to do?

You may submit an LOI for your water system at any time. There is no deadline date to submit the LOI. Here's how:

Go to the DWSRF Web page at <http://healthoregon.org/srf> and visit the LOI section for details.

State agencies final note:

There are two state agencies involved in the DWSRF program. DWS staff performs the technical review, rates and ranks the incoming LOIs against standard criteria for funds. DWS staff also coordinate, prepare and submit the annual Capitalization Grant application to the U.S. Environmental Protection Agency (EPA).

Business Oregon IFA handles loan determination, processing and disbursement of funds. IFA Regional Coordinators can be found at www.orinfrastructure.org/map.php and can assist loan recipients throughout the life of their project. You may contact either agency using the information listed.

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In addition and in an effort to reduce waste and be “green,” we are no longer mailing out LOIs to systems and will not be publishing any public notices in the local newspapers. When public notices for comments are published, they will be on the DWSRF Web page, DWS website and postcards (annually for IUP only) will be mailed out to water systems and other interested parties throughout the state. Typically, notifications will be announced on a quarterly basis if there are projects and/or grant-related updates requiring publication. Quarterly public notices will be posted for comments during the months of July, October, January and April.

Need more information?

It's as easy as:

1. Contact our Drinking Water State Revolving Fund Program Coordinator, Adam DeSemples, at 971-673-0422, or by email at adam.desemples@state.or.us; or
2. Contact IFA's Safe Drinking Water Program and Policy Coordinator, Jeremy McVeety, at 503-507-7107, or by email at jeremy.mcveety@state.or.us, or an IFA regional coordinator near you at www.orinfrastructure.org/map.php

Drinking Water Source Protection (DWSP)

For information related to the Drinking Water Source Protection Fund (DWSPF) grant/loan program, please visit the DWSRF Web page at <http://healthoregon.org/srf> and select the DWSPF section for more detailed information.

2015 Drinking Water Infrastructure Needs Survey and Assessment

Anthony J. Fields

Oregon's Drinking Water Program will be participating in the 2015 Drinking Water Infrastructure Needs Survey and Assessment. EPA uses this survey, a requirement of the Safe Drinking Water Act, to determine financial need across the United States. In Oregon, this includes all water systems serving more than 100,000 people, and about 50 medium-sized systems serving 50,000 people or less. Water systems eligible for SRF funding are asked to participate. As the EPA survey website states, *“Local water utilities must make significant investments to install, upgrade, or replace equipment in order to deliver safe drinking water and protect public health. Every four years, EPA conducts a survey of the anticipated costs of these investments and reports the results to Congress. The results are also used to help determine the amount of funding each state receives for its Drinking Water State Revolving Fund program, which funds the types of*

projects identified in the survey.” (<http://water.epa.gov/infrastructure/drinkingwater/dwns/index.cfm>)

The purpose of the survey is to identify eligible capital investment projects water systems anticipate completing during the next 20 years and includes activities ranging from replacing standard pipe to adding new water sources and water treatment plants. Water systems selected by EPA to participate in the 2015 survey will be notified by Drinking Water Services with an invitation to schedule an interview to identify eligible infrastructure activities and collect relevant supporting documentation. HBH Consulting Engineers, Inc. will again conduct the water system interviews and use this data to complete the survey on behalf of the participating water systems. This process significantly reduces the amount of time and money a water system must devote to the survey process while allowing Oregon to present a more consistent work product to EPA for their evaluation.

The 2011 Needs Survey interviews averaged 90 minutes and typically represented the total time and effort water systems took to participate

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in the survey process. This process allowed water systems in Oregon to have nearly universal participation during the 2011 survey, and because of this, our share of the federal allotment of SRF funds increased from 1% in 2007 to 1.42% in 2011. This increase equates to approximately \$3 million in additional funds annually during each of the 2014–2017 SRF grant periods for eligible water systems via low interest loans and grants.

Additional information is on the EPA website at <http://water.epa.gov/infrastructure/drinkingwater/dwns/basicinformation.cfm>, or you can call the Drinking Water Program at 971-673-0405.

Tony Fields is the Planning, Protection, and Certification Unit manager for Drinking Water Services / 971-673-2269 or anthony.j.fields@state.or.us

Reminders on plan review and construction standards

by Carrie Gentry

When plan review is required

Did you know that a plan review is required before a water system undertakes a major addition or modification? Examples of major additions include installing a new well, waterline, reservoir or treatment system. What are we looking at during the plan review process? We are making sure that your system's project meets the requirements in the Oregon Administrative Rules (OARs) construction standard section.

What happens when a water system skips the plan review process? If the project moves forward without plan review, we aren't able to point out any issues. Drinking Water Services (DWS) reviews several well projects each year that do not meet standards for setbacks from hazards. In those cases, the well may not be approved for use at a public water system unless the well construction meets construction standards and is drilled into a confined aquifer.

For more information about the plan review submittal process, please see our website tab, Plans Review. You will find several plan review packages to help guide you through the process. You can always call your regional engineer for more information.

Reminder on construction standards and setbacks

Water systems must meet the construction standards at all times. One common issue is that the sanitary hazard setback for wells has not been maintained, and a potential contaminant is now present within 100 feet. This is a public health risk.

If a setback issue is identified as a significant deficiency during a survey, the water system has several options for correction. These include moving the hazard, providing secondary containment if appropriate or using a new source. If the well is properly constructed in a confined aquifer, a construction standard waiver may also be an option. With some of these options, additional monitoring may be required. If you have questions, please contact your regulating agency.

Plan review exemption for waterline projects

Did you know that DWS offers community water systems plan review exemption for waterline projects? Your water system may be able to avoid the plan review process and fee for waterline projects. To qualify, a water system must:

- Have a current master plan that DWS has reviewed and approved. (Note: community water systems with 300 or more connections are required to maintain a current master plan. Community water

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MEETING CALENDAR

Drinking Water Advisory Committee

Oregon Health Authority
Public Health Division
Diane Weis / 971-673-0427

July 15, 2015

All meetings are held at the Salem Willow Lake Wastewater Plant, 5915 Windsor Island Road N, Keizer, Oregon

Cross Connection Advisory Board

Go to: public.health.oregon.gov/HealthyEnvironments/DrinkingWater/CrossConnection/Pages/advisoryboard.aspx

Oregon Environmental Services Advisory Council

Go to: www.oesac.org/meeting_schedule.aspx

TRAINING CALENDAR

CEUs for Water System Operators

Check www.oesac.com for new offerings approved for drinking water

OAWU

503-837-1212

May 6	Water Rights & Other Legal Issues
May 12	Control Valves
May 14	Water & Wastewater Field Operations & Safety
May 27	Math for Operators
May 27	Pumps & Pumping
June 2-3	Water (WT/WD) Certification Review
June 17	Mini Expo
June 24	Water Treatment & Labs

Backflow Management Inc.

503-255-1619

Aug. 18	Confined Space Entry Safety
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Cross Connection/Backflow Courses

Backflow Management Inc. (B)
503-255-1619
Clackamas Community College (C)
503-594-3345

Backflow Assembly Tester Course

June 1-5	Portland (B)
June 8-12	Oregon City (C)

Backflow Assembly Tester Recertification

May 1	Oregon City (C)
May 12	Redmond (B)
May 14-15	Oregon City (C)
May 19	Portland (B)
May 20	Portland (B)
June 8	Portland (B)
June 9	Portland (B)
June 16-17	Portland (B)
June 22	Portland (B)
June 24	Portland (B)

Cross Connection Inspector Course

June 29- July 2	Portland (B)
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Cross Connection Inspector Recertification

May 27	Redmond (B)
May 28	Portland (B)
June 5	Oregon City (C)
June 19	Redmond (B)

Basics for Small Water System Training Course

503-837-1212

May 19	The Dalles
May 21	Pendleton
June 16	Springfield
June 18	Coos Bay

OHA-DWS Surface Water Treatment Training for 2015

- Essentials of Surface Water Treatment (4 classes)
- Slow Sand Filtration (2 classes)
- Conventional and Direct Filtration (1 class)

Visit www.healthoregon.org/swt for dates and registration information



PUBLIC HEALTH DIVISION

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Reminders on plan review... continued from page 6

- systems with less than 300 connections can still qualify for the exemption if they have a current master plan.)
- Be able to certify that any future water main extensions will conform to construction standards (OAR 333-061-0050). The water system must have an Oregon professional engineer on staff or under contract to provide engineering services for the entire duration of the project; and
 - Be able to certify that they have staff qualified to effectively supervise the projects.

Additional information on plan review exemption is available on our website at <http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/PlanReview/Pages/exemption.aspx>. As always, you can call your regional engineer for more information. The exemption does not apply to other infrastructure projects such as sources, treatment or storage.

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