



# WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

## Seattle, Tacoma covering reservoirs



The cities of Seattle and Tacoma have been engaged in ambitious projects to cover or replace uncovered drinking water reservoirs that hold millions of gallons of water.

It isn't cheap, and it isn't easy, but by early 2013 the last of these large projects should be finished. That means drinking water for a

significant portion of the Puget Sound population will have better protection from environmental and intentional contamination.

*(Continued on Page 5)*



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## State Pesticide Management Strategy

We've been receiving requests for information about appropriate ways to use pesticides and herbicides near drinking water sources. One water system asked us for help negotiating an herbicide-spraying plan with a watershed landowner who wanted to control noxious weeds. Others want to know how to safely control scotch broom or dandelions in their sanitary control areas.



Because interest in this topic is rising, we decided to review the Washington State Pesticide Management Strategy.

*(Continued on Page 7)*

### Warning! Certified waterworks operators and BATS

## Meet your professional growth requirement or lose certification

**Waterworks operators and backflow assembly testers (BATs):** If you were certified in Washington before January 1, 2010, you must meet your professional growth requirement by December 31, 2012. **Operators and BAT(s) who don't satisfy their professional growth requirement by the deadline cannot renew their certification.** It will be invalid and they will not be eligible to appeal.

*See pages 8 and 9.*

### Inside This Issue

Director's column.....	2
Source protection assistance ...	2
Funding from energy incentives.....	3
Setting water rates.....	4
Publications.....	5
Drinking water superstars.....	6
News for operators and BATs .....	8-9
WFI reporting expectations ....	10
Protect Your Groundwater Day .....	11
EPA webinar.....	11
Stage 2 DDBP update .....	12
Rulemaking.....	13
CCC Seminar.....	13
Treatment optimization awards .....	14
Lead and copper requirements .....	15

# THE DIRECTOR'S COLUMN

BY DENISE ADDOTTA CLIFFORD



## When the water runs out, will you be ready?

Odessa and some 20 other farming communities in the

Columbia River Basin are at risk of running out of water if they don't make some changes. Simply put, they're using groundwater faster than nature can replenish the aquifers.

The Department of Ecology and the Columbia River Basin Groundwater Management Area (GWMA) program are the lead agencies working on this problem. Our office is at the table because we want water systems to understand the potential severity of the situation and to offer technical assistance to ensure reliable future water supplies.

We will soon contact utilities in the basin to discuss recommendations in the *Columbia River Basin 2011 Long Term Water Supply and Demand Forecast*, which was released in July.

The report, put together by the GWMA, identifies risks, projects possible timelines for water shortages, and examines potential solutions. It is online at <http://www.ecy.wa.gov/programs/wr/cwp/forecast/forecast.html>

Even if your water system isn't among those with uncertain sustainability, there are lessons to be learned about conservation, planning, and regional collaboration to solve water supply and water quality problems.

This isn't about the six-year planning water systems are required to do. This is 20- to 50-year planning.

Water system managers in Central and Eastern Washington will tell you that everything has to work right with winter precipitation—enough rain and plenty of snowpack—for their systems to have enough water to get through hot, dry summers.

Conservation goes only so far in farm country, where agriculture consumes 90 percent of the water used.

One long-term alternative under consideration is tapping into Columbia River tributaries, an expensive proposition for a small farming community. However, if these communities shared the expenses of designing, building and operating surface water treatment plants, the costs would be more manageable.

We know there's a general trend toward decreasing water levels in the Columbia River Basin, but we need better data to guide water management decisions and planning. We require meters, but they're not enough. Water management tools, such as water level-monitoring devices in municipal wells, will generate the information the communities need to more fully understand what is happening to their water supply.

By assessing the situation now and planning to meet future needs, we can ensure that the generations of people who follow us in our Columbia River Basin farming communities will have a reliable water supply.

*Denise A. Clifford*

## Source protection technical assistance available

The Office of Drinking Water is funding a one-year source water protection position with Evergreen Rural Water of Washington. Charlie Brown is the new source water protection circuit rider. He is available to help Group A water systems with various source water protection issues, including planning, implementation, delineation, potential contaminant inventories, and water use efficiency. For information, or to request assistance, call Kitty Weisman at (360) 236-3114 or e-mail [kitty.weisman@doh.wa.gov](mailto:kitty.weisman@doh.wa.gov)



## Money to fix leaks

# Funding water projects with energy incentives

Saving water means saving energy. By reducing leaks, you reduce your electricity usage, saving money for your water system. In fact, you can actually get paid to save energy by taking advantage of incentives aimed at funding leak detection and repair projects.

How does water equal energy? Your system uses energy to pump, treat, and distribute water. You can use this calculation to determine how much energy it takes for your system to produce a gallon of drinking water:

$$\frac{\text{Energy Consumed (measured in kilowatt-hours)}}{\text{Water Produced (measured in million gallons)}} \quad \text{or} \quad \frac{\text{kWh}}{\text{MG Produced}}$$

From the electric utility's standpoint, every gallon of water leaked from your system represents energy it didn't need to generate in the first place.

Through conservation incentive programs, such as the Bonneville Power Administration's [Energy Smart Industrial Program](#), participating electric utilities help pay for your leak detection and repair projects. The incentives vary by utility, but could represent savings as high as 35 cents per kilowatt-hour (kWh) the first year.

Most utilities cap incentives at a percentage of the project's total cost, typically between 50 and 70 percent. See the example below.

If you're planning water conservation improvements, such as leak repairs, find out whether your electric utility offers conservation incentives to help with project costs. It doesn't cost anything to ask, and the incentives could be significant.

If you buy power from a public utility district or municipality in Washington, call Layne McWilliams, the Energy Smart Industrial Program's water/wastewater sector specialist, at (971) 244-8581, or e-mail [layne.mcwilliams@energysmartindustrial.com](mailto:layne.mcwilliams@energysmartindustrial.com)

### Incentive funding for a hypothetical leak repair project

You already know how much water you produce; it's part of your annual Water Use Efficiency (WUE) Report. To determine corresponding energy consumption for this water use, your electric utility's conservation staff will use annual billing data, pump hour-meters, data logging, or other ways to estimate the total kilowatt-hours (kWh) associated with sourcing, treating, and distributing water.

For example, if you produced 200 million gallons (MG) of water in 2011, and you've determined that your energy consumption for 2011 was 400,000 kWh, your system consumes 2,000 kWh per million gallons produced ( $400,000 \text{ kWh} \div 200 \text{ MG} = 2,000 \text{ kWh}$ ). At an average cost of 7.5 cents per kWh, you paid about \$150 in electricity for every 1 million gallons of water produced ( $2,000 \text{ kWh} \times \$0.075 = \$150$ ).

Now, according to your WUE Report, your customers purchased 150 million gallons last year, and you accounted for 10 million gallons of known, but unbilled, water usage. This 160 MG is known as your "authorized consumption." The remaining 40 million gallons (200 MG produced - 160 MG authorized consumption = 40 MG) is "lost water" that leaked back into the ground. That lost water wastes about 80,000 kWh of electric energy—or \$6,000—each year ( $\$150 \text{ per MG} \times 40 \text{ MG} = \$6,000$ ).

Using the same energy factor, if a leak repair project saved 20 million gallons annually, you would reduce energy usage by 40,000 kWh, saving your water system about \$3,000 in electricity per year. If your electric utility pays 18 cents per kWh, your water system would get an incentive of \$7,200, subject to a cap. If the incentive cap is 50 percent of the project cost and you spent \$10,000 to find and repair the leak, the final incentive paid would be \$5,000. This reimbursement is paid on top of any energy savings you achieved.

In this example, you spent a net \$5,000 to save \$3,000 per year. That results in a payback period of less than two years! In addition to energy savings and any incentives paid to your water system, you've also eliminated the operational costs and wear associated with pumping 20 million gallons of water through your system.

# Setting water rates

No community water system wants to raise rates. However, the goal of every public water system is to provide customers an uninterrupted supply of safe, fairly priced water now and in the future. To do that, your system needs to be financially viable. A key to financial viability is the amount of revenue coming through your door. And, of course, your system's rates determine your income.

## Tips for developing a sound rate structure

1. **Rates must cover the full cost of producing, treating, storing, and distributing water to customers.** This includes debt service, financial reserves, operation, maintenance, all regulatory compliance costs, and inflation.
2. **Rates must be adequate and fair.** Adequate means the rate is high enough to cover all system costs. Fair means each customer type or class pays its fair share of the costs.
3. **Do not use water system revenues to pay for other municipal services.** Using water revenues for other purposes, and not maintaining adequate financial reserves for future expenditures, will increase your long-term operating costs.
4. **Customers should know what the rates are.** This information should be in your annual Consumer Confidence Report and water bill.
5. **Your rate structure should be easy to understand.** In general, the rate structure for a system with fewer than 5,000 connections should have no more than three user classifications and no more than five consumption blocks.
6. **Examine your rate structure once a year** as part of your budget development process. Water rates have a short lifespan.
7. **Use good budgeting practices and customer records to support your rates.** It's tough to develop a fair and adequate rate structure if you don't know expenses and revenues from previous years or how much water you're selling to each customer.
8. **Your rate structure should be easy to administer.** Customers need to understand their rates before they will support them. Make careful, thoughtful decisions that balance the needs of both small and large users in your service area.
9. **Consider the need to conserve.** The Water Use Efficiency (WUE) Rule requires municipal systems to set water-saving goals, implement water-saving measures, and report progress to us each year. Conservation can help maintain storage levels and help you avoid paying peak power rates that some electrical companies charge during "heavy use" times.
10. **Calibrate and replace meters as needed.** Meters are the cash registers of your utility. If the meters are inaccurate, you may be losing revenue! The WUE Rule requires you to calibrate and replace your meters periodically. Make sure you have a plan and budget to calibrate or replace them.

## Rates and water use efficiency

Water systems say they can't conserve water because it negatively affects their revenue. When your rates encourage conservation, people generally use less, which results in less revenue. However, it is possible to encourage conservation and generate the revenue your system needs. Take another look at the tips above.

For more information, order *Financial Viability for Small Systems* (331-405) online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

# EPA's Check Up Program for small systems (CUPSS)

CUPSS is a free, easy-to-use asset management tool for small drinking water and wastewater utilities. The tool provides a simple, comprehensive approach based on EPA's highly successful Simple Tools for Effective Performance (STEP) Guide series. Use CUPSS to help you develop:

- A record of your assets
- A schedule of required tasks
- An understanding of your financial situation
- A tailored asset management plan

We have a limited supply of CUPSS CDs. You can order one through our publications database at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm> (Click "Add to cart.")

# New & Revised Publications



**Procedimiento de Muestreo del Nitrato (331-222-S).** Translated July 2012. Spanish version of **Nitrate Sampling Procedure (331-222)**. December 2009. Explains how to collect water samples for nitrate testing. Discusses containers, timing, sampling points, and forms.

**Procedimiento de Muestreo de Bacterias Coliformes en el Sistema de Distribución de Agua (331-225-S).** Translated July 2012. Spanish version of **Coliform Distribution System Sampling Procedure (331-225)**. September 2011. Explains how to collect water samples for coliform testing. Discusses containers, timing, sampling points, and forms.

For copies of our publications, call (800) 521-0323 or visit us online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

Get e-mail copies of new and revised publications. Sign up at <http://listserv.wa.gov/cgi-bin/wa?SUBED1=wadinkingwaterpub&A=1>

## Seattle, Tacoma reservoirs... (Continued from Page 1)

“Seattle’s Reservoir Covering Program has been a major accomplishment with significant benefits to our customers,” said Dave Hilmoe, drinking water director at Seattle Public Utilities. “In 1990, we had 10 open distribution reservoirs accounting for about 85 percent of our total system storage. By early 2013, we will not have any uncovered reservoirs in service.”

In March 2012, Tacoma Water finished replacing three open basins on the South Hill of Puyallup. In their place are two safer, more efficient, concrete storage tanks holding 66 million gallons.

In all, Tacoma Water has covered or replaced eight open water storage basins.

“The value of each of these projects has been enormous,” said Linda McCrea, Tacoma Water superintendent. “Because the quality of the water no longer degrades as it moves through storage, we eliminated retreatment at five sites. Overall security is greatly improved and compliance with regulations is ensured.”

Seattle Public Utilities went underground on some of its reservoirs, such as Maple Leaf.

“About 70 acres of open space has been created on and near these new reservoirs,” said Seattle’s Hilmoe. “All of these improvements benefit our customers.”

Both communities got financial help for their projects from the Drinking Water State Revolving Fund, the American Recovery and Reinvestment Act and the former Referendum 38 construction grant program.



Seattle Public Utilities expects to complete the Maple Leaf covered reservoir project next year.



The covered McMillin Reservoirs replaced three open basins. Tacoma Water officially finished the project in March.

# Drinking Water Superstars

*Water Tap is always looking for stories about the talented people who provide safe, reliable drinking water to their customers. Do you know an exemplary individual or team? Send your stories to [watertap@doh.wa.gov](mailto:watertap@doh.wa.gov)*

## Washington Water Service Company Southwest Region

Quickly responding to public health emergencies is among a certified operator's most important responsibilities. This spring, Paul Robischon and his team at Washington Water Service Company (WWSC), Southwest Region, quickly responded to three drinking water emergencies at systems the company owns or manages.

Challenges included line breaks and coliform-positive episodes. Some problems were easy to identify, while it took time to discover the origin of others. In most cases, weekend or not, the problem was identified and corrected in three to five days.

When WWSC receives initial notice of a line break or fecal coliform-positive sample, the team quickly contacts us. They issue a voluntary boil water advisory to water system customers, give them a phone number to call for questions, and notify them as soon as they lift the advisory.

For example, when an *E. coli* positive result came in on a Saturday, the team advised all the customers to boil their water, collected repeat samples, inspected the whole system, and started the disinfection process.

By Monday morning, the team had completely disinfected the system, including the reservoirs, flushed chlorine out of the system, and was ready to collect the first round of samples necessary to lift the advisory. That day they also completely inspected, disinfected, and pressure tested the suspected reservoir. The operators were convinced that the reservoir was the likely cause of the problem, so they had already taken it offline.

They collected the second round of samples on Tuesday, at the same time the results of repeat samples came in confirming the incident. This is notable because some systems wait for confirmation before beginning their response to an *E. coli* positive sample result.

They lifted the advisory on Wednesday morning, and completed the last remediation steps on Thursday when they sealed the concrete reservoir's wall-to-roof joint, where pressure testing revealed weakness. The sealing will protect it from environmental contamination. After completing this work, they disinfected and tested the reservoir for coliform before putting it back in use.

## City of Walla Walla

In July, the City of Walla Walla won the Association of Washington Cities (AWC) 2012 Municipal Excellence in Public Works award for its Infrastructure Repair and Replacement Program (IRRP). This program developed and funded a coordinated water-sewer-street repair and replacement program.

"The City of Walla Walla accomplished what many of us in local government dream about," says the AWC website. "They were able to actively engage city residents in addressing two community-wide issues simultaneously—deteriorating water and wastewater pipes, and deplorable city streets."

Read more online at <http://www.awcnet.org/ProgramsServices/CityAwards/MunicipalExcellenceAwards/publicworks.aspx>



Washington Water Services consistently identifies and corrects problems within three to five days. From left are Andrea Holmes, Carol Schlender, Zach Osborn, Ben Pratt, Paul Robischon, Jordan Beard and Mike Forsberg.



Watch Walla Walla officials discuss their project with Dominick Alia, chair of the Infrastructure Repair and Replacement Program oversight committee. Click graphic to play the video.

## State pesticide strategy... (Continued from Page 1)

In December, we will publish a new pesticide fact sheet with practical information on how to manage pesticide use near drinking water sources.

Washington State Department of Agriculture (WSDA) administers the Federal Insecticide, Fungicide, and Rodenticide Act in our state. WSDA is working cooperatively with the U.S. Environmental Protection Agency and the state departments of Health and Ecology to develop and implement the strategy.

The purpose of the strategy is to protect human and environmental health while maintaining the viability of the state's agricultural industry. The strategy emphasizes preventing contamination of ground and surface waters by focusing on education and training, implementing proper pesticide management practices, and using regulatory measures or compliance when needed.

According to the strategy, the word "pesticide" actually refers to insecticides, fungicides, herbicides, and rodenticides. EPA requires WSDA to assess the environmental or public health risks from pesticides that could end up in surface and groundwater. If WSDA determines a significant risk exists, it must develop management measures to address that risk. The strategy sets up a process for WSDA to assess pesticide contamination risk, determine appropriate management measures, and work with partner agencies.

### The state pesticide strategy's three-tier approach:

1. **Evaluate pesticides of interest:** Identify pesticides that could occur in surface or groundwater at concentrations approaching or exceeding a reference point (such as a maximum contaminant level or health advisory level).
2. **Manage pesticides of concern:** "Pesticides of concern" are those considered to pose a risk of contamination based on WSDA's evaluation. The strategy proposes a scaled management approach starting with a "soft" or non-regulatory approach, and escalating to enforcement if needed.
3. **Demonstrate progress:** Measure how successful management approaches are at keeping or returning a pesticide concentration to below a reference point.

To assess pesticide contamination risk, WSDA used existing monitoring data, including the Department of Health's well sampling data, to populate a statewide aquifer vulnerability database. WSDA created the database with funding from EPA, in partnership with Ecology and Health, to determine the geographic areas of the state that are vulnerable to pesticide contamination (based on hydrogeology, water quality monitoring data, and pesticide-use data). The database is an important tool in focusing WSDA's contamination prevention efforts.

After designating a "pesticide of concern," WSDA assesses the extent of occurrence, degree to which it may affect public health, and effectiveness of voluntary management measures to reduce or eliminate contamination.

### Pesticide management approaches include:

#### Regulatory measures

- Application buffers or setbacks
- Regulatory use restrictions and geographic bans
- Pesticide reclassification
- Civil penalties for illegal pesticide use



#### Non-regulatory measures

- Increased education and training of pesticide sellers, handlers and growers
- Increased inspections and use audits
- Public notification
- Voluntary use restrictions
- Drinking water source protection planning

WSDA may conduct additional sampling to determine contamination levels and sources.

The strategy considers our Source Water Protection Program a risk-reduction measure, not a regulatory approach. Our program emphasizes preventing drinking water contamination through forward-thinking land use controls and education of landowners.

(Continued on Page 15)



We will mail annual renewals in November

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

We plan to mail annual waterworks certification renewals during the second week of November. However, if you were certified before January 1, 2010, you must meet your professional growth requirement before you can renew. Your deadline for meeting your professional growth requirement is December 31, 2012.



**We will not mail a renewal notice to you until you meet your professional growth requirement.**

You can check your professional growth status on the Washington Certification Services website at <http://www.wacertservices.org>

Check your status today. You may still be able to meet the requirement between now and December 31.

This is also a good time to make sure we have your correct employer, e-mail, and home mailing address. If you've moved or changed jobs recently, you need to notify us in writing. You can do so by:

- Sending an e-mail to Larry Granish at [larry.granish@doh.wa.gov](mailto:larry.granish@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 or e-mail [larry.granish@doh.wa.gov](mailto:larry.granish@doh.wa.gov)

*Warning! Certified waterworks operators and BATs*

## Deadline looms for professional growth requirements

If you were certified in Washington before January 1, 2010, you must meet your professional growth requirement by December 31, 2012. Operators and backflow assembly testers (BATs) who don't satisfy their professional growth requirement by the deadline cannot renew their certification. It will be invalid and they will not be eligible to appeal.

Waterworks operators and BATs certified after January 1, 2010, have until December 31, 2015, to meet their requirement for the first time.

Washington Certification Services (WCS) at Green River Community College in Auburn administers the professional growth programs for both waterworks operators and BATs. WCS follows criteria we established.

### If you are a waterworks operator

Most waterworks operators meet the requirement by earning at least 3.0 continuing education units (CEU) or college credits for completing relevant training. All training applied toward this requirement must meet our evaluation criteria and be completed during your professional growth reporting period.

Operators may also meet the requirement by passing an exam to advance within the water distribution manager and water treatment plant operator classifications at a level 2, 3, or 4, or by achieving certification in a different classification as approved in regulation.

### If you are a BAT

BATs must pass our hands-on professional growth exam. If you don't pass the professional growth exam by the deadline, you will have to apply for and pass the BAT certification exam again.

Exams are filling quickly! The demand is higher than usual because all certified BATs must pass the hands-on exam under the new USC *Tenth Edition* field test procedures to test assemblies beginning January 1, 2013. The longer you wait, the greater the chance that some exams may be full. Apply soon to ensure your choice of exam dates.

Go to <http://www.wacertservices.org> to:

- Check your waterworks or BAT professional growth status
- View BAT exam schedules
- Download a BAT exam application

# Time is running out! BATs must pass the exam on USC 10th Edition procedures

More than 500 backflow assembly testers (BATs) still need to pass the professional growth exam based on the new USC field test procedures. BATs must pass the *Tenth Edition* hands-on exam by December 31, 2012, or they can no longer test backflow prevention assemblies that protect public water systems.

Effective January 1, 2013, water systems can only accept test reports from state-certified BATs who have passed the hands-on exam and use field test procedures based on the *Tenth Edition* (WAC 246-290-490). If you haven't scheduled your hands-on exam, don't delay. Visit <http://www.wacertservices.org> for information on applying for an exam.

Nearly a year ago, we published our transition plan for implementing the revised backflow assembly field test procedures based on the *Tenth Edition Manual of Cross-Connection Control* published by the University of Southern California (USC). See our transition plan requirements below:

Requirements for water systems	
Timeframe	Water systems must:
Now through 12/31/2012	Accept assembly tests conducted by DOH-certified BATs using the USC <i>Ninth Edition</i> or <i>Tenth Edition</i> test procedures (as long as BATs use the same test procedures in the field as used on their most recently passed hands-on exam).
1/1/2012 – 12/31/12	Apply the <i>Tenth Edition</i> pass/fail criteria to all RPBA field tests conducted during this time.
Effective 1/1/2013	Only accept tests conducted by DOH-certified BATs who: <ul style="list-style-type: none"> <li>• Have passed the hands-on exam based on the USC <i>Tenth Edition</i> procedures.</li> <li>• Are using the <i>Tenth Edition</i> test procedures in the field.</li> </ul>

Requirements for backflow assembly testers	
Timeframe	Certified Backflow Assembly Testers must:
Now through 12/31/2012	Use the same test procedures (USC <i>Ninth</i> or <i>Tenth Edition</i> ) in the field as used on their most recently passed hands-on exam.  Start using the <i>Tenth Edition</i> field test procedures as soon as they pass the BAT hands-on exam under the <i>Tenth Edition</i> procedures.
1/1/2012 – 12/31/12	Apply the <i>Tenth Edition</i> pass/fail criteria to all RPBA field tests conducted during this time.
Effective 1/1/2013	Pass the hands-on exam based on the USC <i>Tenth Edition</i> field test procedures in order to test assemblies in the field.

## How to verify BAT certification status

Testers, employers, and water systems can visit Washington Certification Services online at [http://www.instruction.greenriver.edu/wacertservices/bat/cert\\_verification.asp](http://www.instruction.greenriver.edu/wacertservices/bat/cert_verification.asp) where a report:

- Verifies whether an individual holds a valid BAT certification in Washington.
- Lists professional growth reporting period start-and-end dates.
- Shows whether the BAT has passed the professional growth exam during that period.
- Confirms whether the most recently passed exam was based on the *Ninth Edition* or the *Tenth Edition* field test procedures.

# Water Facilities Inventory (WFI) reporting expectations

Most community water systems will receive our annual request for WFI update in the next three to four months. We will include detailed instructions on updating the WFI.

## Reporting mobile homes on your WFI

We expect water systems to include mobile homes in the reported number of single-family residences.

Community systems that serve mobile home parks, but do not report the mobile homes as single-family residences, should make a reasonable estimate of the number of mobile homes supplied through a “master connection.” Then include this estimate with the total number of single-family homes the water system serves.

Do not include the master connection to these mobile home parks among the other commercial or business connections reported in field 27B. All the mobile homes served through such a connection should be counted in field 25A. For example:

*A community water system serves Mobile Home Park A and Mobile Home Park B. Park A has 25 mobile homes and Park B has 100 mobile homes. The community water system has always included these two master connections among its commercial/business connections (field 27B) on the WFI, but has never included the 125 mobile homes among the single-family residential connections.*



Estimate the number of mobile homes and include that estimate with the total number of single-family homes the system serves.

*We expect the water system to report the 125 mobile homes as single-family residences in field 25A, and to remove the master connections to these two mobile home parks from the commercial connections reported in field 27B.*

Dwelling units within multi-family buildings, such as apartments and condominiums, should be reported in field 26B.

## Reporting recreational and transient accommodation uses

### Community systems

Counting campsites, RV sites, and hotel and motel rooms can be cumbersome for community water systems. Therefore, we will no longer ask each community water system to report recreational and transient accommodation uses in field 27A.

Instead, we will ask community water systems to report the water service to each campground, RV park, hotel, motel, and so on, as a commercial connection in field 27B. This change gives us a more reliable number of commercial connections. For example:

*In the past, we expected a community water system serving an RV park with 75 RV spaces and a motel with 25 units to report 100 connections in field 27A.*

*Now, we expect this same community water system to report nothing in field 27A, and instead to report the RV park and the motel as two commercial connections in field 27B. The actual RV sites and motel units are not to be reported anywhere on the WFI.*

Community water systems that have never reported all their institutional, commercial, business, and industrial service connections in field 27B should do so in their next WFI update.

Community water systems should continue to check all applicable water system characteristics in field 12 on their WFI. For example, community water systems that supply an RV park and motel should continue to check “lodging” and “recreational/RV” in field 12.

## Transient and nontransient noncommunity water systems

We continue to expect transient and nontransient noncommunity water systems to report in field 27A of their WFI all detail about recreational services and transient accommodations. For example:

*A transient noncommunity water system serves an RV park with 75 spaces, a motel with 25 units, an office building, a restaurant, and a convenience store.*

*(Continued on Page 11)*

# National Protect Your Groundwater Day



The National Ground Water Association has declared September 11 Protect Your Groundwater Day. The association designed the annual recognition to call attention to ways we can protect and reduce health risks to groundwater.

More than 13 million households nationwide rely on groundwater-supplied wells for drinking water. And 88 million Americans rely on groundwater-supplied community water systems for drinking water.

You can find out about Washington's reliance on groundwater at [http://info.ngwa.org/servicecenter/states/State\\_map.cfm?uid=Wa](http://info.ngwa.org/servicecenter/states/State_map.cfm?uid=Wa)

The Protect Your Groundwater Day campaign has a website full of information and resources, including two categories of groundwater protection: keeping it safe from contamination and using it wisely.

On Protect Your Groundwater Day, the National Ground Water Association urges you to ACT:

## ACT — acknowledge, consider, take action

1. Acknowledge the causes of preventable groundwater contamination.
2. Consider which apply to you.
3. Take action to prevent groundwater contamination.

For more information, visit the National Groundwater Association online at <http://www.ngwa.org/Events-Education/groundwater-day/Pages/default.aspx>

For more tools and guidance, visit us online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/sourcewater/SourceWaterProtection.aspx>

## WFI reporting... (Continued from Page 10)

*We expect the water system to report all of the RV spaces and motel units in field 27A (100 connections). Neither of these two businesses should be included in field 27B, because all the RV spaces and motel units served through these two connections are accounted for in field 27A. However, the other three stand-alone service connections (office, restaurant, and convenience store) should be reported in field 27B.*

### For more information

If you have any questions about your WFI, call our regional office:

Eastern Region, Spokane Valley  
(509) 329-2100

Northwest Region, Kent  
(253) 395-6750

Southwest Region, Tumwater  
(360) 236-3030

## EPA to hold webinar on sustainability planning for utilities



On September 13, 2012, from 10 to 11:30 a.m., EPA will host a webinar on how water and wastewater utilities can engage with community stakeholders to establish

sustainability goals that reflect utility and community priorities. Water systems need planning to manage operations, ensure their infrastructure investments are cost-effective, and support other relevant community sustainability goals.

The webinar will feature presentations by two local leaders about projects in their communities. The webcast is free. For more information, call Jim Horne at (202) 564-0571 or e-mail [horne.james@epa.gov](mailto:horne.james@epa.gov) You can register online at <https://www1.gotomeeting.com/register/797362152>

## Stage 2 DBP update

# More systems prepare for routine monitoring

Beginning October 1, 2012, Schedule 2 systems under the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2) must begin following Stage 2 criteria for monitoring Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). Schedule 3 and 4 systems should continue to monitor according to Stage 1.

### What are Schedule 2 systems?

First, they are community and nontransient non-community systems that deliver water continuously treated using chlorination, ozonation, chloramination, or chlorine dioxide. This includes systems that purchase treated water, even if they don't treat it themselves.

Second, either they serve 50,000 to 99,999 people themselves or they are a smaller system interconnected to a system of that size through a nonemergency intertie or series of interties (consecutive systems). If your system purchases from another system that serves 50,000 to 99,999 people, your system is a consecutive system.

### Will an EPA waiver affect these requirements?

No. A very small system waiver (VSSW) or 40/30 certification waiver received from EPA does not waive the requirements for routine TTHM and HAA5 monitoring under Stage 2. They only waived a system's requirement to do an Initial Distribution System Evaluation (IDSE) and submit a report. The waivers no longer apply or relieve you of any requirements.

### Do Schedule 2 systems have to take samples on October 1, 2012?

No. The rule requires systems on quarterly monitoring to take the first sample(s) sometime during that calendar quarter (October – December) and subsequent samples about every 90 days thereafter. If a system is on annual monitoring, and the month of highest TTHM and HAA5 is in July each year, that system would take the first samples under Stage 2 in July 2013.

Systems that do have an approved IDSE report must take samples during the months and at the locations identified in the report, unless updates are needed because of significant changes to sources, treatment processes, or the distribution system.

### Does this affect my disinfection byproducts (DBP) monitoring plan?

Yes. You must modify (or develop) your routine compliance DBP monitoring plan to incorporate Stage 2 requirements prior to the date you start routine monitoring.

You must include monitoring frequency, sampling schedule, number of samples, and sample locations in your plan; these may be different from Stage 1.

The monitoring plan also needs to include compliance calculation procedures.

The number of treatment plants you have will no longer be a determining factor of the number of samples you need to take. Sampling requirements for Stage 2 are based on population served.

### Where should I send my DBP monitoring plan?

Systems that deliver surface water or groundwater under the direct influence of surface water (including systems that purchase it), and serve 3,300 or more people, must submit their DBP monitoring plan to our regional office (see "Resources" below).

Systems that did an IDSE but did not submit an IDSE report must also submit their DBP monitoring plan to our regional office.

The remaining systems must complete their monitoring plans and make them available upon request.

### Resources

A monitoring plan template with additional guidance is online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/PublicationsandForms/Forms.aspx> (scroll to Disinfection Byproducts). After you download the form, you must "Allow Macros" for the spreadsheet to work correctly. You can get help completing your monitoring plan from:

- [Evergreen Rural Water of Washington](http://www.evergreenwater.com) (800) 272-5981
- [Rural Community Assistance Corporation](http://www.ruralcommunityassistance.com) (509) 927-6748 (limited to rural communities serving fewer than 3,300 people)

Read our fact sheet, *Transition from Stage 1 to Stage 2 Disinfection Byproducts Rule Monitoring*, online at <http://www.doh.wa.gov/portals/1/Documents/pubs/331-377.pdf>

### Call your regional DBP specialist:

Eastern Region, Spokane Valley  
[Russell Mau](mailto:Russell.Mau@dnr.wa.gov), P.E. (509) 329-2116

Northwest Region, Kent  
[Jolyn Leslie](mailto:Jolyn.Leslie@dnr.wa.gov), P.E. (253) 395-6762

Southwest Region, Tumwater  
[Regina Grimm](mailto:Regina.Grimm@dnr.wa.gov), P.E. (360) 236-3035

## RULEMAKING

### Public hearing - Group B public water systems, chapter 246-291 WAC

The State Board of Health (board) will hold a public hearing on proposed changes to the Group B rule on October 10, 2012.

The 2009 Legislature eliminated funding for the Group B program and amended state law directing the board to adopt rules. The proposed rule shifts the regulatory framework to align the rules with our capacity to implement the program. The proposal:

- Strengthens water system design and construction standards for new and expanding systems.
- Strengthens new source water approval requirements.
- Sets more stringent water quality and quantity standards.
- Improves public notification requirements.
- Eliminates ongoing water quality monitoring requirements.
- Provides local governments flexibility to set more stringent standards than state rules.
- Allows local governments to waive some requirements under specific conditions.

Visit our Group B Web page at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/RuleMaking/GroupB.aspx> where you can:

- Read the proposed rule language and supporting information.
- Learn how to comment on the changes.
- Get directions to the public hearing.
- Join our Group B e-mail.

#### Other rulemaking information

The following rulemaking activities are online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/RuleMaking.aspx>

- Water Works Operator Certification, chapter 246-292 WAC
- Basic information on the rulemaking process
- Rulemaking moratorium
- Link to the Agency's rulemaking web page

#### All drinking water rules are online

All of our drinking water rules are online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules.aspx>

#### Get automatic up-to-date information

You can subscribe to our rulemaking e-mail list at <http://listserv.wa.gov/cgi-bin/wa?SUBED1=WA-DRINKINGWATERRULES&A=1>

#### Questions?

Call Theresa Phillips, rules coordinator, at (360) 236-3147 or e-mail [theresa.phillips@doh.wa.gov](mailto:theresa.phillips@doh.wa.gov)

Don't miss this!

### 20th Annual Cross-Connection Control Group Seminar October 17, 2012

The Group will hold this year's seminar from 7 a.m. to 4 p.m. October 17 at the La Quinta Inn, 1425 E. 27 Street in Tacoma. If you need to meet your professional growth requirement, this may help. A request for 0.6 CEU is pending. A few topics on this year's program:

- The legal aspects of a backflow prevention program.
- A status report on residential sprinkler systems and the National Fire Protection Association role.
- Washington Certification Services will update BATs and CCSs on current certification requirements and answer questions from the audience.

Space is tight, so register early. For more information, visit The Group online at <http://www.backflowgroup.org>



## 10 years of overachievement

# Surface water filtration plants beat or meet treatment optimization goals

Eight Washington surface water filtration plants are bringing home silver and bronze certificates this year for feats in water treatment that are no less heroic than those of Olympic athletes.

Department of Energy 200W earned silver for exceeding or meeting treatment goals for five years.

Town of Carson, City of Everett, City of Leavenworth, River Bend Water System, Thunderbird Terrace Water System, Water District 19 on Vashon Island, and City of Woodland all earned bronze for reaching the three-year milestone.

We present bronze, silver, and gold certificates to water systems the first time they meet the turbidity goals for three, five, and ten consecutive years, respectively. Nine other water systems have held their winning positions beyond the milestones, including four gold certificate winners.

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See all TOP award recipients on Page 16.

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“These treatment plant operators have met or exceeded every challenge we threw their way,” said Office of Drinking Water Director Denise Clifford. “They indeed are winners. But their customers also win because the continuous improvements result in better public health protection.”

In 2001, the Office of Drinking Water challenged surface water systems to meet optimized filtered water turbidity goals. The idea of treatment optimization is to achieve the best treatment possible, using the existing treatment facilities. Participation in the program is voluntary. The Treatment Optimization Program’s (TOP) goals are simply a target; there are no consequences or repercussions for not achieving them.

So, you can imagine how proud we are to report that our 2011 monitoring results show these treatment plants, as a group, continue to improve their performance. With 10 years of continuous improvement, these systems definitely have something to brag about.

The performance of rapid-rate filters for turbidity (particle) removal is a key element in protecting consumers from microbial contaminants and maximizing public health. The treatment optimization goals include:

1. Meet 0.10 nephelometric turbidity units (NTU) or less in 95% of the maximum daily combined filter effluent (CFE) measurements taken during the year.
2. Never exceed 0.30 NTU in any CFE measurement.

In addition, the water systems had to remain free of any drinking water violations during the evaluation period.

To learn more about TOP and treatment optimization visit us online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/SourceWaterProtection/RapidRateFiltration.aspx>

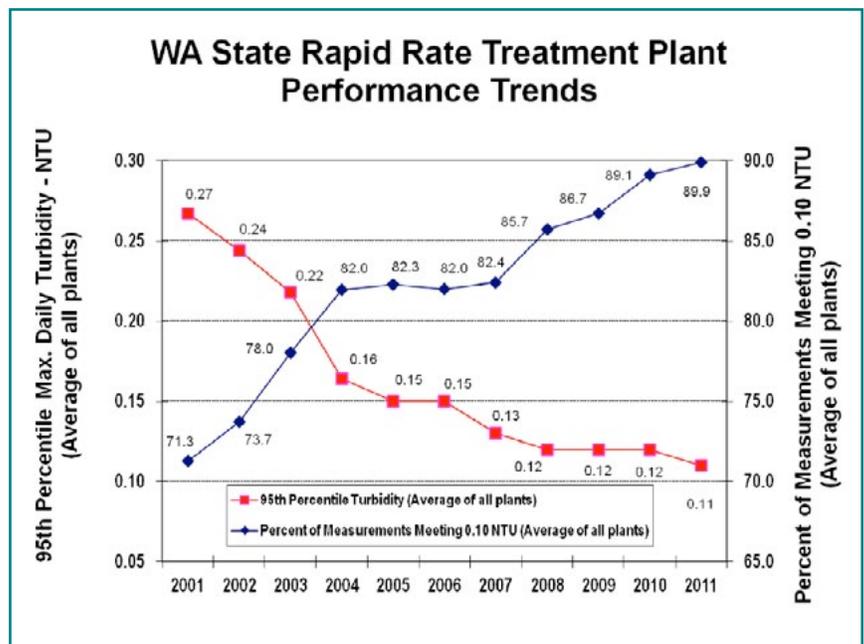
### Regional surface water contacts:

For assistance on improving treatment plant performance, contact our regional office:

Eastern Region, Spokane Valley  
[Mike Wilson](#) (509) 329-2117

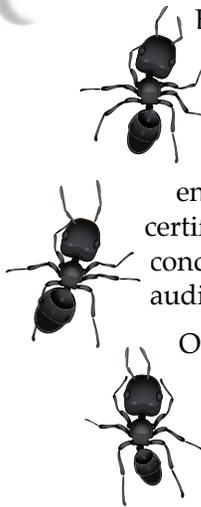
Northwest Region, Kent  
[Nancy Feagin](#) (253) 395-6765

Southwest Region, Tumwater  
[Janet Cherry](#) (360) 236-3036



This graph illustrates turbidity reduction performance improvement by all rapid-rate treatment plants in Washington as a group from 2001 through 2011. Data points are the average of all included treatment plants for the given year.

## State pesticide strategy... (Continued from Page 7)



Enforcement is a key element of the strategy. WSDA believes that a strong commitment to regulatory oversight is essential for successful pesticide contamination prevention. WSDA accomplishes enforcement by registering pesticide products, certifying and training pesticide handlers, and conducting on-the-ground inspections and audits.

Over the last year, we worked closely with WSDA to implement the strategy in the Quincy and Walla Walla areas, where dacthal contamination is increasing in vulnerable aquifers. Dacthal is a pre-emergent herbicide used primarily when

growing onions. There is an opportunity to reduce contamination now because, while dacthal levels in the aquifers are rising, the levels are still relatively low and don't threaten public health.

At present in Quincy, WSDA is asking growers to reduce their use of dacthal to reverse the contamination problem. At the same time, it is increasing inspections, education, and sampling. If these voluntary measures don't succeed, WSDA will consider regulatory approaches.

For more information about the Washington State Pesticide Management Strategy, call Kitty Weisman, Source Water Protection Program Manager, at (360) 236-3114 or e-mail [kitty.weisman@doh.wa.gov](mailto:kitty.weisman@doh.wa.gov)



## Don't forget: New lead and copper requirement

If you are required to conduct lead and copper monitoring you must provide consumer notices of individual sampling results to the persons at each sample location. You must also verify that you completed the notification by sending a certification form to us.

### Notification of results

You must provide the consumer notice as soon as possible, but no later than 30 days after learning the results. To meet this reporting requirement, you may use our *Consumer Notice: Lead and copper water sample results\** template.

**Community systems:** You must provide individual sampling results to all residences where you collected lead and copper samples. In multi-unit structures, notify only each unit tested.

**Nontransient noncommunity systems:** You must notify all consumers who use water from the sample tap, even if they do not receive a water bill. With prior approval from us, you can post the notice in public areas.

### Certification to the state

You must send a sample copy of one consumer notice and a signed certification form to us within 90 days after you get the results. To meet this reporting requirement, you may use our *Lead and Copper Results: Consumer Notification Certification Form (331-462-F)\**.

You can e-mail the form and a copy of the consumer notice to [denise.garrett@doh.wa.gov](mailto:denise.garrett@doh.wa.gov), fax it to (360) 236-2252, or mail it to the address on the certification form.

### Multiple systems

If you are responsible for preparing consumer notices for multiple systems, please see the resource-saving tips in the *Lead and Copper Results: Consumer Notification Certification Form (331-462-F)\**.

\*Available online at <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Contaminants/LeadandCopperRule.aspx>

# Congratulations, TOP Award Recipients!

## Gold Award Recipients

10 or more years of continuously optimized performance, 2001-2011

- Arlington Water Department
- Lake Whatcom Water and Sewer District – South Shore Water System
- Pasco Water Department
- Skagit County PUD #1 – Judy Reservoir System



## Silver Award Recipients

Five to nine years of continuously optimized performance

- Lake Chelan Reclamation District (2005-2011)
- Stevens Pass Water System (2005-2011)
- Hoquiam Water Department (2005-2011)
- City of Kelso (2006-2011)
- **Department of Energy 200W (2007-2011)\* Congratulations 1st time winner!**

## Bronze Award Recipients

Three or four years of continuously optimized performance

- Lummi Island Scenic Estates Community Club (2008-2011)
- Ryderwood Improvement & Service Association (2008-2011)
- **Town of Carson (2009-2011) • Congratulations 1st time winner!**
- **City of Everett (2009-2011) • Congratulations 1st time winner!**
- **City of Leavenworth (2009-2011) • Congratulations 1st time winner!**
- **River Bend Water System (2009-2011) • Congratulations 1st time winner!**
- **Thunderbird Terrace Water System (2009-2011) • Congratulations 1st time winner!**
- **Water District 19 on Vashon Island (2009-2011) • Congratulations 1st time winner!**
- **City of Woodland (2009-2011) • Congratulations 1st time winner!**

## In This Issue

The following people contributed to the production of this issue of *Water Tap*:

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