



WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

A community's journey through WUE

By Ernie Klimek, City of Port Angeles

Twenty-one percent! That's where the City of Port Angeles started in 2007 as a baseline for water loss under the new Water Use Efficiency (WUE) Rule. Twenty-one percent and climbing! It wasn't the typical, "You know, around 10 percent," answer that is casually thrown out in conversations among water utilities.



We had no documentation of unmetered authorized uses, we knew our service meters were old (many installed in 1976), and we knew the infrastructure was suspect.

(Continued on Page 8)



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Office of Drinking Water
PO Box 47822
Olympia, WA 98504-7822
(800) 521-0323

<http://www.doh.wa.gov/ehp/dw/>

Welcome to the new Water Tap

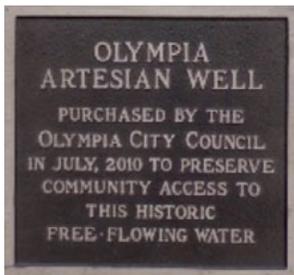
We hope you enjoy clicking through the new, electronic *Water Tap*. We opted to keep our familiar look, right down to the 3-hole punch. Now, without our long print process, we can give you more timely stories, and you can enjoy full-color photographs and links to more online resources. You can also quickly share *Water Tap* with someone else.

We plan to stick to a quarterly publication schedule for now. We will send *Water Tap* to our existing e-mail lists. Anyone who isn't on one of our existing lists, can subscribe at <http://listserv.wa.gov/cgi-bin/wa?SUBED1=watertap&A=1>



Let us know what you think of our new *Water Tap*. Going electronic is a new journey for us, and we will use your comments to improve and learn along the way.

It's the water ... and a lot more!



More than a century ago, residents in the Olympia-Tumwater area knew the value of abundant, high-quality, and free-flowing artesian wells. These were sources of clean, cheap water that just gushed out of the ground. The springs became central meeting points where settlers got water, met to do business, traded news, and built communities. In the late 1800s, the Capital Brewing Company was using

(Continued on Page 12)

Inside This Issue

Director's column.....	2
Training in Oak Harbor	2
5 common WUE mistakes	3
CCRs due July 1.....	4
Publications.....	4
Counting connections	5
Sanitary survey cost.....	6
Bremerton 1 st in state	6
Managerial and financial capacity.....	7
BAT professional growth.....	9
Water operator jobs	9
Operator professional growth	10
New address or boss.....	10
Lab corner	11
Rulemaking.....	13
Tacoma's new filtration system.....	13
Emergency!	14
Washington is ready	16

THE DIRECTOR'S COLUMN

BY DENISE ADDOTTA CLIFFORD



Waste not, want not...

I hope you enjoyed Ernie Klimek's article in this edition of *Water Tap* about how

the City of Port Angeles embraced the Water Use Efficiency Rule and saw significant reductions in water loss. Ernie made several important points:

- Involving and educating city employees about leak reduction efforts caused a shift in mindset. As a result, more problems were detected and reported.
- Working to engage the community is important. In Port Angeles, there was already a lot of citizen interest, and Ernie found that his customers were eager to do more to conserve water.
- It takes time and patience to see results, but small steps do add up.

The intent of the Water Use Efficiency Rule is to ensure that we use water, one of nature's most precious commodities, as wisely and efficiently as possible. The threat of water shortages is very real, even in soggy Western Washington. Although the mountain snowpack this year is above normal, it doesn't take much – a dry winter here, warmer winter temperatures there – to upset the balance.

We simply can't afford to waste water, especially drinking water. Water systems that regularly lose more than 10 percent of their treated drinking water to leaks, might as well be lighting \$100 bills on fire.

Legislators understand that it takes time, and often significant amounts of money, to detect and repair leaks. That's why the Water Use Efficiency Rule was created with a series of milestones.

Our office is tightening up monitoring for annual water use efficiency reporting and ensuring that water systems set appropriate goals for themselves and their customers.

I especially enjoyed Ernie's thinking about being realistic about thoroughly examining authorized water usage to help the city understand weaknesses in the water system and focusing on how to solve them. He also inspired the public works staff to take ownership of water use efficiency efforts.

It's working for Port Angeles. In five years, they reduced their water loss rate from 21 percent to 16 percent. To say it another way, they achieved a 24 percent improvement.

Well done, Port Angeles! Your accomplishments are inspiring.

Denise A. Clifford

Training opportunity in Oak Harbor



The Whidbey Island Water Systems Association is sponsoring a Drinking Water Symposium from 8 a.m. to 4:30 p.m. June 23, 2012, in the Student Union Building at the Oak Harbor High School.

Approved for 0.5 continuing education units, the symposium will cover regulatory updates for small water systems and system management.

Cost: Members free

Nonmembers \$25

The schedule of activities and the registration form are online at <http://www.whidbeywatersystems.org/>

WUE reports due July 1: Avoid these 5 mistakes

By Mike Dixel

Your annual water use efficiency (WUE) report is due July 1. You must file the reports online at <https://fortress.wa.gov/doh/eh/portal/odw/wue/default.aspx>

Last year, about 94 percent of water systems submitted their reports electronically. We noticed that many privately owned water systems are still trying to catch up with WUE goal-setting requirements. A WUE goal must identify the predicted water savings over time.

The most common mistakes we found on WUE reports:

1. **“Our goal is to educate our customers.”** This is important, but education is not a goal. It’s a way to achieve your goal.
2. **Some systems decided not to set a goal because not all of their customers have meters.** Wrong! You must establish a goal. You can base it on source meter information until customer meters are installed.
3. **Some systems established a goal but forgot to include it in their annual WUE report.** Oops! Remember to always include the goal in your report, even if it hasn’t changed.
4. **Some systems plan to reduce leakage to 10 percent, or install meters by 2017.** Nice try, but the law already requires this. You cannot claim this as your only goal.
5. **Some systems haven’t established a goal at all.** Why not? The deadline for establishing goals has passed. All systems must establish one as soon as possible.

The “Customer Goal” section of the annual WUE report must identify the goal your elected governing board or owner set through your water system’s WUE public forum. We need to see that you are thinking about how to achieve water reduction targets and that you are meeting the goal-setting requirement. For example, you could say, “We will reduce our annual average per capita use from 100 gallons per person to 90 gallons per person by the year 2017.” This goal meets our minimum requirements because it has a **water saving target and a timeframe for achieving it.**

We want to make sure you get off to the right start with your WUE program and start tracking your progress over time. Your annual WUE report tells us what you are trying to achieve by promoting and encouraging conservation with your customers.

If you didn’t establish a WUE goal correctly, you’re not alone. In 2008, only 45 percent of municipalities established a WUE goal. That year, we sent out technical assistance or violation notices to help municipalities do it right the next reporting year. In 2009, more than 80 percent responded with correct WUE goals.

This year, we will look closely at your WUE report to ensure you established a goal that meets our minimum goal-setting criteria. We plan to make sure they are complete and send out more violation notices, if necessary. So, before you submit your next WUE report, make sure your goals are correct.



Reminder Consumer Confidence Report due by July 1, 2012

It's time to prepare your 2011 Consumer Confidence Report (CCR). Drinking water rules require all Group A community water systems to provide a CCR to their customers and to the Office of Drinking Water (ODW) by July 1, 2012.

Your water system's CCR must include results from samples collected between January 1 and December 31, 2011. The CCR must also include sampling data from previous monitoring periods (up to five years) for specific contaminants that you did not need to monitor during 2011.

A certification form, also due to ODW, verifies that you prepared and distributed your annual Consumer Confidence Report. You can get the certification form at <http://www.doh.wa.gov/ehp/dw/forms/331-203-F.pdf> or by calling (800) 521-0323 to order copies.

If you sell water to a Group A community water system, you must give the system the source information and sample results it needs to include in its CCR. The annual due date for water sellers to supply this information is April 1.

New lead informational statement

Every CCR must include a short informational statement about lead in drinking water and its effects on children. Please see pages 7 and 8 of *Preparing User-Friendly Consumer Confidence Reports* (331-296) at <http://www.doh.wa.gov/ehp/dw/Publications/331-296.pdf>



For help preparing your CCR

Call the U.S. Environmental Protection Agency at (800) 426-4791 or visit EPA online at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/index.cfm>. Click "Tools for systems," where you'll find CCRiWriter, a software application to help water system owners and operators quickly create their consumer confidence reports.

For more information

Visit us online at http://www.doh.wa.gov/ehp/dw/our_main_pages/consumer.htm or call our regional office at:

Eastern Region, Spokane Valley (509) 329-2100
Northwest Region, Kent (253) 395-6750
Southwest Region, Tumwater (360) 236-3030

New & Revised Publications



Backflow prevention assemblies approved for installation in Washington State (2012) (331-137). Revised. January 2012. This CD identifies the makes and models of Department of Health-approved backflow assemblies. It is a reformatted version of the *Approved Backflow Assemblies List* published by the University of Southern California (USC) Foundation for Cross-Connection Control and Hydraulic Research.

Source water protection requirements (331-106). Revised. May 2012. This 4-page booklet explains the requirements and includes a checklist you can use as a tool to develop your own source water protection plan.

For copies of our publications, call (800) 521-0323 or visit us online at <http://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=wa-drinkingwaterpub&A=1>

Counting service connections in multifamily dwelling units

Group A public water systems must report all service connections on their Water Facilities Inventory (WFI) every year. Water Tap recently learned that some community water systems are having trouble counting dwelling units, especially if their service areas include multifamily units. Some don't know they need to count every unit in a dwelling, and others aren't sure how to count them, so we asked Dr. Drip for guidance.

Why count every unit in a multifamily dwelling?

Water systems that serve larger numbers of households require more monitoring, planning, and oversight. It is important for you to know how to count dwelling units, residential service connections, and population accurately, so you can keep the people in your community safe.

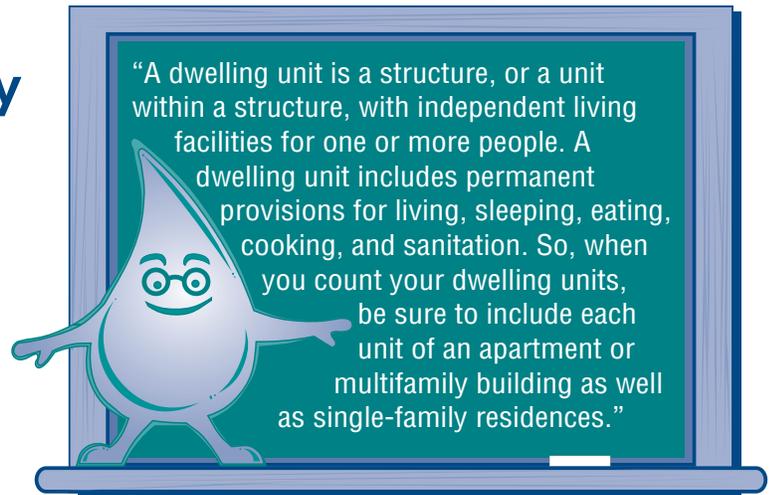
Remember, although some multifamily buildings have one master water meter, we need to know the actual number of dwelling units that receive drinking water from your utility.



How do I get the actual numbers?

You may be able to get accurate data about the number of units in a condominium, apartment, or other residential multifamily structure from one or more of the following sources:

- **Electrical utility** usually bills each dwelling unit within a service area.
- **Sewer utility** may use the number of dwelling units as the basis for their charges.



- **Managers of multifamily dwellings** should be able to tell you how many units they serve.
- **Local planning office** may track the number of dwelling units in approved multifamily developments.
- **County assessor's office** may maintain a database on the number of dwelling units in each multifamily development.

What's the bottom line?

Water systems need to know how many dwelling units they're serving and report that number on their WFIs.

For more information, contact your regional WFI coordinator:

Eastern Region, Spokane Valley

George Simon (509) 329-2135
george.simon@doh.wa.gov

Northwest Region, Kent

Aniela Sidorska (253) 395-6751
aniela.sidorska@doh.wa.gov

Southwest Region, Tumwater

Brad Brooks (360) 236-3049
brad.brooks@doh.wa.gov

A reminder for community systems with a groundwater source

Reduce sanitary survey expenses

Here's some advice to help reduce the cost of routine sanitary surveys for owners and operators of community systems using groundwater. The



federal Groundwater Rule increased the frequency of sanitary surveys to once every three years for community systems. However, you can qualify for the less frequent five-year survey cycle if you:

Didn't have any acute or nonacute total coliform MCL violations—or more than one coliform monitoring violation—since the last sanitary survey.

To maintain a clean coliform record you have to make sure there are no unprotected points for contaminants to enter the system. Everything must operate normally to provide adequate pressure and treatment if installed. You must ensure that the coliform sampling procedures you use yield results that truly represent the water quality present. Sampling errors don't help anybody.

You can do this by having a well-written Coliform Monitoring Plan with good sample sites, good sampling techniques, and trained staff. Develop an operations and maintenance program that ensures your system has the best sanitary protection possible, and no unprotected openings in the wellhead, storage

(Continued on Page 15)

Bremerton ranks 1st in state for conservation challenge

The City of Bremerton placed first in Washington State and third out of more than 100 other medium-sized western cities in the National Mayor's Conservation Challenge.

The contest ran through the month of April 2012. Its goal was to improve the environment using an online outreach campaign to engage citizens about their water conservation efforts.

Bremerton Mayor Patty Lent, city staff, and other community groups worked diligently, encouraging residents to take an online pledge at <http://www.mywaterpledge.com> to show their commitment to conserving water, saving energy, and reducing pollution.

Two other Washington cities were among the top 10 for their categories. The City of Lacey ranked 6th in the medium-sized western cities category, and Olympia ranked 8th among larger western cities.

"The Conservation Challenge highlighted the impact of each person's water-saving efforts," said Bremerton Water Resources Manager Kathleen Cahall. "Bremerton's prize for participating in this contest is increased awareness about the importance of our water resources."



The 2012 Mayors Challenge used five public service announcements to encourage residents to take the online pledge. Above, singer-songwriter Nick I encourages us to conserve water, save money and reduce pollution. (Click IMAGE to play.)

The challenge divided cities into four regions and categorized them by population. Participants in cities placing first in their category were eligible to win prizes.

"This kind of community involvement is a great way for municipalities to increase awareness about their customer's water use and engage them in a national trend to use less water," says Mike Dexel, water resources policy lead for the Office of Drinking Water.

The Mayor's Challenge for Water Conservation was sponsored by the Wyland Foundation. <http://www.wylandfoundation.org/>

Community water systems with fewer than 1,000 connections

Managerial and financial capacity: A continued commitment

Tending to the technical, managerial, and financial capacity of your water system will ensure that it can continue to provide safe and reliable drinking water to your customers. Did you know it could also save your community money? Developing and implementing effective management tools and pursuing clear-eyed financial planning enables your governing board and your operator to be most efficient in the use of your system's limited resources.

Greater efficiency and effectiveness translate into higher value to your customers. You can achieve this higher value now by:

- Filling any gaps in standards, policies, and authority you need to manage your water system.
- Carrying out a cost recovery plan that goes beyond day-to-day expenditures and prepares for future infrastructure replacement.

Making repairs and replacing your critical infrastructure in a timely manner protects the current and future health of your community.

The 2011 online capacity assessment: A fine start

We are committed to helping you plan for and address your capacity needs. Last year, we used *Water Tap* to tell you about our new online capacity assessment tool. The tool asks 18 simple questions to help you assess the managerial and financial health of your water system. Last fall, we offered the assessment to the 560 community water systems in Washington serving 100 to 1,000 connections.

Each of the 304 systems that completed the online assessment received customized feedback. We are working with the information we received from these systems to help us align our resources and program priorities. We're committed to giving tailored support to water system governing boards and operators that recognize one or more areas for improvement.

An ongoing effort...

In January, we opened the assessment to all community water systems with 1,000 or fewer connections. Haven't participated yet? Now is the

time to take stock of your system's managerial and financial strengths and vulnerabilities.

When you complete the online assessment, you'll get instant, customized feedback to help you build your system's capacity. There are opportunities throughout the

assessment to make comments, and we encourage you to share your thoughts with us. Don't worry, taking the assessment is easy. Instructions and a link to the assessment are at <http://www.doh.wa.gov/ehp/dw/Programs/capacity2.htm>

We intend to build this assessment into our sanitary survey process, so you might hear about it at your next sanitary survey. If you already took the online assessment, your surveyor may talk to you about your answers, feedback report, and the progress you've made toward meeting your goals. We'll also look at where it makes sense to take your next step toward more effective management or improved financial capacity.

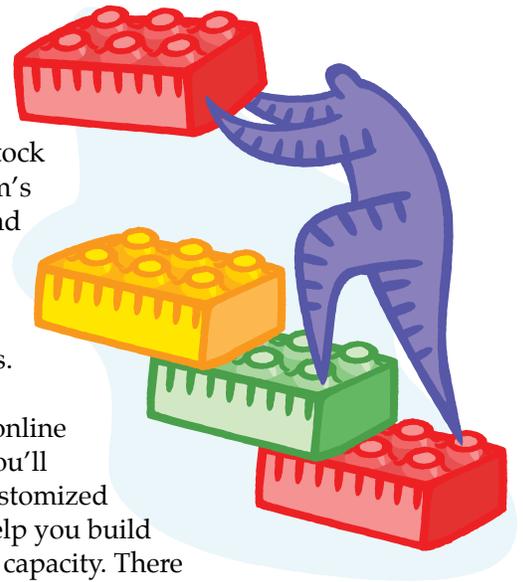
Take some time now to work on the roadmap that will put your system on a path to success. It all starts with evaluating your system's needs and setting priorities. Go ahead and take the assessment now. And, remember, we're here to help you along the way.

Have questions about the assessment? Call Lorelei Walker at (360) 236-3097 or e-mail loralei.walker@doh.wa.gov

Need help building your system's capacity? Our regional office staff can help. Find contact information at http://www.doh.wa.gov/ehp/dw/Staff_Lists/dwnames.htm

Ready to take the assessment? For instructions and a link to the assessment, go to <http://www.doh.wa.gov/ehp/dw/Programs/capacity2.htm>

Want to see results from the 2011 pilot assessment? Go to <http://www.doh.wa.gov/ehp/dw/Programs/capacity3.htm>



Community's journey... (Continued from Page 1)

After the initial water loss evaluation, we began looking at our efforts to track what actually was happening. Using the WUE Rule as a guide, we began to separate authorized consumption from real water loss. What made this effort work was education.

By sharing what unmetered uses we were looking for with our crews and other city staff, we put more people on the watch for the types of uses they could help us track. We looked to our fire department to document uses, including fire suppression responses and training. We looked to our street crews to document uses for cleanup and flusher truck operations, and we looked to our wastewater crew to document water used by the "Vactor" truck.

In house, we looked for better documentation on hydro-excavating, flushing, and reservoir cleaning numbers. We ran calibration checks on our source and reservoir meters.

These were small efforts, but they began to change a mindset about daily operations. We began to turn our attention toward conservation of our resource, the intent behind the WUE Rule, and decision-making processes within the utility.

Then, we waited (patience my young Padawan). We began to see the numbers slowly trend downward. We replaced some service meters. Now that we had an idea where we were, we could go into our public hearing process and work to develop our goals.

The public hearing process is interesting. I've attended many hearings where staff far outnumbered the public. Our WUE hearing was different. We have a very active, involved, and informed community here in Port Angeles. They took our information, reviewed it, and came back with public comment (really, real public comment!). They asked us to add deeper water use reductions to the system. They wanted more.

We had to evaluate our processes, our resources, and the WUE Rule requirements. Those who attended knew their stuff, and we could see they were willing to team with the utility to make this work. We were a partnership. With goals in hand and partnerships in place, we set out like Lewis and Clark into the great unknown of Water Use Efficiency. In the end, we accepted one recommended change and used the other recommendations as guidance going forward.

So, how have we done? During the past five years, we reduced our water loss from 21 percent to 16 percent. We accomplished this through education, partnerships, communication, and an honest effort



The satisfaction of finding a leak and repairing it is immeasurable. Clamping this water main leak are (clockwise from front left) Ron Anderson, Jason Holbrook, and Jeff Groves of Port Angeles Public Works and Utilities.

to change. We calibrated meters, started to track previously unmetered authorized water uses, and aggressively went after leaks by responding within 12 hours and repairing in 24 to 48 hours.

Our customers know we will respond when they call. We thank them for their stewardship of the resource and we have many repeat calls because they are on the lookout for leaks when driving around town or going for walks in their neighborhoods.

Instead of hiring a leak detection company, we purchased our own leak-detecting correlating equipment that allows us to look for leaks on our schedule, not once a year. Crews learned to operate the equipment. The satisfaction of learning to use the equipment, finding a leak, and repairing it is immeasurable. The staff took ownership. Better yet, they were doing it for their community, their hometown—helping their neighbors and friends.

We also are embarking on a full-scale automatic meter reading and advanced metering infrastructure (AMR/AMI) project to replace our utility meters. We started calling the water meters "revenue meters" in conversations. Not only were the old meters failing to account for all consumption, which increased our water loss percentage, we were losing revenue through the inaccuracies. The city's water, wastewater, and light utility departments are sharing the cost of this project. When fully operational, AMR/AMI will enable us to monitor the system, look for leaks through meter usage, and let customers begin to manage and regulate their consumption.

(Continued on Page 15)

Professional growth exam deadline for BATs: 12/31/12

Are you one of the 800 backflow assembly testers (BATs) who still has to pass the professional growth exam by December 31, 2012? Most BATs wait until the last year of the professional growth reporting period to apply. The demand for exams is higher than usual because all certified BATs must pass the practical exam under the new USC 10th Edition field test procedures in order to test assemblies beginning January 1, 2013.

If you don't pass the exam by the deadline, you will not be eligible to renew your BAT certification. To become certified again you will have to apply for and pass the BAT certification exam.

BATs certified before January 1, 2010, must pass their professional growth exam by December 31, 2012.

Washington Certification Services (WCS) at Green River Community College in Auburn administers the BAT professional growth program. WCS follows criteria we established.

It's easy to apply for a BAT professional growth exam

Visit WCS online at <http://www.wacertservices.org> Select an exam date and location, fill out the

current application, and mail it with a check or money order for \$145. WCS must receive applications by the published deadline, which is 10 working days prior to the exam. Space is limited, so exams may fill before the application deadline.

More than enough exam dates are scheduled during the reporting period to accommodate all certified BATs. However, the longer you wait, the greater the chance that some exams may be full. You should apply soon for your choice of exam dates.

If you don't pass your exam

Processing your exam can take up to two weeks. As soon as you receive the official results in the mail saying you did not pass, you may apply for another exam. If you wait until December to take your exam and do not pass, you may not have time to meet the application deadline for another exam.

If you don't pass the exam by the December 31, 2012, professional growth deadline, you are not eligible to appeal the inactivation of your certification. To become certified again you will have to apply, pay the fee, and pass both the written and practical exams.

Water operator among 10 jobs Americans can't live without

Water and wastewater operators ranked among the top 10 professions America needs most according to *Reader's Digest* and *24/7 Wall Street*. Check it out at

<http://www.rd.com/slideshows/10-jobs-americans-cant-live-without/#slideshow=slide9>



[Previous](#) | [Next](#) >

2. Water/Wastewater Treatment Plant and System Operators

Number Employed: 108,330
Median Income: \$40,770

Water and liquid waste treatment plants require near-constant supervision in order to ensure that customers receive safe water. As a result, system operators must either work or be on call at all hours. Plants are highly regulated and can face a number of problems. Storms can cause flooding in sewers, and water can be tainted by chemicals. Plant operators are responsible for all of this.

© Hemera/Thinkstock

(READERSDIGEST.COM)

If you know people interested in working for the water sector, send them to the *Work for water* website at <http://www.workforwater.com/> The product of a collaborative effort between the American Water Works Association and Water Environment Federation, the website features resources for water recruiters, job seekers, and students. It also features sections specifically for college students, second career and retired military job seekers, and advanced science professionals.

Waterworks operators professional growth deadline: 12/31/12

All waterworks operators certified before January 1, 2010, must meet the professional growth requirement by December 31, 2012, to be eligible for 2013 certification renewal. Operators certified between January 1, 2010, and December 31, 2012, have until December 31, 2015 to meet the professional growth requirement.

Washington Certification Services (WCS) at Green River Community College in Auburn administers the waterworks operator professional growth program. WCS follows criteria we established.

How to meet the requirement

Most waterworks operators meet the requirement by earning at least 3.0 continuing education units or college credits for completing relevant training. All training applied toward this requirement must meet our evaluation criteria and be completed during the operator's 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.

Find out if you met the requirement

WCS mails a reminder to each certified operator who has not met the requirement about six months before the professional growth reporting period deadline. When you meet the professional growth requirement, WCS mails a completion letter and an official transcript. WCS also notifies us that you have met the requirement and are eligible to renew your certification.

Check your professional growth report

You can check your professional growth transcript and status online at <http://www.wacertservices.org>. Just use the quick link to "View Professional Growth Report," and follow the logon instructions.

If you don't meet the requirement

If you do not satisfy the professional growth requirement by the deadline, you cannot renew your certification. It will be invalid and you will not be eligible to appeal your inactivation.

Moved recently? Changed employers?

Operators must report changes in writing to the Waterworks Operator Certification Program. Operators must submit changes of home address, home phone number and employer information.

You should also make sure we have your current e-mail address. During the recent renewal, you may have noticed that we asked you to list your e-mail addresses. We are using more and more electronic communications to contact you quickly and keep you informed. We still need e-mail addresses for nearly 2,000 operators.

We need your e-mail addresses

This is the first electronic *Water Tap*. If a friend or coworker forwarded it to you, it's probably because you haven't given us your current e-mail address. There are several ways to update your information. Be sure to include your operator certification number on all correspondence.

Write us: Waterworks Operator Certification Program
PO Box 47822
Olympia WA 98504-7822

Use the online form: www.doh.wa.gov/ehp/dw/operatorcertification/op_form.htm

E-mail: larry.granish@doh.wa.gov

Fax: Larry Granish at (360) 236-2252

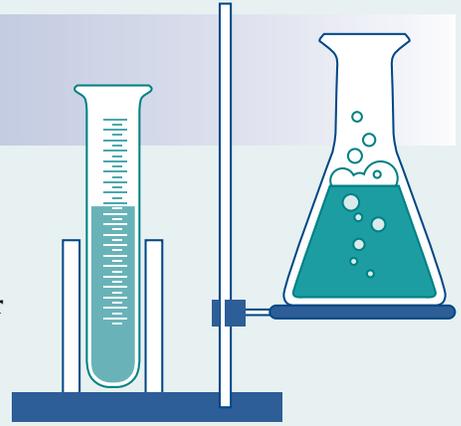
If you have questions, call Larry Granish at (360) 236-3141 or (800) 525-2536, Ext. 1.



LAB CORNER

Water Laboratory Alliance

You may be interested in joining the Water Laboratory Alliance (WLA), an integrated nationwide network of laboratories for the water sector. This network offers the capabilities and capacity to analyze water samples in the event of natural, intentional, or unintentional water contamination involving chemical, biological, or radiochemical contaminants.



WLA members have access to water security-related training opportunities, analytical support to address analyses not conducted by their laboratory, and standardized analytical methods.

Response plan, exercises, and training

The WLA Response Plan establishes a comprehensive, national laboratory response approach to water contamination events. It covers a spectrum of activities, including utility and lab preparedness, response, remediation, and recovery.

To support water sector preparedness, the WLA and its partners conduct full-scale exercises (FSEs) that test emergency response procedures and provide opportunities to practice multi-regional coordination during large-scale incidents involving drinking water utilities. FSEs include participants from:

- Drinking water utilities
- EPA regions
- Centers for Disease Control and Prevention (CDC)
- Federal Bureau of Investigation (FBI)
- State public health and environmental laboratories
- First responders
- Law enforcement

These multiregional FSEs allow participants to practice procedures to support incidents, including initial response, communication and coordination, sampling and analysis strategies, actual sample analyses, and data reporting.

In addition, EPA provides training to support utility and laboratory preparedness on an ongoing basis (*e.g.*, Laboratory Chain of Custody and Evidence Preservation).

For information on the Water Laboratory Alliance, e-mail WLA@epa.gov or visit EPA online at <http://water.epa.gov/infrastructure/watersecurity/wla/index.cfm>



It's the water... (Continued from Page 1)

its artesian wells to craft its premium “export” lager **Olympia Beer**. In 1902 the brewery changed its name to Olympia Brewery and marked its label with the slogan “It’s the Water!” celebrating the many artesian wells that served the brewery.

The rich legacy of artesian water is woven deeply into the fabric of the South Sound. Early records for the area indicate that more than 93 free-flowing artesian wells served the Olympia area. Today, a number of artesian wells still bubble up and some still serve local businesses. The 4th Ave. artesian well, in particular, has captured the hearts and passions of area residents.

It takes a village to create an icon

Best estimates suggest the 4th Ave. artesian well was constructed between 1895 and 1915 on a former railroad station site. Until 2011, it was just a pipe in a parking lot, water flowed onto the ground. Over the years, the 4th Ave. well attracted devotees from all over Thurston County and the surrounding area. They arrived at all hours and year-round to fill bottles and containers to take home.



Water Tap Editor, Linda Waring, at Olympia's iconic artesian well. Photo by Leslie Gates

During a five-day survey in 2009, more than 1,400 people stopped at the well. About 69 percent were from the Olympia area, 22 percent were from elsewhere in Thurston County, and 9 percent came from other counties. Of those surveyed, 97 percent said they used the water as their primary source of drinking water. They say the artesian well provides the clean, clear, cold, pure, plentiful and free water they want.

A problem or an opportunity?

The well developed a life and a mystique all its own. However, it was also a source of frustration, concern and a challenge. There were discussions, arguments, initiatives, volunteers and coalitions working to alternately close, protect, and preserve the 4th Ave. well and Olympia's connection to its artesian legacy.

The City of Olympia has a well-regulated water supply and provides comprehensive service to its community. Was a bubbling pipe in a vacant lot its

responsibility? How does a city or utility protect and manage something it doesn't own? Was the 4th Ave. well an icon of the past and a valuable cultural resource, or a risk to public health?

The debate put Olympia's Public Works Department in an interesting and challenging position. Like most water systems, Olympia has invested in programs to protect its sources, serve its growing customer base, prepare to meet future demand, and protect its infrastructure from potential effects of climate change. Like every other water system, it must do all of this with a fixed budget and a limited staff. Managing a cultural icon and a historical legacy wasn't necessarily part of its water system operating plan.

Finally in 2011, the City of Olympia purchased the parking lot and the City Council authorized funds to develop a “pocket park” centered on the well.

The Olympia Public Works Department offered its expertise in public health and safe drinking water. Working with the city and citizens groups, the utility plans to manage the well, celebrate its history, and provide key public health protection to those who use the water.

What makes this success so interesting is that—because of coalitions and grassroots support for clean free-flowing water—Olympia has reclaimed its link to the region's historical brand, “It's the water.” And, in the process, it's also shown “It's a lot more!”

There is so much more

A short article like this can't adequately recognize all the volunteers, organizations, local officials and supporters who worked together to keep the water flowing, test it, develop a plan, gain support and funding, and ultimately build what is now the 4th Ave. Olympia Artesian Well Pocket Park.

To review the history, the partnerships, the current status and water quality records as well as plans for the future of the 4th Ave. well, visit the City of Olympia online at <http://olympiawa.gov/city-utilities/drinking-water/water-quality/Artesian%20Well%20Olympia>

Friends of the Artesians produced a video that captures some of the passion locals have for their artesian well. It's online at http://www.youtube.com/watch?v=7Io7Rcg_9jA&feature=related

Curious about artesian wells? Visit Artesian Wells http://en.wikipedia.org/wiki/Artesian_aquifer

RULEMAKING

Correction to the Lead and Copper Rule—Short-Term Revisions

The final rule became effective April 30, 2012. We made a correction to WAC 246-290-72010, Report contents—required additional health information. The change requires community water systems to include a lead information statement in their annual consumer confidence reports.

Final rule changes are online at http://www.doh.wa.gov/ehp/dw/our_main_pages/regula-2.htm#leadcopper

For more Lead and Copper Rule requirements, visit http://www.doh.wa.gov/ehp/dw/our_main_pages/leadcopper.htm

If you need help, call Denise Garrett at (360) 236-3099 or e-mail denise.garrett@doh.wa.gov

Get automatic up-to-date information

To subscribe to our rulemaking e-mail list, go to our home page at <http://www.doh.wa.gov/ehp/dw/>. Scroll down to “Join our E-mail Lists” at the bottom of the page and click “Drinking Water Rules.”

Other rulemaking information

The following rulemaking activities are online at http://ehp/dw/our_main_pages/regula.htm

- Group B Public Water Supplies, chapter 246-291 WAC
- Water Works Operator Certification, chapter 246-292 WAC
- Basic information on the rulemaking process
- Rulemaking moratorium
- Links to the Department of Health and Division of Environmental Public Health rulemaking web pages

Questions?

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

All drinking water rules are online

Links to all our drinking water rules are online at http://www.doh.wa.gov/ehp/dw/our_main_pages/regula-2.htm

Tacoma breaks ground on new filtration system

On May 11, 2012, Tacoma Water and its partner utilities Covington Water District, the City of Kent, and Lakehaven Utility District, broke ground on construction of the new Green River Filtration Facility. When complete in 2014, this facility will be able to treat up to 150 million gallons per day of drinking water, and will be the largest filter treatment plant in Washington or Oregon.

From left are David Knight, Covington Water District Board of Commissioners President; Peter Thein, Tacoma Public Utilities Board Chair; Leonard D. Englund, Lakehaven Utility District Board of Commissioners President; Linda McCrea, Tacoma Water Superintendent; Suzette Cooke, Mayor of the City of Kent; Denise A. Clifford, Director of the Office of Drinking Water; and Bill Gaines, Tacoma Public Utilities Director and CEO.



Emergency! Who ya gonna call?

The federal grant that funded our water system security coordinator ended this spring. So, if you need to report water security concerns, call local law enforcement and the Office of Drinking Water regional office nearest you:

Eastern Region, Spokane Valley (509) 329-2100

Northwest Region, Kent (253) 395-6750

Southwest Region, Tumwater (360) 236-3030

Greg McKnight, who filled this important role for nearly three years, now works for another division at the state Department of Health. During his time as security coordinator, one of Greg's most important accomplishments was launching Washington's Water/Wastewater Agency Response Network (WARN), a mutual assistance agreement that is now flourishing in our state.

Members of the network have found they can help each other not only in emergencies, but in routine matters such as going in together on purchases of water chemicals to save money. Another benefit of the WARN network is the enhanced ability to share information about problems, such as the current rash of copper thefts.

"It's great that water systems have stepped up to keep building the WARN network," said Clark Halvorson, deputy director for field operations at the Office of Drinking Water. "That's huge. It takes a big commitment of time and energy, but the drinking water community is seeing their efforts pay off."



The WARN statewide committee is:

Central Washington

Chair: Dave Brown, Water/Irrigation Division Manager, City of Yakima
dbrown@ci.yakima.wa.us

Vice Chair: Greg Brizendine, Manager, E.Wenatchee Water District, briz@ewwd.org

Northwestern Washington

Chair: Ned Worcester, Emergency Manager, Seattle Public Utilities, ed.worcester@Seattle.gov

Vice Chair: Matt Everett, General Manager, Highline Water District, meverett@highlinewater.org

Southwestern Washington

Chair: Hugh Findlay, HR Director/Risk Manager, Clark Regional Wastewater District,
jpeterson@crwwd.com

Vice Chair: Vacant

Eastern Washington

Chair: Vacant

Vice Chair: Vacant

For more information, visit WARN online at <http://www.doh.wa.gov/ehp/dw/Security/WARN.pdf>

Sanitary survey... (Continued from Page 6)

tank or other facilities. Routine scheduled checks will ensure that everything is in good condition and stays that way. Develop clear, detailed practices for sanitizing your systems after repairs and maintenance.

If your water quality depends on disinfection, be vigilant in assuring treatment is operating properly, all the time, under all conditions. Test residuals daily and make sure you maintain the chemical feed system. Take steps to detect any problems early and correct them before untreated water makes it to your customers.

Correct any significant deficiencies found during the last survey.

Survey reports will clearly identify the significant deficiencies found and how much time there is to correct them. Failure to address these deficiencies can keep the survey schedule at the once-every-three-year cycle. If you can't complete the corrections within the time given, develop an action plan with a schedule

and milestones to get it done. Contact our regional staff to get help developing an action plan that makes sense for you and your system.

Provide at least 4-log treatment for viruses, usually by disinfection with a department-approved design.

Monitor as required and demonstrate effective treatment before finished water reaches the first customer.

You should know why your system has treatment and what performance level you need to provide. If your system is required to have 4-log disinfection, be aware that inadequately treated water could create a health risk for your customers.

Work with our regional staff to find out what you need to do to qualify for the once-every-five-year survey cycle:

Eastern Region, Spokane Valley (509) 329-2100

Northwest Region, Kent (253) 395-6750

Southwest Region, Tumwater (360) 236-3030

Community's journey... (Continued from Page 8)

We can see our community's effort to reduce waste and consumption as they work toward their customer-side goal. We offer conservation education at fairs, home shows, and through our conservation office. We also offer low-flow showerheads and faucet aerators to our customers and we show them their water-use history through our utility billing.

We reduced annual consumption in 2011 by an additional 23 million gallons over 2010; per-capita use dropped from 113 gallons to 109 gallons.

The City of Port Angeles created a Water Use Efficiency Program that serves the community as a whole. It benefits residents, the environment, and the utility. Conservation, efficiency, quality, and water loss reduction will not change overnight. People often lose sight of the fact that positive and forceful changes take time. Look for those results in three to five years.

It requires patience to stay the course and allow the results to evolve. Remember, you are working to change something that evolved over time, and it will take time to control and correct. Don't rush for results. Study your findings, monitor your data, and

build baselines. Educate, communicate, and put this information to use as you work to achieve your WUE program goals.

2011 WUE Annual Performance Report

<https://fortress.wa.gov/doh/eh/portal/odw/wue/ReportForm/WUEReportViewer.aspx?WSId=68550&RptYear=2011>

2010 Water Quality and WUE Report to our customers

<http://www.cityofpa.us/PDFs/PWorks/WaterQualityReport2010.pdf>

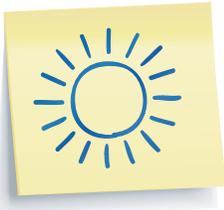
City of Port Angeles

WUE Program <http://www.cityofpa.us/PDFs/Water/WUE-EfficiencyMeasures.pdf>

Public Works & Utility Dept. <http://www.cityofpa.us/pwWaterU.htm#WaterQRpts1>

Municipal Sewer and Water magazine

<http://www.mswmag.com/editorial/2011/11/a-delicate-balance>



Washington is ready for almost anything

How prepared are states to deal with the effects of a changing climate on water supplies? How will climate-related changes to water resources affect the communities within a state? What potential physical, social, economic, and public health implications will states face because of those changes?

The Natural Resources Defense Council (NRDC) asked those questions in a recent survey of the 50 states. They summarized their findings in the report, *Ready or Not: An Evaluation of State Climate and Water Preparedness Planning* (Executive summary <http://www.nrdc.org/water/readiness/files/Water-Readiness-issue-brief.pdf>).

Good news: Washington is “more” ready than most

The NRDC’s survey found that Washington is one of nine states leading the way in developing integrated and comprehensive preparedness plans. While it is nice to be noticed, it is not really that surprising.

We have all been dealing with *La Niñas* and *El Niños* for years. As a state, we have lots of experience

wrestling with repeat seasonal droughts, floods, changes in snowpack, and changes in storm patterns and sea level. All together, that has given us a pretty good picture of what “could be” if climate change predictions for our region prove accurate.

However, the NRDC report found that more than half the states have done only limited or no adaptation planning. Maybe they just haven’t experienced our west coast weather weirdness!

Want to know more?

If you would like to read the NRDC’s review of Washington State’s efforts, follow the link to the full report. In the table of contents, click the Washington chapter. (Full report <http://www.nrdc.org/water/readiness/files/Water-Readiness-full-report.pdf>)

To see our state’s plan, you can go to the report *Preparing for a Changing Climate, Washington State’s Integrated Climate Response Strategy*

Executive summary <http://www.ecy.wa.gov/pubs/1201004b.pdf>

Full report <http://www.ecy.wa.gov/pubs/1201004.pdf>

In This Issue

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

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The Department of Health Office of Drinking Water publishes *Water Tap* quarterly to provide information to water system owners, waterworks operators and others interested in drinking water.

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Maryanne Guichard, Assistant Secretary of Health, Environmental Public Health Division

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Comments, questions, story ideas, articles and photographs submitted for publication are welcome. Please address correspondence to Linda Waring, Water Tap, Office of Drinking Water, P.O. Box 47822, Olympia, WA 98504-7822, or e-mail linda.waring@doh.wa.gov. Past issues are online at http://www.doh.wa.gov/ehp/dw/our_main_pages/watertap.htm