



WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

Editor's note: For the first time in many years we look forward to a summer that doesn't seem to be threatened with drought. So, that leaves us some breathing room to work on developing and meeting our water use efficiency goals instead of fretting about water shortages.



Volume 23, #3 - June 2008

2008 Water Supply Outlook

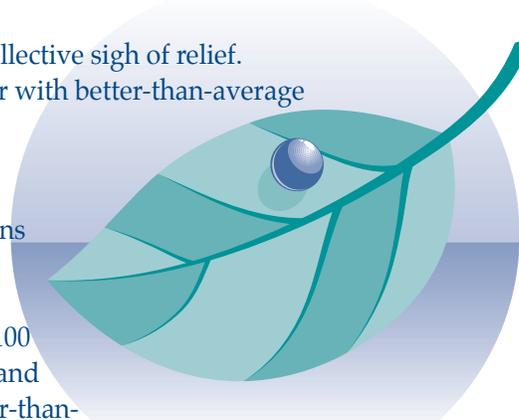
At this time each year, **Water Tap** often gives you a heads-up about the water supply predictions for the rest of the year. For most of the last few years, that involved warnings about impending drought and recommendations on preparing for a water-tight summer.

This year, the state's water wizards are offering a collective sigh of relief. Across most of the state, we are starting the summer with better-than-average conditions.

Snowpack

In April, the snowpack measurements for most basins were above average. A few recorded levels at more than 150 percent of normal. The few basins in the state that were low were hovering between 80 and 100 percent of normal. The wetter-than-normal winter and spring produced a bumper crop of snow. The cooler-than-normal spring helped keep the snowpack in the mountains. Spring snowpack conditions are the best they have been since 1999 and 1997.

(Continued on Page 14)



Drinking Water Week Awards

See Page 6.

Water Use Efficiency

Developing customer efficiency measures

Amy Vickers, a national water use efficiency expert, believes drinking water managers have important enough jobs just delivering a safe and reliable supply of water. But, with four droughts already this decade and increased growth in our state, one of their new tasks is to manage lawn irrigation to reduce peak demand.

In an article she wrote for the **American Water Works Association Journal**, Vickers says, "Society needs to re-orient itself to a healthier and more sustainable relationship with its home landscape and the water cycle."

(Continued on Page 15)



Inside This Issue

Director's Column.....	2
Rate setting.....	3
Good PR from your CCR.....	4
Drinking Water Week.....	6
New faces serving you.....	7
Lab corner.....	8
The Toolbox.....	8
Rulemaking.....	9
Exam schedule.....	10
2008 legislation.....	10
Publications.....	11
Training calendar.....	12
Group A publication.....	16

THE DIRECTOR'S COLUMN

BY DENISE ADDOTTA CLIFFORD



Pharmaceuticals in drinking water: Now what?

As if you didn't have enough to think about, along comes a thorny new problem:

Pharmaceuticals in drinking water. Brace yourselves, folks. This is an emerging issue that's likely to be with us for years to come.

However, it's not a battle we need to fight alone. I recently had conversations about this issue with Region 10 and national contacts at the U.S. Environmental Protection Agency. Other state drinking water program administrators and I made it clear to EPA that water systems didn't get us into this mess and they shouldn't be expected to shoulder the burden of getting us out of it.

Prevention is key, so it will be essential to work with the pharmaceutical industry to figure out how to keep these substances out of water in the first place.

As you probably know, the Safe Drinking Water Act, the federal law that spells out protections for drinking water, does not include a requirement to monitor for pharmaceuticals or personal care products.

We know of a few water systems in Washington State that are beginning to voluntarily test their water for pharmaceuticals, and we encourage you to do so, too. A simple test to detect the presence of caffeine is a good way to find out if other pharmaceuticals or personal care products could be in your water supply. Knowing about a problem is the first step toward solving it.

Gregg Grunenfelder, assistant secretary for our Environmental Health Division, is providing leadership on this issue for the Department of Health. He's coordinating with the Department of Ecology to ensure that programs from both agencies work cooperatively. He is also working at the national level to raise awareness and seek collaborative solutions. We'll keep you informed about new developments.

As the scientific community learns more about the extent of contamination and how to deal with it, new treatment methods are likely appear on the market.

In the meantime, you may be getting calls from customers concerned about pharmaceuticals in drinking water. You can reassure them that what has been detected so far are trace amounts and that the Department of Health doesn't believe they pose an immediate health threat.

We do believe, however, that pharmaceutical companies should be required to fund research that determines what the health effects are at trace amounts.

We hope you'll help us spread the word that the best practice is to keep pharmaceuticals and personal care products out of our water supply in the first place. Tell your customers not to flush unwanted medications down the toilet or sink. That's likely a significant source of the substances showing up in our water supply. Instead, they should follow the safe disposal guidelines below.

Denise A. Clifford

Safely dispose of unwanted medications

Don't flush unwanted medicines down the toilet or sink. Instead take them to a pharmacy that has a take-back program to safely dispose of unwanted drugs.

Information about Washington's drug take-back program is online at <http://www.medicinereturn.com/>

If there is no drug take-back program available in your area, here are guidelines for safe disposal:

- Keep the medication in its original container.
- Modify the medications to discourage consumption. Add a small amount of water to pills or capsules to dissolve them. Add something unappealing, such as kitty litter or sawdust.
- Seal and conceal. Tape the container lid shut with tape, place in a sealable bag, then place in a non-transparent container to ensure that the contents cannot be seen.
- Discard the container into the garbage away from kids or pets. Do not place in the recycling bin.

How to Set Rates

A primer for Small Water Utilities

By Skip Rand

Editor's note: Skip Rand works for the Rural Community Assistance Corporation, a non-profit organization providing technical services to small communities. He often reviews budgets and helps systems establish rates. In this article, he describes some thoughts on establishing a rate structure.

Water system rates should generate revenue and apportion costs to customers in a manner consistent with utility policy. Typical utility policies include support for low-income users, fairness, and wise water use or conservation. It's a very interesting phenomenon that most small water systems really don't know if their rates are doing these things or not!

Rate structures

There's an important relationship between service charges and commodity charges. A **Service Charge** or **Base Rate** is usually a monthly or bi-monthly charge for a **benefit provided to property**. A **Commodity Charge** or **Rate** is the cost for an amount of water, usually 1,000 gallons or 100 cubic feet.

There is a financial risk to commodity-driven rates because in a cool, wet year, the revenues could be in deficit. But there's a similar risk in base-rate driven structures during hot, dry years. The answer to both worries is an adequate operating reserve fund.

A flat or base-rate structure, where most of the revenue comes from service charges, unfairly places the financial burden of large water users on all customers. That means someone who conserves water pays the same rate as someone who wastes water. Low water users are usually lower income customers.

To achieve their goals, most utilities need only a service charge and a uniform block rate where the price of water per unit stays the same no matter how much is used. But what about water included in the service charge? What about seasonal customers or very large water users? If a single customer uses 54 percent of all the water, how much of the annual revenues should they return?

Water included in the service charge, or "included water," is the most misunderstood concept I run in to. People often think this water is free. It usually penalizes small water users, which is just the opposite of what management expects.

Using tiers, where the price changes above a certain amount of use, can target customer use in a very accurate (or inaccurate) way to achieve policy goals.

No matter what rate structure you choose, DO NOT call the town next door and copy their rates! You must look at your own use and needs. All water systems are different, and their rates probably won't meet your needs.

Recommended small water system rate method

Tiers and included water are technical ways to establish a rate structure. In small non-expanding systems I use a simple equivalent residential use (ERU) methodology. An ERU is the annual amount of water a residential customer uses in an average billing period.

The following question will help you understand how the ERU methodology works:

If you are a customer with an average monthly bill of \$30, and I always use twice as much water as you, what should I pay?

In my experience, most people think "twice as much" or \$60. But, I think the cost per additional ERU should be 50 to 70 percent of the total cost for the first ERU. You can show

this methodology mathematically, and it automatically supports the policies mentioned in the first paragraph. It also moves rates toward "demand" theory.

So, if you pay \$30 a month and I always use twice as much as you, I believe I should pay at least \$45. Most of the communities I work with charge well below 30 percent per additional ERU. So, small water users on their systems are supporting larger users!

In closing, there are many ways to apportion costs to customers.

The more complicated rate structures require detailed data collection to understand "who's using what?" I suggest you keep it simple, and use a 50 to 70 percent cost per additional ERU. You can easily answer the "twice as much" question for your system with a hand calculator. See where you are relative to my recommended 50 percent minimum!

Useful Definitions

Commodity Charge or Rate: The cost of an amount of water (usually per 1,000 gallons or 100 cubic feet)

Equivalent residential unit (ERU): Equivalent residential unit (ERU) means a system-specific unit of measure used to express the amount of water consumed by a typical full-time single family residence.

Service Charge or Base Rate: The charge for benefit provided to property, usually on a monthly or bimonthly basis.

Getting Good PR Out of Your CCR

Article adapted with permission from *The Safe Drinking Water Trust e-Bulletin*

July 1 Deadline!

By July 1, 2008, your system must deliver its CCR to each water system user and the appropriate Office of Drinking Water Regional Office. Your correspondence to the regional office must include a certification form – certifying that you did deliver the CCR to water system users.

Doing a good job in the drinking water utility business can be a thankless task. As long as the water faithfully pours out of your customers' taps and everybody's white laundry remains that way, most people will fail to recognize all the planning and hard work that goes into providing a safe, affordable and reliable supply of drinking water.

Your job goes on behind the scenes until a water main breaks or it's time for a rate increase. Until then, most people pretty much take their drinking water for granted.

That's why it's important for all water systems to take advantage of every opportunity to communicate with their customers and let people know about all the hard work that goes into keeping their water safe and secure.

As you go about putting together your Consumer Confidence Report (CCR) over the coming days, take advantage of this opportunity to tell your customers a little about what is going on behind the scenes at their local water treatment plant.

The ABC's of the CCR

The CCR is the centerpiece of the right-to-know provisions of the 1996 Amendments to the Safe Drinking Water Act. These amendments direct all community water systems to create an annual report on the quality of the drinking water they produce.

CCRs don't have to be fancy, but state and federal rules require them to contain key information including:

Water System Information

- Name and phone number of the person customers can call for answers to questions about the report.
- Times, dates, and locations of board meetings and other public participation opportunities.
- Information for non-English speaking customers (if necessary).

The Source of Your Water

- List the name, location and type(s) of water source(s) your system uses.
- Explain where and how to get a copy of the most recent source water assessments your system completed.
- Discuss the significant sources of contamination that could affect your system's water source.

Important Definitions

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water.
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

Detected Contaminants

- A summary of data on all detected regulated and unregulated contaminants.
- Known or likely source of each detected contaminant with an MCL or MRDL.
- Description of potential health effects related to the contaminant.

Compliance with other Drinking Water Regulations

- Explain any violations, potential health effects, and steps you took to correct the violations.
- Explain any variances or exemptions that may apply to your water system.

It's important to remember that this is not a comprehensive list. Be sure to ask your regional office what you must include in your system's CCR.

Building Confidence with Your CCR

Each year when it comes time to compile your water system's CCR, instead of dreading the task, think of it as an opportunity to shine a little light on all the hard work you do each and every day.

The CCR is one of the simplest and most effective tools you have to generate communication between yourself and your customers.

Depending on how much space you have left after listing violations that occurred over the previous year (and we hope that you have plenty of space left), take some time to write a few paragraphs about any current projects your system is working on or successes you've had over the past year. Remember, a CCR is an educational tool and a great way to educate your customers about the job that you do.

One good way to drive home the notion that a safe and reliable source of drinking water is clearly a great value is to offer up a few vital comparisons, such as:

- ◆ Quart of Milk for \$1.59 = \$6.36 per gallon
- ◆ Lipton Ice Tea 16 oz for \$1.19 = \$9.52 per gallon
- ◆ Diet Snapple 16 oz for \$1.29 = \$10.32 per gallon
- ◆ Evian (water) 9 oz for \$1.49 = \$21.19 per gallon
- ◆ STP Brake Fluid 12 oz for \$3.15 = \$33.60 per gallon
- ◆ Pepto Bismol 4 oz for \$3.85 = \$123.20 per gallon
- ◆ Vicks Nyquil 6 oz for \$8.35 = \$178.13 per gallon
- ◆ Whiteout 7 oz for \$1.39 = \$25.42 per gallon
- ◆ Gasoline = \$3.75 per gallon
- ◆ Absolut Vodka 59.3 oz for \$26.99 = \$58.26 per gallon
- ◆ Cover Girl Nail Polish 0.4 oz for \$2.79 = \$892.80 per gallon
- ◆ Tap Water = \$0.05 per gallon average

Best of all, unlike the other products listed here, the water you provide is delivered straight to their house! So don't hesitate to gently remind your customers of this simple fact.

Responsible water systems, public service districts, and sewer systems know their success depends, to a large extent, on good relationships with their customers—and their communities. So go ahead, create a little good PR while you have the chance.

Remember, you have quite a bit of flexibility when it comes to the design of your CCR. Why not spend a few extra dollars and add an extra page to your next CCR letting your customers know what's going on at their water system?

A Little Help from EPA

While the thought of producing a CCR might seem daunting, it's important to remember that you aren't alone. To ease the process, EPA designed CCRiWriter to help you along. CCRiWriter is a Web-based program that allows water system operators or designated personnel to enter data and generate a CCR.

This program walks users through all of the required sections of the CCR, helps you convert lab results, and allows you to insert and edit EPA's recommended text into your very own report at a price that every system can afford – for **free** over the Internet.

In a nutshell, this on-line program enables you to produce a regulation-compliant Consumer Confidence Report by simply filling in the blanks with your system's specific information.

Once you are done, you may choose to publish your CCR on the EPA's Web site for your customers to view. It is also a great place to go and view other systems' CCRs as you prepare to make your CCR even better in the coming years.

For more information

You can access the following publications, links to EPA and other resources on the ODW Web page at <http://www.doh.wa.gov/ehp/dw/our_main_pages/consumer.htm>

Consumer Confidence Reports (331-209)

Tips for preparing user-friendly consumer confidence reports (331-296)

Call your ODW regional office:

Eastern Region – Spokane (509) 456-3115

Northwest Region – Kent (253) 395-6750

Southwest Region – Tumwater (360) 236-3030



Go beyond your Consumer Confidence Report. Use the "Tap into Goodness" tool kit to educate your customers on the benefits of tap water. For details, visit the Web site at <<http://www.doh.wa.gov/ehp/dw/tapwater.htm>>

Drinking Water Week Awards

Drinking Water Week is an opportunity for utilities and public officials to communicate to consumers, media and other stakeholders about the value of tap water service, and the need to reinvest in water infrastructure.

The national campaign highlights the value of water service in terms of public health protection, fire protection, support for the economy and overall quality of life. It also encourages wise community stewardship of water pipes and facilities to ensure they continue to serve future generations.

This year, the Washington Department of Health (DOH) presented five awards during Drinking Water Week, May 4-10.

“This year’s award recipients exhibited courage and leadership, often in the face of daunting circumstances,” said Secretary of Health Mary Selecky. “We can all take pride in the incredible work that Washington’s water system operators are doing to protect public health.”

Lifetime Achievement

Edward Bush, who recently retired as water system manager for the City of Washougal in Clark County, received the “Lifetime Achievement Award.” During his 30-year career, Bush spearheaded water system initiatives and improvements, provided leadership in professional associations, and worked to improve service, education, accountability and professionalism.



Ed Bush receives a round of applause after receiving the Lifetime Achievement award from ODW Director, Denise Clifford.



ODW Deputy Director Jerrod Davis presents an award to Kathy Small for leading efforts to reduce leakage for the district, and then using what she learned to develop training for other water system operators.

Operator of the Year

Kathy Small, manager of Pasadena Park Irrigation District No. 17 in the Spokane Valley, is “Operator of the Year.” Small not only led efforts to rehabilitate a water system with one of the state’s highest leakage rates, she documented the steps she took and calculated savings in pumping costs as well as

water conserved for future growth. Small then created a training course to help other systems tackle leakage issues. She was also recognized for active service through professional and educational organizations, her team-building management style and enthusiasm for her work, which inspires others to give their best as well.

Friend of Drinking Water

Lorna Parent, environmental health specialist for the Skagit County Health Department, is the “Friend of Drinking Water” winner. For more than 20 years, she has helped towns such as Rockport, Big Lake, and Marblemount obtain safe, reliable



Jerrod Davis, ODW deputy director, recognizes Lorna Parent for her efforts to ensure safe and reliable drinking water for Skagit County residents

water. Her efforts to get access to drinking water data for local health departments led DOH to develop the online drinking water database, Sentry.

Going Above and Beyond

Sharon Germano, who led the Forest Glen Estates Homeowners Association’s efforts to overhaul its failing water system, won the “Going Above and Beyond” award. Germano, who had no experience running water systems, volunteered to obtain grants and loans to finance construction, oversaw system improvements, and guided the community through water outages and health advisories. Today, the Pierce County development has an improved water system that can handle peak demands.



ODW Director Denise Clifford and John Ryding, ODW regional engineer for Pierce County, congratulate Sharon Germano (center) for her work to improve the Forest Glen Estates Water System in Pierce County.

(Continued on Page 9)

Serving you!

New people at the Office of Drinking Water

We have several new faces in our Office of Drinking Water regional offices, including two regional managers.

Eastern Region

Heather Cannon is the new planner in the Eastern Regional Office. Heather previously worked at the Town of Millwood, WA, where she was the planning director/building official for 13 years. She has a bachelor's degree in Urban and Regional Planning from Eastern Washington University.

Dorothy Tibbetts is the new regional manager for the Eastern Regional Office. She previously supervised the DOH Zoonotic Disease Program, and before that managed the DOH Pesticide Program. Dorothy has master's degrees in both Health Education and Environmental Health.

Scott Torpie changed his role within the Spokane office from regional manager to regional engineer. He made this decision to pursue his interest working with water systems to help solve the challenges they face. Scott has been with the Office of Drinking Water for 15 years.

Southwest Region

Clark Halvorson is the new regional manager for the Southwest Regional Office. Clark has 14 years of professional experience in environmental regulatory compliance related to federal and state drinking water, waste water, and solid and hazardous waste regulations.

Clark comes to the ODW from the Nisqually Tribe where he was the water resource manager and public works director.

Sophia Petro joined the Southwest Regional Office as the chemical monitoring specialist. Sophia's professional experience includes seven years working as an environmental geologist focusing on investigation and remediation of groundwater and 10 years providing science and environmental conservation education to middle school youth.

Gael Kantz is the new compliance manager at the Southwest Regional Office. Gael has a strong background in compliance with our Operator Certification Program. Gael also has experience working in the private sector, and is familiar with the perspective of being regulated as well as being a regulator.

Headquarters

Dave Christensen is our new Policy Unit supervisor within the Policy and Finance Section. Dave has a master's degree in water resources. He has extensive policy experience working for local governments and the Hood Canal Coordinating Council. In his 10 years with Jefferson and Thurston counties, Dave worked on a wide variety of water resource issues, including small drinking water systems.

Catherine (Kitty) Weisman is the new Drinking Water State Revolving Fund infrastructure finance coordinator within the Policy and Finance Section. Before coming to us, she worked for Evergreen Rural Water of Washington, where she taught courses on developing small water system management programs and assisted water systems through the application process for the Drinking Water State Revolving Fund loan program.



Lab Corner

Fluoridation Refresher

It is important to be accurate when reporting fluoridation monitoring results. Following the correct fluoride monitoring and reporting procedures can save you time and money.

We require water systems that fluoridate drinking water to maintain a fluoride level of 0.8 to 1.3 mg/L. Many certified laboratories help these water systems by providing data on monthly split samples.

Water systems that fluoridate must do fluoride sampling every day. Once a month, the water system splits its daily routine samples into two portions:

1. The water system operator analyzes one portion of the sample and records the results on the lab submittal form. This is the field report.
2. The operator sends the rest of the sample and the completed submittal form to a certified lab for fluoride analysis.

After completing its analysis, the lab compares the field report and lab report. The lab should:

- Make sure the fluoride monitoring results fall between 0.8 and 1.3 mg/L. If so, the system is “in compliance.”
- Check the results to make sure the differences between the field report and lab report are no more than 0.30 mg/L. Meeting this criterion means the system is “in control.”

The results of both tests tell whether the system is doing fluoridation and testing correctly.

The water system must send a monthly report, with all of its daily fluoride readings, to the Office of Drinking Water by the tenth day of the following month. To protect public health, we compare the information from the labs and the monthly reports.

Update on Laboratory Reporting Rule

We thank the labs and public water systems that provided comments over the last year on our draft Laboratory Reporting Rule. For an update, see Rulemaking Activities on page 9.



Arsenic compliance

To help water systems comply with arsenic rules, the U.S. Environmental Protection agency created an arsenic Web site. You will find guidance documents, publications, training, treatment technologies, case studies and other tools online at <http://www.epa.gov/OGWDW/arsenic/compliance.html>

Introduction to cross-connection control

University of Southern California's Foundation for Cross Connection Control and Hydraulic Research has a Web site where you can learn more about topics, such as degree of hazard, backsiphonage and types of backflow preventers. The site includes many helpful diagrams. Check it out at <http://www.usc.edu/dept/fccchr/intro.html>

Training for Tribes

EPA has an online list of training opportunities that may be of interest to Tribes and Tribal operators. If you are a certified operator, check with Compliance Services to ensure the training you select counts toward your continuing education units. You can learn about upcoming training in your region and correspondence training available nationwide at <http://www.epa.gov/safewater/tribal/training.html>

Rulemaking Activities

Water Use Efficiency – Goal-Setting Correction

On May 6, 2008, the Office of Drinking Water held a public hearing in Tumwater to accept comments on a correction to the water use efficiency goal-setting requirement. We changed the rule to align with the law. The revised rule, which goes into effect in July 2008, now requires water systems to set a water use efficiency goal for their customers. For more information about this change, call Mike Dexel, water resources policy lead, at (360) 236-3154 or e-mail michael.dexel@doh.wa.gov

Federal Groundwater Rule

The State Board of Health gave us authority to adopt the federal Groundwater Rule on October 10, 2007. The rule increases public health protection against viral and bacterial contamination for water systems that use groundwater. It takes a risk-targeted approach to protect groundwater systems at risk of fecal contamination. The rule affects about 3,800 community and non-community water systems that serve groundwater to more than 4.5 million people in Washington. Groundwater systems may need to take source-water quality samples, be inspected more frequently, and may need to treat groundwater in addition to fixing water system problems. We are analyzing the rule, and will develop a rule adoption schedule later this year.

Drinking Water Laboratory Data Reporting Rule

We propose to update the Drinking Water Laboratory Certification Rule, chapter 246-390 WAC, to remove duplication of rule requirements with the Department of Ecology's Accreditation of Environmental Laboratories Rule (chapter 173-50 WAC).

Last spring, we prepared a draft rule on reporting laboratory data for public drinking water system monitoring compliance analyses. We revised the rule based on comments from laboratories, water systems, stakeholders and staff.

We will brief the State Board of Health on our progress in August 2008 and get their feedback. We will request a public hearing on the proposed rule in late 2008.

If you have any questions about the Drinking Water Laboratory Data Reporting Rule, please call Jim Hudson, technical adviser, at (360) 236-3131 or Dick Pedlar, laboratory certification coordinator, at (360) 236-3115.

For more information about these rulemaking activities, call Theresa Phillips, lead rules coordinator, at (360) 236-3147, e-mail theresa.phillips@doh.wa.gov or visit our Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/regula.htm.

Drinking Water Week Awards... *(Continued from Page 6)*

Grace Under Pressure

Spanaway Water Co. Manager Jeff Johnson and staff received the 2008 "Grace Under Pressure" award for their efforts after E. coli was detected in water samples last October. They scrambled to alert their 20,000 customers, coordinated with state and local agencies, staffed an after-hours call center, set up a watering station for customers and scrutinized sampling stations and facilities for any signs of contamination or damage.



May Selecky, Secretary of Health (first row second from left), and Denise Clifford, ODW director (first row, center), congratulate Spanaway Water Company Manager, Jeff Johnson (first row third from last) and his award-winning staff.

2008 Legislative session



The 2008 Legislative session ended Thursday, March 13. The Office of Drinking Water reviewed 142 bills during the session. The governor signed three bills that affect us.

Water System Acquisition and Rehabilitation Program (Substitute Senate Bill 6340)

This bill establishes the water system acquisition and rehabilitation program as an ongoing program. It directs us to provide financial assistance to water systems. We will jointly administer the program with the Public Works Board (PWB) and the Department of Community, Trade and Economic Development (CTED).

We must prepare a report that will recommend ways to strengthen the program and increase financial assistance. The report is due to the Fiscal and Water Policy Committee of the Senate and House by January 1, 2009.

Capital Budget (Engrossed Substitute House Bill 2765)

Section 1022 (Office of Financial Management Section)

The Office of Financial Management (OFM), in cooperation with the Department of Community, Trade and Economic Development, the Department of Ecology, the Department of Health, the Transportation Improvement Board, and the Office of the State Treasurer will develop an implementation plan. The plan must identify options for better organization and coordination of appropriate state infrastructure assistance programs. The plan is due December 1, 2008.

(Continued on Page 15)

2008-2009 Operator Certification Exam Schedule

Exact dates, times and locations are subject to change because of site availability. Applicants will receive a letter four to six weeks before the exam date.

Exam Locations		Exam Dates	Application Deadlines	Retake Application Deadlines
Bellingham	Seattle	October 7, 8 or 9, 2008	July 9, 2008	August 8, 2008
Mount Vernon	Spokane			
Olympia	Vancouver	February 3, 4, or 5, 2009	November 12, 2008	December 12, 2008
Pasco	Wenatchee	June 9, 10, or 11, 2009	March 11, 2009	April 10, 2009
Port Angeles	Yakima			

If you have questions about the examination process, or to order an application packet, call Larry Granish at (800) 525-2536, ext. 1, or e-mail larry.granish@doh.wa.gov. You can also order an application packet online at http://www.doh.gov/ehp/dw/our_main_pages/opcertification.htm

2008 Backflow Assembly Tester Exam Schedule

BAT Certification Examinations		BAT Professional Growth Examinations	
3rd Monday of each month, <i>except holidays</i>		3rd Friday of each month, <i>except holidays</i>	
Auburn and Spokane		Auburn and Spokane	
July 21	August 18	July 18	August 15
September 15	October 20	September 19	October 17
November 17	December 15	November 21	December 19

For more information on applying for a BAT certification or professional growth exam, visit Washington Certification Services online at <http://www.wacertservices.org> or call Pamela Basquez, Certification Services Support, at (253) 288-3376 or toll-free in Washington (800) 562-0858.

- New & Revised Publications

Reduce Leaks: Using water audits and leak detection surveys (331-388) - New! 6 pages explain how to calculate your leakage rate, and detect and repair leaks.

Chlorination Controls (331-398) - New! 4-page illustrated Tech Tip explains how fixed-rate and variable-rate chlorine injection systems provide consistent, minimum free chlorine residual when a water system is operating.

Emergency Response Information (331-400) - New! A packet of information explains how to respond to many emergencies and inform your consumers and ODW about the emergency. Available online only.

Pump Controls (331-401) - New! 4-page illustrated Tech Tip explains how pump controls regulate source production to maintain adequate flow rates and water pressures.

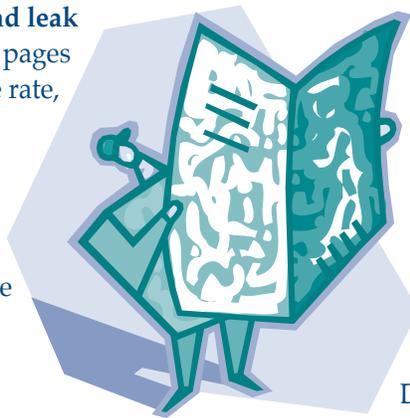
Water Use Efficiency Rule: Goal Setting (331-402) - New! 2 pages of questions and answers on the goal systems must set to help their customers understand how to use water more efficiently.

Group A Public Water Systems: chapter 246-290 WAC (331-010) - Revised. 224-page guidance document, also known as the "Blue Book." Available online only. A CD version will be available in late July.

Backflow prevention assemblies approved for installation in Washington state (2008) (331-137) - Revised. Identifies makes and models of DOH-approved backflow assemblies. Based on the Approved Backflow Assemblies List published by the University of Southern California. (Hard copy only. One per person.)

When arsenic is detected in drinking water (331-166) - Revised. 2-page fact sheet with guidance and customer messages water systems must use when arsenic is detected in drinking water.

Arsenic in Drinking Water (331-167) - Revised. Two pages of questions and answers on arsenic in drinking water sources, health effects, standards, geographic distribution, and what systems do about it.



Drinking Water State Revolving Fund 2008 Funding Cycle Application Guidelines (331-196) - Revised. 48 pages explain the requirements and process for water systems that want to apply for financial assistance from the Drinking Water State Revolving Fund.

Cross-connection control rules and definitions (331-355) - Revised. 14 pages of extracts from WAC 246-290, Group A Drinking Water Rules.

Rule Changes for Group A Public Water Supplies – Chapter 246-290 WAC (331-365) - Revised. 2-page fact sheet on changes to the Municipal Water Law, the Long Term 2 Enhanced Surface Water Treatment Rule and minor rule clarifications.

Municipal Water Law - Duty to Provide Service Requirement (331-366) - Revised. 2-page fact sheet explains when municipal water suppliers have a duty to provide service to all new connections within their retail service area.

Municipal Water Law - Documentation for Expanding a Water Right's Place of Use (331-367) - Revised. 2-page fact sheet explains how a municipal water supplier can expand its water right's place of use to a service area identified in an ODW-approved planning or engineering document.

Municipal Water Law - Approval Requirement for Water System Plans (331-368) - Revised. 1-page fact sheet explains how to educate a water system's governing body on the information in its water system plan.

Long Term 2 Enhanced Surface Water Treatment Rule (331-369) - Revised. 2-page fact sheet on rule changes that went into effect February 14, 2008.

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

Use our Listserv to get e-mail copies of new and revised publications. Sign up at <<http://listserv.wa.gov/cgi-bin/wa?SUBED1=wa-drinkingwaterpub&A=1>>

Training and Education Calendar: June - October 2008

Date	Topics	Location	Contact	Phone #	Cost/CEU
June 18-22	BAT Certification Class	Auburn	WETRC	1-800-562-0858	\$645/3.7
June 9-13	BAT Certification Course	Auburn	WETRC	1-800-562-0858	\$655/3.7
June 9-13	BAT Certification Course	Spokane Valley	WETRC	1-800-562-0858	\$655/3.7
June 9-18	BAT Refresher Course	Vancouver	WETRC	1-800-562-0858	\$330/2.1
June 10	Confined Space Entry	Kenmore	ERWOW	1-800-272-5981	\$85/\$105/0.7
June 11	Confined Space Entry	Richland	WETRC	1-800-562-0858	\$149/0.7
June 11-12	BAT Professional Growth 2-Day Review	Liberty Lake	ERWOW	1-800-272-5981	\$210/\$280/1.5
June 12-13	Competent Person for Cave-In Protection	Richland	WETRC	1-800-562-0858	\$239/1.4
June 17-19	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	\$340/2.1
June 17-19	BAT Refresher Course	Spokane Valley	WETRC	1-800-562-0858	\$340/2.1
June 18-20	Wastewater Laboratory	Auburn	WETRC	1-800-562-0858	\$345/2.1
June 26	Confined Space Entry	Yakima	ERWOW	1-800-272-5981	\$85/\$105/0.7
July 7-11	BAT Certification Course	Auburn	WETRC	1-800-562-0858	\$655/3.7
July 8-9	BAT Professional Growth 2-Day Review	Moses Lake	ERWOW	1-800-272-5981	\$210/\$280/1.5
July 15-17	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	\$340/2.1
July 15-17	BAT Refresher Course	Spokane Valley	WETRC	1-800-562-0858	\$340/2.1
July 15-17	Wastewater Treatment Plant Operations Basics	Auburn	WETRC	1-800-562-0858	\$295/2.1
July 22-23	Advanced BAT Troubleshooting & Repair	Auburn	WETRC	1-800-562-0858	\$295/1.4
July 22-24	Wastewater Treatment Plant Operations Basics	Spokane Valley	WETRC	1-800-562-0858	\$295/2.1
Aug. 4-8	BAT Certification Course	Auburn	WETRC	1-800-562-0858	\$655/3.7
Aug. 12-13	BAT Professional Growth 2-Day Review	Everett	ERWOW	1-800-272-5981	\$210/\$280/1.5
Aug. 12-14	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	\$340/2.1
Aug. 12-14	BAT Refresher Course	Spokane Valley	WETRC	1-800-562-0858	\$340/2.1
Aug. 19-21	Water Works Basics	Auburn	WETRC	1-800-562-0858	\$295/2.1
Aug. 21	Asbestos Cement Pipe Handling Procedures	Yakima	ERWOW	1-800-272-5981	\$100/\$110/0.7
Aug. 25-27	Water Works Basics	Spokane Valley	WETRC	1-800-562-0858	\$295/2.1
Aug.28	Confined Space Entry	Wenatchee	ERWOW	1-800-272-5981	\$85/\$105/0.7
Aug. 28	BTO/WTPO OIT and Level 1 Cert Exam Review	Auburn	WETRC	1-800-562-0858	\$110/.07
Aug. 29	BTO/WTPO OIT and Level 1 Cert Exam Review	Spokane Valley	WETRC	1-800-562-0858	\$110/.07
Sept. 2	Advanced Math	Moses Lake	ERWOW	1-800-272-5981	\$60/\$80/0.4
Sept. 3-5	Cross Connection Control Specialist Exam Review	Olympia	ERWOW	1-800-272-5981	\$200/\$250/2.1
Sept. 3-5	Water Distribution Manager Certification Exam Review	Moses Lake	ERWOW	1-800-272-5981	\$200/\$250/2.2
Sept. 4	Advanced Control Valve Training	Richland	ERWOW	1-800-272-5981	\$50/0.7
Sept. 8	BAT Professional Growth 1 Day Review	Shelton	ERWOW	1-800-272-5981	\$105/\$140/0.7
Sept. 8-12	BAT Certification Course	Auburn	WETRC	1-800-562-0858	\$655/3.7
Sept. 9-11	ERWOW 2008 Fall Conf & Tradeshow & Equip Expo	Ocean Shores	ERWOW	1-800-272-5981	TBA/1.4
Sept. 9-11	Water Distribution Certification Exam Review	Lacey	WETRC	1-800-562-0858	\$295/2.1
Sept. 15	Interpreting Utility Maps and Drawings	Yakima	ERWOW	1-800-272-5981	\$75/\$85/0.5
Sept. 15	Package Filter Plant Operation	Olympia	ERWOW	1-800-272-5981	\$105/\$140/0.7
Sept. 15-16	Wastewater Treatment Plant Operator Exam Review	Moses Lake	ERWOW	1-800-272-5981	\$200/\$250/1.4
Sept. 16-17	Wastewater Certification Exam Review (Treatment)	Auburn	WETRC	1-800-562-0858	\$235/1.4
Sept. 16-18	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	\$340/2.1
Sept. 16-18	BAT Refresher Course	Spokane Valley	WETRC	1-800-562-0858	\$340/2.1
Sept. 16-18	Water Treatment Plant Operator Exam Review	Olympia	ERWOW	1-800-272-5981	\$200/\$250/2.1
Sept. 17-19	Cross Connection Control Basics and Exam Review	Yakima	WETRC	1-800-562-0858	\$295/2.1
Sept. 17-19	Water Distribution Certification Exam Review	Everett	WETRC	1-800-562-0858	\$295/2.1
Sept. 22	Interpreting Utility Maps and Drawings	Vancouver	ERWOW	1-800-272-5981	\$75/\$85/0.5

Training and Education Calendar: June - October 2008

Date	Topics	Location	Contact	Phone #	Cost/CEU
Sept. 22	Review the WAC	Olympia	ERWOW	1-800-272-5981	\$90/\$120/0.6
Sept. 22-23	Advanced BAT, Troubleshooting & Repair	Auburn	WETRC	1-800-562-0858	\$295/1.4
Sept. 23	Water Distribution Specialist Certification Exam Review	Auburn	WETRC	1-800-562-0858	\$125/0.7
Sept. 23-25	Cross Connection Control Specialist Exam Review	Moses Lake	ERWOW	1-800-272-5981	\$200/\$250/2.1
Sept. 23-25	Water Distribution Manager Certification Exam Review	Olympia	ERWOW	1-800-272-5981	\$200/\$250/2.2
Sept. 24	Asbestos/Cement Pipe Work Practice Procedures	Spokane Valley	WETRC	1-800-562-0858	\$160/0.7
Sept. 25	Automatic Control Valves, Cla-Val Service Training	Lacey	WETRC	1-800-562-0858	\$110/0.7
Sept. 25-26	Fire Hydrants: Installation, Testing, Operation & Repair	Spokane	WETRC	1-800-562-0858	\$255/1.4
Sept. 25-26	Water Hydraulics	Everett	ERWOW	1-800-272-5981	TBA
Sept. 29-30	Wastewater Treatment Plant Operator Exam Review	Olympia	ERWOW	1-800-272-5981	\$200/\$250/1.4
Sept. 29-30	Wastewater Certification Exam Review (Treatment)	Spokane Valley	WETRC	1-800-562-0858	\$235/1.4
Sept. 30	WTPO Level 3 Exam Review	Richland	ERWOW	1-800-272-5981	\$105/\$140/0.7
Oct. 1	Preparing for a Sanitary Survey	Liberty Lake	ERWOW	1-800-272-5981	\$95/\$105/0.7
Oct. 2	Asbestos Cement Pipe Handling Procedures	Moses Lake	ERWOW	1-800-272-5981	\$100/\$110/0.7
Oct. 2	Automatic Control Valves, Cla-Val Service Training	Spokane Valley	WETRC	1-800-562-0858	\$110/0.7
Oct. 2	BAT Professional Growth 1-Day Review	Tri-Cities	ERWOW	1-800-272-5981	\$105/\$140/0.7
Oct. 2-3	Adv CCC: Risk Assessment & Hazard Analysis	Auburn	WETRC	1-800-562-0858	\$185/1.4
Oct. 3	Review the WAC	Liberty Lake	ERWOW	1-800-272-5981	\$90/\$120/0.6
Oct. 6-10	BAT Certification Course	Auburn	WETRC	1-800-562-0858	\$655/3.7
Oct. 7-9	Pumps and Pumping in Water and Wastewater Facilities	Everett	WETRC	1-800-562-0858	\$295/2.1
Oct. 8	Automation and Process Optimization	Lacey	WETRC	1-800-562-0858	\$145/0.7
Oct. 13	Simplified Nutrient Monitoring & Ultraviolet Common Sense Disinfection	Liberty Lake	ERWOW	1-800-272-5981	TBA
Oct. 14	Confined Space Entry	Spanaway	ERWOW	1-800-272-5981	\$85/\$105/0.7
Oct. 14-16	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	\$340/2.1
Oct. 14-16	BAT Refresher Course	Spokane Valley	WETRC	1-800-562-0858	\$340/2.1
Oct. 15	Basics Course for Small Public Water Systems	Liberty Lake	ERWOW	1-800-272-5981	\$105/\$140/0.7
Oct. 15	Simplified Nutrient Monitoring & Ultraviolet Common Sense Disinfection	Moses Lake	ERWOW	1-800-272-5981	TBA
Oct. 15	Basics Course for Small Public Water Systems	Ellensburg	ERWOW	1-800-272-5981	\$105/\$140/0.7
Oct. 15-16	BAT Professional Growth 2 Day Review	Spanaway	ERWOW	1-800-272-5981	\$210/\$280/1.5
Oct. 16	Preparing for a Sanitary Survey	Yakima	ERWOW	1-800-272-5981	\$95/\$105/0.7

Our training calendar is updated quarterly; please visit the additional training links for current information.

For information about distance learning activities, call WETRC at (800) 562-0858

Additional Training Links:

AWWA King County Subsection Web site—<http://www.kcawwa.org/>

ERWOW Web site—<http://www.erwow.org/>

WETRC Web site—<http://www.wetrc.org/>

AWWA Pacific Northwest Section Web site—<http://www.pnws-awwa.org/>

EPA Electronic Workshops Web site—<http://www.epa.gov/safewater/dwa/electronic.html> (No CEU assigned to these courses.)

Partnership for Water Conservation—<http://www.partners4water.org>

For the complete Training Calendar, visit the Drinking Water Homepage and click on Training - <http://www.doh.wa.gov/ehp/dw>

NOTE: Links to external resources are provided as a public service, and do not imply endorsement by the Washington State Department of Health.

Water Supply Outlook... (Continued from Page 1)

Experts optimistically predict spring and summer stream flow forecasts to be average or above for most river basins in the state. This bodes well for both surface and groundwater drinking water supplies.

La Niña

It seems the fall 2007 prediction for a La Niña winter came true. Whether or not it will be a La Niña summer is still an open question, but the 2008 La Niña winter provided a buffer that is protecting us from a summer drought.

If La Niña conditions persist into the summer, the historical record suggests we will see cooler summer temperatures in Western Washington and slightly warmer temperatures in Eastern Washington. A La Niña summer generally brings slightly lower-than-normal levels of precipitation across the state.

Since Washington receives only a small percent of its annual precipitation in the summer, the effect on stream flows and water supplies will be minimal. In fact, if we see cooler-than-normal conditions in Western Washington there may be a slight benefit, as residents use less outside water and less power for air conditioning. So, overall we have a modestly optimistic water supply outlook for summer 2008.

Abnormal conditions

People may disagree and debate about whether these conditions are the results of sunspots, climate change, holes in the ozone, greenhouse gases or a geologic and climatological hiccup. Experts weigh in on all sides with theories. While they may not agree on the cause, there is agreement on a common theme – Washington’s weather seems to be more variable and subject to extremes.

Washington has seen its share of abnormal conditions over the past decade. We have had hurricane-force windstorms, and weathered 100-, 200- and 500-year floods. We have had back-to-back seasons of flooding and drought. Over the past 10 years, we had drought conditions in six years and formal drought emergencies declared in four years.

“Why?” may not be as important as “So what?”

While we face the 2008 summer water supply outlook optimistically, water system operators should ask themselves some questions. How is my system faring with our “exceptional” weather? Are we ready for another tough season next fall? Next winter? Next summer? Are there issues and maintenance that we put off while our system coped with the last hot issue or emergency?

A reliable water supply is only one part of what it takes to run a successful and efficient water system. Savvy water system operators might use this summer’s “breather” to review their emergency supply, flooding and drought response plans. It is always easier to look at these issues when there is still plenty of water in the tanks and pipes. Take some time this summer to dust off, review and update those portions of your water system’s operations and emergency plans that can help you weather Washington’s extremes.

For more information

The Office of Drinking Water has a variety of publications available to assist you. Visit our Drinking Water Emergencies Web page at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwflood.htm#Water_Systems



What is
WaterSense?

WaterSense is a voluntary public-private partnership program sponsored by the U.S. Environmental Protection Agency. Its mission is to protect the future of our nation's water supply by promoting and enhancing the market for water-efficient products and services.

www.epa.gov/watersense

Legislative Round Up... (Continued from Page 10)

Section 2009 (Department of Health's Section)

We must review small public drinking water systems (less than 1,000 connections) that require, or may require, significant state resources to resolve urgent threats to public health and safety. We must evaluate case studies and the rules in place for small water systems, and provide a report. The report will recommend early interventions or changes to the rules that could prevent such problems in the future.

The report must identify the communities that would benefit from consolidation, regionalization, or other measures that will lead to improved small water system compliance, long-term public health protection, and sustained economic vitality. We must submit a progress report to the Legislature and OFM by December 1, 2008, and a final report by June 30, 2009.

Technical Advisory Group on Fire Sprinkler Systems in Private Residences (Substitute House Bill 2575)

This bill directs the State Building Code Council to set up an advisory group on private residential fire sprinkler systems. We serve on the advisory group. The group must develop recommendations to remove barriers and provide incentives for the voluntary installation of sprinkler systems in private residences. The recommendations will assist local governments that choose to implement a private residential fire sprinkler system requirement. The advisory group must submit a report to the Legislature by January 15, 2009.

For more information, call Kristin Bettridge, policy and finance section manager, at (360) 236-3166 or e-mail kristin.bettridge@doh.wa.gov

Water Use Efficiency... (Continued from Page 1)

All people can make a difference by making a conscious decision about what they do with their home landscape.

Vickers lists five recommendations to help decrease the amount of water used to irrigate lawns:

1. Limit the number of watering days per week – or month.
2. Limit the area allowed for irrigation.
3. Plant smaller, drought-tolerant lawns that can go dormant and not die with little or no watering during the summer.
4. Stop the use of fertilizers. The intense watering cycle recommended after adding chemicals to lawns pollutes surface water and creates health risks to us.
5. Promote natural lawns and landscapes by planting what can naturally thrive in your area.

Remember, the Water Use Efficiency Rule says you do not have to evaluate water efficiency measures if you choose to implement them. Most of Vickers' recommendations are examples of water efficiency measures that can help you meet your water use efficiency goal.

Consider implementing these and other types of measures to encourage your customers to:

- Use less water.
- Use water more efficiently.

You can read Vickers' article, *Discussion: Are Water Managers Becoming Lawn Irrigation Managers?*, in the February 2007 **American Water Works Association Journal**.



Group A Public Water Supplies publication

The Office of Drinking Water is updating **Group A Public Water Supplies, Chapter 246-290 WAC (#331-010)**. We are adding the new requirements for water use efficiency, federal Long Term 2 rules, planning and engineering, and fees.

PLEASE RECYCLE!

The July 2004 Group A Public Water Supplies publication, also known as the "Blue Book," is outdated and unavailable.

Do not use this outdated publication.



Due to the high cost of printing and mailing this large publication, it will be available in electronic formats only. You can download the document from our Web site now or pre-order as many free CDs as you need. The CD will be available in late July.

You may also pre-order the CD by calling (800) 521-0323 or visiting the Web site at <https://fortress.wa.gov/doh/eh/dw/publications/>

In This Issue

The following people contributed to the production of this issue of *Water Tap*: Michelle Austin, Marsha Carlton, Denise A. Clifford, Carolyn Cox, Larry Granish, Jennifer Kropack, Donna Lynch, Dick Pedlar, Theresa Phillips, Skip Rand, Paula Smith, Ginny Stern, Amy Swecker, Mike Wilson, and Linda Waring.

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

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Comments, questions, story ideas, articles and photographs submitted for publication are welcome. Please address correspondence to Linda Waring, Editor, *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

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July 1 Deadline!
By July 1, 2008, your system must deliver its CCR to each water system user and the appropriate Office of Drinking Water Regional Office. Your correspondence to the regional office must include a certification form – certifying that you did deliver the CCR to water system users.

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