



the WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

Three water systems recognized during Drinking Water Week



Volume 19, #3 - June 2004



Drinking Water Week award winners from the Town of Hamilton and state and local health officials celebrate by drinking water from their tap. Pictured (from left to right) are: Ted Anderson, Skagit County Commissioner; Janice Gibson, Hamilton Town Council; Margaret Fleek, Town Planner; Andrew Hansen, Town Council; Denise Clifford, Director, Office of Drinking Water; Don Wick, Economic Development Association of Skagit County; Nancy Feagin, Northwest Regional Office of Drinking Water; Corinne Story, Environmental Health Supervisor, Skagit County Health Department; Lorna Parent, Skagit County Health Department; Bob James, Northwest Regional Director, Office of Drinking Water; and Town of Hamilton Mayor Tim Bates.

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Three water systems in Washington were recognized for significantly improving and protecting the health of Washington residents. The Office of Drinking Water (ODW) presented "Drinking Water Awards" to the City of Shelton in Mason County, Public Utility District #1 in Stevens County, and the Town of Hamilton in Skagit County in observance of Drinking Water Week, May 2-8.

"These water systems deserve this recognition for their efforts beyond the call of duty and demonstrating a commitment to providing safe and reliable drinking water to their customers," said ODW Director Denise Clifford. "This is an opportunity to celebrate the value of clean, safe water and award those dedicated to providing it to us."

ODW oversees public water supplies, making sure water quality meets safe drinking water standards and water system operators are properly trained and certified.

City of Shelton, Mason County

The City of Shelton did an excellent job notifying 8,400 customers to boil their water after discovering the presence of fecal coliform bacteria last October. The city began to chlorinate the water and implemented a program to locate the source of the contamination, clean the reservoir and flush the distribution system. Shelton is also recognized for creating a regional plan for water supply and wastewater management (between the city, Washington Corrections Center, Port of Shelton and Washington State Patrol).

(Continued on Page 3)

THE DIRECTOR'S COLUMN

BY DENISE ADDOTTA CLIFFORD



The dust has settled. When Gregg Grunenfelder took on his new role as Chief Administrator for the Division of Environmental Health, Rich Hoey stepped up to the plate and did a tremendous job leading us through this very challenging time.

I feel fortunate to walk in their shoes. By positioning us well, we've been able to stay

the course and assure the people of Washington have safe and reliable drinking water. I want to thank all of our staff and managers who took on new responsibilities during the transition. We truly have a committed drinking water team!

As I move through my own transition to Office Director, I will continue to move our organization in the positive directions we have charted. As the Constituent Relations Manager I met many of you as we sorted through tough issues together—from health advisories and security incidents, to new state (municipal water law) and federal policy directions (arsenic rule) and emerging drinking water issues. I look forward to working with you in my new role and getting out to see you more often.

I was excited that one of the first things I did as Office Director was to recognize three water systems during National Drinking Water Week. Clean water is essential to public health, and celebrating the tremendous work of these utilities to provide safe drinking water to their communities was very rewarding.

I want to thank Mike Golat, City of Shelton Director of Public Works, and his team of professionals for going above and beyond the call of duty in responding to bacterial contamination. I applaud the city for moving forward with a long-term solution to prevent future problems.

As you can see from the photo on page 1, I had a great time presenting an award to the Town of Hamilton and toasting the community's success with tap water obtained from Town Hall. This rural community of 350 people overcame major obstacles to develop a new groundwater well that is protected from the threat of Skagit River floods. The flood-line signs on buildings and trees around the town and the stories people shared were amazing.

Although I was unable to join the celebration for Stevens County Public Utility District #1, the District's reputation for leadership in facilitating the consolidation and rehabilitation of small, struggling water systems, is an example for others to follow.

Congratulations to all of you for work well done!

We will face many new challenges in our respective responsibilities to assure safe and reliable drinking water into the future. I am committed to working with our partners and constituents as we face these challenges together.

Please feel free to call or visit me when you are in the Olympia area.

Following a nationwide search, the Office of Drinking Water is pleased to announce Denise Addotta Clifford as its new Director, effective April 16. Denise has been with the Office of Drinking Water as Constituent Relations Manager since December 2001, where she established herself as a very effective communicator and leader.

Denise also brings a wealth of experience and balance to the job having worked in the government, business, and non-profit arenas. She takes over from Gregg Grunenfelder, who in August 2004 took the position of Chief Administrator for the Department of Health's Division of Environmental Health.

Please join us in congratulating Denise and welcoming her into her new role.

Grunenfelder receives Pioneer Award

In February, the Board of Directors of Evergreen Rural Water of Washington (ERWOW) presented their first Pioneer Award to Gregg Grunenfelder for providing leadership to the Office of Drinking Water over the past six years.



Gregg Grunenfelder, left, receives the first Pioneer Award from Gary Rhoades, executive director of Evergreen Rural Water of Washington.

The award recognizes Grunenfelder for his

"pioneering efforts as a drinking water industry professional who has demonstrated dedication to our mutual goal of helping to ensure safe and reliable drinking water for all to use and enjoy."

"During Gregg's tenure, the Office of Drinking Water experienced tremendous growth and faced many challenges," said Gary Rhoades, executive director of ERWOW. "Although it was not always easy, Gregg met those challenges head on, a true tribute to his management abilities and his commitment to public service. His positive working relationships with organizations such as ours have truly made us feel a part of the Drinking Water Team."

Drinking Water Week - (Continued from Page 1)

Public Utility District (PUD) #1 of Stevens County

Stevens PUD has a history of providing safe and reliable drinking water to Spokane and Stevens counties. They are being recognized for taking their leadership and efforts "above and beyond" by assisting small, struggling water systems. They currently manage 15 water systems with over 4,000 customers.

Town of Hamilton, Skagit County

Hamilton, a rural community of 350 people, is recognized for creating a protected well outside Skagit River's flood plain. It replaced an older well that was highly susceptible to flooding and surface water contamination.



More than 50 people helped Steven's PUD celebrate their Drinking Water Week Award. From left to right are Dan Sander, Office of Drinking Water, Eastern Regional Office Manager; Lloyd Henry, Vice-President, Stevens PUD Board of Commissioners; Secretary of Health Mary Selecky; KO Rosenberg, President, Stevens PUD Board of Commissioners; Jim Berger, Secretary, Stevens PUD Board of Commissioners; and Tom Justus, Environmental Engineer, Office of Drinking Water.

From left: City of Shelton Commissioner, Dick Taylor, Shelton Mayor John Tarrant and City Commissioner Dawn Pannell pose with the Drinking Water Week Award they received from Secretary of Health Mary Selecky. (photo courtesy of The Shelton-Mason County Journal)



Water Use Efficiency Advisory Committee is Up and Running

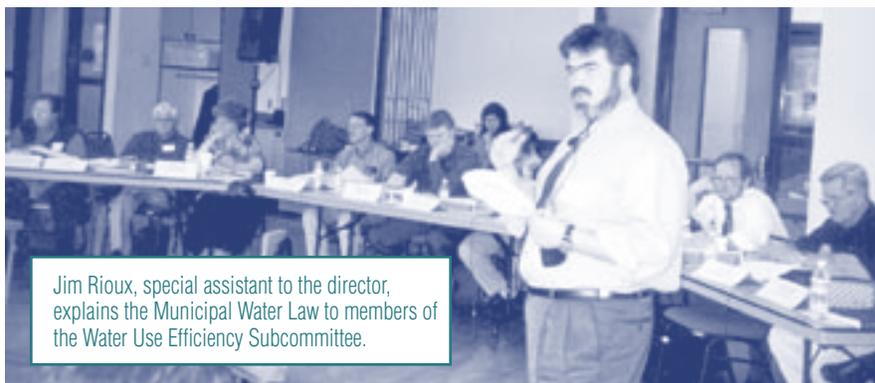
The Office of Drinking Water (ODW) has taken another step forward in developing the water use efficiency regulation required by the 2003 Municipal Water Law.

The stakeholder process was kicked off April 7, with the first meeting of the Water Supply Advisory Committee's Water Use Efficiency Subcommittee.

The subcommittee is on an aggressive schedule. Monthly meetings are scheduled through the year, and members expect to complete a report of recommendations by December.

ODW will use the subcommittee's advice and recommendations through the rule-making process to adopt and implement the Municipal Water Law.

For more information about the meetings and the rule-making process, visit the ODW Web site at http://www.doh.wa.gov/ehp/dw/municipal_water/municipal_water_law.htm or call Jim Rioux at (360) 236-3154.



Jim Rioux, special assistant to the director, explains the Municipal Water Law to members of the Water Use Efficiency Subcommittee.

UTC may raise the revenue threshold for water company regulation



The Washington Utilities and Transportation Commission (UTC) is seeking comments on a proposal to increase the amount a privately owned for-profit water company can charge before it falls under the commission's rate regulation. The deadline for comment is September 8.

Currently, UTC begins to regulate a water company when it generates an average of \$429 in annual revenue per customer.

"The commission will consider, through the rulemaking process, whether it is appropriate to raise the revenue threshold for water companies and, if so, by how much," says Danny Kermode, a UTC water company regulatory analyst who is leading the rulemaking team that will make a final recommendation to the commission.

There are about 1,200 privately owned for-profit water companies in Washington. Systems that charge more than the revenue threshold become regulated by the commission and must justify the higher rates before they can legally charge them.

State law allows the commission to raise the threshold periodically to account for inflation. "If the threshold is

increased, a company charging rates just below the current threshold will be able to increase its rates to just below the new, higher threshold without being regulated by UTC," Kermode said.

The existing revenue threshold has been in effect since December 1999.

In addition to the change in the threshold, the commission may consider other amendments to WAC 480-110-255 to clarify the rule's regulatory intent. A final decision is expected this fall.

The rulemaking schedule, rulemaking documents, and other aspects of this rulemaking may be found on the UTC Web site at www.wutc.wa.gov. To be put on the mailing list or to share your comments or observations, send an e-mail to records@wutc.wa.gov or a fax to (360) 586-1150. You may also mail them to:

Carole J. Washburn, Secretary
Washington Utilities and Transportation Commission
P.O. Box 47250
1300 S. Evergreen Park Drive, S.W.
Olympia WA 98504-7250

Include your organization's name, the docket number UW-040375, and the date of the comments. If you have questions regarding the change in the revenue threshold and how it would affect you, send them to Danny Kermode at dkermode@wutc.wa.gov or call (360) 664-1253.

61 systems participate in 2003 Drinking Water Infrastructure Needs Survey

The Office of Drinking Water is concluding its work on the third cycle of the Drinking Water Needs Survey – a nationwide survey to assess the 20-year capital investment needs of drinking water systems.

For this cycle, the U.S. Environmental Protection Agency (EPA) surveyed a sample of about 3,000 medium and large water systems across the country. All 61 water systems selected to participate in Washington completed their surveys, identifying over 4,000 needed projects.

EPA uses the results of the survey to apportion the Drinking Water State Revolving Fund (DWSRF) money to each state, based on their respective need. The DWSRF provides low-interest loans and other forms of assistance to public water systems so they can make capital improvements.

EPA will release the total national need and Washington's portion in late Spring 2005.

For more information, please contact Peter Beaton, Needs Survey Coordinator, by phone at (360) 236-3150 or e-mail peter.beaton@doh.wa.gov.

Think About Summer Water Supply and Demand



Across Washington, people are reveling in a spring that has been warmer, drier and sunnier

than usual. But with the National Weather Service predicting warmer-than-normal weather for the rest of spring and summer, it's time for water system owners and operators to think about conservation.

Water conservation is always a good policy, especially in the summer when peak demand can double or triple average water use. Conservation is a cost-effective alternative to developing new water sources or building new infrastructure when faced with supply, demand, delivery or operational challenges.

Before even warmer and drier weather sets in, take time to think about the steps you can take to ensure you are able to supply your customers with a safe, reliable water supply. Some things to consider are:

- Do you think a supply shortage will occur? When? This weekend, in July, August or September?
- What data can you collect and analyze to determine if well levels are declining or storage levels are being impacted?
- Where is your "break point"* and are policies in place to begin temporary water use reduction measures and restrictions, if that becomes necessary?

**Break point occurs when wells or storage are not replenishing themselves normally and you need to advise your customers to reduce or restrict their water usage.*

Talk to your customers

Motivating customers to save water can bring both peak-demand and year-round reductions in water consumption. During the summer, nearly 40 percent of municipal water is used for watering lawns and gardens, washing cars and outdoor uses.

Some key messages to share with customers are:

- Water lawns and gardens before 10 a.m. or later than 7 p.m.
- Wash full loads of clothes and dishes.
- Avoid water-use activities such as laundry, car washing, and showers between the peak hours of 5 to 7 p.m.
- Improve your soil by working compost into it.
- Choose native plants. Once established, they are drought tolerant.

Check for leaks



Ensure your storage and distribution systems are well maintained and free of leaks. Major leaks are usually

obvious, but finding others may require a systematic leak detection process:

1. Conduct a preliminary survey to determine obvious leaks and water losses through malfunctioning pumps, valves, meters and other hardware.
2. Measure water flow by isolating each distribution zone, then listening to water movement, testing pressures, and watching tank levels and meters to determine leakage.
3. Pinpoint leaks with listening devices.
4. Repair leaks.



We can help

The Office of Drinking Water has many resources to help you.

- **A Water Efficiency Web site** at http://www.doh.wa.gov/ehp/dw/our_main_pages/water_use_efficiency.htm.
- **Water conservation: Guidelines to being water wise.** A brochure containing eight water conservation guidelines for customers. You may order up to 500 copies (DOH pub. 331-120) free of charge.
- **Guidelines for the preparation of water shortage response plans.** A guidance document to help you create a plan for a minor, medium or severe water shortage.

Minor Water Shortage Stage

Supply capacity down 5% - 10% of normal

Moderate Water Shortage Stage

Supply capacity down 10% - 20% of normal

Severe Water Shortage Stage

Supply capacity down by more than 20% of normal

New Operating Permit Rule Becomes Effective

The Office of Drinking Water (ODW) revised the operating permit rule April 1 to clarify its evaluation of individual Group A water systems. The revision shifts some water systems into alternate categories based on their ability to meet drinking water requirements.

Under the rule, individual water system owners must get an operating permit every year. ODW assigns them to one of four categories – ranging from green to red – based on their compliance with drinking water regulations.

The red category is now reserved for high-risk public health violations.

This means a lot of water systems that operate at an acceptable level of compliance – but lack design approval or have exceeded the approved number of service connections – will be shifted into the blue category.

The revision also provides more information on the adequacy of a system to serve existing services or the capacity to grow, and updates language to match other regulations and ODW's new compliance strategy.

Local decision makers use ODW's categories to make growth management and permitting decisions.

Green systems are in substantial compliance with all requirements.

ODW recommends these systems be viewed as adequate for existing uses and additional connections up to the approved number of connections, unless they are already at capacity.

Yellow systems are in substantial compliance with all requirements except:

- They have been notified to submit a water system plan but have not satisfied the planning requirement.

- They are under a compliance agreement for a state significant non-complier violation.

ODW recommends these systems be viewed as adequate for existing uses and additional connections up to the approved number, unless they are otherwise limited by a compliance agreement.

Blue systems are in substantial compliance with requirements except:

- They do not meet design approval requirements.
- They have exceeded the number of approved connections established by the ODW.

ODW recommends these systems be viewed as adequate for existing uses, but not adequate for adding new connections.

Red systems are in substantial non-compliance with requirements.

ODW recommends these systems be viewed as inadequate for existing uses and that no additional connections be allowed. This may result in denial of loans, building permits, on-site sewage disposal permits, food service permits, liquor licenses, and other permits or licenses for properties served by a water system.

For more information:

Eastern Region -
George Simon (509) 456-2801

Northwest Region -
Luis Buen Abad (253) 395-6773

Southwest Region -
Cheri Paine (360) 753-2884

Headquarters -
John Aden (360) 236-3157

Infrastructure Funding News



IACC Conference in November

The Infrastructure Assistance Coordinating Council (IACC) will hold its fall conference November 2-4, at the West Coast Wenatchee Hotel. This popular conference features various training and program sessions related to infrastructure, funding and technical assistance. For more information on the conference or to register, contact Bill Cole, Public Works Board, at (360) 586-4125.

Use the IACC database as a resource for locating infrastructure funding or technical assistance in Washington state. The Web site address is <http://www.infracfunding.wa.gov>.



2003 Water System Acquisition and Rehabilitation Program (WSARP)

The Public Works Board approved the top scoring WSARP projects at their April board meeting. Applicants with projects approved for funding must execute their contracts by September 2004 to remain eligible for funding. Projects are expected to be completed two years after contracts have been executed. Future funding for the program is unknown at this time.

For more information, please contact Chris Gagnon by phone at (360) 236-3095 or e-mail chris.gagnon@doh.wa.gov.



Drinking Water State Revolving Fund (DWSRF) - 2004 Applications

The Office of Drinking Water received 66 DWSRF applications from 54 jurisdictions worth more than \$55 million. About \$20 million is available to fund this year's projects. Projects will be reviewed, scored and prioritized this summer. The draft priority project list will be released in September for public review and comment. Financial and environmental reviews conducted by Public Works Board staff will follow. Funding will be available in the spring of 2005.

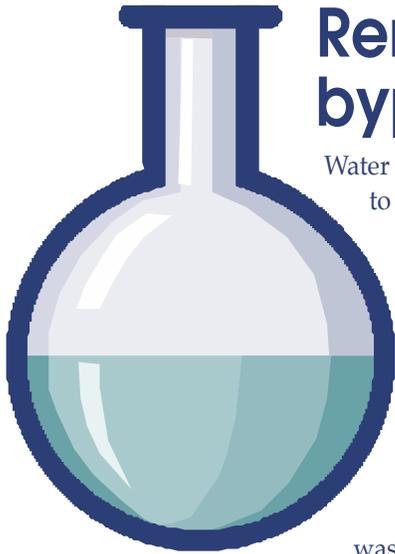
For more information, please contact Chris Gagnon by phone at (360) 236-3095 or e-mail at chris.gagnon@doh.wa.gov.



Northwest Community Development Institute (NWCDI)

The NWCDI is a three-year certification program that provides community and economic development practitioners with formal training designed to address complex community issues and increase community effectiveness for existing and potential leaders. After meeting the required education and work experience, participants have the option of taking an exam to become a professional Certified Community Developer (CCD) or to receive a Community Partners Certification (CPC).

For information on the July curriculum, please call Mindy Hobson at (800) 344-8594 or visit www.idahocities.org and click on the "Training Events" link.



Reminder: Test for disinfection byproducts this summer

Water systems that use either chlorine or ozone in any part of the treatment process are required to sample for total trihalomethanes (TTHMs) and haloacetic acids (HAAs). This sampling must occur during the month of warmest water temperature at a location representing the maximum residence time in the distribution system.

In other words, sample for TTHMs and HAAs at the end of the distribution system where the water has been in the system the longest amount of time. Generally, this sampling should occur between late July and early September unless historical water temperature data is available to determine the month of warmest water temperature.

The Stage 1 Disinfectants and Disinfection Byproducts Rule (D-DBPR) was developed to protect public health from disinfection byproducts that form when chlorine, ozone, or other disinfectants are added to drinking water.

If your samples exceed 0.080 mg/L for TTHMs or 0.060 mg/L for HAAs, contact your Regional DBPR specialist for follow-up sampling requirements:

- Eastern Region: Mike Wilson (509) 456-3186
- Northwest Region: Jolyn Leslie (253) 395-6762
- Southwest Region: Jim McCauley (360) 664-8734

Other useful reminders:

- Monitor and record the chlorine residual at the same time you collect a sample for TTHMs, HAAs or coliform.
- Monitoring requirements are based on the number of “treatment plants.” In some cases, multiple wells drawing from a single aquifer may be determined to be a single treatment plant. Both a single wellfield and a single well are considered a single treatment plant.
- All water systems are required to have a disinfection byproducts (DBP) monitoring plan. A simple form that can be used to create a DBP monitoring plan is available on the Evergreen Rural Water Web site at <http://www.erwow.org/>. If your water system serves more than 3,300 people and uses surface water, you must send your DBP monitoring plan to your regional engineer.
- Groundwater only systems that collect samples with TTHMs less than 0.040 mg/L and HAAs less than 0.030 mg/L qualify for reduced monitoring.
- Water systems that use ozone must also take monthly bromate samples at the entry point to the distribution system.

Sampling Resources

Sampling instructions for HAAs and TTHMs are available on the ODW Web site at <http://www4.doh.wa.gov/dw/publications/>.

See page 21 of this newsletter for new disinfection byproducts publications.

Additional information is available from the U.S. Environmental Protection Agency’s Web site at <http://www.epa.gov/safewater/mdbp/dbp1.html>.

Groundwater systems that serve less than 10,000 people and surface water systems that serve less than 500 people must collect TTHM and HAA samples during the month of warmest water temperature.

Larger systems must monitor this summer and more often in accordance with their monitoring plans.

DOH collects third round of cross-connection control data

For the third year in a row, the Office of Drinking Water (ODW) has collected cross-connection control (CCC) program data from large utilities. The CCC data collection efforts focus on implementation activities and backflow protection for high hazard premises.

ODW will use the 2003 data to update information on the status of CCC program development and implementation activities, identify public health trends, assess public health improvements, and identify guidance document and training needs.

“Our long-term goal is to use the information to enhance public health protection in Washington through implementation of comprehensive CCC programs by public water systems,” says Terri Notestine, Cross-Connection Control Program manager for ODW.

Collection of 2003 CCC data

This year, ODW requested 2003 data from the largest community public water systems (with 1,000 or more connections) in Washington. More than 200 systems were contacted, and eight of the systems were asked to submit CCC forms for the first time.

To make it simpler for water systems to respond, ODW:

- Improved the Web-based process that enables utilities to submit CCC data on the Internet. As of May 3, 75 percent of systems had used the Internet to complete their forms, compared to 68 percent last year.



- Conducted four training sessions in Yakima, Spokane, Tacoma and Longview in January, compared to two sessions last year.
- Mailed the forms out in January, as requested by water system CCC program managers. The report due date was shifted accordingly to March 15. With this schedule, utilities can work on their CCC forms during winter “down time” and ODW receives updated CCC data sooner.

92 percent response rate

State drinking water regulations require water systems to complete CCC forms and submit them to ODW upon request. As of May 3, 92 percent of the contacted water systems had responded, compared to 97 percent of systems responding at the end of last year. The CCC results received to date are highlighted in the box to the right.

Follow-up activities

Systems that failed to meet the March deadline received reminder letters. Systems that don't comply with the CCC reporting requirements will receive violation letters in the near future.

ODW will inform water systems that reported they have no CCC program and/or implementation activities about a free, on-site technical assistance program available through Evergreen Rural Water of Washington. For information, call (800) 272-5981.

ODW will also be contacting purveyors that serve unprotected high health cross-connection hazards in certain categories (starting with the sewage-related facilities). These systems will be asked to submit action plans outlining a strategy and schedule to ensure proper backflow protection is provided in a timely manner to protect the public water system from contamination.

For more information

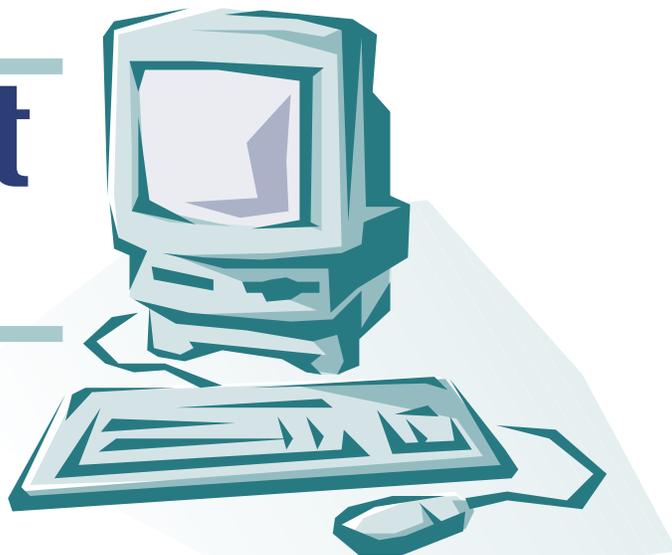
Contact Terri Notestine by e-mail at terri.notestine@doh.wa.gov or phone (360) 236-3133.

2003 CCC Results

- 71 percent of systems have written CCC programs and implementation activities.
- 88 percent of systems have a state-certified cross connection control specialist to develop and implement their CCC programs.
- 64 percent of more than 9,200 high hazard premises met the backflow protection requirements.
- 79 percent of sewage-related facilities had the required backflow protection.
- 88 percent of Reduced Pressure Backflow Assemblies (RPBAs) and 84 percent of Double Check Valve Assemblies (DCVAs) were tested during the 2003 reporting year.

Based on data from 188 systems that reported by April 29, 2004.

Sneak Peak at SWAP Site



The Office of Drinking Water is preparing to unveil our Source Water Assessment Program (SWAP) Web site this fall, and we need your help reviewing what we'll be telling the public about your source water.

SWAP is a federally mandated effort to:

- Identify the location of current and future drinking water supplies.
- Evaluate how easily those source waters can be contaminated.
- Inventory potential sources of contamination that might threaten drinking water quality.
- Inform interested people about the assessment results.

We used existing wellhead protection and watershed control program data to identify locations of current and future supplies, and monitoring waiver susceptibility assessments to estimate source water susceptibility.

Over the last several years we also worked with local governments, other state agencies, and the U.S. Environmental Protection Agency to build a geographic information system (GIS). The system tracks wellhead areas, service area boundaries, critical aquifer recharge areas, sole source aquifers, and watersheds used for surface water sources of drinking water.

It also shows a variety of potential contaminant sources such as leaking underground storage wells, hazardous waste generators, and animal feeding operations.

SWAP isn't perfect, yet

Our assessment under the SWAP program is a simple summary of the following information for each water source (well, spring, or surface water intake):

- The type of source.
- The assessed susceptibility of the source.
- Any potential contaminant source the GIS system indicates falls within a wellhead area or within 750 feet of the surface water that drains into a drinking water intake.

With more than 2,500 water systems and 6,000 water sources, we are sure some data needs to be corrected. Please don't panic or get upset if it looks like the data we have on your sources is incorrect – just let us know so we can correct it. That is why we are sharing with you the underlying data we are using to generate the assessment information we will be publishing on the SWAP Web site.

You can help us get it right

To help ensure this information is accurate, we need your help. Please visit the following Web sites. The password is included in a letter we will send to you this month.

- <http://www4.doh.wa.gov/dw/swap/app/inventory.cfm> is the initial version of the Web site that will be accessible to the general public this fall. It will have the SWAP information available as text and tables.
- To get the Web address with the GIS data for your water system, e-mail us at dwhelp@doh.wa.gov

We'd like answers to the following questions:

- Are your sources in the right location?
- Are they labeled properly (e.g. well 1, source 2)?
- Does the susceptibility rating match what we have told you previously?
- Does your wellhead area/watershed seem to be the correct shape and size?
- If we show your service area boundary, is it accurate?
- If we do not show your service area boundary, do you have one?

To report corrections, please use the online order form on the Web site. If you need the password, or more information on either of these Web sites, please contact ODW's IT help desk at (360) 236-3113 or dwhelp@doh.wa.gov.

How do you say, “Don’t drink the water” in Greek?

To help water systems ensure their customers always know if a problem with drinking water poses a health risk, the Office of Drinking Water (ODW) has developed an on-line tool consisting of four basic messages translated into 27 languages.

The four messages are:

1. This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.
2. Boil your water before using.
3. Don’t drink the water.
4. Children under 12 months old should not drink the water. Don’t use the water to make formula.

ODW developed the translations to support implementation of the new federal Public Notification Rule.

Notifying water system customers as quickly as possible when their water may not be safe to drink, gives them time to take actions to protect their health.

State and federal public notification laws require customers to be notified within 24 hours if there is a serious problem, and

within 30 days for less serious violations. Water systems are also required to send copies of their notices to ODW along with certification that the notice was delivered to customers, as required by law.

ODW works hand-in-hand with water systems in response to drinking water emergencies. ODW will notify water systems experiencing violations of their obligations to notify their customers, when the notices should be issued, the information that should be included, and a sample form they can use.

Μην πίνετε το νερό.

It may be Greek to you, but to a family from Athens it's a clear warning that they shouldn't drink the water.

The translated messages and other useful information about public notification are on the ODW Web site at <http://www.doh.wa.gov/ehp/dw/translations/translations.htm>.

For more information

Eastern Region - (509) 456-3115

Northwest Region - (253) 395-6750

Southwest Region - (360) 664-0768

Headquarters - (800) 521-0323

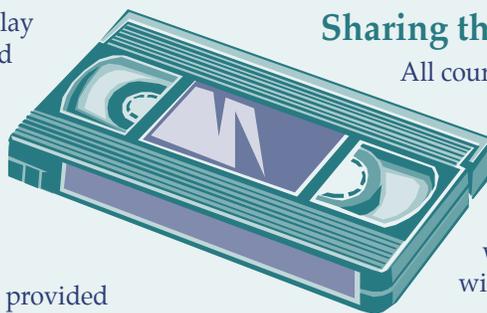
Training video available for water boards and commissions

Board members and commissioners play a vital role in protecting the health and safety of Washington residents by ensuring their systems deliver safe reliable drinking water. And, the more information they have, the better able they are to protect their customers.

The Office of Drinking Water recently provided 20 training opportunities to help board members and commissioners understand their responsibilities under the federal Safe Drinking Water Act and applicable state rules and regulations.

This EPA-funded training covered topics such as:

- Roles boards and commissions play in public health.
- The requirements of state and federal rules and regulations.
- Ways to build relationships with partners.
- Roles and responsibilities pertaining to legal liabilities of board members.



Sharing the learning

All courses were taught on Saturdays and evenings to make attendance easier. However, not everyone could attend.

To reach those who were unable to attend, ODW videotaped the four-hour course and will mail it to all boards and commissions within Washington by the end of July.

The VHS tape is organized into four one-hour segments that are ideal for sharing at regularly scheduled board or commission meetings, or for training new members when they begin their term of office.

In addition to the video, boards and commissions will receive all of the classroom materials, including the Washington state version of “The Water Board Bible,” originally produced by Kansas Rural Water Association, and the “Financial Toolbox” CD produced by Rural Community Assistance Corporation to help boards keep their systems financially viable.

For more information, please contact Paula Smith by phone at (360) 236-3114 or e-mail at paula.smith@doh.wa.gov.

Emergency response exercises for public water systems

Intentional contamination of drinking water is the topic of three tabletop exercises planned for water systems near Redmond, Vancouver and Kennewick. The Office of Drinking Water will conduct the exercises in July to test the ability of the water systems, public health jurisdictions, and others to assure safe and reliable water supplies by responding to a drinking water emergency.

The exercises will not affect water system customers, and no water service interruptions will occur.

The exercises will enhance relationships between the water utilities, local health jurisdictions, first responders, the Office of Drinking Water, and state emergency management officials. A useful learning tool, they will make water system personnel familiar with their emergency responsibilities, demonstrate operational capabilities, and test their overall ability to respond to emergencies.

The exercises will also help to identify resource gaps, improve communications and coordination, clarify respective roles and responsibilities, and reveal planning weaknesses.

A grant from the U.S. Environmental Protection Agency is providing funding for the exercises. Facilitation is being provided under contract with CH2M Hill and ECO Resource Group. The outcome of the exercises will be summarized in a *Report of Lessons Learned* that will be used to improve the state's emergency preparedness and response efforts.

For more information about the exercises, call Scott Decker at (360) 236-3162 or e-mail scott.decker@doh.wa.gov.



Drinking water risk communication workshops

The Office of Drinking Water (ODW) will hold three risk communications workshops in July and August to stimulate discussion and feedback on a Draft Communication Strategy. Participants will include public water systems, local health jurisdictions and state Department of Health representatives in Spokane, Thurston, Pierce, Snohomish and King counties.

As participants explore the inter-jurisdictional coordination and communication issues associated with a drinking water emergency, a regionally appropriate communications framework will begin to be created. The framework will reflect participant roles, agency contacts, and coordinated responsibilities needed for effective risk communications during a drinking water emergency.

The workshops will enhance relationships between the water systems, local health jurisdictions and ODW.

Feedback and “lessons learned” from the workshops will be valuable for understanding the challenges associated with communicating public health concerns across multi-jurisdictional boundaries when emergencies arise.

ODW will use an assessment of the workshops to improve its Communications Strategy and make recommendations for future staff and stakeholder training.

A grant from the Washington State Revolving Fund is funding the workshops. ECO Resource Group will facilitate them.

For more information about the workshops, call Ginny Stern at (360) 236-3134 or e-mail ginny.stern@doh.wa.gov.



Changes coming to ABC Exams in October 2004

The Association of Boards of Certification (ABC) has revised the standard 100-question exams the Office of Drinking Water (ODW) and many other states use to certify water works operators.

ABC continually updates and improves its exams with the assistance of subject matter experts such as operators, regulators and trainers. The most recent changes, which go into effect October 1, are based on ABC's thorough review of its question bank in 2003.

Among the changes are three of major significance to Washington operators.

First, the revision addresses a discrepancy that allows water operators in some states to reach the highest level of certification by answering 100 questions, while those in other states must answer 400.

ABC's model certification program for water and wastewater operators is based on a sequential classification system, which requires four 100-question exams to be taken in order from Class 1 to 4 (highest level).

States that use a sequential approach require operators to take exams and serve at each class level before they are eligible to test for the next higher level. Other states, including Washington, use a multiple-entry approach that allows operators to immediately test and serve at the highest level for which they qualify.

ABC's new exams serve states using either approach. The sequential version of the standardized exams will continue to be 100 questions for each level. The multiple-entry exam will consist of the same 100 questions plus additional essential questions from each lower level exam.

The new multiple-entry exams include questions as described below:

Class 1	Class 2	Class 3	Class 4
Class 1 Sequential Exam	Class 2 Sequential Exam plus knowledge of essential Class 1 tasks	Class 3 Sequential Exam plus knowledge of essential Class 1 and 2 tasks	Class 4 Sequential Exam plus knowledge of essential Class 1, 2 and 3 tasks
100 Questions	120 Questions	150 Questions	180 Questions

Second, personnel questions are eliminated from the exams.

Managerial questions, such as budgeting, will remain. But, questions on personnel issues, such as evaluating employee performance and hiring employees are gone. This will place greater emphasis on operational, regulatory and security questions. And, ABC has developed more than 500 new questions on these topics.

Third, Formula/Conversion Tables are split into separate Water and Wastewater Tables.

Previously, ABC had one formula sheet that included the formulas for all water and wastewater exam categories. The new water formula table will include water treatment, distribution, and laboratory and will be included in all exam packets.

For more information, please call Cheryl Bergener, Water Works Certification Program, at (360) 236-3137 or (800) 525-2536, or e-mail cheryl.bergener@doh.wa.gov.

Is it time to calibrate your turbidity meter?

To ensure turbidity meters (known as “turbidimeters”) are accurate, state regulations require surface water treatment plant operators to calibrate them at least as often as recommended by the manufacturer.

You can check your owner’s manual, but if it’s been more than three months since your last calibration, it is probably time to give them a check-up.

A properly calibrated turbidimeter will accurately measure the clarity of your water, and provide an important “window” through which you can reliably judge the effectiveness of your treatment process.

There are two ways to check the accuracy of a turbidimeter:

1. **Calibration by comparison to a known standard.** Use this method for quarterly checks.
2. **Calibration by comparison to another turbidimeter.** Use this method on a weekly basis to verify the performance of on-line reporting meters. Verification checks assume that the meter being used for comparison has, itself, been calibrated to a known standard. Ultimately, the validity of any turbidity reading depends upon the accuracy of the standard used to calibrate the turbidimeter.

New treatment standards

By January 2005, all rapid rate filtration plants will be required to achieve a purity level of 0.3 Nephelometric Turbidity Units (NTU). While many plants are already achieving this and lower levels, others will have to make some improvements to comply. One of the first (and most

important) things for all operators to do is to confirm that your turbidimeter is operating properly.

Turbidity standards

A turbidity standard is a liquid sample or other material having a defined and reproducible turbidity value.

There are two types of turbidity calibration standards:

- **Primary standards** are used to either directly calibrate a meter or to calibrate a secondary standard. Primary standards are the “gold standard” for turbidity. All calibrations must eventually be traceable to a primary standard.

The most common acceptable form of primary standard is formazin. The other is a commercially manufactured liquid suspension of styrene divinyl benzene polymer beads (SDB). Either is acceptable because it will give repeatable results.

Formazin may be easily produced in the laboratory, or it may be purchased in various prepared forms. While a 4,000 NTU stock solution may be good for a year, more dilute solutions used in calibration generally must be discarded after one week. SDB solutions are more costly, but remain stable almost indefinitely.

- **Secondary standards** include common examples such as liquid latex, SDB or Gelex™ solutions in a sealed sample container. They may also include glass rods or plates, plastic cylinders, and mirror devices tailored for use in a specific manufacturer’s device. These standards are convenient, easy to use, cheap and reliable for daily calibration checks.

However, to meet monitoring requirements, every secondary standard must first be calibrated to a primary standard. Also, since the secondary standard is likely to degrade with time, it is important to recheck its value against a primary standard every four months.

Dr. Drip Says...



A properly calibrated turbidimeter allows you to reliably judge the effectiveness of your treatment process and helps ensure the water you deliver to your customers is safe to drink.

Remember to:

- Calibrate turbidimeters with primary standards on a quarterly basis.
- Verify the precision of a reporting turbidimeter with another turbidimeter on a weekly basis.
- Check secondary standards against primary standards on quarterly basis.
- Discard expired stocks of formazin solution.
- Follow the manufacturer’s instructions for instrument calibration, and record your calibration readings and adjustments in the instrument logbook.



Especially for Small Systems

New courses being developed for small water system operators

The Office of Drinking Water (ODW) is developing new 2004 classes for small system water operators. Some of the classes we are pursuing include:

- Advanced Consumer Confidence Reports
- Disinfectant Disinfection Byproducts Rule Training (using a new EPA training tool)
- Service Connections (routine and emergency PVC pipe repair, metering, tapping process, and line locating)
- Disinfection (cleaning and disinfecting storage tanks and reservoirs, diving tanks, and shut down/start up on an emergency basis)
- Cave-in Protection

- Basic Electric (minor electrical/mechanical trouble-shooting)
- Maintenance Management (including well maintenance and rehabilitation)
- Confined Space Entry

We hope to begin offering some of these new courses later this summer. ODW welcomes your suggestions for new courses and your comments on courses you've already attended. To offer your training ideas, please call Ronnie Woolrich at (360) 236-3092 or e-mail ronnie.woolrich@doh.wa.gov.

Repeat courses

ODW also is offering a limited number of repeat sessions for courses offered last year. These include:

- Basic Waterworks Overview
- Operations and Maintenance Basic Overview
- Basic Chlorination
- Budgeting and Rate Setting
- Consumer Confidence Report
- Corrosion Control
- Cross Connection Control
- Field Operations
- How to Develop a Small Water System Management Program
- Pump Operations and Maintenance
- Sanitary Survey

- Project and Management Issues
- Water Sampling Basics
- Water System Controls, Monitoring and Alarm Basics
- One-day Water Distribution Specialist (WDS) Exam Review
- Three-day WDS Exam Review

New course fee

In January we started collecting a \$15 fee for each class, with the exception of conferences and exam review courses.

For information about classes, call Ronnie Woolrich at (360) 236-3092 or e-mail ronnie.woolrich@doh.wa.gov.

Continuing education credits

If you repeat a classroom course you took to meet professional growth requirements in a previous reporting period, you may apply only one-half of the continuing education units (CEU) originally assigned to the course for the current reporting period. No CEU may be applied toward the professional growth requirement for courses repeated during the same reporting period, or for any repeated correspondence courses or distance learning activities.

For information about CEU, please call the Washington Environmental Training Center at (800) 562-0858.

Did You Know?

Since July 2002, the Office of Drinking Water has spent approximately \$1.4 million providing:

- Forty courses at 364 locations statewide,
- To 6,537 attendees,
- For a total of 57,330 classroom hours.

Mark Your Calendar

Annual fall Drinking Water Seminars scheduled

This fall, the annual Drinking Water Seminars will deliver timely, interesting topics in convenient locations across the state. The cost for each one-day seminar, including lunch, is \$30.

Date and locations

September 29	Spokane	Red Lion at the Park
September 30	Wenatchee	Convention Center
October 18	Olympia	Red Lion
October 19	Silverdale	Red Lion
October 26	Mount Vernon	Cotton Tree Inn



The agenda is not yet entirely firm, but there will certainly be attention to emerging issues and upcoming regulatory requirements, water system liability, municipal water law and the water use efficiency rule, emergency response, nitrate, managing “hot” issues, and restructuring/ consolidation.

The seminars will offer:

- Timely, interesting topics
- Skilled, knowledgeable presenters
- CEU credit
- An opportunity to meet with your colleagues
- Two tracks for small and large water systems

The full agenda and registration information will be available later this summer on the Office of Drinking Water’s Web site, in a mailed brochure, and the next issue of *the Water Tap*.

Customers and staff test the Office of Drinking Water Web site

Local health jurisdiction staff, certified water works operators, and Office of Drinking Water (ODW) staff recently completed about 20 tasks designed to identify deficiencies in the navigation and layout of the ODW Web site.

As a result of the user testing, some of the enhancements that will be made to the Web site include:

- Providing water system data text files available for download in additional formats such as Excel or Access.
- Making some navigation links more intuitive.
- Cross-linking more program information to related publication Web pages.
- Expanding the A to Z Topic List (a favorite way to search for information).

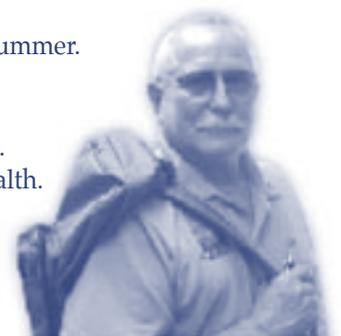
You can check out these improvements and more at <http://www.doh.wa.gov/ehp/dw> later this summer.

Special thanks to those who helped with user testing:

Local health: Arlene Hyatt, Mason County Department of Health Services; Gary W. Duvall, Jr., R.S. Thurston County Environmental Health Division; and Vickie Humphrey, Lewis County Public Health.

Certified operators: Dave Barclift and Steve Craig, Public Works Operations, Tumwater; Linda Gray, Sylvan Terrace Water System; and Jim Coomes, Lacey City Water.

ODW Staff: Amy Koch, Donna Lynch and Donna Freier.



Jim Coomes of Lacey City Water, sports one of the backpacks each of the testers received in appreciation for their time and effort.

Information and suggestions

If you have ideas or suggestions to improve the ODW Web site, contact Judy J. Sides by phone at (360) 236-3096 or e-mail judy.sides@doh.wa.gov.

Department of Health sets new requirements for distance education and self-study courses

To get Continuing Education Unit (CEU) credit for completing an approved distance education or self-study course, certified water works operators must complete the course by passing a monitored closed book examination.

This requirement applies to online (computer), correspondence (paper and pencil), CD-ROM, and videotape distance education courses. It is part of the new procedures outlined in the state Department of Health's Distance Education Approval and Examination Procedure that went into effect January 1.

Both the examination monitor and the student must submit a signed affidavit affirming that all examinations have been completed in accordance with this procedure.

For a copy of the procedure and required forms, call Peggy Barton at the Washington Environmental Training Center (WETRC) at (253) 288-3369 or (800) 562-0858.

Approved distance education courses

The following distance education courses have been evaluated and meet Department of Health's criteria for CEU approval as indicated. For pricing information, to order the course, and/or enrollment information, contact the sponsors.

To ensure you receive CEU credit, contact WETRC for approval and the necessary forms before you enroll in any type of distance education. Also, please note that the CEU accepted for some courses in Washington may be different than the CEU awarded by the sponsor.

Check future issues of *the Water Tap* or contact WETRC for information about new distance education opportunities for water works operators in Washington.

American Water Works Association 6666 West Quincy Avenue Denver, CO 80235		Phone: (800) 926-7337 or (303) 794-7711 FAX: (303) 347-0804 Web site: http://www.awwa.org
<u>Course Title</u>	<u>Course Format</u>	<u>CEU Approved</u>
Applied Mathematics	Online	0.3
Basic Mathematics	Online	0.7
Coagulation, Flocculation and Sedimentation Basics	Online	0.3
Disinfection Basics	Online	0.3
Distribution Service to Customers	Online	0.3
Distribution System Materials and Equipment	Online	0.3
Filtration Basics	Online	0.3
Fundamentals of Chemistry for Water Professionals	Online	0.8
Hydraulics	Online	0.8
Water Main Installation	Online	0.3
California State University, Sacramento Office of Water Programs Modoc Hall Suite 1001 6000 J Street Sacramento, CA 95819-6025		Phone: (916) 278-6142 FAX: (916) 278-5959 E-Mail: wateroffice@owp.csus.edu Web site: http://owp.csus.edu/
<u>Course Title</u>	<u>Course Format</u>	<u>CEU Approved</u>
Small Water System Operation and Maintenance/4th Ed.	Correspondence	2.9
Small Water Systems Video Information Series	Video/Manual	2.0
Water Distribution System O & M/4th Ed.	Correspondence	3.5
Water Treatment Plant Operation Volume I/4th Ed.	Correspondence	3.9
Water Treatment Plant Operation Volume II/3rd Ed.	Correspondence	5.1
Water Environment Federation 601 Wythe Street Alexandria, VA 22314-1994		Phone: (800) 666-0206 or (703) 684-2452 FAX: (703) 684-2492 Web site: http://wef.org/
<u>Course Title</u>	<u>Course Format</u>	<u>CEU Approved</u>
Pumps - Operation and Maintenance	CD-ROM	2.0

Training and Education Calendar: May - December 2005

<u>Date</u>	<u>Topics</u>	<u>Location</u>	<u>Contact</u>	<u>Phone #</u>	<u>Cost/CEU</u>
Jul 6	Water Sampling Basics*	Wenatchee	ERWOW	1-800-272-5981	\$15/0.7*
Jul 6	Fire Hydrant Maintenance	Bellingham	ERWOW	1-800-272-5981	Call/TBD
Jul 7	Confined Space Entry*	Richland	WETRC	1-800-562-0858	\$140/0.7*
Jul 7	Water Sampling Basics*	Yakima	ERWOW	1-800-272-5981	\$15/0.7*
Jul 7	Fire Hydrant Maintenance	Everett	ERWOW	1-800-272-5981	Call/TBD
Jul 10	Project and Management Issues *	Bremerton	ERWOW	1-800-272-5981	\$15/0.7*
Jul 12-15	Backflow Assembly Tester Certification Class	Auburn	WETRC	1-800-562-0858	\$525/3.0
Jul 13	Water Sampling Basics*	Bremerton	ERWOW	1-800-272-5981	\$15/0.7*
Jul 14	Fire Hydrant Maintenance	Liberty Lake	ERWOW	1-800-272-5981	Call/TBD
Jul 14	Project and Management Issues *	Kelso	ERWOW	1-800-272-5981	\$15/0.7*
Jul 15	Project and Management Issues *	Shelton	ERWOW	1-800-272-5981	\$15/0.7*
Jul 15	Fire Hydrant Maintenance	Moses Lake	ERWOW	1-800-272-5981	Call/TBD
Jul 16	Backflow Assembly Tester Certification Exam	Auburn	WETRC	1-800-562-0858	\$180/N/A
Jul 17	Project and Management Issues *	Spokane	ERWOW	1-800-272-5981	\$15/0.7*
Jul 20	Confined Space Entry	Richland	ERWOW	1-800-272-5981	\$100/TBD
Jul 28	Anatomy of a Service Connection	Port Angeles	ERWOW	1-800-272-5981	Call/TBD
Jul 29	Anatomy of a Service Connection	Mt Vernon	ERWOW	1-800-272-5981	Call/TBD
Aug 3	Budget Construction & Rate Setting*	Spokane	ERWOW	1-800-272-5981	\$15/0.7*
Aug 3-4	Competent Person Cave-in Protection	Auburn	WETRC	1-800-562-0858	\$210/1.4
Aug 3	Cross Connection Control and Backflow Basics*	Walla Walla	ERWOW	1-800-272-5981	\$15/0.7*
Aug 4-6	Water Works Basics	Richland	WETRC	1-800-562-0858	\$275/2.1
Aug 4	Budget Construction & Rate Setting*	Moses Lake	ERWOW	1-800-272-5981	\$15/0.7*
Aug 4	Cross Connection Control and Backflow Basics*	Kennewick	ERWOW	1-800-272-5981	\$15/0.7*
Aug 10	Budget Construction & Rate Setting*	Mt. Vernon	ERWOW	1-800-272-5981	\$15/0.7*
Aug 10-12	Water Works Basics	Auburn	WETRC	1-800-562-0858	\$275/2.1
Aug 11-13	Basic Wastewater Treatment Plant Operation	Auburn	WETRC	1-800-562-0858	\$275/2.1
Aug 11	Budget Construction & Rate Setting*	Tacoma	ERWOW	1-800-272-5981	\$15/0.7*
Aug 17	Budget Construction & Rate Setting*	Kennewick	ERWOW	1-800-272-5981	\$15/0.7*
Aug 17	Fire Hydrant Maintenance	Chelan	ERWOW	1-800-272-5981	Call/TBD
Aug 17-19	Water Works Basics	Everett	WETRC	1-800-562-0858	\$275/2.1
Aug 18	Budget Construction & Rate Setting*	Yakima	ERWOW	1-800-272-5981	\$15/0.7*
Aug 18	Fire Hydrant Maintenance	Kennewick	ERWOW	1-800-272-5981	Call/TBD
Aug 24	Fire Hydrant Maintenance	Battle Ground	ERWOW	1-800-272-5981	Call/TBD
Aug 25	Fire Hydrant Maintenance	Bremerton	ERWOW	1-800-272-5981	Call/TBD
Sept 1	Budget Construction & Rate Setting*	Kelso	ERWOW	1-800-272-5981	\$15/0.7*
Sept 2	Budget Construction & Rate Setting*	Shelton	ERWOW	1-800-272-5981	\$15/0.7*
Sept 7-9	Water Distribution Certification Exam Review	Everett	WETRC	1-800-562-0858	\$265/2.1
Sept 7-9	Water Distribution Certification Exam Review	Yakima	ERWOW	1-800-272-5981	Call/2.2
Sept 7-9	Cross Connection Control Specialist Exam Review	Richland	ERWOW	1-800-272-5981	\$180/2.1

*These courses are designed for small water systems serving 3,300 people or less.

<u>Date</u>	<u>Topics</u>	<u>Location</u>	<u>Contact</u>	<u>Phone #</u>	<u>Cost/CEU</u>
Sept 7-9	Water Treatment Plant Operator or Basic Treatment Plant Operator Certification Exam Review	Olympia	ERWOW	1-800-272-5981	\$180/2.1
Sept 7-9	Water Distribution Certification Exam Review	Everett	WETRC	1-800-562-0858	\$265/2.1
Sept 9	Confined Space Entry	Auburn	WETRC	1-800-562-0858	\$140/0.7
Sept 13	Small Water System Management *	Richland	WETRC	1-800-562-0858	\$15/0.7*
Sept 13-14	ERWOW's Fall Conference and Trade Show*	Ocean Shores	ERWOW	1-800-272-5981	Call/TBD
Sept 13-14	Wastewater Certification Examination Review	Auburn	WETRC	1-800-562-0858	\$195/1.4
Sept 14	Water Distribution Specialist Cert Exam Review*	Spokane	WETRC	1-800-562-0858	\$15/0.7*
Sept 14	Water Sys. Controls Monitoring/Alarm Basics*	Moses Lake	WETRC	1-800-562-0858	\$15/0.7*
Sept 15	Storage Tank Disinfection	Ocean Shores	ERWOW	1-800-272-5981	Call/TBD
Sept 15-17	Water Distribution Certification Exam Review	Richland	ERWOW	1-800-272-5981	Call/2.2
Sept 15-17	Cross Connection Control Specialist Exam Review	Moses Lake	ERWOW	1-800-272-5981	\$180/2.1
Sept 16	Water Distribution Specialist Cert Exam Review*	Centralia	WETRC	1-800-562-0858	\$15/0.7*
Sept 17	Budget Construction & Rate Setting*	Spokane	ERWOW	1-800-272-5981	\$15/0.7*
Sept 21-23	Water Distribution Certification Exam Review	Mt Vernon	ERWOW	1-800-272-5981	Call/2.2
Sept 21-23	Cross Connection Control Specialist Exam Review	Olympia	ERWOW	1-800-272-5981	\$180/2.1
Sept 21-23	Water Treatment Plant Operator or Basic Treatment Plant Operator Certification Exam Review	Moses Lake	ERWOW	1-800-272-5981	\$180/2.1
Sept 21-23	Water Distribution Certification Exam Review	Richland	WETRC	1-800-562-0858	\$265/2.1
Sept 23	Water System Controls, Monitoring and Alarm Basics*	Auburn	WETRC	1-800-562-0858	\$15/0.7*
Sept 25	Budget Construction & Rate Setting*	Bremerton	ERWOW	1-800-272-5981	\$15/0.7*
Sept 25	Water System Controls, Monitoring and Alarm Basics*	Moses Lake	WETRC	1-800-562-0858	\$15/0.7*
Sept 27-29	Water Distribution Certification Exam Review	Auburn	WETRC	1-800-562-0858	\$265/2.1
Sept 28-30	Water Distribution Certification Exam Review	Olympia	ERWOW	1-800-272-5981	Call/2.2
Sept 28	Automatic Control Valves	Richland	ERWOW	1-800-272-5981	Call/TBD
Sept 28-30	Cross Connection Control Specialist Exam Review	Mt Vernon	ERWOW	1-800-272-5981	\$180/2.1
Sept 29	Anatomy of a Service Connection	Yakima	ERWOW	1-800-272-5981	Call/TBD
Sept 30	Anatomy of a Service Connection	Tacoma	ERWOW	1-800-272-5981	Call/TBD
Sept 30	Basic Field Operations*	Spokane	WETRC	1-800-562-0858	\$15/0.7*
Oct 5-6	Competent Person Cave in Protection	Richland	WETRC	1-800-562-0858	\$210/1.4
Oct 5	Cross Connection Control and Backflow Basics*	Port Angeles	ERWOW	1-800-272-5981	\$15/0.7*
Oct 6	Cross Connection Control and Backflow Basics*	Battle Ground	ERWOW	1-800-272-5981	\$15/0.7*
Oct 6	Anatomy of a Service Connection	Ritzville	ERWOW	1-800-272-5981	Call/TBD
Oct 7	Anatomy of a Service Connection	Wenatchee	ERWOW	1-800-272-5981	Call/TBD
Oct 14	Basic Field Operations*	Mt. Vernon	WETRC	1-800-562-0858	\$15/0.7*
Oct 18	Small Water System Management*	Centralia	WETRC	1-800-562-0858	\$15/0.7*
Oct 19	Water Sys. Controls Monitoring/Alarm Basics*	Tacoma	WETRC	1-800-562-0858	\$15/0.7*
Oct 26	Anatomy of a Service Connection	Battle Ground	ERWOW	1-800-272-5981	Call/TBD
Oct 28	Anatomy of a Service Connection	Kennewick	ERWOW	1-800-272-5981	Call/TBD
Nov 1-12	Backflow Assembly Tester Certification Class	Vancouver	WETRC	1-800-562-0858	\$525/3.0
Nov 2	Confined Space Entry	Fife	WETRC	1-800-562-0858	\$140/0.7

*These courses are designed for small water systems serving 3,300 people or less.

<u>Date</u>	<u>Topics</u>	<u>Location</u>	<u>Contact</u>	<u>Phone #</u>	<u>Cost/CEU</u>
Nov 2	Storage Tank Disinfection	Bellingham	ERWOW	1-800-272-5981	Call/TBD
Nov 3	Storage Tank Disinfection	Oak Harbor	ERWOW	1-800-272-5981	Call/TBD
Nov 9	Automatic Control Valves	Spokane	ERWOW	1-800-272-5981	Call/TBD
Nov 10	Storage Tank Disinfection	Moses Lake	ERWOW	1-800-272-5981	Call/TBD
Nov 11	Storage Tank Disinfection	Chelan	ERWOW	1-800-272-5981	Call/TBD
Nov 13	Backflow Assembly Tester Certification Exam	Vancouver	WETRC	1-800-562-0858	\$180/NA
Nov 16	Storage Tank Disinfection	Chehalis	ERWOW	1-800-272-5981	Call/TBD
Nov 29-Dec 2	Backflow Assembly Tester Certification Class	Pasco	WETRC	1-800-562-0858	\$525/3.0
Nov 30	Storage Tank Disinfection	White Salmon	ERWOW	1-800-272-5981	Call/TBD
Dec 1-2	Competent Person Cave-in Protection	Fife	WETRC	1-800-562-0858	\$210/1.4
Dec 2	Storage Tank Disinfection	Spokane	ERWOW	1-800-272-5981	Call/TBD
Dec 3	Backflow Assembly Tester Certification Exam	Pasco	WETRC	1-800-562-0858	\$180/NA
Dec 6-8	Basic Wastewater Treatment Plant Operation	Auburn	WETRC	1-800-562-0858	\$275/2.1
Dec 7-9	Water Works Basics	Auburn	WETRC	1-800-562-0858	\$275/2.1
Dec 9	Basic Field Operations*	Auburn	WETRC	1-800-562-0858	\$15/0.7*
Dec 13	Small Water System Management*	Mt. Vernon	WETRC	1-800-562-0858	\$15/0.7*
Dec 14	Water System Controls, Monitoring and Alarm Basics*	Everett	WETRC	1-800-562-0858	\$15/0.7*
Dec 14-16	Water Works Basics	Fife	WETRC	1-800-562-0858	\$275/2.1
Dec 20-22	Wastewater Laboratory Workshop	Auburn	WETRC	1-800-562-0858	\$325/2.1
Jan 24-25	Wastewater Certification Examination Review	Auburn	WETRC	1-800-562-0858	\$195/1.4
Mar 23-25	Wastewater Laboratory Workshop	Auburn	WETRC	1-800-562-0858	\$325/2.1
Apr 4-6	Basic Wastewater Treatment Plant Operation	Auburn	WETRC	1-800-562-0858	\$275/2.1
Apr 5-7	Water Works Basics	Lacey	WETRC	1-800-562-0858	\$275/2.1
Apr 6-8	Water Works Basics	Auburn	WETRC	1-800-562-0858	\$275/2.1
May 2-3	Wastewater Certification Examination Review	Auburn	WETRC	1-800-562-0858	\$195/1.4
June 20-22	Wastewater Laboratory Workshop	Auburn	WETRC	1-800-562-0858	\$325/2.1

*These courses are designed for small water systems serving 3,300 people or less.

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>

For the complete Training Calendar visit the Drinking Water Homepage and click on Training - 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.

▪ New & Revised Publications ▪

Safe drinking water (331-004). Revised.

A 36-page booklet designed to educate the public about drinking water. Topics include federal and state laws, water sources, water quality, health effects, water treatment, and additional resources.

Backflow prevention assemblies approved for installation in Washington State (331-137). Updated for 2004.

A 60-page document that lists Department of Health approved backflow prevention assemblies. See related article on page 22 for more details.

Coliform Bacteria (331-181). Revised. A 2-page fact sheet for consumers on the nature of coliform and what can be done about it.

Cross connection control for small water systems (331-234). Revised. A 253-page guidance document on the development and implementation of a cross-connection control (CCC) program for Group A public water systems with less than 1,000 connections.

Translated drinking water warnings (331-246). New! A publication offering translations of basic public notification messages on drinking water safety from English into 27 other languages. See related article on page 11.

Disinfection Byproducts (331-251). New! A 2-page Q & A that answers questions such as, How are disinfection byproducts (DBPs) formed? What types of systems use chlorination? Do DBPs affect human health? Are there regulations? Should chlorination be discontinued?

Alternate Disinfectants (331-252). New! A 2-page Q & A that talks about using disinfectants other than chlorine. There is a table that offers disadvantages and advantages of those alternate treatments.



Chlorination of Drinking Water (331-253). New! A 2-page fact sheet that covers why systems chlorinate drinking water on a continuous basis, the history of chlorination, and the effects of chlorination on human health.

Stage 1 Rule: Disinfects and disinfection byproducts (331-254).

New! A 2-page fact sheet that explains the rule. It covers disinfectants, byproducts, and monitoring plans.

Lead in school drinking water (331-255).

New! A 2-page fact sheet that explains why lead is a concern for schools, how lead gets into drinking water, and what can be done about it.

Municipal water law: Interim planning guidance (331-256). Revised. A 42-page booklet explaining the interim requirements purveyors must meet to gain approval for a water system plan. These requirements will remain in effect until the Department of Health establishes long-term processes that will be phased in over the next three years.

Testing for lead in school drinking water systems (331-261). New! A brochure that explains how to collect a drinking water sample to test for lead in school and non-residential building water distribution systems. This is the newest in a series of 10 sampling brochures.

Water sampling: What we test for and why (331-262). New! A 40-page booklet that explains how to interpret a water test report and a description of common contaminants and effects they may have on human health. This is a nice companion piece to the sampling brochure series.

Office of Drinking Water publications are available on the Internet at <http://www4.doh.wa.gov/dw/publications/> or by calling (800) 521-0323.

How old is your water?

By Kathy Jespersen

(Reprinted from Water Tap Magazine with permission from West Virginia University)

Water age doesn't seem like something that anyone would have to worry about. But the truth is that water quality will deteriorate the longer water stands in storage facilities or distribution lines.

Water age refers to the time it takes for water to reach customers after it's been treated. The longer it takes to get to the faucet, the more likely there will be problems. Water age is highly system specific, and many utilities have never calculated the age of water in their systems.

Signs of Water Age

The U.S. Environmental Protection Agency (EPA) says there are several indicators of excessive water age, including poor aesthetic conditions, such as:

- **Customer taste and odor complaints** – Stale, aged water provides an environment conducive to the growth and formation of taste- and odor-causing microorganisms.
- **Discoloration** – Water in low flow and dead-end areas often accumulates sediment, and during demand periods, these deposits are stirred up and degrade the clarity and color of the water.
- **Water temperature** – Stagnant water provides a nice, warm place for microorganisms to grow.

Monitoring indicators also provide clues that water has aged beyond its expiration date. Indicators include:

- **Depressed disinfectant residual** – Chlorine and chloramines decay over time.
- **Elevated DBP levels** – The reaction between disinfectants and organic precursors occur over long periods.
- **Elevated bacterial counts** – Bacteria can grow in stagnant water.
- **Elevated nitrite or nitrate levels** – Nitrification.

For more information about water age, visit EPA's Web site at www.epa.gov/safewater/tcr/pdf/waterage.pdf.

2004 Approved Backflow Assemblies List now available

The "big" 2004 List of Backflow Prevention Assemblies Approved for Installation in Washington State, also known as Department of Health's (DOH) Approved Assembly List, is now available.

This list is based on the University of Southern California's (USC) Foundation for Cross-Connection Control and Hydraulic Research List of Approved Backflow Prevention Assemblies.

Per agreement with USC, the **DOH-Approved Assembly List** may not be posted on the DOH Web site or distributed en masse. Therefore, DOH distributes the list only upon request and limits distribution to the regulated community (i.e., purveyors, cross-connection control specialists and backflow assembly testers), building officials, other state agencies and consultants working in the drinking water industry in Washington.

To get a copy of the list

Call Amy Koch at (800) 521-0323 or e-mail amy.koch@doh.wa.gov.

Updates to the list are sent during the calendar year so, when you request a list, be sure to include your name, organization name, operator certification number, phone number, and regular mailing and e-mail addresses.

Once you supply your name and address, you will automatically receive updates.

For more information

For assistance on how to interpret the **DOH-Approved Assembly List** or information about the approval status of a specific assembly, please contact:

- Terri Notestine – (360) 236-3133
e-mail terri.notestine@doh.wa.gov
- Simon Tung – (360) 236-3132
e-mail simon.tung@doh.wa.gov

Washington state drinking water regulations require water system purveyors to ensure that backflow assemblies used to protect public water systems from contamination via cross-connections meet the following criteria:

1. They appear on the most recently published DOH-Approved Assembly List.
2. They are installed in the orientation for which they are approved as shown on the DOH-Approved Assembly List.

Group A Public Water Systems Chapter 246-290 WAC

Publication Revised July 2004

The Office of Drinking Water (ODW) has revised the publication, Group A Public Water Systems Chapter 246-290 WAC (#331-010), also known as the "Blue Book." The revisions reflect new U.S. Environmental Protection Agency rules regarding Long Term 1 Enhanced Surface Water Treatment and Arsenic, and increased fees for water system evaluation and project review and approval.

A link to the State Code Reviser's official version of the current regulations is available on our Web site. Click on "Rules and Regulations" from the ODW home page: <http://www.doh.wa.gov/ehp/dw/default.htm>.

The revised publication will be available early in July. You can download it from our Web site in July at <http://www4.doh.wa.gov/dw/publications/>.

This year, for the first time, we are also producing the publication as a CD.

You may order as many CDs as you'd like. Due to the cost of printing the publication, we are limiting the number of hard copies to two per order.

To order a hard copy of the book or a CD, please call Michelle Austin at (360) 236-3156, e-mail michelle.austin@doh.wa.gov, or mail the form below to:

Michelle Austin
Office of Drinking Water
PO Box 47822
Olympia, WA 98504-7822

I would like to order **Group A Public Water Systems Chapter 246-290 WAC** as a:

Book - number of copies: _____ (limit 2)

CD - number of copies: _____

Please print

Name _____

Business / Agency _____

Mailing Address _____

City, State ZIP _____

Phone Number _____

Fee increases

Following a May 10 public hearing, the state Department of Health approved a 3.2 percent fee increase. The increase, which matches the growth factor for state fiscal year 2004, begins in July. It will enable Office of Drinking Water programs to continue protecting public health by acquiring the revenue needed to maintain current service activities and meet program costs.

The fees covered by this increase are:

- Monitoring waivers
- Plan reviews, including water system plans, review of project reports and review of construction documents
- Water works operator certification for all classification levels
- Standard hourly rate
- Sanitary surveys

The new fee schedule will be posted on the Web site at:

http://www.doh.wa.gov/ehp/dw/publications/331-228_7_11_03_DDW_Fee_Schedule.pdf.

In This Issue

The following people contributed to the production of this issue of *the Water Tap*: Denise Clifford, Amy Koch, Donna Lynch, Kaye Earl, Jennifer Kropack, Rich Hoey, Peter Beaton, Sam Perry, Stephen Baker, Jim Rioux, Theresa Phillips, John Aden, Danny Kermode, Scott Decker, Peggy Barton, Paula Smith, David Jennings, Christina Gagnon, Cheryl Bergener, Judy Sides, Terri Notestine, Michelle Vasquez, Bonnie Waybright, Tanya Mohammadi. The Department of Health, Office of Drinking Water, publishes *the Water Tap* to provide information to water system owners, water works operators, and others interested in drinking water. Comments and questions are welcome.

Past issues are available by writing to the editor, *the Water Tap*, Office of Drinking Water, PO Box 47828, Olympia, WA 98504-7828, or e-mail your request to linda.waring@doh.wa.gov. Past issues are also available on the Web site at <http://www.doh.wa.gov/ehp/dw>