



# the WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

## Meeting Summer Water Demand: Is your conservation program ready or all wet?

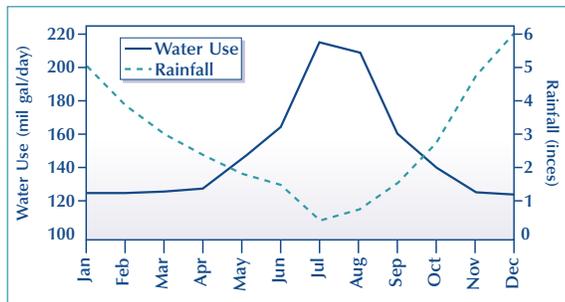


Issue 41 • March 2000

The need to conserve water is greater than ever, and Washington water utilities play a key role in conserving Washington's most precious resource.

Rural Community Assistance Corporation, your consulting engineer or other businesses involved in leak detection.

During the summer months, the importance of this resource is most visible. As rainfall declines during the summer, people's use of water increases dramatically: so when the demand is highest, the supply is lowest! This impacts all water users.



This chart shows that water availability and water use are mirror images. Water use is highest when water availability is lowest, creating a summer water supply "crunch."

\*Based on Western Washington rainfall data. Seattle Public Utilities

- Develop and implement a leak detection

program, using the same resources;

- Mail or hand out conservation brochures to your customers (DOH has some samples);

- Begin implementing other feasible measures that you

may have already identified in your most recent water system plan.

Since both people and fish depend on the same water, conserving water:

- Improves system reliability and protects public health.
- Increases the total amount of water available to all water users and could even eliminate the need to develop new and costly sources.
- Increases the instream flow of water in rivers and streams, helping restore salmon, steelhead and bulltrout.

Some things you should consider doing now:

- Conduct a water audit. Information may be obtained from the American Water Works Association, Evergreen Rural Water,

To support salmon recovery efforts and the careful management of water, the 1999 Legislature provided the Department of Health and the Department of Ecology new resources to help public water systems and local governments promote water conservation. Stay tuned to *Water Tap* for opportunities to learn more about public water system water conservation, and about the new resources that DOH will be making available to you.

For more information about municipal water conservation, such as ideas for conservation measures suitable to your system or opportunities for technical assistance, contact Jim Skalski at (360) 236-3152 or [jim.skalski@doh.wa.gov](mailto:jim.skalski@doh.wa.gov).

### Reminder to Wholesale Water Systems:

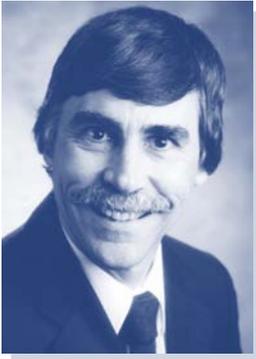
*April 1, 2000 is your deadline for providing 1999 water quality monitoring results to your purchasers for use in preparing their year 2000 Consumer Confidence Report.*

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# THE DIRECTOR'S COLUMN

BY GREGG GRUNENFELDER



## Safe drinking water doesn't just happen:

### Focus on basic public health prevention measures

In January, the Department of Health issued its *Water System Inspection and Testing Report for*

*Drinking Water Serving Temporary Farmworker Facilities.*

This report describes the most extensive surveying and testing effort ever undertaken by the department for a single category of water systems. For more details, please see article at right.

Our findings during this effort highlight the importance of the most basic water system construction and monitoring requirements. More than half the systems surveyed require improvement to protect the health of their customers. The most common problems found during the inspections were poorly constructed old wells that were in bad locations in the first place, and inadequately maintained, deteriorating drinking water facilities.

Our environment contains a large variety of potential health risks. Public perception and recognition of those risks are increasing as we increase our ability to detect minute quantities of contaminants and learn more about them. However, we must all continue to focus attention on basic, long-standing public health protection measures: using safe sources of water, protecting those sources from contamination, maintaining facilities properly, and testing to make sure the water remains safe to drink.

Preventing illness and disease is the primary goal of public health protection activities. As Secretary of Health Mary Selecky has noted in her strategic planning vision for the department: "I see policy makers looking to us for ways to PREVENT health crises and eliminate disparities." As water purveyors, keeping focus and attention on basic water system construction, protection and maintenance activities remains key to preventing illness. Remember – safe drinking water doesn't just happen.

## Drinking water study reveals few pesticide detections, but many other problems...

Inspections of water systems serving 10,000 farm workers and their families in 1999 revealed few instances of pesticide contamination, according to a recent Department of Health report. However, the study did find more than half the systems inspected require improvements to protect public health including 23 systems that must develop new, approved sources.

Last summer and fall, department staff inspected facilities and tested the water supplied by 150 public water systems serving 189 temporary farm worker facilities statewide. Only two water samples— one percent of the total— exceeded drinking water standards for pesticides. This is similar to water quality results from other public water systems statewide.

While the testing found few instances of pesticide contamination, more than half of the systems inspected require some kind of improvements to protect public health.

The most common problems found during the inspections were poorly constructed old wells that were in bad locations in the first place, and inadequately maintained, deteriorating drinking water facilities. These conditions can allow bacteria and other harmful contaminants to reach drinking water.

As anticipated, the testing showed many systems with elevated nitrate levels, which can cause a type of anemia in young children. In those instances, immediate steps were taken to protect public health, including requiring facility operators to provide bottled water and post warning signs on drinking water facilities.

This was the most extensive effort ever for a single category of water systems, launched in response to Governor Gary Locke, who asked the department to evaluate whether current testing requirements—particularly for pesticides—are adequate to protect the health of temporary farm workers.

While the results of this extensive testing led Health Secretary Mary Selecky to conclude that existing regulations are adequate to protect farm worker health, she said there is room for improvement in applying those regulations.

The department has initiated enforcement efforts to make sure all problems are addressed before temporary farmworker facilities are licensed this year.

The full report can be found on our department's web page under "Reports to the Governor," at <http://www.wa.gov>

## Methyl tertial butyl ether (MTBE): “60 Minutes” highlights drinking water contaminant

A recent “60 Minutes” program highlighted places across the nation where water supplies were contaminated with a gasoline additive called methyl tertial butyl ether (MTBE). While federal and Washington state drinking water standards do not currently require public water systems to specifically test for MTBE, EPA is considering it for future new standards and testing requirements.

Based on our current information, the Department of Health does not consider MTBE contamination to be a problem for Washington public water systems. Though they are not required to test specifically for MTBE, routine public water system chemical tests, that could also show MTBE, have not detected it. In addition, tests by the United States

Geological Survey throughout large portions of Washington have shown no MTBE contamination.

However, we are looking into ways to collect more information about MTBE in public water supplies. The state Department of Ecology is currently testing for MTBE in ground water at sites that have had leaking underground storage tanks. The Department of Health is participating in this work, and will take an active role if any public drinking water supplies appear to be at risk. For questions, call Jim Hudson at (360) 236-3131.



## Department supporting waterborne illness studies

The Department of Health and two large water utilities — Seattle Public Utilities and the Spokane Water and Hydroelectric Services — are participating in studies to determine the risk of gastrointestinal illness from drinking water. Customers of these two water utilities will be recruited to be involved in these studies, which began recently and should be completed by December, 2002.

The studies will estimate waterborne disease risks associated with changes in water treatment. They also will look at risks of waterborne illness in a community that uses unfiltered water from a well-protected surface water source, compared to a community using water from a protected ground water source.

The studies are funded by the Environmental Protection Agency and the American Water Works Association Research Foundation and will be conducted by the Lovelace Clinic Foundation from Albuquerque. Other partners include the Children’s Hospital and Regional Medical Center in Seattle.



## Habitual Non-complying Water System Draws Federal Action

The owner/operator of Pump 8 Water Association, a Zillah, Washington, public water system serving 17 homes, has been issued a civil complaint by the U.S. Environmental Protection Agency for years of non-compliance with drinking water requirements. The complaint demands corrections to water system problems and seeks substantial financial penalties.

The enforcement action, filed by the U.S. Department of Justice, alleges that for many years the water system owner/operator has endangered customers’ health by failing to comply with requirements and consistently ignoring enforcement efforts by the state Department of Health and EPA. The numerous violations include failing to test for coliform bacteria, chemicals, lead, copper and radioactivity, and failure to respond to enforcement actions.

## New SWSMP Guide Available

Small water systems may now get from DOH a guide to help existing non-expanding water systems develop their Small Water System Management Program (SWSMP), which is required under WAC 246-290-105. DOH has designed this guide to assist existing non-expanding systems in completing 18 technical, managerial and financial elements that address critical elements of owning and operating a public water system in compliance with the requirements of state and federal drinking water laws.

DOH will conduct several SWSMP guide workshops throughout the state later this year. To have your name added to an interested party list, or to receive a copy of the SWSMP guide call Christine Smith at (360) 236-3161 or email to [christine.smith@doh.wa.gov](mailto:christine.smith@doh.wa.gov). The guide is also available from our website <http://www.doh.wa.gov/ehp/dw/public.htm>

# Safe Drinking Water Act Update

Every one involved in providing safe drinking water – water systems, utility stakeholder groups, technical assistance providers and federal and state regulators – continue to face challenges in carrying out the 1996 amendments to the Safe Drinking Water Act.

Last year's new Consumer Confidence Report rule was the first of the major new regulatory requirements expected during the next few years. Currently in development are rules for radon monitoring and control, a new lower Maximum Contaminant Level (MCL) for arsenic, and groundwater well disinfection. All are expected to significantly affect many Washington water systems in the future.

Below are some key new requirements under EPA's projected schedule for SDWA Programs:

- By October 2000, DOH is expected to develop an EPA-approved strategy to ensure water systems can demonstrate sufficient "physical, operational, financial and management capacity" to comply with all rule requirements. Emphasis will be on development of Small Water System Management Plans as a means for smaller systems to demonstrate this capacity.
- By the end of 2001, larger systems (those serving more than 10,000 consumers) will be required to sample for new disinfection by-products in their distribution systems, or meet new requirements under "enhanced" surface water treatment stipulations. Smaller systems (those serving 10,000 or fewer consumers) will have similar requirements by the end of 2003.
- New operator certification requirements (for those systems not currently required to have a certified operator) are expected to be implemented sometime in 2001.

- By late 2000, new federal monitoring requirements for radionuclides, including radon, are expected to be established for all community systems with groundwater sources. For example, the recently proposed radon rule indicated at least one year of quarterly monitoring for wells and set MCLs that vary depending on whether the state or individual water systems are addressing radon levels in indoor air as well as tap water.
- The federal ground water rule, expected to be finalized by late 2000, includes new requirements for monitoring, and establishes other criteria for well disinfection decisions. This rule focuses on wells located in susceptible geological formations, many of which are typical in Washington State.
- By 2001 a lowered MCL (maybe a ten-fold decrease) for arsenic is expected. Many systems may find it necessary to provide treatment under the lower MCL.

These are a few of the highlights. We'll use a variety of means of communicating key issues and decisions – including routine *Water Tap* updates - as we sort through new requirements and identify our role in helping water systems comply with them. Meanwhile, here are a few resources for more information about new Safe Drinking Water Act requirements:

- ~ **Division of Drinking Water Website**  
[www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)
- ~ **EPA Office of Water Website** - [www.epa.gov/OGWDW](http://www.epa.gov/OGWDW)
- ~ **Assoc. of State Drinking Water Administrators Website**  
[www.asdwa.org](http://www.asdwa.org)
- ~ **EPA SDWA hotline** 1-800-426-4791
- ~ **AWWA number for small systems** 1-800-366-0107

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## New Update to Backflow Prevention Assemblies List

The list of Backflow Prevention Assemblies Approved for Installation in Washington State, revised for the year 2000 is now available. DOH policy is to send out the list only upon request. If you received the 1999 list or its updates, you need to request the list again. Those requesting this year's list will automatically be mailed updates to the publication through the end of this year. Call Denise Grant at 360-236-3097 or our toll-free number 1-800-521-0323 to obtain a copy. Copies are also available at the DOH Regional Offices.



# Liability Insurance: Does your system have adequate coverage?

Many water systems may not realize they are in the “business” of operating a water system. The people responsible for system operation can be held responsible for anything that goes wrong with the system or the way it does business. This could include health problems created by contaminated water, injuries caused by improperly installed equipment, or a host of other ways a system may fail to meet legal requirements.

Owners/operators of water systems of all sizes should consider obtaining liability insurance to cover such possible problems. While both the federal Safe Drinking Water Act and Clean Water Act have made liability insurance easier to obtain, many owners do not view the cost of insurance as a necessary expense.

As the old saying goes: “Anyone can sue anybody over anything.” Even if the party filing a lawsuit does not prevail, litigation can carry a big price tag the water system may be responsible to pay. Privately- or publicly-owned water systems might be sued for a number of reasons by employees, volunteers, customers and others. Board members and water system operators (paid or not) are probably most at risk for being sued for negligence or unfair practices by the system, including work that the system may contract out.

## Where to begin

A general liability insurance policy is a good place to start. Make sure you know what the insurance covers or does not cover. For instance, does it cover flushing a hydrant and causing property damage? A road washing away due to a pipe break? An accidental release of hazardous materials? Allegations of mismanagement by employees?

You may also need directors’ and officers’ liability insurance to protect from losses as a result of their acts or the acts of others while performing their jobs.

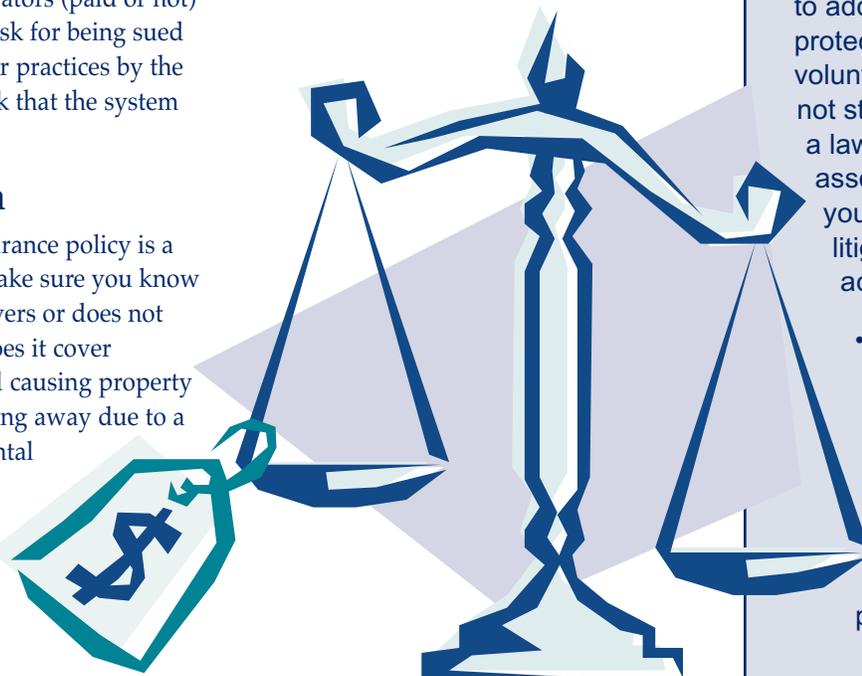
As with any insurance premium, the cost will depend on how much coverage is needed and the number and the cost of claims that have been previously filed. Obtaining two or three competitive bids is a good way to develop an affordable insurance package. The lowest price won’t necessarily provide the best deal for the water system if the policy provides inadequate coverage.

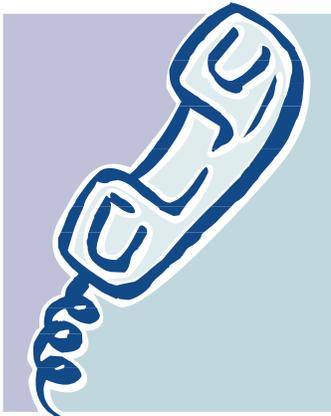
Water-related associations, such as Evergreen Rural Water of Washington ([www.erwow.org](http://www.erwow.org)), companies that routinely insure water systems, and water system legal and financial advisors are potential sources of information about water system liability and insurance issues.

*This article is an excerpt from a series of articles in the spring and winter 1999 edition of the Water Sense newsletter. For more information the complete articles can be found on the National Drinking Water Clearinghouse website, [http://www.estd.wvu.edu/ndwc/ndwc\\_homepage.html](http://www.estd.wvu.edu/ndwc/ndwc_homepage.html)*

## Limit Your Potential for Liability

- Have knowledgeable board members and employees who consistently use written policies and procedures.
- Make sure the people responsible for your water system are knowledgeable about rules and requirements for operating and maintaining a water system, and follow them. This includes drinking water regulations as well as rules related to labor safety and other state and federal business practices.
- Establish clear and consistent policies and procedures. For example, homeowners’ associations should have policies and procedures established in bylaws, and should strongly consider formally incorporating the association to add an additional level of protection to officers and volunteers. While this may not stop someone from filing a lawsuit against the association, they may aid you in responding to litigation and minimizing actual liability.
- As with any issue involving legal liability, getting good legal advice is a necessity. While this may cost the water system money, in the long run it will probably pay for itself.





To register call these contacts...

**ERWOW**

Evergreen Rural Water  
of Washington  
1-509-962-6326

**WETRC**

Washington Environmental  
Training Center  
1-253-288-3369

**AWWA**

American Water Works  
(PNWS)  
1-509-924-3655

Tim Fulton  
360-753-8392

Judy Grycko  
1-877-767-2992

Kathy Kimsey  
425-334-5399

Terri Notestine  
360-236-3133

Ty Wick  
509-536-0121

## Training and Education Calendar March - June 2000

<u>Date</u>	<u>Topics</u>	<u>Location</u>	<u>Contact</u>
Mar 29	Small Systems Cross Connection Control Workshop*	Mt. Vernon	Terri Notestine
Mar 30	Small Systems Cross Connection Control Workshop*	Pt. Townsend	Terri Notestine
Apr 4	Valve Exercising and Hydrant Maintenance*	Goldendale	ERWOW
Apr 4-5	Backflow Assembly Tester Troubleshooting and Repair	Auburn	WETRC
Apr 4-5	Cross Connection Control Program Implementation	Tacoma	WETRC
Apr 5	Valve Exercising and Hydrant Maintenance*	Dayton	ERWOW
Apr 6	Valve Exercising and Hydrant Maintenance*	Colville	ERWOW
Apr 6	Confined Space Entry	Richland	WETRC
Apr 6-7	Process Control and Instrumentation	Everett	WETRC
Apr 11-13	Basic Water Works	Richland	WETRC
Apr 11-13	Chlorination System Operation & Maintenance	Yakima	WETRC
Apr 14	AC Pipe Work Practice Procedures	Auburn	WETRC
Apr 18	Small Systems Cross Connection Control Workshop*	Wenatchee	Terri Notestine
Apr 18	Valve Exercising and Hydrant Maintenance*	Shelton	ERWOW
Apr 19	Valve Exercising and Hydrant Maintenance*	Mt. Vernon	ERWOW
Apr 19-21	Pump Operation and Maintenance	Auburn	WETRC
Apr 20	Small Systems Cross Connection Control Workshop*	Spokane	Terri Notestine
Apr 20-21	Cross Connection Control Program Implementation	Richland	WETRC
Apr 21	Welding & Compressed Gas Safety (AWWA Subsection)*	Ocean Shores	Tim Fulton
Apr 25-27	Basic Water Works	Everett	WETRC
Apr 26	How to Read Surveying Stakes (AWWA Subsection)*	Spokane	AWWA
Apr 26-28	WSEHA Annual Education Conference	Vancouver	Kathy Kimsey
Apr 26-28	Water Certification Exam Review	Auburn	WETRC
Apr 26-28	Basic Electrical	Tacoma	WETRC
May 2-4	Water Certification Exam Review	Yakima	WETRC
May 3-5	PNWS American Water Works Assoc. Annual Conf.	Spokane	Judy Grycko
May 9-11	Cross Connection Control Specialist Cert Review	Everett	WETRC
May 16-17	Cross Connection Control Program Implementation	Everett	WETRC
May 23-25	Water Certification Exam Review	Everett	WETRC
May 24	IESS/SRC4 Annual Banquet	Spokane	Ty Wick
May 24-26	Basic Electrical	Richland	WETRC
May 25-26	Emergency Planning	Auburn	WETRC
June 1-2	Process Control and Instrumentation	Richland	WETRC
June 2	AC Pipe Work Practice Procedures	Auburn	WETRC
Jun 13-14	Cross Connection Control Program Implementation	Auburn	WETRC
June 20-22	Pump Operation and Maintenance	Richland	WETRC
June 27-28	Backflow Assembly Tester Troubleshooting & Repair	Auburn	WETRC

**Additional Training Links:**

AWWA Website - <http://www.pnws-awwa.org/index.htm>

ERWOW Website - <http://www.ERWOW.org>

WETRC Website - <http://www.ivygreen.ctc.edu/wetrc>

\*Indicates  
training is less  
than \$25.00

**For the complete Training Calendar visit the Drinking Water Homepage & click on Training - [www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)**

## Tap Tips: Creating a System Map

A map or as-built drawing of your water system can be of inestimable value in locating water lines and shut-off valves should an emergency occur. A good as-built drawing shows locations of all water sources, treatment (if applicable), mains (by size, type and depth), valves, service lines (and meters), hydrants, elevations, and other utilities. You may want to have several base maps for additional operational related information. Information on valves and hydrants would include model type, installation date, last date tested, plus the direction and number of turns for opening. A map that shows previously repaired leaks and customer complaints is also a good tool for operation and maintenance scheduling, and planning for future capital improvements.

If you do not have a map of your system, you may want to make one yourself (least expensive) or contract to have one made. But, before you begin, check with the contractor and/or engineer that originally installed/designed your system for any existing documentation. Next, you might want to check with the Drinking Water Division regional office or local health jurisdiction. If your system was approved, chances are the plans for the original design of your system are on file. Remember that your system may not have been installed exactly as designed, so you should still verify the accuracy of the map.

If no documentation of your system is found, you can use aerial photos or county maps to create a new system map. Many counties now have digitized base maps. You can also use leak detection equipment or pipe locator equipment to locate water lines, including plastic pipe, polyvinyl chloride (PVC), and asbestos-cement (AC) pipe. Unfortunately,

*Continued on back page...*

# Dr. Drip



Dear Dr. Drip:

Another CCR report is due by July 1! My customers were pretty interested in the report I gave them last year. You know, I don't think they had a clue how hard I work to keep our community's drinking water safe. Their confidence in their tap water is increasing, even more so than learning Division of Drinking Water staff fill their personal water bottles with their tap water! Got any ideas how I can make this year's Consumer Confidence Report even better than last year's?

Signed, C. C. Arthur

*Dear C. C. Arthur:*

*You're right, another deadline is approaching! The report is due to your customers and your system's DOH Regional Office by July 1, 2000. The same federal CCR requirements that applied last year will apply to this year's report.*

*Washington water systems' response in 1999 was excellent: More than 90% of regulated systems sent a report to the state. Here are some suggestions to improve your report and meet content requirements:*

- ◆ *Do not staple lab sheets to your report. Chemical detections must be summarized in a table according to specific formatting and reporting requirements.*
- ◆ *Summarize your most recent data between January 1995 and December 1999 only.*
- ◆ *Do not list non-detected chemicals in your summary table.*
- ◆ *List and explain any violations, including failure to meet the minimum monitoring requirements.*
- ◆ *Include all mandatory educational language to inform readers about common contaminants in water and their typical sources, vulnerable populations, and required definitions*
- ◆ *Staple your completed certification form to your report when sending it to your DOH Regional Office so that you are properly credited with meeting the distribution requirement.*

*Remember to distribute your report to each of your customers regardless of whether they are billed for the water. Anyone who drinks the water is entitled to the report.*

*For more information and for access to the federal CCR guidance document visit [www.doh.wa.gov/ehp/dw/consumer.htm](http://www.doh.wa.gov/ehp/dw/consumer.htm). You may also obtain the guidance document by calling EPA at 1-800-426-4791. For questions contact Donna Freier at (360) 236-3162, fax (360) 236-2252 or [donna.freier@doh.wa.gov](mailto:donna.freier@doh.wa.gov).*

Continued from page 7.

equipment can be expensive to purchase (typically from \$1,000 to \$3,000). Other options include:

- Renting or borrowing equipment. You may want to check with other local utilities in your area, Satellite Management Agencies, Evergreen Rural Water of Washington (ERWOW), or Camano Island Water Systems Association if on Camano Island. ERWOW loans leak detection equipment to members for free. However, they can also train non-members how to use the equipment.
- Hiring someone to locate your water lines
- Asking those that may have been around during construction of the original system. Someone may have old photos you can use, too.

See the December 1999 issue of Water Tap for important information on locating other underground facilities before you begin digging. You do not want to get stuck paying for repairs to other utilities in addition to the repair work on your water system.

## In This Issue

The following people have contributed to the production of this issue of the *Water Tap*: Peter Beaton, Donna Freier, Jim Hudson, Dave Monthie, Lisa Raysby, Jim Skalski, Simon Tung, Ronni Woolrich, Judy Sides ~ co-editor and Janice Keller ~ Communications Manager/co-editor.

The Water Tap is published by the Department of Health, Division of Drinking Water, to provide information on subjects of interest 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, Division of Drinking Water, P.O. Box 47822, Olympia, WA 98504-7822, Olympia, WA 98504-7822 or Email your request to [DWINFO@doh.wa.gov](mailto:DWINFO@doh.wa.gov). Past issues are also available on our website <http://www.doh.wa.gov/ehp/dw>

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**Water Works Wonders!**  
Drinking Water Week is,  
May 7-13, 2000!  
The American Water Works  
Association provides a  
wealth of information to  
assist water systems in  
their public education  
activities on their website  
[www.awwa.org/dw](http://www.awwa.org/dw)



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