

2003 Report on Oregon public drinking water

by Dave Leland

2003 was year of notable and significant achievements for safe drinking water in Oregon! We will break with tradition this year and focus just on those major achievements and their context within our statewide goal of “assuring Oregonians safe drinking water.” Refer to our drinking water Web site for the full text of the detailed USEPA-required statewide Annual Compliance Report for 2003. After reviewing these accomplishments, we conclude with a look at the remaining work that lies ahead.

(Continued on page 2)

Drinking Water Program staffing changes

The Drinking Water Program welcomes Bob Devaney to our Technical Services group. He is a professional engineer and will be concentrating in field work in Clackamas and Marion counties. He graduated with a MSCE from the University of Washington in 1995 and has been working in the civil engineering field since 1996.

John Davis recently left the Drinking Water Section to take a position as a Database Administrator with the Board of Nursing. John was responsible for what you saw in our Drinking Water Web site, and for meeting so many other information needs of the program. Most recently, he was assisting labs in electronic reporting of microbiological results. We will miss being able to call on him for assistance in a variety of data projects but wish him the very best in his new challenge.

Oregon Environmental Laboratory Accreditation Program

by Irene Ronning

July 1, 2004 was a day of celebration for the Oregon Environmental Laboratory Accreditation Program (ORELAP). On that day, ORELAP became fully implemented while the old Drinking Water Laboratory Certification Program, which had certified drinking water testing laboratories since Oregon first accepted drinking water primacy, passed into history. ORELAP, while accrediting drinking water testing labs, is broader in scope and accredits environmental testing labs to the more stringent national standards adopted by the National Environmental Laboratory Accreditation Conference (NELAC). This day was especially joyous because the birth of ORELAP was a long and complicated process, involving two decades of effort by three Oregon agencies, the U.S. Environmental Protection Agency (EPA), and the laboratory community.

(Continued on page 12)

Inside this issue

Coliform sampling plans.....	8
Security vulnerability assessment.....	10
Requirements for plan submission.....	10
Creating a water system operations manual....	13
Water operators renewals	14
Training calendar	15

2003 Report — continued from page 1

Surface water treatment

During 2003, the last of the 165 unfiltered surface water supplies identified in 1992 met surface water treatment requirements! This is indeed a major milestone in Oregon. Some of you remember when unfiltered and inadequately disinfected surface water supplies were the norm in Oregon. These were associated with most of the two-dozen community waterborne disease outbreaks recognized in Oregon from 1971 through 1997 (National Centers for Disease Control and Prevention). The main culprit was the microscopic parasite *Giardia*, which turned out to be quite resistant to the disinfection treatment practices of the time.

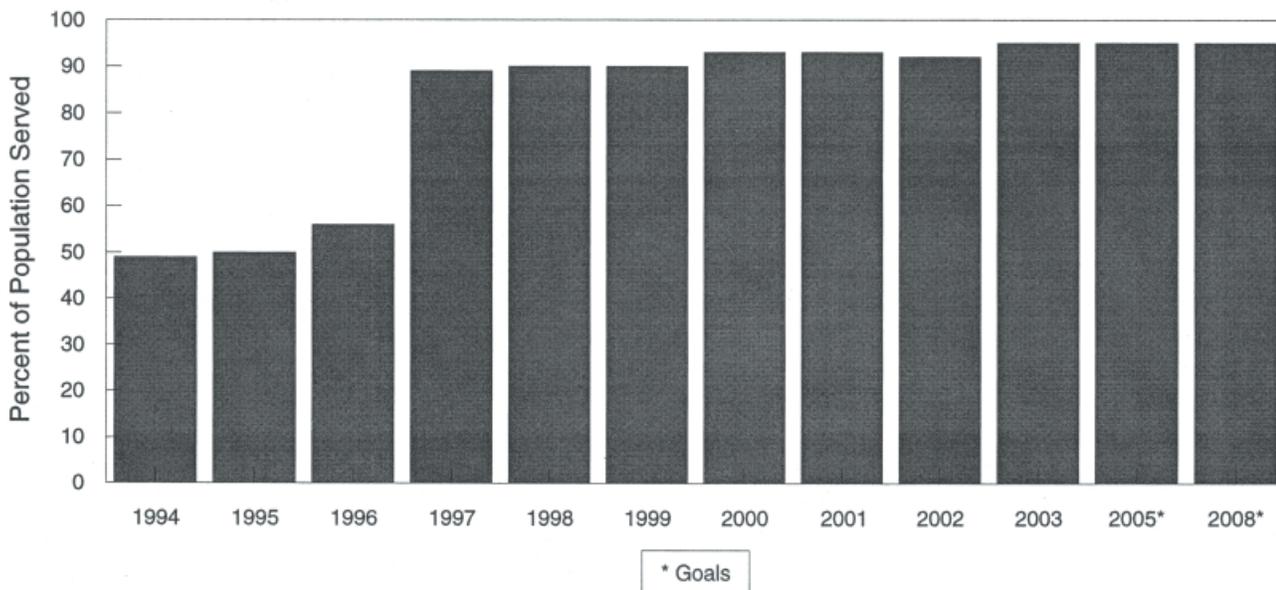
By 1981, Oregon ranked sixth in the nation in incidence of waterborne disease, with three times the national average in waterborne outbreaks. Combined with high-profile USEPA enforcement actions against several Oregon communities, this convinced Oregon policy-makers that it was time to act to solve this problem. The 1981 Legislature passed the Oregon Drinking Water Quality Act.

After the Act was passed, Kristine Gebbie, Administrator of the Oregon Health Division, predicted a “Ten (to Fifteen) Year Fight to Cover Oregon with Safe Drinking Water” (Oregonian, October 28, 1981). As it turned out, Ms. Gebbie wasn’t too far off.

Most communities with surface water sources constructed filtration/disinfection treatment plants, and this took a lot of time and money. Other approaches were also used widely, including developing alternate water supplies such as wells, or consolidating with other nearby communities and purchasing treated water. These solutions were also costly, and it took time in some communities to work out difficult local planning and land-use issues. Only four Oregon communities (Portland, Bend, Baker City, and Reedsport) are allowed to remain unfiltered because their unique water sources continue to meet stringent USEPA criteria.

(Continued on page 3)

Figure 1. Drinking Water Benchmark, 1996-2003
Oregon Drinking Water Program



2003 Report — continued from page 2

In the end, Oregon’s community waterborne disease problem was solved. Our last community-wide waterborne disease outbreak in a public water system was recognized in 1997. Headlines such as “Quality of State Drinking Water Sickening” (Oregonian, September 20, 1984) should now be behind us.

Drinking water benchmark

The second important achievement of 2003 was meeting our goal for the Oregon Safe Drinking Water Benchmark! The benchmark is calculated as the percentage of the population served by public water systems that receive water meeting all health-based standards (MCLs and treatment techniques) continuously during each year. We set a benchmark goal to reach 95 percent by 2005, and then maintain that level through 2010 as new USEPA standards go into effect. As a state, we collectively met the 95 percent goal in 2003!

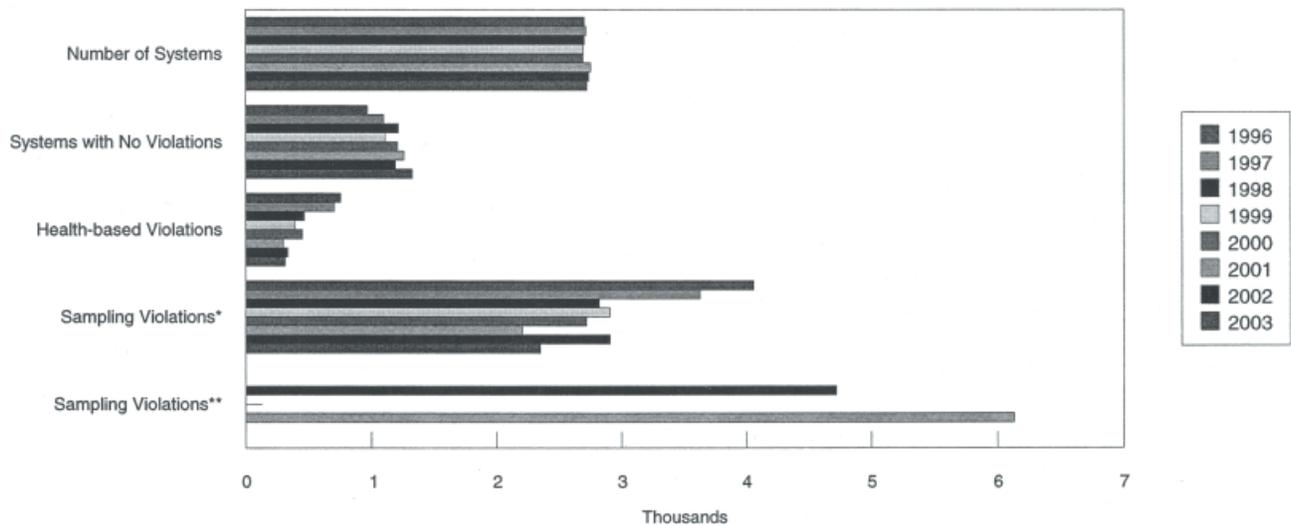
Progress on the benchmark is shown in Figure 1 (page 2). In 1996, state agencies developed benchmarks to support a statewide effort to identify performance goals and track progress toward those goals over time. Reports are made periodically through the Oregon Progress Board. The drinking water benchmark (#69) is listed under “Community Development-Healthy and Sustainable Surroundings”, recognizing the critical importance of safe drinking water to Oregon communities.

Water systems improved in 2003

In 2003, eight drinking water systems serving a total of more than 29,000 Oregonians completed significant improvements to meet drinking water standards. Heceta Water District, Florence, Manzanita, Wheeler, Pendleton and Cedar Tree Mobile Home Park completed surface water treatment related improvements. Lafayette installed corrosion control treatment for lead and copper. Vista Dale connected to Junction City, resolving coliform bacteria contamination.

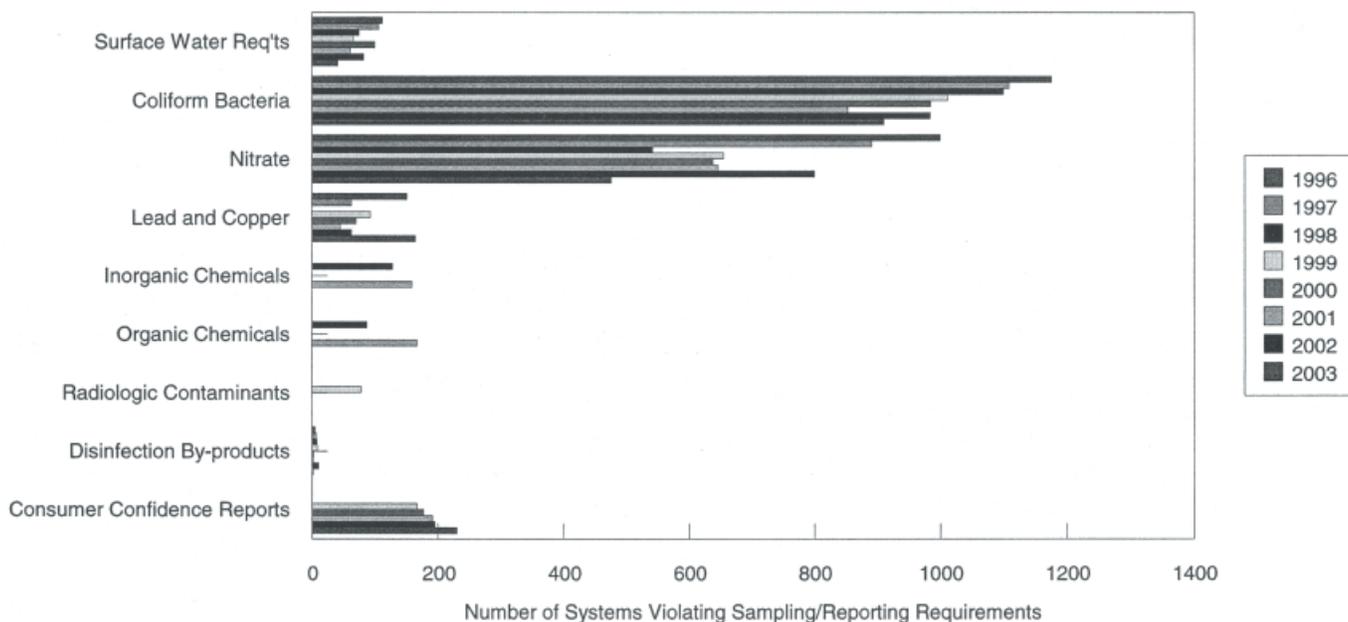
(Continued on page 4)

Figure 2. Summary Compliance Data, 1996-2003
Oregon Drinking Water Program



*Microbials-coliform & SWTR, nitrate, lead/copper, TTHMs **13 inorganic, 53 organic chemicals

Figure 4. Compliance Data - Sampling/Reporting. 1996-2003
Oregon Drinking Water Program



specific indicator of fecal contamination warranting immediate action, and occurrence of this is very infrequent. Only seven water systems experienced *E. coli* or fecal coliform presence in 2003 compared to 153 systems experiencing total coliform contamination. Nitrate, inorganic chemical, and organic chemical contamination at levels of health concern remain rare.

Oregon water suppliers could substantially improve their sampling and reporting of test results. Sampling and reporting violations are much more common than instances of actual contaminated water, as shown in Figure 4 (above). Many water suppliers violate sampling/reporting requirements for coliform bacteria and for annual nitrate testing, although the numbers are declining over time. Fewer water suppliers fail to sample/report surface water treatment data, lead and copper, and chemical and radiologic contaminants. The number of water suppliers failing to conduct required annual consumer

confidence reports actually shows a slight increase over time.

Then and now

Twenty years ago, USEPA was struggling with implementing the federal Safe Drinking Water Act in Oregon while encouraging DHS to step up and take primacy for the full drinking water program and 23 established USEPA drinking water standards. Mike Gearheard was the newly appointed USEPA Oregon office director in Portland at that time. He predicted that Oregon would need three key elements to have a well-run and effective state program that could help local communities to solve the state's waterborne disease problem (Oregonian, September 20, 1984):

(Continued on page 6)

2003 Report — continued from page 5

- Enough field workers to visit water systems systematically, to get to know the operators, to share disease-prevention information, and to take quick action to protect public health,
- A funding system to provide money to the water systems that need it to protect health, and
- Mandatory state certification of operators of drinking water delivery systems.

Today, after almost twenty years in the USEPA Superfund program, Gearheard returns as the newly appointed Director of the Office of Water for USEPA Region X in Seattle. We look forward to working with him again in his new capacity. We think he will find that much of what he hoped for in Oregon has been achieved.

The Department of Human Services accepted primacy from USEPA in 1986. From the original 14 state drinking water program positions in 1984, the program grew to 33.5 positions today and includes contracts with county health departments and the Oregon Departments of Agriculture, Environmental Quality, and Economic and Community Development.

During this same time period, however, the number of USEPA drinking water standards increased from 23 to 95, and many new program responsibilities were added. In 1997, DHS and OECDD implemented the Safe Drinking Water Revolving Loan Fund under the 1996 federal Safe Drinking Water Act Amendments. By June 2004, over \$95M in federal and state money was committed to nearly 60 safe drinking water projects in Oregon communities. This represents more than 99 percent of the total funds available since 1997!

Mandatory water system operator certification was implemented by DHS in 1989 and expanded in 2003. By June 2004, 347 of 387 water systems requiring an operator certified in water treatment (WT) and/or water distribution (WD), met that standard. An additional 732 of 871 small ground-

water systems had an operator with the new Small Groundwater Operator (SGO) certification. Efforts continue to get remaining water system operations into full compliance with the statewide certification standard.

The future

We have accomplished much together to make water safe for the general population in Oregon. Today, however, we understand that more needs to be done to protect vulnerable subpopulations at particular risk from drinking water contaminants. These subpopulations include infants and children, the elderly, pregnant women and people with weakened immune systems. We understand, too, that at any particular time of our lives any of us may find ourselves in one or more of those vulnerable groups.

There is more to do to fully implement existing USEPA drinking water standards in Oregon. To fully protect health, surface water filtration treatment plants must operate effectively at all times without failure. Achieving this high level of plant performance depends directly on the skills and continuous diligence of operators. Ongoing training, competent supervision and support, and high performance standards for operators are keys to success.

Some of the wells used by Oregon public water suppliers are located very near streams and other open surface water bodies. Some of these wells may turn out to be directly influenced by those nearby surface waters, and these public water suppliers may need to provide filtration treatment.

Many water suppliers in Oregon are now monitoring for disinfection by-products for the first time (see Spring 2004 *PIPELINE*), and some may need to act to reduce levels of these contaminants. By

(Continued on page 7)

2003 Report — continued from page 6

2006, Oregon water suppliers must meet the new 0.010 mg/L USEPA standard for arsenic, either by installing treatment systems or finding alternate water sources. Some water systems have yet to install or successfully adjust corrosion control treatment to meet lead and copper action levels that were established in the 1990s.

Finally, a significant number of water suppliers fail to report some test results each year, and that serves to undermine public confidence in the safety of public drinking water. Remember, water that is untested is unknown in terms of quality and safety.

Additional USEPA national drinking water regulations are scheduled for adoption over the next several years. These new rules are unprecedented in scope and complexity.

This fall, we should see the final Ground Water Rule. This will likely include both new microbiological testing for public wells and analysis of well construction, location, and geology in order to identify those wells at risk of contamination by human enteric viruses. Those at-risk wells will need to have disinfection treatment or improved well construction. Since there are about 4,000 public water system wells in Oregon, this will prove to be a major undertaking.

Next summer, we should see the Stage 2 Microbials and Disinfection By-Products Rule. This rule will require *Cryptosporidium* testing of surface water sources used by public water systems, and additional treatment technologies will be required for those water sources that demonstrate high levels of that microscopic parasite. Public water systems with disinfected water will have to assure that each part of the distribution system has disinfection by-products levels below established maximums.

The Radon Rule is not currently scheduled to go final, and will likely be further debated before moving forward. At issue is the controversial proposal

to establish two MCLs for radon; a higher one for states with USEPA-approved programs in place to control radon in indoor air, and a lower one for states without approved indoor air programs.

Also on the USEPA future agenda is a revised Coliform Rule with provisions to protect distribution systems, including cross connection control.

The Department of Human Services needs additional resources to maintain primacy for the current USEPA drinking water standards in Oregon, and to play a meaningful role in the expanded USEPA standards of the future (see Spring 2004 PIPELINE). This issue will likely be discussed in the 2005 Legislature. Stay tuned, and keep up the good work!

Dave Leland, PE, is Manager of the Drinking Water Program / (503) 731-4010 or david.e.leland@state.or.us



Coliform sampling plans

by Shane Phelps & John Potts

A coliform sampling plan is one of the pieces of information that all public water systems are required to maintain. Not only is this plan a useful tool in performing routine coliform sampling, it is highly beneficial in allowing you to quickly identify repeat sampling locations and possible sources of contamination in the event that a routine sample tests positive for coliform. A brief description is given below detailing the components that should be included in a complete coliform sampling plan.

What is a coliform sampling plan?

A coliform sampling plan is a written document that public water systems should use to consistently and accurately perform sampling that is representative of drinking water in the system's distribution system.

Who is required to have a coliform sampling plan?

All public water systems must develop and implement a written coliform sampling plan. These plans need to be reviewed and approved by the DHS Drinking Water Program or county health department during the on-site sanitary survey inspection.

What should the sampling plan include?

The plan should include the following elements:

- A brief **narrative** of the water system that includes source, treatment, storage, distribution system maintenance, pressure zones, number of connections, population, etc.

- A **map** of the distribution system with the routine and repeat sampling sites identified, distribution piping locations, entry points, etc.
- A **sample siting plan** that includes sample site addresses, the minimum number of samples collected, rotation schedule of sample sites, chlorine residual monitoring, contact person and phone number, sampling procedure or protocol, etc.

In the event that a routine site sample tests positive for coliform or E. coli, the plan should list repeat sites for each routine site and should include a written procedure of what steps the water system will follow to investigate a positive sample.

The sampling sites should be representative of and provide adequate coverage of the distribution network and pressure zones. It is also important to select sampling sites that provide the least amount of negative influence on the water sample. Examples of sites to avoid include leaky or dirty faucets, sampling points in areas with little or no water use, swivel faucets, custodial or industrial use sinks, or any location you believe to be questionable.

Many water systems utilize dedicated sampling stations in the distribution system that are used exclusively for sampling purposes, eliminating many outside influences that may potentially impact water samples.

If, when you go to collect your routine sample, you find the water tap has been damaged or is leaking, use one of your alternate sites until you can repair the original. Likewise, if the sample bottle is damaged or you believe you may have contaminated it, do not use it. Select a clean one for your sample and return the other to the lab empty.

Coliform sampling — continued from page 8

Where can I find the rules regarding coliform sampling plans?

Rules regarding coliform sampling plans can be found in OAR 333-061-0036(5)(b)(F).

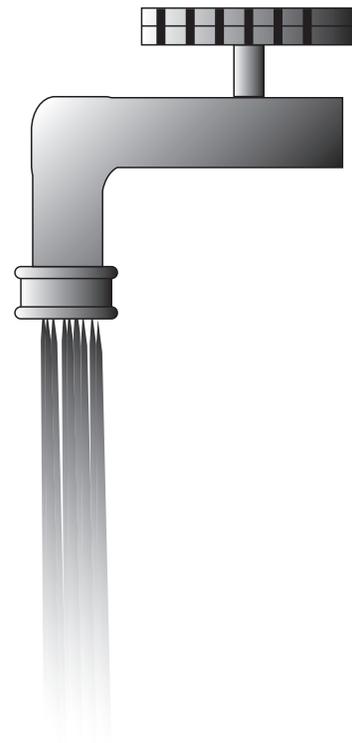
Who can I contact for additional information?

Additional information regarding coliform sampling plans and coliform-related issues can be obtained by calling your local county health department, or by calling the DHS Drinking Water Program at (503) 731-4317. Online information can be found on the

DHS Drinking Water Program Web site at <http://www.dhs.state.or.us/publichealth/dwp>.

Shane Phelps, Natural Resource Specialist, is a member of the Capacity Team in the Protection and Development Unit of the Drinking Water Program / (503) 731-4317 or shane.m.phelps@state.or.us

John Potts, RS, is in the Technical Services Unit of the Drinking Water Program / (541) 757-4281 or jpotts13@comcast.net



Security vulnerability assessment deadlines

by Kurt Putnam

The federal Bioterrorism Act of 2002 requires all community water systems with more than a 3,300 population complete a Security Vulnerability Assessment and submit a copy of the assessment and certification of completion to the EPA by prescribed dates. June 30, 2004 was the latest deadline for community water systems with a population of 3301-49,999 and we want to congratulate those systems on their 92 percent success rate on this endeavor. Out of the 96 systems in this population range, all but eight have completed the task on time. These systems now have until December 31, 2004 to complete an Emergency Response Plan that incorporates the results of their Security Vulnerability Assessment.

This is an appropriate time to remind all the remaining community water systems with a population of 3,300 or fewer and all non-community water systems that their due date for completion of a Vulnerability Assessment and Emergency Response Plan is June 30, 2005. DHS-DWP has adopted the same requirements as the EPA except that DHS-DWP does not require systems to submit a copy of the actual Vulnerability Assessment document. All water systems, however, are required to submit a letter of "Proof of Completion" to DHS-DWP. If you haven't already, visit our Web site (www.dhs.state.or.us/publichealth/dwp/index.cfm) and look under "Water System Security" for detailed information and resources to help you accomplish this important task. You may also contact Kurt Putnam or Chris Hughes at (503)731-4317 for specific information and we encourage you to attend one of our security workshops being offered over the next year.

Kurt Putnam, RS, is in the Protection & Development Unit of the Drinking Water Program / (503) 731-4317 or kurt.d.putnam@state.or.us

Requirements for plan submission and review — Drinking Water Program

All plans must be submitted to and approved by the Department of Human Services (DHS) *prior to construction* of a new system, major additions or modifications to existing systems. (* **"Major additions or modifications"** means changes of considerable extent or complexity including, but not limited to, projects involving water sources, treatment facilities, facilities for continuous disinfection, finished water storage, pumping facilities, transmission mains, and distribution mains, except main replacements of the same length and diameter.)

- I. Plans must be prepared by a professional engineer (Oregon registered), as determined by the state.
- II. Plans must include the following (refer to Construction Standards for technical details):
 - A. Sufficient details with specifications.
 - B. Report on **quality** and **quantity** of proposed source of water.
 - C. Estimates of system demand.
 - D. Vicinity map.
 - E. Owner's name and address.
 - F. Proper procedures for cleaning and disinfecting.
- III. A Land Use Compatibility Statement, or equivalent documentation, approved by the local planning authority must accompany the plans.
- IV. Copy of water right permit from water resources department (if required).
- V. Submit the appropriate plan review fees.

(Continued on page 11)

Plan submission and review — continued from page 10

VI. Certification that the project has been constructed in compliance with the plans as approved, or if there are any changes, as-built plans will be submitted.

Additional requirements for wells

- I. *Prior to drilling* a well a site plan needs to be submitted showing:
- A. Site location.
 - B. Topography.
 - C. Drainage and flood plain information.
 - D. Surface water sources within 500' of proposed well site.
 - E. Well drilling specifications.
 - F. The well's proximity to sanitary hazards (septic tanks, sewers, drainfields, underground storage tanks).
 - G. Ownership.
 - H. Location of project on a USGS topographical map.

II. After the well is drilled, submit the following:

- A. Well driller's report.
- B. Well pumping test.
 - 1. Static water level.
 - 2. Pumping rate.
 - 3. Drawdown and rate of recovery.
- C. Pump performance data.
- D. Water quality analysis.
- E. Structure detail (well house, slab, drainage, pipe to waste, etc.).
- F. Plans and specifications for connection of new well to system.

The plan review process requires a fee based on water system type and project category. See Table 30 in the OARs.

*Visit our Web site for additional information:
www.dhs.state.or.us/publichealth/dwp*

Lab Accreditation Program — continued from page 1

About 20 years ago, the nation's environmental community requested that the EPA establish a national lab accreditation program with uniform standards. With each state having its own standards for environmental testing, it was too costly for labs that work in multiple states. In addition, the data produced in any one state, was not comparable with that of others.

In response, the EPA solicited help from the states, territories and other interested federal agencies to determine how this could be accomplished. In 1995, this effort resulted in the establishment of NELAC, a national standard setting body, and the National Environmental Laboratory Accreditation Program (NELAP), the EPA program that oversees the implementation of these standards by recognizing qualified states that apply to be accrediting authorities. NELAP began accepting state applications in 1999.

In the meantime, Oregon, through the Oregon Health Division (HD) of the Department of Human Resources, accepted drinking water primacy in 1986. This required Oregon to establish a program to certify drinking water testing laboratories to EPA standards. This resulted in the Oregon Drinking Water Laboratory Certification Program, Oregon's first and, at that time, only program for certifying environmental testing labs.

However, by the early 1990s, it became apparent that the program was too limited. The standards were not stringent enough to always ensure the quality of the data produced, the labs were using Oregon drinking water certification as credentials for other types of testing, and there was no way to certify labs in most other states. Certified out-of-state labs are needed because Oregon lacks lab capacity for certain types of required testing such as asbestos, dioxin and radionuclides in drinking water.

During this same time, the Oregon Department of Environmental Quality (DEQ), who along with the Oregon of Department of Agriculture (ODA) was

assisting HD's certification program by conducting inspections of laboratories performing chemical analysis, made several unsuccessful attempts to establish a laboratory accreditation program for the oversight of analyses required by DEQ.

However, in 1999, the planets became aligned, or in less astrological terms, the efforts of all the interested parties converged. HD, DEQ and ODA, with the support of Oregon's certified drinking water testing labs, obtained authority from the Oregon Legislature to jointly establish ORELAP and simultaneously applied to NELAP for recognition as a national accrediting authority. As one of the first twelve NELAP accrediting authorities in the country, ORELAP began accrediting laboratories in 2001.

As of August 2004, ORELAP remains a uniquely three-agency program, with the administrative office residing with the Department of Human Services at the Oregon Public Health Laboratory. Currently ORELAP grants national accreditation to qualified labs that test for environmental contaminants in potable and non-potable water, air, hazardous solid waste, and non-human biological tissue. To date, ORELAP has accredited 71 laboratories and the number continues to increase as more labs see the value of NELAP accreditation.

With ORELAP's NELAP accreditation, laboratory clients have the assurance that laboratories can produce comparable, defensible data of known quality. Also, with the ever-increasing number of ORELAP-accredited labs, clients can be assured that there is sufficient laboratory capability to meet their testing needs.

As citizens of Oregon, we all benefit from improvements to the quality of data on which decisions are made regarding our environment. So July 1, 2004 was actually an important milestone for us all.

Irene E. Ronning, PhD, is ORELAP Administrator of the Oregon State Public Health Laboratory / (503) 229-5505 or irene.e.ronning@state.or.us

Creating a water system operations manual

by Shane Phelps

All public water systems in Oregon are required to maintain a current water system operations manual. While the specific contents of each system's manual will reflect the unique set-up and operational needs of that system, there are general components that are required to be in all water system operations manuals. The following is a summary of the information that should be included in your system's manual.

What is a water system operations manual?

A water system operations manual is a comprehensive "how-to" guidance document that pertains to all physical aspects of a water system's daily operation and maintenance. Specifically, it includes operation and maintenance activities performed at the system's:

- Source and intake facilities,
- Water treatment facilities,
- Reservoir(s), and
- Distribution system.

Additionally, if a system has a certified operator in direct responsible charge (DRC), and employs, contracts or utilizes other operators in addition to the DRC, then the system must establish a written protocol for each of these other operators that:

- Describes the operational decisions the operator(s) are allowed to make,
- Details the condition under which the operator(s) must consult with the DRC, and when and how contact is made,

- Takes into account the certification level of the operator(s), their knowledge, skills and abilities, and the range of expected operating conditions of the water system, and
- Is signed and dated by the DRC and the other operator(s).

Once the manual is complete, water system staff shall be instructed and trained in the use of the manual.

Why is the manual necessary?

The creation and implementation of the manual provides a detailed resource that can be used in the event that the system suddenly loses its DRC and has to employ or contract new operators that are unfamiliar with the system. Additionally, it serves as a good training tool for new employees.

Where can I find the rules regarding the manual's content?

Rules regarding the manual can be found in OAR 333-061-0064 (2). Additional requirements in regard to operator actions can be found in OAR 333-061-0225 (5).

Who should I contact if I need help in creating the manual?

Additional information regarding manual content and development can be obtained by calling your local county health department, or by calling the DHS Drinking Water Program at (503) 731-4317. Online information can be found on the DHS Drinking Water Program Web site at <http://www.dhs.state.or.us/publichealth/dwp>.

Shane Phelps, Natural Resource Specialist, is a member of the Capacity Team in the Protection and Development Unit of the Drinking Water Program / (503) 731-4317 or shane.m.phelps@state.or.u

Water Operator Renewals

by Deb Weatherford

(Clip this article and tack it to a bulletin board)

Drinking Water Certifications are renewed yearly. The fees remain the same (\$40 for one certification and \$60 for two). All current certified operators should be receiving a renewal form in November.

The due date for receipt of your completed renewal is December 31, 2004. Everything received after that date as well as incomplete submittals will be subject to late fees.

A complete renewal includes:

1. Proper amount of fees,
2. Signed renewal form,
3. 2.0 accepted CEUs **earned in 2003 and 2004** (last name **A-K**).

Fees cannot be refunded, so make sure you are sending accepted CEUs. Check www.oesac.com prior to submitting. Remember, those CEUs that cannot be used for renewals, can be used as post high school education, so be sure to save them.

Operators with lapsed certifications will not be receiving renewal forms in November. For those who are lapsed for non-payment or lack of required CEUs yet want to keep their certification, your complete renewal must be **received** by December 30. It's a good idea to also pay 2005 fees at that time in order to avoid paying more late fees.

To reinstate a lapsed certificate in November or December, send:

1. Renewal fees (\$40 or \$60),
2. Reinstatement fee of \$50,
3. Next year renewal fees (\$40 or \$60), and

4. CEUs, if needed.

More notes on CEUs:

1. If you do not get acceptable CEUs during the required time period, earn CEUs right away and send them in. Make a note on that CEU, because CEUs can be used for only one renewal.
2. A course can be used only once per renewal period. For instance, credit cannot be given for taking our free .6 CEU course four times during a renewal period. Only one class will count toward the required CEUs.
3. If you are an operator who also has Cross Connection or Backflow certification and that's the only type of CEU you have ever sent in (there are several of you), you need to start taking more of a variety of classes.

Some operators received their first certifications in 2004. New operators are given at least a year to start earning those CEUs, so new operators with last name beginning with A-K will NOT be required to send CEUs this year. They will be required to send them the next even numbered year — 2006.

If, however, you were certified in another state and applied for reciprocity in Oregon during the year, you will need to report CEUs with everyone else. While you may be new to Oregon, we expect your education to be on-going. CEUs earned out of state are reviewed on an individual basis by the department.

Please mail everything requiring fees to:

Cashier — DHS
PO Box 14260
Portland, OR 97293-0260

Deb Weatherford is in the Monitoring & Compliance Unit of the Drinking Water Program / (503) 731-4899 or deborah.a.weatherford@state.or.us

TRAINING CALENDAR

CEUs for Water System Operators

Check www.oesac.com for new offerings approved for drinking water.

Cross Connection/Backflow Courses

Backflow Management Inc. (B)
(503) 255-1619

Clackamas Community College (C)
(503) 657-6958 ext. 2388

Backflow Assembly Tester Course

Dec. 13-17 Oregon City (C)
Dec. 13-17 Portland (B)

Backflow Assembly Tester Recertification

Dec. 10 Oregon City (C)
Dec. 10 Portland (B)

Cross Connection Inspector Course

Dec. 15-18 Oregon City (C)
Dec. 15-18 Portland (B)

Water System Training Course

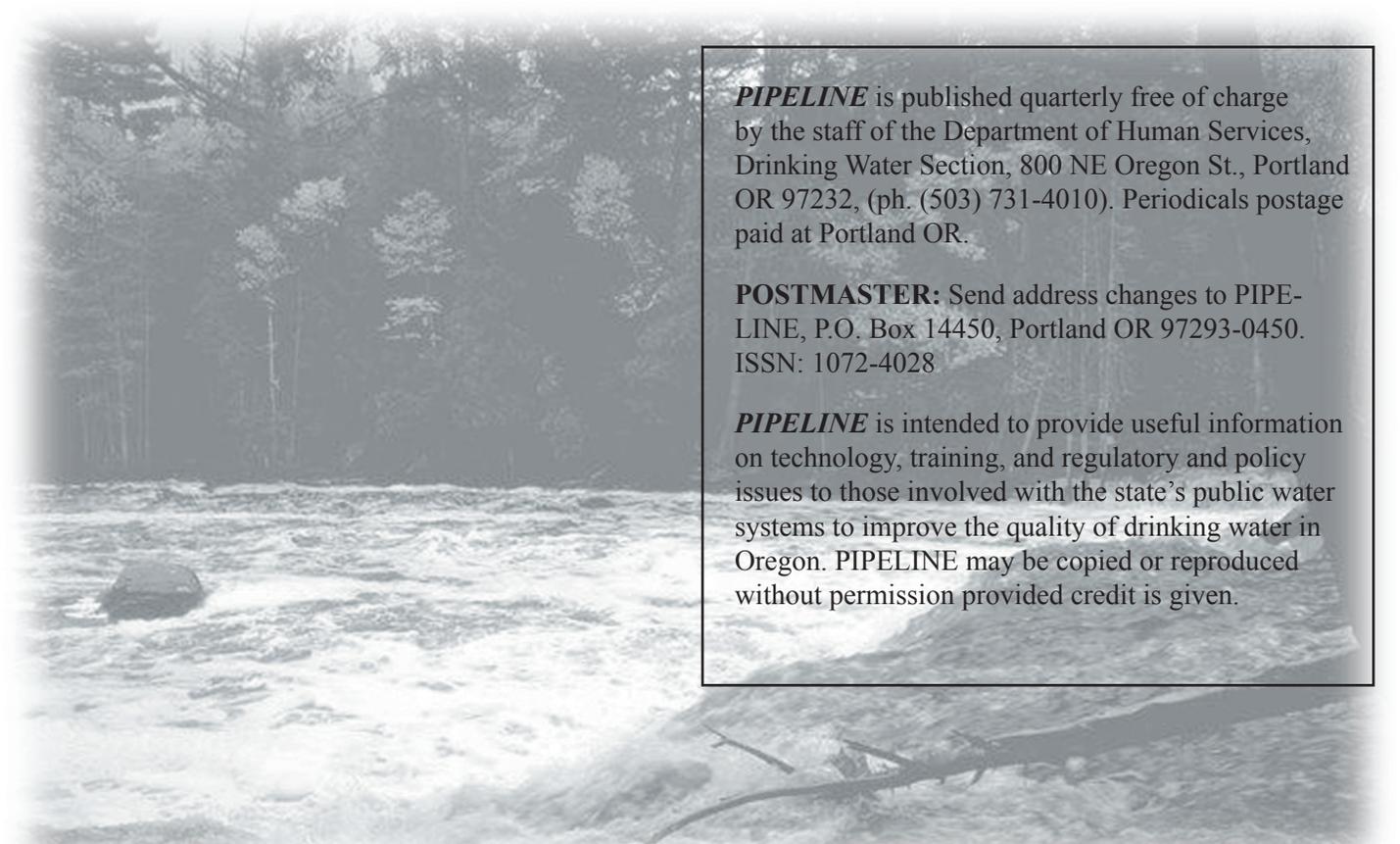
Department of Human Services
Marsha Fox/(503) 731-4899
November* Clatsop, Columbia, and
Tillamook Counties

* Dates and locations to be announced.



Department of Human Services
Drinking Water Program
PO Box 14450
Portland, OR 97293-0450

PERIODICALS
POSTAGE
PAID
PORTLAND, OR



PIPELINE is published quarterly free of charge by the staff of the Department of Human Services, Drinking Water Section, 800 NE Oregon St., Portland OR 97232, (ph. (503) 731-4010). Periodicals postage paid at Portland OR.

POSTMASTER: Send address changes to PIPELINE, P.O. Box 14450, Portland OR 97293-0450. ISSN: 1072-4028

PIPELINE is intended to provide useful information on technology, training, and regulatory and policy issues to those involved with the state's public water systems to improve the quality of drinking water in Oregon. PIPELINE may be copied or reproduced without permission provided credit is given.

If you would like this publication in an alternate format, please call (503) 731-4010.