Oregon Drinking Water News
PIPELINE
Department of Human Services, Drinking Water Program

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20 Years of *primacy* in Oregon!

February 24 marks the 20th anniversary of primacy in Oregon for the federal Safe Drinking Water Act. This is an opportunity to reflect on our collective accomplishments to protect public health in Oregon, and to assess our future opportunities and challenges.

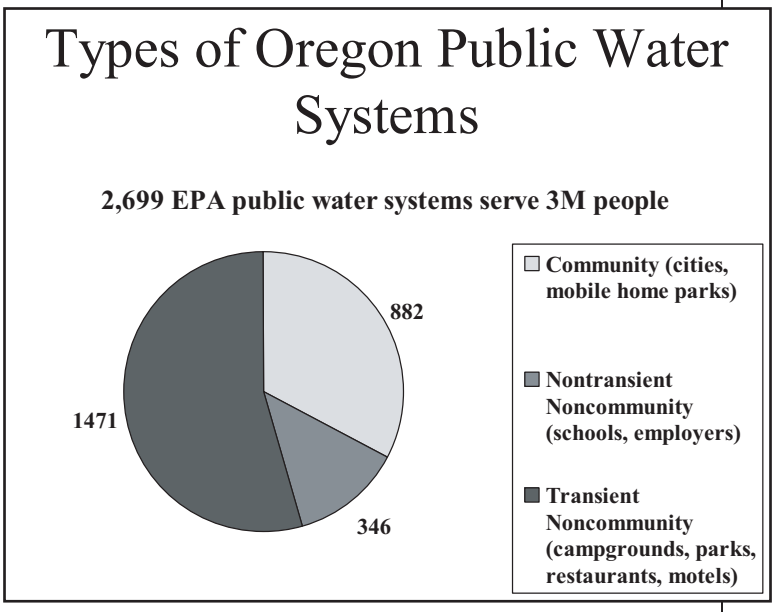

Figure 1, Types of Oregon public water systems

The public health system for safe drinking water

The public health system for assuring safe drinking water in the United States has three essential parts. First and foremost is the community of 166,000 public water suppliers that provide safe drinking water to 275 million Americans every day. Second is the U.S. Environmental Protection Agency (EPA), which sets national standards defining minimum requirements for safe drinking water under the Safe Drinking Water Act. Finally, state drinking water programs assure safe drinking water by adopting state drinking water regulations that are no less stringent than federal regulations, and then implementing and enforcing those state regulations under an agreement

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Drinking water rules adopted

by Ron Hall

Following is a summary of changes to our administrative rules *(OAR 333-061:Public Water Systems)* that became effective January 31, 2006. These changes were primarily driven by legislation that passed in 2005, and include direct lab reporting, updated fees, and new fees. The full text of these rules as well as a complete set of rules with these changes incorporated, can be found on our Web site.

The rulemaking process included notices to our interested parties list, the *PIPELINE* newsletter, and formal hearings that were held in Portland, Roseburg and Bend in January 2006. The rule changes are consistent with the 2004 recommendations of the Task Force on Drinking Water Program Workload and Funding, and were reviewed and approved by the Drinking Water Advisory Committee and the Cross Connection Advisory Committee.

Direct lab reporting

SB 1080: Requires certified drinking water testing labs to report to DHS the validated results of analyses from any compliance samples with levels in excess of any established Maximum Contaminant Level (MCL). At the request of laboratories, we installed a dedicated fax machine to receive these results from labs, and to provide laboratories with evidence that test results submitted

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were received. (Note that just two percent of all test results from public water system compliance samples exceed an MCL.) We are currently working with the laboratory association to develop detailed procedures and guidance for implementing this reporting requirement. We have completed the guidance and began the reporting process April 1, 2006.

Fees for operator certification and plan review

We adopted increased fees for operator certification and plan review. These follow the recommendations from the 2004 Drinking Water Task Force. Fees were raised to cover the department's full cost for providing these services.

Operator certification fees have not been raised since certification became mandatory in 1987. We raised the fee for reciprocity applications from $30 to $100, increased the late fees (from $10 to $30) and initiated a document replacement fee of $25. The current exam fee ($35) will be separated and made distinct from the application fee (the two are currently combined in the $35 fee). We also graduated the new application fees for the four tiers of operators ($50-$110). The application fee is non-refundable. The exam fee can be credited or refunded if the applicant is not eligible to take the exam for which they have applied. These fees are consistent with the wastewater operator fees that the Department of Environmental Quality now charges.

Plan review fees have not been raised since originally authorized in 1981. We have tripled the plan review fees across-the-board. The increased revenue pays the full cost of this service.

Cross connection /Backflow prevention

HB 3108: Authorized the department to assess a new annual cross connection program implementation fee on community public water systems, based on the number of service connections as follows:

Service connections:	Annual fee:
15-99	$30
100-999	$75
1,000-9,999	$200
10,000 or more	$350

This fee provides a permanent source of funding for the department's cross connection effort which has, in the past, been funded with state general funds as available. The department will mail invoices soon to all community water systems to collect the fee.

HB 3093: Authorized the department to exempt certain journeyman or apprentice plumbers from certification for testing backflow prevention device assemblies. This is in favor of new requirements to be adopted and enforced by the Department of Consumer and Business Services defining training that plumbers must complete to qualify for this exemption.

HB 2069: Allows owners or employees of licensed landscape businesses to repair/maintain assemblies serving irrigation and water features. These individuals must be licensed landscape contractors with "Plus Backflow" phase of licensure and also be DHS-certified as Backflow Assembly Testers.

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20 years of primacy — continued from page 1

with EPA called *primacy*. Under *primacy*, EPA oversees the state programs, and provides funding support for their operation.

Oregon public water systems

In Oregon, 2,699 public water systems serve three million people *(Figure 1, cover)*. These public water systems meet the EPA criteria as community water systems; they serve 15 or more connections used by year-round residents, or regularly serve 25 or more people per day.

Public water systems in Oregon vary widely in size, ranging from small seasonal campgrounds up to our largest cities, but 90 percent of these systems serve 500 or fewer people *(Figure 2, page 3)*.

Fifty-four large water systems serve 70 percent of the population (*Figure 3, page 3*). In addition, state law regulates very small water systems serving 4-14 connections or 10-24 people. These are not subject to EPA regulations. We have nearly 1,000 of these state regulated water systems.

The EPA role

EPA is charged with setting national standards for safe drinking water under the federal Safe Drinking Water Act. The Act was enacted by Congress in 1974, and significantly amended in 1986 and 1996. The number of public drinking water contaminants regulated by EPA increased from 22 in 1976 to 91 today *(Figure 4, page 4)*. The scale, scope, and complexity of the federal regulations increased even

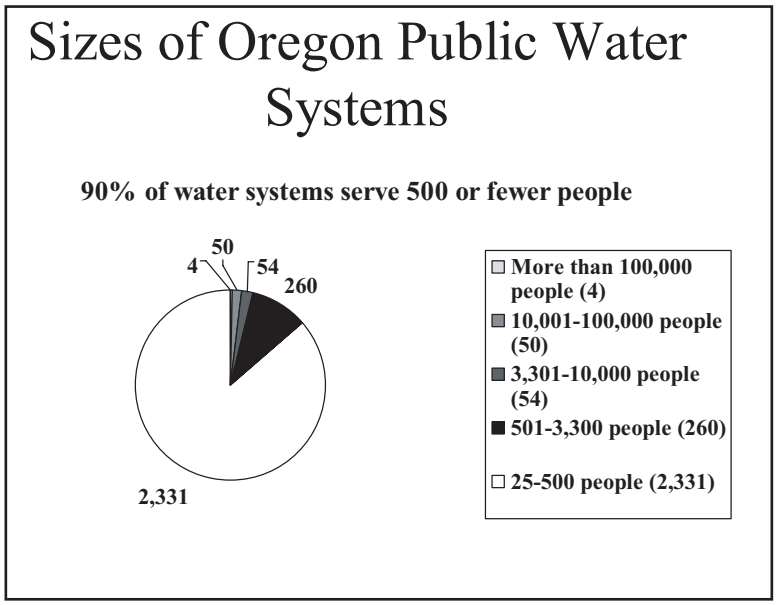

Figure 2, Sizes of Oregon public water systems

more dramatically, resulting primarily from efforts to better target regulations to specific health risks. In 1976, federal drinking water regulations occupied 20 pages in the *Code of Federal Regulations*. In 2005, they occupied 280 pages!

The state role

The federal Safe Drinking Water Act recognized the vital role of states in assuring safe drinking water and protecting public health. States have knowledge of local water systems, relationships with water system mangers and operators, and familiarity with local drinking water issues. Regulatory decisions impacting specific water systems are best made nearer to the regulated community. The federal

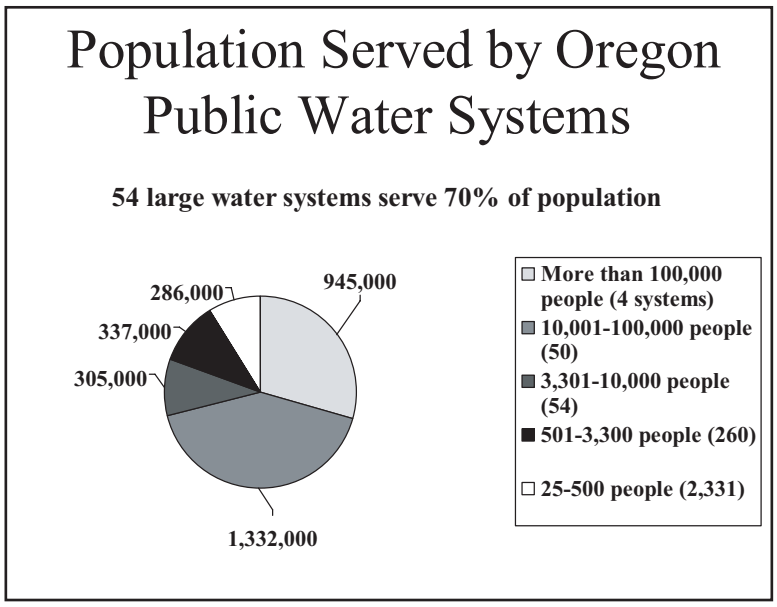

Figure 3, Population served by Oregon Public Water Systems

Act therefore specifies conditions under which the state can formally assume the primary responsibility to directly implement the national safe drinking water standards, called *primacy*. Under *primacy*, state programs are the front line; EPA oversees the state programs and provides partial funding support. As a further expression of the key role of the States, the 1996 Act specified that the state must have *primacy* as a precondition for communities in that state to access federal drinking water revolving loan funds for safe drinking water construction projects.

States perform required functions under *primacy*:

- Adopt state rules no less stringent than federal regulations within two years.
- Certify drinking water laboratories to conduct analytical tests of samples from water systems.
- Receive and manage test results received from water suppliers, determine compliance with regulations, and assure data quality.
- Investigate drinking water contamination.
- Plan for and respond to drinking water emergencies.
- Assure compliance with regulations, conduct enforcement where necessary.
- Conduct periodic sanitary survey inspections of drinking water systems, identify deficiencies, and assure their correction.
- Review and approve plans and specifications for water system modifications prior to construction.
- Conduct public education, outreach and involvement.
- Report safe drinking water compliance information to EPA.

Primacy declined in Oregon

Prior to the 1974 Safe Drinking Water Act, Oregon, like other states, operated a drinking water regulatory program authorized by state law. The Oregon program was housed in the Health Division of the Department of Human Resources (now the Department of Human Services), and had a staff of 23. In 1975, states began to adopt

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20 years of primacy — continued from page 3

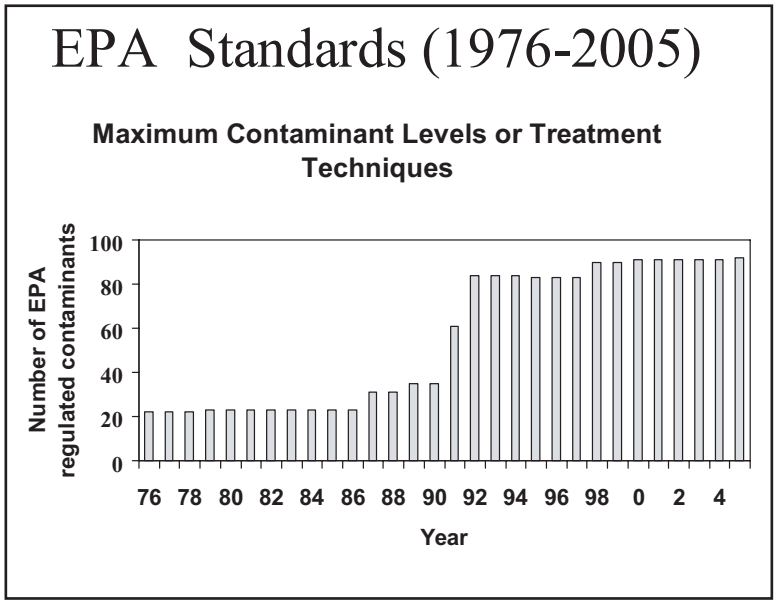

Figure 4, EPA standards (1976 - 2005)

the newly established EPA drinking water standards and assume the *primacy* role. EPA determined that Oregon would need to significantly improve its drinking water statute and rules, and increase staff to 80 within three years to effectively implement *primacy*. Amid concerns about the workload and costs specific to *primacy*, and about federal programs and mandates in general, the Governor's office declined *primacy*. In 1977, EPA began direct implementation of the national drinking water standards in Oregon, and the existing state program was largely disbanded.

Waterborne disease outbreaks spur legislative action

During the late 1970s and early 1980s, public and agency concerns mounted over continuing outbreaks of acute waterborne disease in Oregon communities. Media headlines of that time included:

- "Drinking Water Quality Uncertain" — Oregonian newspaper, 1980
- "Is Oregon's Water Hazardous to Your Health?" — Oregon Magazine, 1981
- "Head of Health Division Sees 10-year Fight to Cover Oregon With Clean Drinking Water" — Oregonian newspaper, 1981
- "Districts Fall Down on Testing, EPA Says" — Oregonian newspaper, 1981
- "Quality of Oregon's Drinking Water Sickening"— Oregonian newspaper, 1984

Against this backdrop of concern, the 1981 Legislature enacted the Oregon Drinking Water Quality Act (ORS 448), and in the midst of a severe economic recession reestablished a drinking water regulatory program in the department with 10.5 staff and contracts with local county health departments. Annual memorandums of understanding between the department and EPA coordinated the activities of the state and federal drinking water programs. The 1983 legislature increased state staffing to 14.5 positions.

Oregon assumes *primacy*

Successful initial implementation of the Oregon program led to key support by water suppliers and organizations for *primacy*. This support carried forward to the 1985 Legislature and enactment of Senate Bill 904 authorizing the department to enter into a *primacy* agreement with EPA. In spite of strong support for Oregon *primacy*, legislators, stakeholders, EPA and the department held reservations and concerns about the *primacy* agreement. The Legislature therefore subjected its *primacy* authorization to a list of ten "assumptions," included in the final Senate Bill:

- EPA provides annual program grant;
- EPA provides assistance in emergencies and outbreaks;
- EPA negotiates annual work plan for the department that can be accomplished within available resources;
- Department adopts state standards no less stringent than EPA;
- Department provides engineering assistance in four geographic areas;
- Department funds county health departments equitably;
- Department can cancel *primacy* in 90 days if EPA requirements exceed funding;
- EPA can impose financial sanctions on department for nonperformance;
- EPA can act to enforce standards if department does not;
- EPA enforcement can be by injunction or civil penalty.

After a protracted and challenging negotiation process, EPA granted *primacy* to Oregon on February 24, 1986 (*see photo this page*). EPA disbanded its program in Oregon, and the state program increased staff to 24. Only Wyoming and Indiana remained as non-***primacy*** states. Ironically, just as Oregon assumed *primacy*, Congress completed a major overhaul of the Safe Drinking Water Act that required EPA to increase the number of drinking water standards from 23 to 83 within three years, and to set 25 more standards every three years thereafter.

Oregon tackles waterborne diseases

Primacy in Oregon was implemented chiefly as an intervention method to combat the community waterborne disease outbreak problem. Many of the recognized outbreaks were associated with the use of unfiltered surface waters (rivers and streams) used for community drinking water supply, with illnesses attributed to the microscopic parasite *Giardia*. In 1988, more than half of the 300 public water systems in Oregon using surface water sources employed chlorination treatment only without filtration.

Early EPA standards for surface water focused on requiring water suppliers to meet maximum contaminant levels for turbidity, a physical property of water that indicates the presence of particles including sediment and microorganisms. Many public water systems could not supply water consistently meeting these turbidity levels, and either installed filtration treatment systems, changed to groundwater supplies (wells), or in some cases connected to other nearby public water systems. Recognizing that the simple turbidity standards alone were not adequate to protect people against the health risks of waterborne disease agents, especially *Giardia*, EPA established new surface water treatment requirements in 1989. These required water suppliers using surface water treatment to meet filtration and disinfection treatment techniques or find alternative water sources, unless the quality of the surface water source met stringent water quality criteria. By 2004, all Oregon water suppliers required to filter had installed filtration, or changed water sources (*Figure 5, page 6*). Portland, Baker City, Bend and Reedsport demonstrated that their surface water sources were protected and met the filtration exception criteria, and they remain unfiltered today.

Ernesta Barnes, USEPA Region X Administrator, signs the Oregon Primacy Agreement on February 24, 1986. Also pictured are Dick Thiel, Drinking Water Programs Chief (standing) and Mike Gearheard, Oregon Operations Office Director (seated).

Over this time period, a dramatic decline occurred in recognized Oregon community waterborne disease outbreaks (*Figure 6, page 6*). It is reasonable to conclude that this very positive public health outcome resulted from the implementation of effective filtration and disinfection treatment of surface water sources by the water supply community. Several other efforts also contributed vitally to this successful outcome: mandatory state certification of public water system operators beginning in 1987, and the Safe Drinking Water Revolving Fund beginning in 1998. Today, nearly 3,000 public water system operators maintain state certification and meet continuing education requirements. Over $100M in revolving fund loans has been made to communities for safe drinking water construction projects.

Chemical exposures reduced

The Oregon program and water suppliers also worked together to detect and reduce exposure of people to chemical contaminants in drinking water. Some water suppliers found that groundwater sources contained levels of arsenic, nitrate or organic chemicals such as trichloroethylene that were higher than maximum contaminant levels. These water suppliers either installed treatment processes or replaced water sources. Other water suppliers found that the chemistry of their source water caused

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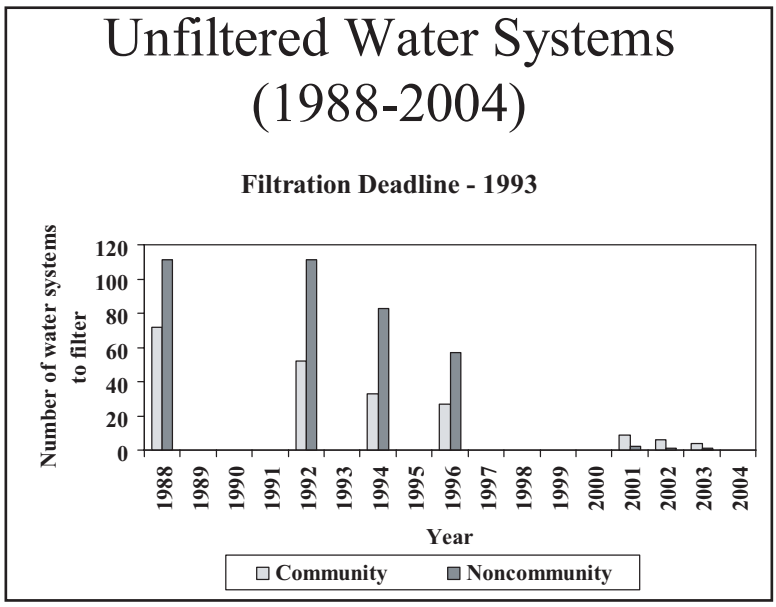

Figure 5, Unfiltered water systems (1988 - 2004)

materials used in water system components to release contaminants into the drinking water, such as asbestos from asbestos-cement water mains, or lead from home plumbing. Lead from home plumbing was the most extensive problem to solve; since 1992, 246 water systems experienced excessive levels of lead at the customer tap on at least one occasion. Water suppliers successfully reduced lead levels by either installing corrosion control treatment systems or by replacing plumbing materials (*Figure 7, page 7*).

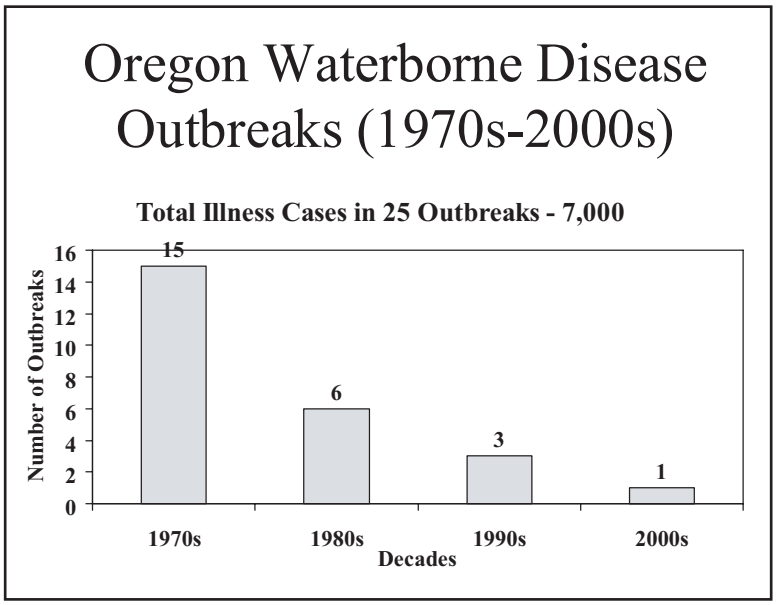

Figure 6, Oregon waterborne disease outbreaks (1970s - 2000s)

Compliance to standards improves

Compliance with health-based drinking water standards is measured and tracked by the Oregon Drinking Water Benchmark, reported annually to the Oregon Progress Board since 1994 (*Figure 8, page 7*). The Oregon Benchmark measures the percentage of the population served by Oregon community water systems that receive water meeting all maximum contaminant levels and treatment requirements continuously during the year. Oregon met the goal of 95 percent, two years ahead of schedule.

Challenges

The 20-year *primacy* effort to provide safe drinking water in Oregon yielded substantial measurable benefits in public health protection. Oregon public water systems reliably produce drinking water meeting currently established maximum contaminant levels. The occurrence of waterborne disease and instances of exposure of water users to chemical contaminants is greatly reduced.

Effort is needed now both to sustain the public health protections already achieved and to increase protections where needed. The Oregon Secretary of State (2001) and EPA Region X (2001, 2003) identified significant challenges for the Oregon program and the water supply community:

- Reduce the number of small water systems that still fail to comply with standards;
- Increase the frequency of onsite sanitary survey inspections to meet EPA *primacy* program requirements, and assure that identified deficiencies are corrected;
- Improve tracking, management, and quality of safe drinking water data received from water suppliers;
- Find ways to fund program workload associated with both recent and future EPA drinking water standards.

In 2004, a Drinking Water Task Force was formed at the direction of the Oregon Legislature consisting of key drinking water stakeholder organizations and the department (*See PIPELINE, Spring 2004)*. The task force was directed to identify the workload of the department to carry out the EPA standards, and to recommend the amounts and sources of

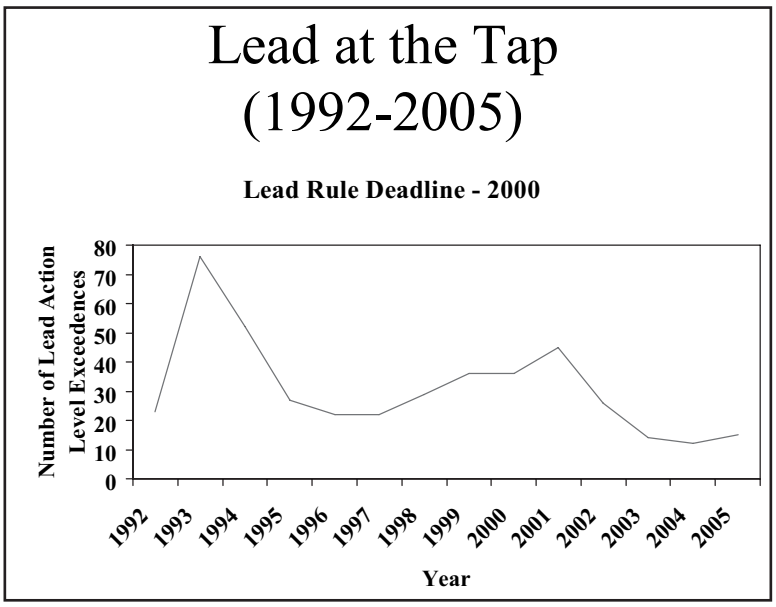

Figure 7, Lead at the tap. (1992-2005)

funding to effectively implement the standards. The task force concluded that the department requires additional resources to carry out its *primacy* responsibilities in a credible, effective and sustainable manner. The task force described three areas that require additional resources:

- Fully implement the current (2004) EPA drinking water standards (11 staff needed);
- Implement new EPA drinking water standards in 2005 and beyond (2.5 staff needed);
- Oversee the non-EPA very small public water systems subject to state law (five staff needed).

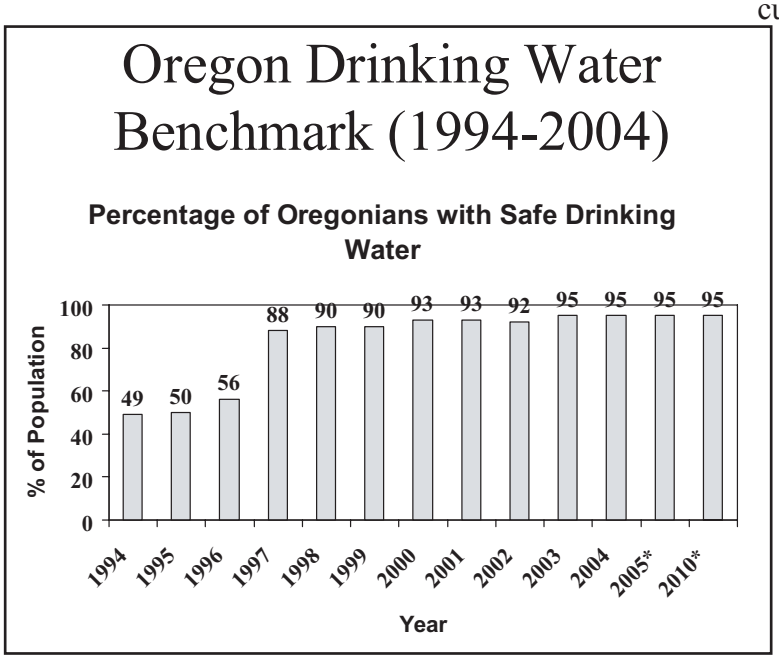

Figure 8, Oregon Drinking Water Benchmark 1994 - 2004)

Recall that EPA estimated in the late 1970s that Oregon would require a level of effort of 80 people to fully implement *primacy*. Federal funding for state programs nationally did increase over the years, but failed to keep pace with the expanding scale, scope, and complexity of the federal drinking water regulations. Nationally, a very large gap exists between funding for state programs and the workload to fully implement the EPA standards. Oregon today has 26.5 state staff committed to the *primacy* effort, plus about eight additional staff equivalents through county health department contracts. This is just slightly more than the staffing committed to *primacy* in Oregon in 1986 *(Figure 9, page 8)*. Even with productivity improvements over the years made possible by computers, databases, process improvement, and streamlining efforts, available EPA funding falls far short of workload expectations.

Oregon has been unable even to access the full amount of federal funding available due to a chronic lack of state matching funds required for federal program grants. House Bill 2171, considered but not passed by the 2005 Legislature, sought authority for new fees to fund the remaining required state match. While the fee bill did not pass, the department and stakeholders had important discussions with legislators during the session that raised the visibility and importance of safe drinking water. After the legislative session, the department increased drinking water program resources as it could within its own authority by reallocating general funds and raising current fees for specific services to cover the full cost of services provided as the Task Force recommended *(see PIPELINE, Fall 2005)*. This effort assures that the drinking water program can continue to operate at the current level of effort during 2005-07. The department expects to return to the 2007 Legislature to address additional drinking water program funding.

Looking ahead

The drinking water program will focus its limited resources on three key objectives for 2005-07:

- Improve public water system compliance with current EPA standards, including the revised arsenic standard, lead levels at the tap, stage 1 disinfection by products, long-term 1 enhanced surface water treatment,and monitoring/reporting for all current rules;

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20 years of primacy — continued from page 7

- Increase frequency of sanitary survey inspections, and correct identified deficiencies;
- Expand and improve management and quality of public water system and water quality information.

EPA recently announced final promulgation of two major new drinking water regulations, collectively referred to as the Stage 2 rules *(see PIPELINE, Fall 2005)*. The purpose of these rules is to identify water systems that have high levels of the waterborne parasite *Cryptosporidium* in their surface water sources, or have specific locations in their distribution service areas that have consistently high levels of disinfection by-products. These rules contain compliance dates for water suppliers that precede the date by which states must adopt their own versions of these rules. Oregon, along with a number of other states, lacks the resources to commit to these early implementation efforts. In addition, we believe that the public health benefit presented by the new rules in Oregon is not as high as the benefits we can realize by more fully implementing the current rules, based on what we know today. Therefore, EPA will be implementing the Stage 2 rules in Oregon for at least the next two to four years, while the department focuses on continuing implementation of the current standards.

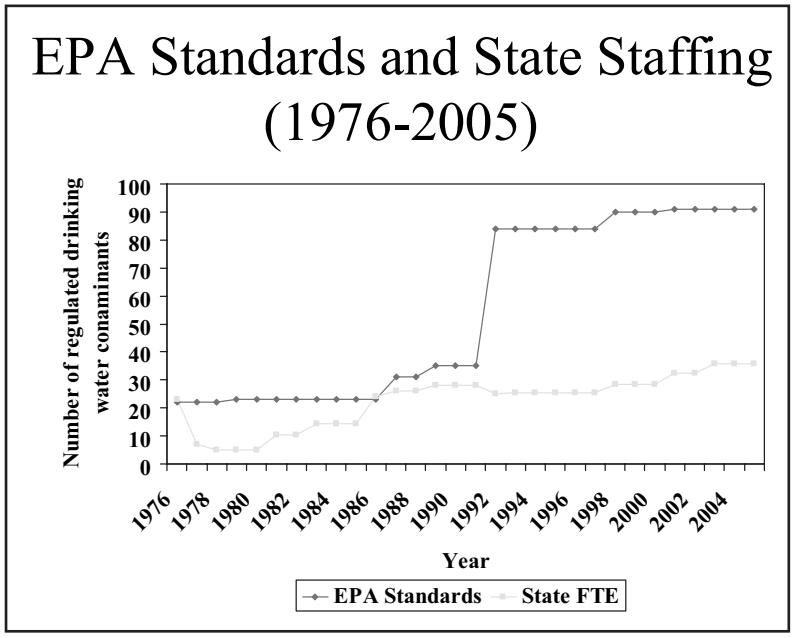

Figure 9, EPA Standards and state staffing (1976 - 2005)

Finally, we look forward to your support for collective and collaborative efforts in the 2007 Legislature to fund the drinking water program at the level needed to maintain *primacy*; assure a credible, effective, and sustainable state program; and assure Oregonians safe drinking water.

Consumer confidence reports

A wealth of assistance is available

by Tom Mitchell

All community water systems are required by the EPA drinking water regulations to submit an annual water quality report called a Consumer Confidence Report (CCR) to their customers. The CCR summarizes information that the water system has already collected to comply with EPA regulations. Most reports can fit on two or three pages.

These reports are meant to be flexible. So, in addition to the EPA-required elements, the reports allow owners and operators to communicate to their customers on any number of other system issues of their choosing. It is also an opportunity to showcase the safety of a system's water that is made possible through the numerous routine samples and other efforts made on behalf of the customers, such as construction upgrades and security measures.

Water suppliers must deliver their CCRs annually to all water system customers no later than July 1 of the following year. A copy of the CCR must also be supplied to the Drinking Water Program no later than July 1. Also required is a CCR Certification form that specifies the manner in which the CCR was distributed. The certification form is best sent along with the CCR itself so as not to be forgotten, but the rules require that the certification be submitted no later than October 1 of the same year. The certification form is available on the drinking water Web site. Below is a summary of the many sources of assistance available to produce a Consumer Confidence Report that meets the content and format requirements of the regulations.

The following aids, listed in the order of usefulness in creating a CCR, can be found on the Drinking Water Web site at: *www.oregon.gov/DHS/ph/dwp*

- **Checklist** — This is a useful, two-page summary of the basic items required to be included in the CCR. It can be very helpful to those trying to create their first CCR.

- **Oregon Association of Water Utilities (OAWU) CCR template and instructions** — The OAWU has produced a step-by-step and easy-to-follow template to guide users through 17 sections of information required in the CCR. Much of the required language is in place and only requires some "cut and paste" of sampling data and language specific to the individual water system. It can be a useful and timesaving document for those creating their first CCR, because much of the document is already written. Remember to delete the contaminants for which there are no detections (ND), as they are not required to be reported, and adding them will only increase the cost of producing and distributing the CCR.
- **CCiWriter Computer Program** — This is an EPA program that creates a CCR that complies with federal regulations. The program will automatically generate the majority of the required language. Along with an Internet connection, all you need is the system's monitoring data. It's a free service, is automatically updated to reflect any regulatory changes and CCRs can be saved, edited and downloaded as needed.
- **Guidance document** — This is a lengthy EPA document that details everything you need to know about CCRs. The document is best used as a reference manual, rather than a guide to creating a CCR for the first time. Very useful are several sample CCRs found at the end of the document, especially one titled "Sampletown Annual Water Quality Report" that can help guide small water systems in creating their CCRs.
- **Full text of the CCR Rule** — Here you will find the full text of the Oregon Administrative Rule regarding CCRs. It discusses what to include in the document, report delivery requirements and record-keeping requirements. It is best used as a reference guide, rather than a "how-to" for producing a CCR.

NOTE: If a user does not have an Internet connection, the above documents are also available in hard copy by calling the DHS-Drinking Water Program number listed below.

Additional help — If you have attempted to create a CCR using the above guidance documents but still have questions or need additional help, the following resources are also available:

- Oregon Association of Water Utilities (OAWU) in Silverton at (503) 873-8353
- Drinking Water Program in Portland — Tom Mitchell at (971) 673-0417
- American Water Works Association (AWWA) in Denver at (303) 794-2711

Water systems may also have a third party prepare the CCR for them. Some water testing laboratories will prepare them, and there are private individuals and companies that will prepare them for a fee. Regardless who prepares the CCR, the water system is still responsible for delivering the CCR to its customers and to the Drinking Water Program properly prepared and on time.

NOTE: An updated version of the CCR Certification form is located on the Drinking Water Web site. If your water system uses the Web version of this document, please start using the updated form.

Tom Mitchell is in the Protection, Planning & Certification Unit of the Drinking Water Program / (971) 673-0417 or thomas.j.mitchell@state.or.us

City of Powers #4100672 in Coos County has an opening for a Water and Waste Water Treatment Plant Operator. The drinking water treatment plant is a Keystone Package Plant and is rated for a WT2 and WD1 operator. Please contact the City Manager, Ben McMakin at 541-439-3331 to apply.

Drinking Water Program employees — Past and * present

Mary Alvey
Andy Baker
Judy Bateman
Guy Beachler
Leslie Bensching
Paul Berg
Cody Bear Blue Eagle
Joe Bogart
Fred Bolton
Norma Booth
Rachel Bosecker
Jim Boydston
* Gary Burnett
George Burton
* Joe Carlson
Lynn Cashion
* Tom Charbonneau
Joann Collins
Jill Cox
* Scott Curry
* Paul Cymbala
Mel Damewood
* Dewey Darold
John Davis
Bob Devaney
Gerald Devito
Rustie Dokelsky
Brendan Doyle
Carol Drury
Laura Dye
Sandi Edgmond
* Peter Farrelly
* John Fling
Dean Foor
* Marsha Fox
Jeff Frederick
Lisa Garbo
Carrie Gentry
Kylee Godfrey
* Bill Goss
John Gram
Mike Grimm
* Ron Hall
Sandra Heckard
* Evan Hofeld
John Huffman
* Chris Hughes
* Annette Hunt
Carrie Hutchcraft
Joe Jensen
Pam Judd
* Karen Kelley
* Lee Keyes
Vickie King
Jan Koehler
Winslow LaDue
* Debra Lambeth
Sheila Larson
Cheri Law
* Dave Leland
* Roberta Lindgren
* Kate Mattimore
Mary Meehan
Dolores Melone

Current DWP staff

Pat Meyer
* Tom Mitchell
Bernita Morgan
Juan Muniz
* Dennis Nelson
* John Odisio
Irmgard Oliver
* Amy Parmenter
* Tom Pattee
Bob Patterson
Mike Patterson
Meredith Perkins
Tom Perry
Robin Peterson
Dave Phelps
Shane Phelps
* John Potts
Jennifer Powell
Georgine Proctor
Alerita Purvine
* Kurt Putnam
* Roberto Reyes-Colon
Brian Rigwood
* Irene Ronning
Diane Rumage
* Kari Salis
Joan Scheer
Alison Schutt
Harold Smith
Al Smythe
Nicole Spray
Chuck Stahl
Nancy Stellmach
Paula Stemmler
Bart Stepp
Claudia Stiff
* Diane Stockton
John Stoner
John Straughan
Kim Swanson
Cassie Walker
* George Waun
Bonnie Waybright
* Deb Weatherford
George Weed
* Diane Weis
Richard Weixel
Sue Welton
* Michael Whiteley
JoAnn Worley
Sam Yamin
Elizabeth Yost
David Yu

Training calendar

CEUs for Water System Operators

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

OAWU — (503) 873-8353

OAWU strives to ensure CEU awarding, however they are unable to guarantee acceptance for class CEUs for certifications by regulatory agencies.

Apr. 18	Source Water Protection Planning
Apr. 19	Proper Management Procedures
Apr. 19	Setting Water & Wastewater Rates
May 4-5	WT/WD Certification Review
May 11-12	WT/WD Certification Review
May 23	Small Water System O&M part I
May 24	Small Water System O&M part II
May 25	Small Water System O&M part III

Cross Connection/Backflow Courses

Backflow Management Inc. (B)
(503) 255-1619
Clackamas Community College (C)
(503) 657-6958 ext. 2388

Backflow Assembly Tester Course

Apr. 17-21	Portland (B)
June 12-16	Clackamas (C)
June 26-30	Portland (B)

Cross Connection Inspector Course

Apr. 10-13	Clackamas (C)
Apr. 10-13	Portland (B)
June 12-15	Portland (B)

Cross Connection Inspector Recertification

Apr. 14	Clackamas (C)

Water System Training Course

Department of Human Services
Marsha Fox/(971) 673-0408

April 11	Salem
April 24	Hillsboro
April 27	Clackamas
June *	The Dalles & Coos Bay

* Dates to be announced

Department of Human Services
Drinking Water Program
PO Box 14450
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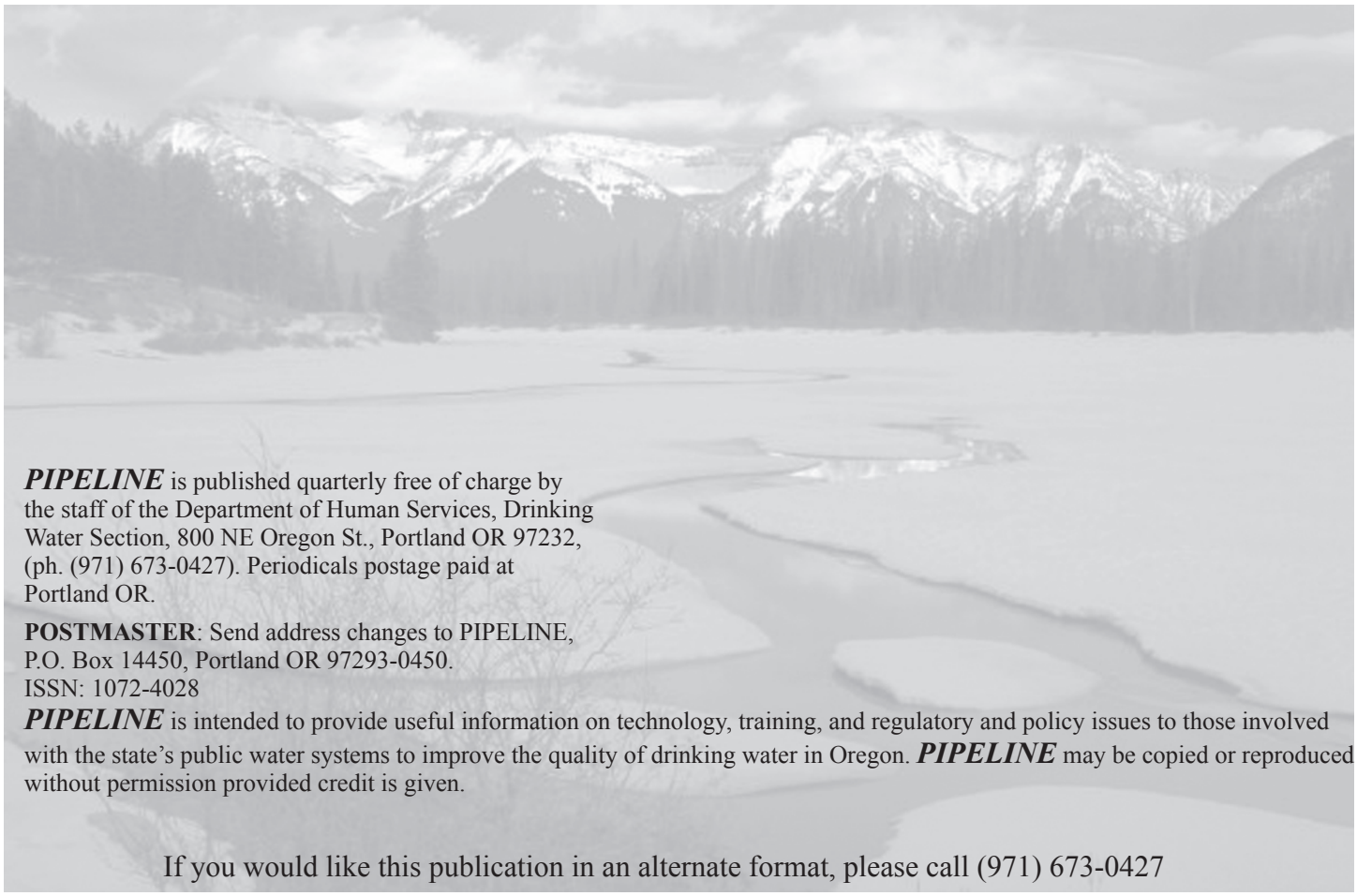

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