REVIEW YOUR WATER SYSTEM’S RECORD ON THE INTERNET!
by Mary Alvey

Now you can check on your water system’s compliance status - 24 hours a day, 7 days a week. To review this data, you need access to the Internet and a computer with a browser such as Netscape or Explorer. If you don’t have a computer and Internet access, you might be able to use your local library or school.

Here is the location: http://159.121.19.167

Just type this location where you might otherwise type in a “www.somewhere.com” address using your browser and go to the site. Once there, you will want to add it to your “Bookmarks” or “Favorites”. You will find a general information page and clues on how to locate your water system by name or PWS ID number. You can print the information from each page.

We hope you will verify it against your records and if you find we don’t have all of the reports you have, send copies to us. This will help ensure that our records reflect all of the testing you have done. You can help us to make the public water system database as complete and accurate as possible.

While you are online, check out the information on our website by selecting “DWP Home Page” in the header. There you will find information on preparing your Consumer Confidence Report, the loan fund for water system improvements, training announcements, forms and water testing requirements for your system type, the complete “Rules for Public Water Systems”, health effects information for contaminants, and much more.

Mary Alvey, RS, is Unit Manager of the Monitoring & Compliance Unit

DRINKING WATER PROGRAM UPDATE
by Dave Leland

We recently conducted our annual series of fall workshops for our local county health department drinking water partners. I’ll share some of the highlights of those workshops with you, focusing on current issues including program results, update on drinking water regulations, program budget and workload, and program priorities.

The 25th anniversary of the federal Safe Drinking Water Act this year gives us an opportunity to reflect on the accomplishments by the drinking water community in Oregon toward safer drinking water for people. The article on page 2, reprinted from the Oregon Insider newsletter, recounts the work to date. Regulatory compliance rates are up, the drinking water benchmark is up, community safe drinking water construction projects are up, and reported disease outbreaks are down. Good work, everyone!

While much has been accomplished, there remains much to do. The new standards and regulations of the 1996 Safe Drinking Water Act (SDWA) are beginning to take effect and demand the attention of both our program and Oregon water suppliers. New EPA rules on controlling disinfection by-products and Cryptosporidium are in place (PIPELINE, Spring 1999), as are requirements on annual Consumer Confidence Reports (PIPELINE, Fall 1998). Over 600 CCRs were actually received by our office from Oregon communities by the October deadline! The implementation schedule for the next several years is daunting, including: Unregulated Contaminant Monitoring (8/99), Public Notification (12/99), Filter Backwash Regulation (8/00), Radon (8/00), statewide Capacity Development Strategy (8/01), Long-Term Stage 1 Enhanced Surface Water

Continued on page 7
THE SAFE DRINKING WATER ACT
25 YEARS OF PROGRESS IN OREGON
by Dave Leland

Reprinted by permission from Oregon Insider,
David Light, Editor. Phone: (541) 343-8504,

December 16, 1999, marks the 25th anniversary of the federal Safe Drinking Water Act. The Act was amended and reauthorized on a number of occasions since its original passage, the most significant amendments occurring in 1986 and 1996. This anniversary is an important opportunity to reflect on and celebrate the significant achievements in safe drinking water nationally and in Oregon, and to look forward to the new work ahead.

Safe drinking water is important to everyone! We all drink it every day, in one form or another. We all need an adequate quantity of safe drinking water to live - about two liters per day, on average. The most common and available drinking water is tap water from public water supply systems, which serve about 2.9 million people here in Oregon. Public water systems include those that supply residential communities, as well as those serving premises used by the public, such as schools, businesses, campgrounds, and parks. Public water systems take water from a natural supply source, either surface water sources (rivers, lakes, and streams), or groundwater (wells and springs). The water system may have a central treatment plant to remove contaminants, such as filtration and disinfection for surface water sources. The water system then distributes the water to users through a distribution network of water mains and storage tanks. The safety of tap water distributed by public water systems is regulated under the federal Safe Drinking Water Act in order to protect public health.

Other forms of drinking water include individual home wells and bottled water. Home wells serve about 500,000 Oregonians, and there is comparatively little direct regulation of safety of this water in Oregon. Bottled water is regulated as a food product under regulations of the federal Food and Drug Administration.

A system of “multiple barriers” is used to assure the safety of our drinking water and provide health protection. The first barrier is protection of the waters of our state from initial contamination, especially those waters used as drinking water supplies. This work is done by state and federal environmental programs such as those under the federal Clean Water Act. The second barrier is treating the water used by public water systems as necessary to reduce contaminants before distribution to users. A final degree of safety is provided by protecting the water from recontamination as it is distributed to water users after treatment. The most important tools we have to monitor the safety of our drinking water are: 1) regular water sampling and testing for contaminants to be sure concentrations are below established maximum allowable levels; and 2) close monitoring of water treatment processes to be sure that treatment requirements are continuously met. These tools are called public drinking water standards.

Drinking Water Contaminants

All drinking water, including bottled water, can be reasonably expected to contain at least small amounts of some contaminants, but the mere presence of contaminants in a water does not necessarily mean that the water presents a health risk. Drinking water standards and testing schedules are established for public water systems to limit the exposure of people to certain contaminants. These are described in general below, from highest to lowest level of health concern and frequency of occurrence in Oregon.

Microbial Contaminants: such as bacteria, viruses, and parasites which can cause acute gastrointestinal illnesses in people. These microorganisms can come from sewage treatment plants, septic disposal systems, agricultural and livestock operations, and wildlife.

Corrosion Products: resulting from contact between water and the inside surfaces of water mains, storage tanks, and home or premise plumbing.

Disinfection By-Products: chemicals formed by the interaction of natural substances in water with essential disinfection treatment chemicals, such as chlorine, used to inactivate harmful microorganisms.

Inorganic Chemicals: such as salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharge, mining, or farming.

Organic Chemicals: pesticides and herbicides which may come from agriculture, forestry, urban stormwater runoff, and residential use. Other synthetic chemicals come from industrial discharges, gas stations, urban stormwater runoff, and septic tanks.

Radioactive Contaminants: naturally-occurring or from mining discharges.

Safe Drinking Water -
A Key Public Health Achievement

Control of infectious disease is recognized as one of the ten great public health achievements of the 20th century in the US. (Centers for Disease Control and Prevention, 1999). Contaminated water was a major cause of illness and death early in the century. Clean water and improved sanitation dramatically reduced infections like cholera and typhoid that can be spread by contaminated water. In addition, the discovery of antimicrobial medical therapies successfully controlled tuberculosis and sexually transmitted diseases. [The other nine great public health achievements are vaccination, motor-vehicle safety, safer workplaces, decline in deaths from coronary heart disease and stroke, safer and healthier foods, healthier mothers and babies, family planning, fluoridation of drinking water, and recognition of tobacco use as a health hazard.]
In Oregon, drinking water safety was first addressed by communities founded by the early settlers. As communities grew, water systems were established using more remote upland streams, while sewage was disposed of into local rivers below drinking water intakes. An example is Portland’s Bull Run watershed, first tapped in 1895, and protected from human access by an Act of Congress in 1904. Public drinking water safety was first addressed in Oregon by the Board of Health in the 1920s, and then by the Oregon Health Division in the 1970s.

**National Drinking Water Regulations**

Early federal regulation of drinking water focused on interstate carriers, such as ships and trains. The 1912 Interstate Quarantine Act regulations prohibited the use of the “common cup” for serving drinking water. In 1914, the first drinking water standards were established governing the level of bacteria in drinking water. In 1925, a few chemical standards were introduced. US Public Health Service standards were established in 1943, 1959, and 1962, ultimately covering 28 drinking water contaminants.

In the late 1960s and early 1970s, several surveys and studies of community drinking water systems showed that US Public Health Service standards were often not met, and that other contaminants, such as organic chemicals, occurred along with elevated rates of chronic diseases like cancer. This heightened concern led to passage of the federal Safe Drinking Water Act (PL 93-523) on December 16, 1974. The Act defined roles of the federal and state government in regulating drinking water safety. The US Environmental Protection Agency (EPA) was charged with establishing national public drinking water standards. The states, with financial assistance from EPA, were to adopt, implement, and enforce these standards - an arrangement called “Primacy”. By 1986, drinking water standards were established for 23 contaminants and 49 states had assumed Primacy.

Oregon declined Primacy in the late 1970s. EPA set up an office in Portland and began to implement the national standards directly within Oregon. In 1981, the Oregon Legislative Assembly passed the Oregon Drinking Water Quality Act (ORS 448), with broad support by the drinking water community. In 1982, a program to carry out the state Act was established at the Oregon Health Division. A Memorandum of Understanding was established between EPA and the Division to coordinate efforts of the two programs. In 1985, the Division received authorization from the Legislature to apply for Primacy for the federal Act, and in 1986 the Division concluded Primacy negotiations with EPA, adopted the federal drinking water standards, received the first annual Public Water Supply Supervision grant assistance, and staffed up to carry out the duties of both the state and federal Acts.

Also in 1986, the federal Safe Drinking Water Act was significantly amended by Congress in an atmosphere of concern over the slow pace of EPA in establishing drinking water standards. The 1986 SDWA required EPA to set 83 specific standards by 1989 and 25 more every three years thereafter, required EPA to set criteria for requiring disinfection and filtration treatment for all surface water supplies and disinfection of all water supplies, banned the use of lead solder and fluxes, authorized protection of land areas around public water system wells, and expanded enforcement powers of EPA.

The expansion in the number of drinking water standards is illustrated in Figure 1. By 1996, there were 84 standards in place, but several problems with the 1986 Act were clearly evident. Insufficient health research and information was available to support the mandated schedule of standard-setting. Widespread lack of compliance with standards and testing schedules plagued mainly the very large group of smaller public water systems. Communities lacked the financial resources to construct improvements needed to meet the standards, and federal and state regulatory programs were understaffed for the effort. Finally, there was a lack of understanding of and commitment to protecting water supplies from contamination in the first place (source protection). These concerns led to the 1996 Safe Drinking Water Act Amendments, signed on August 6, 1996.
mum qualifications for operators of public water systems. The first new standards under the 1996 Act were established in December, 1998, controlling disinfection by-products and the waterborne parasite Cryptosporidium.

Oregon Accomplishments
The work accomplished over the last 25 years by the Oregon drinking water community has been impressive, involving the efforts of public water suppliers, laboratories, consultants, drinking water organizations, partner agencies, and regulators. Currently, the Health Division and local county health departments regulate and supervise over 3,600 public water systems statewide, serving a total of over 2.9M people. 90% of these systems serve less than 500 people each. Almost 300 systems use surface water sources and over 3,300 use groundwater exclusively. These water systems must test their water periodically for up to 84 different contaminants each, and report the results to the Division.

In the 1970s and early 1980s, outbreaks of waterborne disease were recognized in Oregon communities with disturbing regularity (Figure 2). These outbreaks occurred primarily from use of surface water supplies with no filtration treatment and inadequate disinfection treatment - the main microbial culprit was Giardia lamblia. From 1974-1999, 358 community water improvement projects were completed by Oregon communities to meet a variety of specific drinking water standards (Figure 3). 164 projects were to filter surface water supplies and to control bacteria. The result has been a decline in the occurrence of community waterborne disease outbreaks (Figure 2). An additional 168 projects were to control levels of lead and copper at the tap from corrosion of household plumbing. Relatively few Oregon communities detect chemical contaminants at health concern levels; 26 communities have completed projects to reduce or eliminate levels of nitrate, arsenic, or organic chemicals.

In 1998, the Oregon Safe Drinking Water Revolving Loan Fund was established in partnership with the Oregon Economic Development Department using the federal revolving fund grants. $40M is available for loans to Oregon communities and 11 loans have been made so far. Assessments of public drinking water supply source areas was initiated in partnership with the Oregon Department of Environmental Quality (DEQ). Technical assistance for small communities in Oregon is now available through contractors.

Our goal to make sure that contaminant concentrations are continuously below established maximum allowable levels and to continuously meet established water treatment performance standards. Since 1994, the Division has tracked the Drinking Water Benchmark, a measure of the percentage of Oregonians served by communities where the drinking water meets all the health-based standards continuously during the year (Figure 4). The goal is to reach a 95% success rate by 2005, and we are well on our way to meeting that goal.

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Infectious Agent</th>
<th>Number of Cases</th>
<th>Source Water &amp; Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>Crater Lake National Park</td>
<td>Enterotoxigenic E. Coli</td>
<td>2200/628</td>
<td>Sewage overflow into spring supply</td>
</tr>
<tr>
<td>1978</td>
<td>Century Dr. Apts (Linn Co.)</td>
<td>Shigella</td>
<td>20/175</td>
<td>Unchlorinated Well</td>
</tr>
<tr>
<td>1978</td>
<td>Neskowin</td>
<td>Giardia</td>
<td>7/7</td>
<td>Unfiltered surface water</td>
</tr>
<tr>
<td>1979</td>
<td>Colton</td>
<td>Enterovirus</td>
<td>7/7</td>
<td>Unfiltered surface water</td>
</tr>
<tr>
<td>1979</td>
<td>Government Camp</td>
<td>Giardia</td>
<td>10/44</td>
<td>Unfiltered surface water</td>
</tr>
<tr>
<td>1979</td>
<td>Lady Creek (Zig Zag)</td>
<td>Giardia</td>
<td>10/-</td>
<td>Inadequately filtered surface water</td>
</tr>
<tr>
<td>1980</td>
<td>Rockaway</td>
<td>Giardia</td>
<td>10/-</td>
<td>Inadequately filtered surface water</td>
</tr>
<tr>
<td>1982</td>
<td>Corbet</td>
<td>Giardia</td>
<td>30/-</td>
<td>Inadequately filtered surface water</td>
</tr>
<tr>
<td>1984</td>
<td>Canyonville</td>
<td>Giardia</td>
<td>43/-</td>
<td>Inadequately filtered surface water</td>
</tr>
</tbody>
</table>
Upcoming Efforts

While much has been accomplished, much remains to be done. Increased levels of research should expand our understanding of drinking water safety and allow us all to better focus efforts on a health risk basis. The days of community-wide disease outbreaks from microbial contaminants should be behind us as we complete the few remaining projects to provide filtration treatment of surface water supplies. But, concerns remain about sensitive sub-populations such as the very young and the aged, and those that have compromised immune systems from infections, illness therapies, or from organ transplants. While maintaining effective water treatment is key to protecting people from microorganisms, we must also limit the long-term exposure of people to the chemical by-products of essential disinfection treatment. In the next several years, new or revised standards will be implemented for: radon; arsenic; disinfection byproducts; filtration of surface water; and treatment of groundwater - as well as for the first five new contaminant standards. Once public water system source water areas are assessed for risk of future contamination, local communities must be encouraged to use these assessments to undertake voluntary protection efforts. Finally, we must find ways to help water suppliers, especially those with smaller water systems, to increase their capacity to meet the increasingly complex standards and sampling schedules.

Information Increases

The result of this effort should be increasingly safer drinking water supplies in which we can all continue to have a high level of confidence. By this fall, water users in Oregon communities will receive the first annual Consumer Confidence Reports from their local water suppliers. These short reports will contain key information about the local tap water. For more information on drinking water in general, see the Health Division Drinking Water home page at www.ohd.hr.state.or.us/cehs/dwp, or contact the drinking water program at 503/731-4010.

For Additional Information, Contact: Dave Leland, Manager, Drinking Water Program, OHD/DHS, 503/731-4010
RE: Drinking Water Advisory Committee Meetings, contact: Diane Weis, Drinking Water Program, OHD/DHS, 503/731-4010
RE: Free Water Supplier Responsibilities Video & Handbook, contact: Diane Weis, Drinking Water Program, OHD/DHS, 503/731-4010
RE: Drinking Water Protection and Surface Water Assessment, Oregon’s “Source Water Protection Plan”, or arranging a Source Water Protection presentation, Sheree Stewart, Drinking Water Protection Coordinator, DEQ, 503/229-5413
RE: Groundwater Systems Protection Assessment, Dennis Nelson, Drinking Water Program, OHD/DHS, 541/726-2587

Dave Leland, PE, is the Manager of the Drinking Water Program

THE NEW OREGON ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

by Dr. Irene Ronning

From 1986 until the present, Oregon has been granting approval to qualified laboratories that test public drinking water through the Drinking Water Laboratory Certification Program (DWLCP), Oregon’s only environmental lab program. However, in the 1999 legislative session, the Oregon Legislature approved a bill to establish the Oregon Environmental Laboratory Accreditation Program (ORELAP). This new program will accredit labs to national standards for tests used in the implementation of the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA) as well as the Safe Drinking Water Act (SDWA) thereby replacing the current DWLCP.

Just as with the Drinking Water Laboratory Certification Program, the rules for ORELAP will be adopted by the Oregon Health Division (HD) which will administer the program. However, the accrediting authority of the new program will actually reside with three state agencies, Oregon Dept. of Agriculture, Oregon Dept. of Environmental Quality (DEQ), and HD. Also, whereas the standards for the DWLCP are based on the Environmental Protection Agency’s (EPA) drinking water laboratory certification manual, ORELAP standards are those adopted by the National Environmental Laboratory Accreditation Conference (NELAC) as implemented through the EPA’s National Environmental Laboratory Accreditation Program (NELAP). Additionally, ORELAP, unlike DWLCP, will be a fee-based program with the labs charged fees according to a schedule described in the program rules.

Continued on page 6
In order for ORELAP to grant NELAP accreditation, ORELAP must be granted NELAP accrediting authority by the EPA. Prior to the establishment of ORELAP, Oregon applied for such authority through DEQ and HD as separate entities and for different programs but, with the understanding that the two applications would be combined with the creation of ORELAP. Because of delays within EPA, Oregon was not granted approval at the same time as the other 11 states which also applied. However, because Oregon is expected to be approved soon, Oregon was allowed to attend the “graduation” exercises at July 1999 NELAC, where Dr. Irene E. Ronning, Coordinator of DWLCP and representing HD, and Ms. RaeAnn Haynes, Quality Assurance Officer of the DEQ lab, were presented with unsigned NELAP certificates.

The rules for ORELAP are expected to be adopted by the end of October 1999 and the first labs accredited on July 1, 2000. Although ORELAP accreditation will be voluntary for many types of testing, accreditation/certification will still be required of all labs which report drinking water results to the HD.

It is hoped that the establishment of ORELAP with its adherence to the more stringent NELAC Standards and emphasis on total quality management, will give laboratory customers and ultimately, the people of Oregon greater assurance of the quality of the data produced by ORELAP accredited laboratories.

Dr. Irene Ronning is with the State of Oregon Public Health Laboratory and is responsible for certifying Oregon drinking water laboratories.

**Receive NELAP award (left to right on dais):**
Irene Ronning, OHD-PHL; RaeAnn Haynes, DEQ; Nancy Wentworth, EPA; Jeanne Mourrain, EPA

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**TECHNICAL ASSISTANCE CIRCUIT RIDERS MAKING IMPACTS & IMPROVEMENTS FOR SMALL WATER SYSTEMS**
by Mike Grimm

Funded with a portion of the Drinking Water State Revolving Loan Fund (called a “set-aside” fund), the technical assistance circuit riders are providing statewide training and one-on-one technical assistance for communities under 10,000 population. EES Consulting, Inc. has been hired to provide technical assistance to those communities using surface water, and the Oregon Association of Water Utilities (OAWU) has been hired to work with the communities under 10,000 population using groundwater.

A community water system Resolution Plan is the key element that each organization provides. The Resolution Plan has no regulatory intent for DWS. Instead, it is intended to help the communities understand:

1. What are the current capital improvement needs and operational changes necessary for a viable water supply system
2. What steps should be taken to implement these changes for improvement
3. What are the cost of these improvements

This technical service is being offered free of charge to the communities. As of the first of October 1999, nearly 60 water systems statewide have been visited by the two contract circuit riders. **DWS encourages any water system to contact the circuit riders directly for field assistance, technical advice or a Resolution Plan evaluation.** Below is brief outline of areas and tasks on which both circuit riders will be working:

**EES Consulting, Inc.: (503)229-5900**
< 10,000 pop. Communities w/ Surface Water
1. Resolution Plans
2. Cross Connection Program one-on-one technical assistance visits with communities to improve ordinances
3. General cross connection control training sessions - statewide (up to 4 training sessions)
4. Water treatment operations training sessions statewide
5. Revision of DWS Small Water System Training Course

**OAWU: (503) 873-8353**
< 10,000 pop. Communities w/ Groundwater
1. Resolution Plans
2. Cross Connection Program one-on-one technical assistance visits with communities to improve ordinances
3. General cross connection control training sessions - statewide (up to 4 training sessions)
4. Water distribution training sessions statement
5. On site trouble shooting of short term problems (leak detection & repair, etc.)

Mike Grimm, PE, is in the Protection & Development Unit of the Drinking Water Program

Please direct your comments or questions you might have to Mike at (503) 731-4317 or by E-mail at michael.w.grimm@state.or.us.
REMINDER - CONTINUING EDUCATION REQUIREMENTS COMMUNITY AND NONTRANSIENT NONCOMMUNITY WATER SYSTEMS
by Mary Alvey

Persons in charge of operating certain public water systems must earn 2 CEUs every two years:

- All certified operators - If your system has a certified operator, that individual must earn two (2) CEUs every two years in water related courses to renew their certificate.
- If you own/operate a community or nontransient noncommunity (ex. schools and work sites serving at least 25 of the same people for at least 6 months during the year) water system that uses surface water or uses groundwater and has 150 or more connections, you must have a certified operator. This is a new requirement for nontransient noncommunity systems due to changes in the statute by the 1999 Oregon Legislature.
- Operators of community and nontransient noncommunity water systems which serve less than 150 connections and use only ground water, must name a person or persons responsible for the operation to earn the continuing education units according to ORS 448.455(1). This has always been required of community water systems but is a new requirement for nontransient noncommunity systems and you need to start planning now.

The purpose of continuing education is to make you aware of the water quality testing and other requirements to ensure the delivery of safe drinking water to your customers. There are several options for small systems to get CEU credits:

1. Obtain 2 CEUs in any drinking water related courses approved by the Environmental Services Advisory Council (ESAC). If two or more people are responsible for the system, they can combine their CEUs for a total of 2. Two CEUs equal 20 hours of instruction. Training opportunities provided by various organizations are listed on the back of this newsletter, on the training calendar produced by Linn/Benton Community College (www.lbcc.cc.or.us/enviro tech), in other newsletters such as Oregon Association of Water Utilities (503)873-8353, PNWS AWWA (503) 246-5845 and on our web site (www.ohd.hr.state.or.us/cehs/dwp/whatsnew.htm). There are also home study courses. Call our office if you need information on these (503) 731-4899.
2. Attend our Small Water System Training Course. This course is offered free of charge at locations around the state and is worth 6 hours or 0.6 CEUs. Attendance at this course satisfies the full CEU requirement because it is specifically designed to address the needs of small systems. Notices are sent to water systems prior to a course in their area. The schedule is posted on our web site.

Mary Alvey, RS, is Unit Manager of the Monitoring & Compliance Unit

CROSS CONNECTION UPDATE
by Bonnie Waybright

The current list of approved backflow assemblies is dated 1999, with an addendum dated September 23, 1999. Current lists of certified Cross Connection Inspectors and Backflow Assembly Testers are available upon request. Call (503)731-4899 to request this information.

Bonnie Waybright, PE, is in the Field Services Unit of the Drinking Water Program

Drinking Water Program Update (continued from page 1)

Treatment Rule (11/00), Groundwater Rule (11/00), Radionuclides (11/00), Arsenic (1/01), and Operator Certification (2/01).

More to come on these future rules as we move forward. In the meantime, pay attention to water organization publications (Oregon Association of Water Utilities, American Water Works Association), and the USEPA home page, which you can access from links located on our home page (address above).

We've recently been examining the capability of our own program to meaningfully implement all the new rules and initiatives that are before us. Program resources are limited, and only a portion of our revenues are indexed for inflation. As a result, we are hard-pressed to even maintain our current program staffing. Our best workload estimate shows that our current program is staffed at about 80% of what is required in 1999 for full implementation of the SDWA as scheduled, and that by 2005, we will be at 60% because of the workload increase from the new rules. Our Drinking Water Advisory Committee has worked closely with us, establishing priorities for our program to make the best use of the limited resources. The Committee also approved use of a small portion of the state revolving fund to keep the program at the current staffing level. With such a small regulatory program, maintaining the rate of progress on safe drinking water in Oregon is highly dependent on you, the local water supplier, doing your very best to understand and follow the rules, report your water sample results and operation data accurately, completely, and on-time, and to stay on-track to use State Revolving Loan funding to complete needed safe drinking water construction projects.

Look for more detailed information on all of these issues in future editions of the PIPELINE. We look forward to continuing to work with you to meet the opportunities and challenges that face all of us over the next several years. As always, we welcome your thoughts, suggestions, and especially, your assistance! Do your best, and we promise to do our best as well!!

Dave Leland, PE, is the Manager of the Drinking Water Program
TRAINING CALENDAR

Oregon Chapter American Public Works Association
(541) 926-0044
Feb. 17-18 GIS for New Users
Mar. 2-3 Project Management
Mar. 29-31 The Developing Leader
Mar. 30-31 Construction Inspection
Apr. 12-14 Spring Conference
Apr. 26-28 Street Maint. & Collection Systems
May 2-3 Road and Street Surface Repair & Maint.
May 18-19 Pump Station Design

Clackamas Community College
(503) 657-6958 ext. 2388
Mar. 20 UV Disinfection Workshop
Apr. 30-May 3 16th International ABPA Conference
June 13-15 Waterworks School

Backflow Management Inc.
(503) 255-1619
Jan. 27 Confined Space Entry
Jan. 28 Backflow Assembly Repair

Oregon Cross Connection Inspectors Regional Subcommittee
Chuck Commiskey/(541) 267-3128
Feb. 18 Public Education in Cross Connection Control
May 19 Cross Connection Control and the Plumbing Code

Cross Connection/Backflow Courses
Backflow Management Inc. (B)
(503) 255-1619
Clackamas Community College (C)
(503) 657-6958 ext. 2388
Backflow Assembly Tester Course
Jan. 10-14 Portland (B)
Jan. 24-28 Medford (C)
Mar. 13-17 Warm Springs (C)
Backflow Assembly Tester Retraining/Recertification
May 5 Oregon City (C)

Cross Connection Inspector Course
Feb. 7-10 Portland (B)
Feb. 22-25 Bend (B)
Apr. 10-13 Oregon City (C)

Cross Connection Inspector Update
Apr. 14 Oregon City (C)

Water System Training Course
Oregon Health Division
Marsha Fox/(503) 731-4899
Feb. 15 Albany
Mar. 15 Salem
Apr. 11 Grants Pass
Apr. 20 Hillsboro
Apr. 21 Clackamas County*
May 10 The Dalles
June Coos Bay*

*date and location to be announced

IF YOU WOULD LIKE THIS IN AN ALTERNATE FORMAT, PLEASE CALL (503) 731-4010