OREGON’S SAFE DRINKING WATER REVOLVING LOAN FUND
APPROVED BY EPA
AWARD TOTAL IS $18,920,500
By Dave M. Phelps

The first two loans from Oregon’s new Safe Drinking Water Revolving Loan Fund rolled out the door. Congratulations go to the cities of Bandon and Gold Beach!

Oregon’s first Drinking Water State Revolving Fund grant award of $18,920,500 was approved by the US-EP A on July 19, 1998. This award, along with $3,874,000 in state matching funds, creates Oregon’s Safe Drinking Water Revolving Loan Fund with over $19,407,426 in loan money for 1997 and supports some federally mandated water program activities.

The projects to be funded from this first year award were identified from 135 proposals submitted last summer by Oregon community and non-profit noncommunity water systems. All projects were rated and ranked using health risk, compliance and affordability criteria. Of these, 29 projects with the highest ratings can be funded from this first award. (see Fall/Winter 1997 issue, page 3 - 1997 SDWRLF Project Priority List)

Oregon Economic Development Department, which manages Oregon’s Safe Drinking Water Revolving Loan Fund, is reviewing other loan applications while still more water systems are completing their loan applications. Here is a brief summary of those 29 projects:

- Two cities, Bandon and Gold Beach, received loans totaling $1.0 million. (See photos on Page 6)
- Six other applications are being reviewed which are seeking a total of $4,933,665 in SDWRLF assistance.
- Seven more water systems advised OEDD they are finalizing their loan packages seeking just over $4 million in SDWRLF assistance.
- Nine water systems have not advised OEDD of their decision to apply for available 1997 SDWRLF.
- Five water systems have withdrawn their request for 1997 SDWRLF assistance, making an unused balance of $2,257,102 available for loan to other projects on the 1997 SDWRLF Project Priority List.

These 29 projects have one year from the time loan application materials were mailed to sign letters of commitment for a loan. Application materials were mailed in mid-January 1998. This gives a water system

CONSUMER CONFIDENCE REPORTS
By Mike Patterson

Background information

The Consumer Confidence Report rule (CCR), which applies to all community water systems (CWSs), became effective on September 18, 1998.

The CCR rule requires CWSs to provide their customers with an annual drinking water quality report. The report format and content was developed by EPA in consultation with water suppliers, environmental groups and the states.

The Consumer Confidence Report is basically an annual report card which informs the customers whether or not a CWSs drinking water meets federal standards. It must contain information on the quality of the water delivered and characterize the risks (if any) from exposure to contaminants detected in the drinking water. Customers provided with this information, especially those with special health needs, can make informed decisions regarding their personal use of the drinking water.

Specific CCR Requirements

The Consumer Confidence Reports must include the following information:

1. The source(s) of drinking water (springs, wells, rivers, etc.)
2. A brief summary of the susceptibility to contamination of the source water based upon the source water assessments as they are completed by the states over the next 3 years.
3. Instructions on obtaining a copy of the water system’s source water assessment.
4. A table showing the highest level of any contaminant detected in their drinking water plus EPA’s health-
(continued on page 2)
CCR (continued from page 1)

based standard (maximum contaminant level) for that contaminant for comparison and the probable source of the contaminant.

5. The water system’s compliance with other drinking-water-related rules including monitoring.

6. An educational statement for vulnerable populations. Individuals who have suppressed immune systems caused by chemotherapy, organ transplants, aids, etc. fall into this category.

7. Educational information on nitrate, arsenic, or lead where the contaminants are detected above 50 percent of EPA’s maximum contaminant levels.

8. The phone numbers for additional sources of information available from the water system’s staff or EPA’s Safe Drinking Water Hotline (800) 426-4791.

9. The rule specifies how the data is to be presented, with specific instructions for reporting and explaining results for turbidity, lead and copper, total and fecal coliform, cryptosporidium, radon, arsenic, nitrate and any other contaminants.

Implementation Dates

Community water systems must publish their first Consumer Confidence Report by October 19, 1999 (for calendar year 1998) and by July 1st each year thereafter for subsequent calendar years.

Public Notification

The CCR will supplement, not replace, the public notification that water systems must provide to their customers upon discovering any violation of a contaminant standard.

Community water systems must mail or otherwise deliver a copy of the CCR to each of their customers (those who actually receive water bills) but at the same time EPA expects CWSs to make serious and good faith efforts to reach non-bill paying customers. A “good faith” effort means selecting the most appropriate method(s) to reach those consumers from a list of options recommended by the primacy agency. These options include but are not limited to:

- posting the CCR on the Internet
- mailing the CCR to postal patrons in metropolitan areas
- advertising the availability of the CCR in news media
- publishing the CCR in a local newspaper
- posting the CCR in public places such as cafeterias
- delivering multiple copies of the CCR for distribution by single-biller customers such as apartment buildings or large private employers
- delivering the CCR to community organizations
- posting the CCR in libraries or schools

Water systems serving fewer than 10,000 but not less than 500 persons must publish the CCR in at least one local newspaper. The system must also notify its customers of the availability of the report. This could take the form of a note in the water bill, an ad in the newspaper, or any other means approved by the State. Finally, the system must send, fax, or otherwise deliver copies of the report upon request.

Internet Posting of CCRs

Community systems serving greater than 100,000 population will be required to post their CCR’s on the Internet in addition to using other delivery methods. EPA also intends to work with smaller systems to help them get their reports on the Internet if they choose to do so.

CCRs/Certification Letters

The CWS has three months to send a certification letter to the state that the CCR has been distributed to its customers and that the information is correct and consistent with compliance monitoring data previously submitted to the state. These certifications are due January 19, 2000 for the first CCR and by October 1, annually for the second and subsequent reports.

A copy of the CCR must also be mailed to the state at the same time it is delivered to the water system’s customers. The CWS must keep copies of past reports on file for a minimum of 5 years.

Each State that has primary enforcement responsibility must maintain a copy of the CCR for each CWS for a period of one year. The State must also keep the corresponding certification letters for a period of five years.

Additional CCR Requirements

- Systems that distribute water to customers from multiple hydraulically independent distribution systems must develop separate tables or separate reports.
- Systems must report on any monitoring and reporting violations and the steps that were taken to correct the problem.
- The report must include a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water, including bottled water.
- In communities with a large population of non-English speaking residents, as determined by the primacy agency, the report must contain language noting the importance of the report and the phone number or address of where the individual can obtain a translated copy or assistance in the appropriate language.
- A listing of known opportunities for public participation in decision-making processes that affect the drinking water quality e.g. time and place of regularly-scheduled board meetings.
- If a CWS sells water to another CWS, it must deliver relevant monitoring and compliance data to the purchasing system allowing it enough time to prepare a CCR. For the first report, the seller must supply data six months before the purchasers are required to prepare their CCRs, or by April 19, 1998. For the second and subsequent reports, data must be delivered by April 1, unless the purchaser and seller mutually agree upon a
Different date and specify it in the contract between the two parties.

- A new community system is required to file a CCR by July 1st after the first year of operation.
- State primacy agencies are required to adopt the regulation as a primacy requirement and make copies of the reports submitted to the state available to the public upon request.

Where to get help!

Two professional water associations have developed electronic “fill-in-the-blank” templates for use by water systems in preparing their reports. They are the Oregon Association of Water Utilities (Oregon affiliate of the National Rural Water Association) and the American Water Works Association. These report formats were developed in communication with the USEPA and address all the CCR requirements. Contact these organizations directly:

OAWU: (503) 873-8353 (Silverton, OR) - Computer floppy disk containing instructions and report template; free to association members, $10 for nonmembers.

AWWA: (303) 794-7711 (Denver, CO) - Available on-line on the Internet, with instructions, at www.CCRBuilder.com - complete report is $75.

USEPA also expects to develop an electronic template to assist water systems in completing these requirements.

Mike Patterson, RS, assists county health departments with their local drinking water programs and is serving as CCR Coordinator for the drinking water program. He can be reached at (503) 731-4381.

Oregon’s SDWRLF (continued from page 1)

until mid-January, 1999 to complete their SDWRLF application, ample time to resolve any complex project related funding issues.

After January 1999, any uncommitted funds will be offered to other projects on the 1997 Project Priority List, by inviting the next project or projects below the funding line to submit a loan application. This process, called the By-Pass phase, will repeat until all available 1997 SDWRLF money is committed to loans for projects from the 1997 Project Priority List.

1998 loans

Hardly taking time to catch a breath, the Drinking Water Program completed the 1998 SDWRLF grant application — which EPA is reviewing as you read this. This second award is continuation funding of Oregon’s Safe Drinking Water Revolving Loan Fund program.

Dave Phelps is Water Fund Coordinator of the Drinking Water Program

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1999 DRINKING WATER NEEDS SURVEY WORK IS UNDERWAY!!
By Mike Grimm, PE

The USEPA has launched its second nationwide survey of drinking water infrastructure needs. The initial survey was conducted in 1994-95, and the results were presented in a report to Congress February 1997. From that report, Congress appropriated $2.775 billion to state drinking water programs for fiscal years 1997-99 to create the Drinking Water State Revolving Fund (DWSRF). The Oregon allotment is being used for low interest loans for community and some non-community water systems, as well as statewide technical assistance to small community water systems, source water protection work, loan fund and program administration, and other local assistance programs. This was welcome news for the State of Oregon!

Currently, preparations are underway to compile a new survey of infrastructure needs through the year 2018. The resulting report is scheduled to be presented to Congress February 2001, and the report will hopefully be the foundation of the second generation of appropriations from Congress for the DWSRF. In Oregon, 51 community water systems with populations greater than 3300 participated in the needs survey. Several other smaller systems will participate in 1999 through on-site visits to assess drinking water infrastructure needs. Typical capital improvement needs over the next 20 years (and their estimated costs) include source development, treatment, storage, transmission, distribution, and other compliance related issues.

The 1999 Survey is critically important as many believe the needs were dramatically under reported in the 1997 Survey Report. In addition, Congress will use the Survey to not only set the bottom line total to be appropriated but also to aid in determining the state-by-state allotment. On behalf of all public water systems, the Health Division thanks all those who have participated in the Survey!!! If you have any questions about the Infrastructure Needs Survey, please contact Mike Grimm at (503) 731-4317 or by e-mail at michael.w.grimm@state.or.us.

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

NEEDS SURVEY FACT SHEET

The EPA Fact Sheet, on the following page, helps explain the 1999 Drinking Water Needs Survey that begins mid-November, 1998. Needs Survey questionnaires are being mailed to 51 randomly selected community water systems in Oregon. Additionally, at least 6 to 12 small water systems serving fewer than 3,300 people, also are included in this Needs Survey and their capital improvement needs will be assessed during a site visit pre-arranged by the Oregon Drinking Water Program. If you have questions or need more information about the Needs Survey, contact Mike Grimm, Oregon Drinking Water Program, (503) 731-4010.
Fact Sheet
1999 Drinking Water Infrastructure Needs Survey

The U.S. Environmental Protection Agency (EPA) is launching its second nationwide survey of drinking water systems’ infrastructure needs. Data gathering is expected to begin in November 1998 and end in August 1999. The results will be made public in a Report to Congress slated for release in February 2001.

Why Is EPA Conducting This Survey?
The Safe Drinking Water Act (SDWA) requires EPA to conduct an assessment every 4 years of capital improvements that are needed to provide adequate drinking water quality and quantity. In addition, EPA is required, in consultation with the Indian Health Service, to assess the needs of American Indians and Alaska Natives. The survey results will help Congress determine future appropriations to support infrastructure improvements. The results will also be a factor in allotting funds among the States and among American Indian Tribes and Alaska Native Villages.

How Will The Survey Be Conducted?
The Agency will send survey questionnaires to each of the nation’s approximately 813 large water systems (serving 50,000+ persons), the 240 medium-sized systems that serve over 40,000 persons, and to a sample of 2,370 medium-sized systems serving 3,301 to 40,000 persons. EPA also plans site visits to gather data at a sample of approximately 600 small drinking water systems (serving 25 to 3,300 persons). Systems serving American Indians and Alaska Natives will also be included in a related survey.

What Information Will The Survey Collect?
Systems will be asked to summarize their current capital improvement needs and their projected capital investment requirements through calendar year 2018. These estimates will include costs associated with source water treatment, storage, transmission, distribution, and other costs related to compliance with the SDWA.

How Much Money Will Be Available?
Congress appropriated $1.275 billion in FY 1997 and $725 million in FY 1998, and the President’s Budget includes $775 million for FY 1999 for the Drinking Water Survey Revolving Fund (DWSRF). Future appropriation levels are uncertain but will take into consideration the needs identified in the survey.

Do The States Participate In The Survey?
Yes. The drinking water programs of every State in the nation and U.S. territory have agreed to participate. EPA is asking them to provide technical support to systems filling out survey questionnaires. State personnel will be invited to participate in site visits to gather survey information directly from small drinking water systems.

How Can I Get More Information About The Survey?
The Survey Manager is David Travers. For more information about EPA’s 1999 DWSRF Needs Survey, call the toll-free Survey Help Line: 1 877 99NEEDS (or 1 877 996-3337).
RECAP OF USEPA GROUND WATER RULE
STAKEHOLDERS MEETINGS
Summarized by Kari Salis, Regional Engineer

The Environmental Protection Agency (EPA) held a series of Ground Water Rule (GWR) stakeholder meetings in Portland, OR, Madison, WI, Dallas, TX, and Washington DC (May - July 1998). Approximately 75-100 persons attended each meeting, representing states, large and small utilities, public interest groups, consulting engineers, and various associations. EPA made presentations covering four major areas: an overview of the time line and status of various elements related to the GWR; public health concerns; management tools; and regulatory components. Although the Safe Drinking Water Act requires the GWR by May 2002, EPA is on a time line for proposal by May 1999 and final rule by November 2000.

Some of the compelling statistics presented at the meetings include:

- 158,000 PWSs are using groundwater as a source.
- Preliminary data indicate that 8-15 percent of the wells tested were positive for human viral organisms using a viral indicator test called coliphage. This could represent the potential exposure of up to 11 million people.
- 15 percent of groundwater systems account for 90 percent of the Total Coliform Rule (TCR) violations.
- Enterovirus were found in 5 percent of wells that had never had a TCR violation.

Regardless of any shortcomings in the available data, EPA feels that the threat of viral contamination is sufficient to warrant the development and implementation of a national strategy for detecting the presence of such contamination, wherever it occurs in the drinking water supply.

Seeking a happy medium between the status quo and universal disinfection, EPA has refined their approach based on input from stakeholders meetings. This three-step process includes:

1. Baseline measures such as sanitary surveys, source water total coliform monitoring, and a cross connection program;
2. Risk characterization or assessment based on factors including well construction, hydrogeological information, monitoring, proximity of contaminant sources (can be combined with Source Water Assessment Program); and
3. Management of risk based on a state/system compliance agreement, involving corrective action of defects or additional sampling.

EPA emphasized that disinfection for all systems is not always be necessary. Participants were urged to help EPA develop an approach to identify and regulate those groundwater systems that pose the greatest threat to public health. EPA also acknowledged that they consider the rule to be a comprehensive rule addressing issues from the source through treatment and distribution. Check EPA’s website at www.epa.gov/ogwdw for more information.

Kari Salis, PE is in the Technical Services Unit of the Drinking Water Program

DRINKING WATER PROTECTION
By Sheree Stewart

The Department of Environmental Quality and the Health Division have completed a Draft Workplan describing how Oregon will address the “Source Water Assessment” requirements of the 1996 Amendments to the Safe Drinking Water Act. Copies of the draft plan are available for review. Call Betty McArdle at (503) 245-5756 to request a copy. DEQ and OHD will hold several public workshops in January to discuss the Source Water Assessment Plan. Target locations and dates include:
Pendleton, 9am-noon, Tuesday January 5th
Medford, 1pm-4pm, Wednesday January 6th
Salem, 1pm-4pm, Tuesday January 19th

For more information on the location of each workshop, please call Betty McArdle at (503) 245-5756. Betty will be coordinating the workshops for DEQ and the Health Division.

Sheree Stewart is with the Department of Environmental Quality

WATER SYSTEMS IN THE NEWS
By Dave Leland, PE

This article, beginning on the next page, begins a new regular feature highlighting construction projects and other accomplishments by water suppliers in Oregon who are working to improve and protect drinking water quality. We invite you to submit a one-paragraph writeup, or better yet a photograph and caption, of your project or accomplishment to our PIPELINE coordinator, Diane Weis at the drinking water program for publication in a future edition.

Dave Leland, PE, is Manager of the Drinking Water Program
WATER SYSTEMS IN THE NEWS

Bandon - The newly established Oregon Safe Drinking Water Revolving Loan Fund made its very first Oregon award to the City of Bandon. The $500,000 loan, combined with an Oregon Community Development Block Grant of $750,000 and a $500,000 Water/Wastewater Fund award, will help support a $5.2M project to replace the filtration treatment plant and improve water transmission and distribution facilities in order to meet health and supply needs.

Gold Beach - The city received a $500,000 Safe Drinking Water Revolving Loan Fund award to install a two million gallon per day filtration treatment plant for its water source that is under the direct influence of the nearby Rogue River. This is the second award in Oregon from the new loan fund.

Grants Pass - The Grants Pass Water Treatment Plant, located on the Rogue River in downtown Grants Pass, was recently awarded the American Water Works Association Historic Water Landmark Award. The plant was originally constructed in 1931, and has been expanded and updated on several occasions.
OPERATOR CERTIFICATION UPDATE

We would like to introduce Brian Rigwood, our new Certification Coordinator. Brian is a certified operator, formerly with the City of Forest Grove. He will oversee the Health Division certification program for Water Distribution Operators and Water Treatment Operators, and be a technical resource for Water Treatment Plant Operators. He may also assist with certification of Cross Connection Inspectors and Backflow Assembly Testers.

CROSS CONNECTION UPDATE
By Bonnie Waybright, PE

The current list of approved backflow assemblies is dated December 1998. Current lists of certified Cross Connection Inspectors and Backflow Assembly Testers are available upon request. Call (503)731-4899 to request this information.

The 1998 Annual Summary Report forms will be sent out in January 1999. The reports will be due on March 1, 1999. The format for this report is unchanged from previous years.

Cross Connection Inspectors and Backflow Assembly Testers
Certification renewals will be upon us in June 1999. Now is the time to schedule your Cross Connection Inspector Update and Backflow Assembly Tester Recertification courses. Sign up now to beat the last minute crush that always happens after renewal notices are sent out. (Renewal notices will be sent out in April.)

If the Health Division doesn’t have your current address, you may not receive your renewal notice. Remember it is your responsibility to notify the Health Division of any address changes.

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

OREGON WATER SYSTEM EXPERIENCES POST-MIX BEVERAGE DISPENSER BACKFLOW INCIDENT
By Loren Anderson

How do cross connection incidents occur? They can occur due to failing backflow assemblies, by-pass lines around assemblies, improperly installed equipment that is connected to the potable water system and equipment that has the potential to mix hazardous substances with potable water without the benefit of proper back-flow protection.

The latter is what happened in the Corvallis water system in April. Around 4:00 p.m. an employee of a local restaurant notified the Public Works Department that he had brown water and air coming out of multiple outlets in his kitchen area. He had been trying to flush water from the faucets, but it wasn’t helping. Corvallis Utilities Division employees responded immediately checking nearby businesses for signs of a similar problem. No problems were found at the nearby businesses, or at a hydrant adjacent to the restaurant that was being flushed. While doing a quick survey of the restaurant, an iced-over CO₂ tank was discovered. The tank was turned off, and within 15 seconds, the “air” in the outlets stopped and the water cleared up. The restaurant employee was asked to leave the tank off until the soft drink company could respond. The Health Division was notified and consulted.

On the following business day, the Benton County Health Department, the Corvallis Plumbing Inspector and I went to the restaurant to gather more information. The dispenser in use was a post-mix type (requiring an RP device to protect the potable water system). The system had been operating for a number of years, with only the dual check internally installed on these systems protecting the water supply. Both springs in the dual check were broken. The restaurant plumbing looked as if it had been repaired numerous times with copper and galvanized piping. The soft drink company arrived, and the restaurant owner requested the system be switched from a post-mix system to a pre-mix system because of previous problems that they had encountered with RP devices, and the fact that they would not be required to have or test a backflow prevention device.

Although no one ingested any of the contaminated water, the Benton County health nurse was notified so that symptoms of copper poisoning could be reported.

The soft drink company has been very helpful in recognizing the hazard and helping us identify other equipment that needs to be appropriately protected. While this incident caused a great deal of concern, it can be turned into a positive experience as it will be used as a learning tool to more effectively operate our cross connection program.

Loren Anderson, City of Corvallis Public Works Department, Utilities Division

JOB ANNOUNCEMENT

City of Corvallis: Water Treatment Operations Supervisor. Salary: $48,000-$65,000, DOQ. Excellent benefit package. For more information, contact Tom Penpraze, (541) 757-6916.
TRAINING CALENDAR

Oregon Assoc. of Water Utilities
Jason Green/(503)873-8353
Mar. 2-5  21st Annual Technical and Management Conference

Emerald Empire/Mid Coast Subsection
Mitch Postle/(541)341-8500
Mar. 8-10  AWWA Short School

Cross Connection/Backflow Courses
Central Oregon Community College (O)
(541) 383-7280
Clackamas Community College (C)
(503) 657-6958 ext. 2364

Backflow Assembly Tester Course
Mar. 15-19  Newport (C)
Mar.29-Apr.2  Bend (O)

Backflow Assembly Tester Retraining/Recertification
Feb. 12  Oregon City (C)
Apr. 2  Bend (O)
Apr. 9  Oregon City (C)
Apr. 30  Oregon City (C)

Cross Connection Inspector Course
Apr. 12-15  Oregon City (C)

Cross Connection Inspector Update
Apr. 16  Oregon City (C)

Water System Training Course
Oregon Health Division
Roberta Lindgren/(503)731-4317
Feb.*  Albany
Mar.*  Salem
*dates and exact locations to be announced

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