

Drinking Water Protection Bulletin

News you can use from Oregon's Source Water Protection Program

Fall 2006



State of Oregon
Department of
Environmental
Quality

Salem is actively protecting their Aquifer Storage and Recovery (ASR) drinking water wells. Salem pumps treated water into the aquifer when water is plentiful, and withdraws it as needed.

This issue of "DWP BULLETIN" is the first in a series of semiannual newsletters provided to Oregon communities who are concerned with protecting their drinking water supply. The "DWP Bulletin" is a cooperative effort of the respective Drinking Water – related programs of the Departments of Human Services and Environmental Quality. Through this newsletter we hope to provide information and tools to communities that will help them develop local drinking water protection strategies tailored to meet their specific needs. Each issue will describe resources available to communities, as well as provide Oregon examples where communities have worked with stakeholders, identified strategies and overcome challenges to minimize the risk of contamination of their drinking water supply. If you have changes or additions to be made to the mailing list, or if you want to be removed from this mailing list, please contact Dennis Nelson at dennis.o.nelson@state.or.us and provide the necessary information.

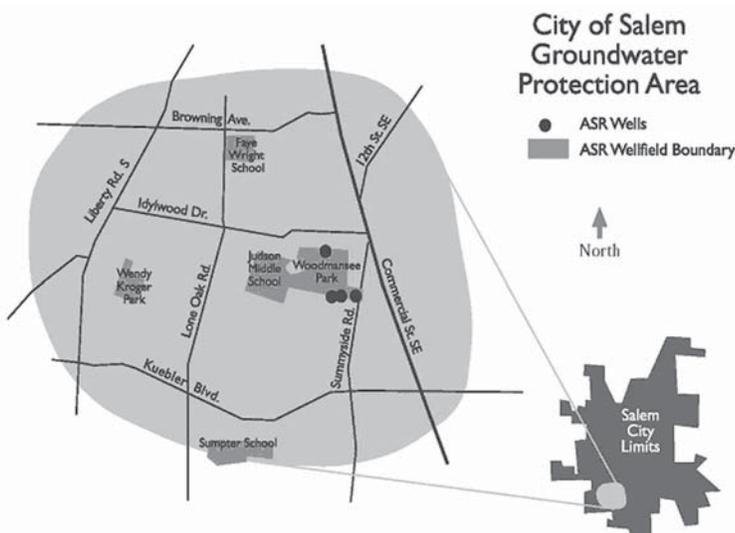
Success story: Salem educates underground storage tank owners

The City of Salem's Public Works Dept collaborated with DEQ's Western Region Tanks Program to reduce risks to their drinking water in the south Salem Drinking Water Source Area of their aquifer storage and recovery (ASR) program.

Compliance inspections were conducted jointly at each regulated

underground storage tank (UST) facility located within the drinking water source area. Lacey Baldwin, Water Quality Program Specialist for the City of Salem, indicates the city recognizes that USTs are already regulated by DEQ. However the joint inspection program increased awareness of the importance to protect the city's drinking water aquifer by delivering brochures and packets supplied by the City to each facility owner and ensured that possible leaks from regulated USTs would be detected, remedied and to the greatest extent possible, prevented.

This project, along with other protection activities, has raised awareness about the steps the public and businesses can take to protect drinking water. Other activities have included signs at the boundaries of the ASR, a magnet with a drinking water information phone number, a video, and a brochure. For more information, call 503-588-6323.



Inside: ♦ Source Water Assessments (p.2 and 3)
♦ Working with auto shops (p.3)

♦ Drinking water quantity (p.3)
♦ Resources and Contacts (back page)

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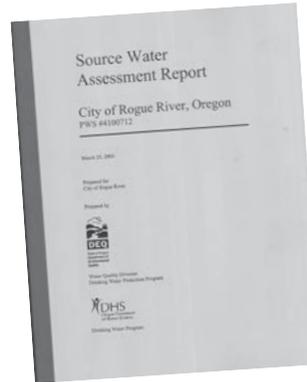
Source Water Assessment Reports have been sent to all communities in Oregon. Please refer to the references on the back page for questions.

Map of drinking water source area (see map below). In this hypothetical situation, a community's drinking water source area is shown with the 1-, 2-, 5- and 10-year time-of-travel for groundwater to move to the well illustrated. Also shown are the high, moderate, and low risk PCSs found within the DWSA.

Source water assessments: A source of information for communities

The 1996 Amendments to the federal Safe Drinking Water Act required states to conduct Source Water Assessments for all public water systems within their respective boundaries. The purpose of the assessments is to provide public water systems with the data they would need if they chose to develop drinking water protection strategies. The key elements of the assessments are:

- Identification of drinking water source areas (DWSAs), or where the drinking water is coming from, e.g., watersheds for surface water and recharge areas for groundwater,
- Inventory of potential contaminant sources (PCSs) in the DWSA, and,
- A determination of the relative susceptibility of the drinking water supply to contamination from those PCSs.



Reports were prepared and distributed to the water system operator for each community. Perhaps most useful, were the maps of the water system's drinking water source areas (example shown).

Knowing the source area for your community's water supply, and the potential risks to its quality, will help you prioritize work that will benefit public health. Copies of the Source Water Assessment for an individual community are available, as are GIS coverages of the DWSA and PCSs (see Resources on back page).

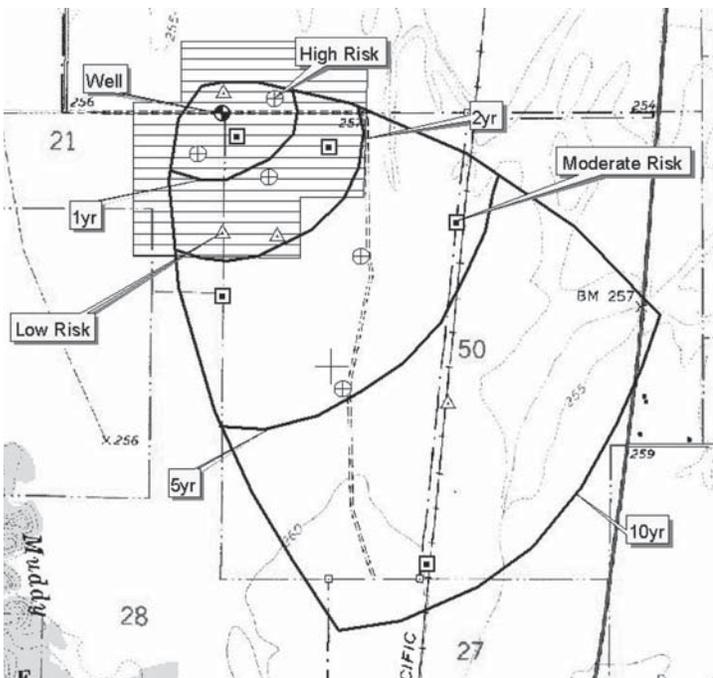
What are Community Water Systems?

In the world of public water systems, community water system means a public water system that has more than 15 connections used by year-round residents, or that regularly serves 25 or more year-round residents. In Oregon there are almost 900 community water systems serving approximately 3,000,000 people.

Developing Management Strategies

Designing protection strategies is best done locally and should focus on education and technical assistance. Often, this can be accomplished by providing operational guidance to the individual facility. Using Best Management Practices (BMPs) often do not increase their operational costs, but do reduce their risk and liability of impacting the community's water supply. Examples of BMP categories include:

- Employee education on spill response,
- Pollution prevention tax credits,
- Household hazardous waste collection,
- BMP Fact Sheets for specific businesses, e.g., dry cleaners, auto repair shops, etc.,



- Education programs in schools,
- Stormwater/runoff plans,
- Pesticide/Fertilizer use training, etc.

Implementing the strategies provided in these fact sheets will help protect the community's valuable drinking water resource. A list of available BMPs and other management options can be found on the Web (*see Resources on back page*).

Who's done this?

Communities that have developed drinking water protection strategies include: Cave Junction, Coburg, Eugene, Fairview, Harrisburg, Hubbard, Junction City, Maupin, Medford, Monroe, Portland, Salem, Sandy, Springfield and Veneta. Many others are in the development stage. Future newsletters will highlight successful strategies.

Protecting drinking water quantity

The question on the minds of many Oregon communities is where they will obtain sufficient drinking water for future growth in their areas (e.g., see "Tapped Out" by Karen McCowan, Eugene Register-Guard, May 21, 2006). Future sources may be limited by the lack of available year-round water rights for surface water sources and, in many bedrock areas, aquifers with limited production capacity. In other areas (see http://www.wrd.state.or.us/OWRD/GW/gw_critical_allocations.shtml), over use of area aquifers has resulted in long-term decline in water levels, again limiting future water availability.

The potential that water availability will limit growth is yet another reason to develop drinking water protection strategies for current and future supplies. Limited water quantity in the future, is all the more reason to make sure that the resources we have now remain safe to drink. Losing a portion of your aquifer to contamination will certainly increase problems associated with limited supply in the future.

Protection strategies you can use for



There are many things you and your community can do to protect your drinking water. This newsletter will highlight management strategies for the most common or high risk potential* threats to drinking water in Oregon.

What: Automotive/fleet/trucking/equipment repair, maintenance, and servicing shops

Rank: 9th most threatening potential contaminant source* identified statewide in drinking water source areas (based on number in sensitive areas).

Why are these a risk? Spills, leaks, or improper handling of automotive fluids, solvents, and repair materials during transportation, use, storage and disposal may impact your drinking water supply.

Are these in my drinking water source area?

Check your Source Water Assessment, or contact us (*See information on back page*)

What can we do? Specific strategies include:

- Contact owners and operators through individual letters, bill stuffers, or one-on-one contact and encourage use of best management practices. Distribute **Automotive Repair and Maintenance Tips** fact sheet: <http://www.deq.state.or.us/wq/factsheets/drinkingwater/fsdwpautomaint.pdf>
- Provide technical assistance to individual businesses to evaluate wastewater handling, stormwater discharges, and hazardous materials handling and storage. Get help from the experts by contacting DEQ's Toxics Use/Waste Reduction Assistance Program (<http://www.deq.state.or.us/wmc/hw/tuwrap/tuwrap-contacts.html>) and the Ecological Business Program (<http://www.ecobiz.org/>) that can provide free technical assistance, facilitate employee training, and provide recognition for businesses that reduce environmental impacts.

**It is important to remember that the land uses discussed are only potential sources of contamination to the drinking water. Water quality impacts are not likely to occur when contaminants are used and managed properly and contaminant releases are minimized.*

Drinking water protection resources

GIS coverages of drinking water source(s), drinking water source area(s) and potential contaminant sources are available for your community by contacting Steve Aalbers, DEQ at (503) 229-6798 or at aalbers.steven@deq.state.or.us.

Source Water Assessment reports should be available from your PWS. If not, contact Dennis Nelson for groundwater systems and Sheree Stewart for surface water systems (See contact info in box).

Drinking Water State Revolving Fund: provides funds in the form of loans and small grants for drinking water protection. Roberto Reyes-Colon (971) 673-0422, Roberto.reyescolon@state.or.us

Oregon Association of Water Utilities: Assistance for small public water systems. Tim Tice/Shawn Stevenson (503) 857-8353, ttice@oawu.net

Oregon Water Resources Department: Information on water rights, conservation and water law. Contact your local watermaster. <http://www.wrd.state.or.us/OWRD/offices.shtml>

Department of Land Conservation and Development: Assistance in land use planning and drinking water. Doug White (541)318-8193, doug.white@state.or.us

U.S. Environmental Protection Agency: A series of fact sheets on best management practices for drinking water protection. www.epa.gov/safewater/protect/swpbull.html

The Trust for Public Land: Has multiple tools to help keep drinking water clean. See *publications* at www.tpl.org. DEQ's Toxic Use/Waste Reduction Assistance Program: www.deq.state.or.us/wmc/hw/tuwrap/tuwrap-contacts.html.

Ecological Business Program: www.ecobiz.org.

Key Oregon contacts

Public Health Division Drinking Water Program: technical assistance for groundwater sources, public water supply data, drinking water standards. <http://oregon.gov/DHS/ph/dwp/index.shtml>

Dennis Nelson (541)-726-2587 x21
dennis.o.nelson@state.or.us

Department of Environmental Quality: technical assistance for surface water sources, drinking water protection planning, GIS coverages, Best Management Practices. www.deq.state.or.us/wq/dwp/dwphome.htm
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Would you like to receive this newsletter electronically?

email: dennis.o.nelson@state.or.us

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