



# Nitrogen and Phosphorus Pollution Series:

## Nitrate in Ground Water

The Watershed Academy



Tuesday, March 29, 2011

Two-hour audio Web broadcast

Eastern: 1:00p.m.–3:00p.m.

Central: 12:00p.m.–2:00p.m.

Mountain: 11:00a.m.–1:00p.m.

Pacific: 10:00a.m.–12:00p.m.

### A Watershed Academy Webcast

Join us for a webcast titled “Nitrogen and Phosphorus Pollution Series: Nitrate in Ground Water.” This webcast will highlight an emerging issue of increased nitrate loading to ground water, a growing national concern. According to EPA’s most recent data, public water systems using ground water as a drinking source serve about 105 million people nationwide. The total number of people drinking ground water increases when factoring in households supplied by private drinking water wells. Ground water can become contaminated by nutrients (nitrogen and phosphorous) leaching from the land surface into the ground water supply. In a September 2010 report, *Nutrients in the Nation’s Streams and Groundwater*, the U.S. Geological Survey monitored and documented nitrate levels above 10 mg/L, which is the Maximum Contaminant Level (MCL) set by the National Primary Drinking Water Regulations through the Safe Drinking Water Act, in over 20 percent of shallow household wells in agricultural areas. Additionally, from 1998 to 2008, the number of nitrate violations recorded at public water systems around the country has nearly doubled. Surface sources of drinking water are also at risk as, for example, stormwater runoff can carry nutrients directly to rivers, lakes and reservoirs – some of which are used as drinking water supplies. Capital costs to remove nitrates from public water systems or to provide alternative water supplies for individual households can be very high, with some communities spending millions of dollars. The webcast will provide a national overview of the nitrate in ground water issue and highlight a case study in Oregon’s Southern Willamette Valley. This webcast is a second in a series of Watershed Academy Webcasts on the impacts of nutrients on water resources. The presentation will be posted in advance at [www.epa.gov/watershedwebcasts](http://www.epa.gov/watershedwebcasts). Participants are encouraged to download the presentation prior to the webcast. More information on nitrates in drinking water can be found at <http://water.epa.gov/drink/contaminants/basicinformation/nitrate.cfm>.



#### Instructors:

**Jill Jonas**, Director, Bureau of Drinking Water and Groundwater, Wisconsin Department of Natural Resources

Jill Jonas currently serves as President of the Association of State Drinking Water Administrators (ASDWA). She represents ASDWA on the State-EPA Nutrient Innovations Task Group. Jill has directed Wisconsin’s Bureau of Drinking Water and Groundwater since her appointment in 1999. She serves as a board member of the Great Lakes Upper Mississippi River Board of State and Provincial Public Health and Environmental Administrators and Co-Chaired the Conservation Committee of State and Provincial representatives for the Council of Great Lakes Governors’ Great Lakes Water Conservation and Efficiency Initiative.

**Audrey Eldridge**, Coordinator for the Southern Willamette Valley Groundwater Management Area, Oregon Department of Environmental Quality

Audrey Eldridge has a MS in Hydrogeology, and has worked for the Oregon Department of Environmental Quality for 20 years. She has been the coordinator for the Southern Willamette Valley Groundwater Management Area since 2002. Audrey is also a board member of the Ground Water Protection Council, and enjoys sharing information with those communities that rely on ground water for their drinking water.

**Neil M. Dubrovsky, PhD**, Chief, Nutrients and Trace Elements National Synthesis Project, National Water Quality Assessment (NAWQA), U.S. Geological Survey

Neil Dubrovsky has been Chief of the Nutrients and Trace Elements National Synthesis team of the U.S. Geological Survey’s NAWQA Program since 2003. Neil earned his doctorate in hydrogeology from the University of Waterloo in 1986, and joined the USGS the same year. Prior to his current assignment, he conducted research on contaminants in rivers and ground water in California, led the NAWQA studies of the San Joaquin-Tulare Basins, and served as a chief scientist for the California Water Science Center.

#### The Watershed Academy

The Watershed Academy is a focal point in EPA’s Office of Water for providing training and information on implementing watershed approaches. The Academy sponsors live classroom training and online distance learning modules through the Watershed Academy Web at [www.epa.gov/watertrain](http://www.epa.gov/watertrain). For more information, visit [www.epa.gov/watershedacademy](http://www.epa.gov/watershedacademy).

#### Registration

You must register in advance to attend this webcast. Register at the Watershed Academy webcast website at [www.epa.gov/watershedwebcasts](http://www.epa.gov/watershedwebcasts). Note: Your computer must have the capability of playing sound in order to attend this webcast. To view archived webcasts, go to [www.epa.gov/owow/watershed/wacademy/webcasts/archives.html](http://www.epa.gov/owow/watershed/wacademy/webcasts/archives.html)

**Questions?** Please contact Amber Marriott Siegel at [amber.marriott@tetrattech.com](mailto:amber.marriott@tetrattech.com).

*The materials in this Webcast have been reviewed by EPA staff for technical accuracy. However, the views of the speakers and the speakers organizations are their own and do not necessarily reflect those of EPA. Mention of commercial enterprises, products, or publications does not mean that EPA endorses them.*