



Applying knowledge to improve water quality

# Pacific Northwest

## Regional Water Program

A Partnership of USDA CSREES  
& Land Grant Colleges and Universities

Summer 2005  
PNWWATER 064

### October 11<sup>th</sup> Satellite Conference:

## Stormwater Management from a Watershed Perspective

Our fourth annual watershed theme-based satellite conference is scheduled for October 11, 2005 from 9:00 to 11:30 PDT.

The audience at the 2004 Watershed Issues Satellite conference, *Improving Community Involvement in Watershed Restoration*, requested a workshop on Stormwater Management. Urbanizing areas and municipalities striving to comply with EPA National Pollution Discharge Elimination System (NPDES) are required to satisfy six minimum control measures. The 2005 Watershed Issues Satellite chronicles three communities successfully meeting these measures and involving their citizens in managing stormwater runoff, beginning at the house, roof, and driveway stage and reaching to city codes and regulations. Each community is distinctive in demographic, ecosystem, and region. However, within those differences, each brings a strategy to share as they meet the six minimum control measures and manage stormwater pollution.



Photo courtesy of Watauga County Extension in North Carolina.

Watauga County, North Carolina sits high in the southern Appalachian Mountains in the northwestern corner of the state. People flock to the refreshing streams and cool valleys to fly fish for native trout, hike pristine trails, and enjoy winter sports at a mile high resort. Many of these people return to build second or dream homes with long vistas amid trees. The disquieting side of this beauty is the chocolate colored streams stained by construction runoff and other land-use changes. The Watauga River Conservation Partners are working to restore stream banks ravaged by hurricane events and rapid development as well as make people aware that their actions have an impact on the beauty of the area. Natural wetlands, restored and planted the spring before the hurricanes, survived the torrents of water pouring down the mountain streambeds, helping to channel and filter the runoff. Banner Elk's newly installed stormwater collection and purification system saved the city's public green space from washing down river into Tennessee.

The Chagrin River watershed east of Cleveland, Ohio flows through 35 villages and townships before entering Lake Erie. Experiencing land-



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<http://www.uaf.edu/ces/water/>

University Publications:

<http://www.alaska.edu/uaf/ces/publications/>

**Idaho**

University of Idaho  
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<http://www.uidaho.edu/wq/wqhome.html>

University Publications:

<http://info.ag.uidaho.edu/Catalog/catalog.html>

**Oregon**

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University Publications:

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**Water Resource Research Institutes**

Water and Environmental Research  
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<http://www.uaf.edu/water/>

Idaho Water Resources  
Research Institute

<http://www.boise.uidaho.edu/>

Institute for Water and  
Watersheds (Oregon)

<http://water.oregonstate.edu/>

State of Washington  
Water Research Center

<http://www.swwrc.wsu.edu/>

**Environmental Protection Agency**

EPA, Region 10

The Pacific Northwest

<http://www.epa.gov/r10earth/>

Office of Research and Development,  
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use changes since the post-Revolutionary days when wetland filling, channelizing, and moving streams allowing for agriculture and city growth was a standard practice. Rehabilitation of streams and wetlands is returning these important natural filters to proper functioning condition. Reintroducing stream meanders and replacing vegetation are two strategies used to restore Chagrin River tributaries. Townships and villages, working with the Chagrin River Watershed Partners, have written zoning rules that require developers to adhere to codes that reserve green space and limit impervious surfaces in all new development.



*Photo courtesy of Bureau of Environmental Services (BES) in Portland, OR.*

collect and filter parking lot and road runoff and other Best Management Practices (BMPs) that have proven beneficial in other parts of the city.

You are invited to join the broadcast on October 11 from 9:00 AM to 11:30 AM (PDT) and see the innovative and effective strategies these three areas have implemented and how citizens and local government work together to maintain water quality and comply with Environmental Protection Agency rulings. Call your local Extension office to reserve the satellite facilities and invite your neighbors to attend the workshop. The diversity of geographical and climates portrayed in the video offer a toolbox of BMPs to use in your gardens and city streets. Updated information on the broadcast and viewing sites is found at <http://wawater.wsu.edu/> or by calling 509-574-1584.

**National Water Quality Program Areas**

The four land grant universities in the Pacific Northwest have aligned our water resource extension and research efforts with eight themes of the USDA's Cooperative State Research, Education, and Extension System.

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|--------------------------------------|--|
| 1. Animal Waste Management           | 5. Pollution Assessment and Prevention |
| 2. Drinking Water and Human Health   | 6. Watershed Management                |
| 3. Environmental Restoration         | 7. Water Conservation and Management   |
| 4. Nutrient and Pesticide Management | 8. Water Policy and Economics          |

*CSREES is the Cooperative States Research, Education, and Extension Service, a sub-agency of the United States Department of Agriculture, and is the federal partner in this water quality program.*