



It's Our Water!

(Join us and schedule a workshop TODAY!)

N.C. Division of Water Resources

Volume 4, Issue 4

Fall 2008

Polluted Runoff — Our Greatest Threat to Water Quality



We all have a part in creating polluted runoff and we can all be a part of the solution.

Polluted runoff is the number one cause of water pollution in North Carolina. Runoff occurs when rain-water, snowmelt or irrigation water does not soak into the ground. Rather it runs off the land or impervious surfaces like parking lots, roofs, or roads. As it flows, it picks up things in its path like fertilizers, loose soil, animal waste, leaking motor oil, chemicals like herbicides and pesticides, metals, pathogens (viruses and bacteria) and trash. This runoff and the pollutants it carries then drain either directly to a water body

or to a storm drain that flows to a water body. Sediment and nutrients are the major forms of nonpoint source pollution, but what do these pollutants do to our waterways?

Loose soil or sediment decreases water clarity, blocking sunlight from reaching aquatic plants. It also has negative effects on aquatic animals by clogging their gills, destroys bottom habitat when it settles out of the water, and carries other pollutants that easily attach to soil particles.

Nutrients like nitrogen and phosphorus originate from many different sources including fertilizers from landscaping and agriculture, animal waste, and leaking sewer and septic systems. These nutrients can cause large algal blooms that greatly reduce dissolved oxygen levels as the algae rots, affecting aquatic animals that breathe dissolved oxygen from the water.

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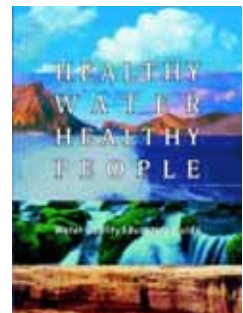
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HAVE YOU SEEN HEALTHY WATER, HEALTHY PEOPLE?

This 200-page activity guide is for educators of students in grades 6 through university level. The purpose of this Guide is to raise the awareness and understanding of water quality topics and issues and their relationship to personal, public, and environmental health. For more information, visit the Project WET Store at www.ProjectWET.org.





Service Learning Projects That Combat Polluted Runoff

Don't have time for service learning projects during school hours? Why not make it an voluntary after-school or Saturday activity? Think about inviting members of the community to join you as you work to improve the water quality of your stream!



- Consider **monitoring your stream year-round**. Report any problems you find to either your municipal or state water quality agency.

- **Formally adopting your stream** may help create a sense of ownership among your students. There are many municipal Adopt-A-Stream programs and a statewide Stream Watch program that can help you formalize your commitment.

- **Organize an annual litter cleanup for your stream**. Removing trash from a waterway makes a huge visual impact and improves the stream habitat. North Carolina Big Sweep has regional coordinators that can help you plan your own Big Sweep event. For more information go to www.ncbig sweep.org.

- **Mark storm drains** on your school's property and others in your stream's watershed so people will know they drain to your stream. Some municipalities make them available for free, but you can also make your own stencils.

- **Start a Scoop the Poop campaign** in a local park or greenway. There are free postcards available for distribution available through the N.C. Office of Environmental Education. They also have free Scoop the Poop signs for parks that have garbage cans available for people to put their pets' waste. For more information, go to www.eenorthcarolina.org/petsign.htm.

- **Build a rain garden**. Installing a rain garden in a drainage area of the school roof or parking lot may help protect your stream. It reduces runoff by holding water and thereby increasing the amount of water that filters into the ground.

- **Educate others about polluted runoff and how to prevent it**. Start an awareness campaign at your school.





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Sponsored by: The Environmental
Education Fund
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www.ncwater.org

It's Our Water!...

- Is a North Carolina-specific high school Earth/ Environmental Science curriculum and resource guide for North Carolina students and teachers. It covers the importance of water quality , quantity, monitoring and maintaining water quality, and the impacts individual choices and actions have on water quality.
- Centers around field activities in a local stream that leads to a final report and recommendations by the class, coordinated with a series of videos, demonstrations, classroom activities, homework and quizzes.
- Is aligned with the new (2004) North Carolina Standard Course of Study for **high school Earth/Environmental Science**.

Would You Like to Host an It's Our Water! Workshop?

All you need to do is...

- Gather up 10 high school science teachers from your school or district.
- Pick a workday or other day you can meet for 6 — 10 hours.
- Find a place to have this meeting.
- Ask the school district or another sponsor to pay \$25 each for your materials (Including: It's Our Water! DVD and Curriculum Guide, Project WET, Healthy Water Healthy People Testing Kit Manual, and NC River Basin Booklet with inserts and posters, and more).
- Contact Shelby Gull Laird <shelby.gull@ncmail.net>, who will arrange for another facilitator or herself to come to your facility and work with your group learning about It's Our Water!

