



Stormwater Management Rules & Regulations



Stormwater Fact Sheet No. 6

This fact sheet is No. 6 of a eight-part series focused on stormwater runoff problems and control strategies. The series covers:

- 1) Stormwater Impacts
- 2) Human Health Impacts
- 3) How Citizens Can Help
- 4) Prevention and Control
- 5) Control for Development
- 6) Rules and Regulations
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- 8) Municipal Prevention



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Federal Rules and Regulations

The Federal Clean Water Act (CWA) is the primary basis for all water quality programs, federal and state. The CWA was enacted with the goal of making all U.S. waters fishable and swimmable. Subsequent legislation has brought about several changes and amendments to the CWA. Some of these changes include new programs to control stormwater runoff. The implementation of several federal programs, including those that are stormwater related, can be delegated by Congress to the states. The Environmental Protection Agency (EPA) and other agencies set standards for federal water quality programs and assure that the states' programs are operating in accordance with the federal guidelines. These agencies also provide technical and financial assistance to states, regional and local governments, the private sector and the general public.

North Carolina State Rules and Regulations

The N.C. General Assembly enacts state legislation concerning surface water protection, including stormwater management. The Environmental Management Commission (EMC) adopts regulations to implement the authorized legislation. The state is also responsible for implementing and enforcing federal programs and regulations related to stormwater management. North Carolina's Department of Environment and Natural Resources (DENR) is the primary state agency responsible for environmental protection programs and stormwater management. The Division of Water Quality is the primary division of DENR that implements stormwater management. However, other divisions have stormwater related programs, including the Division of Land Resources. The state also provides technical assistance to local governments, business, industry and the general public in dealing with stormwater runoff problems.

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Local Government Role

The primary role of local government in stormwater management is to address local problems and needs and at the same time, comply with state and federal regulations in the most cost-effective manner. In North Carolina, local governments have the major responsibility for regulating land use activities and their associated impacts. As local communities across the state grow, local governments will need to increase their efforts to manage stormwater runoff.

Role of Private Sector and the Public

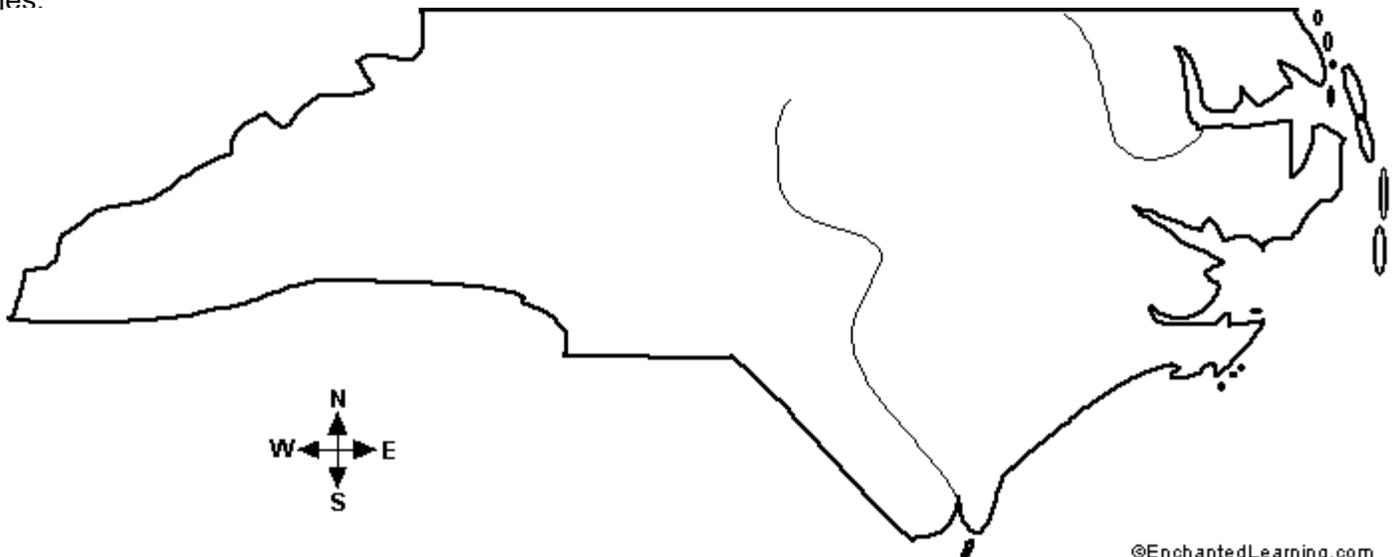
All citizens and land managers should utilize measures to minimize the generation of stormwater runoff, such as limiting the amount of impervious surfaces and maximizing the infiltration of runoff onsite. They must also be aware of their actions that can pollute stormwater runoff and implement pollution prevention and control measures to protect water quality. Citizens must realize that stormwater problems are caused by many individual activities and everyone must do his or her part to prevent or solve these problems. There are numerous sources of technical assistance available. In addition, there are many opportunities for citizens to become actively involved in local efforts to protect water resources.

Specific Rules and Regulations

NPDES Stormwater Permitting Program

The U.S. EPA delegated North Carolina the authority to administer its NPDES permitting program in 1975. The program permits all point source discharges to surface waters. The purpose of the stormwater permitting program is to reduce and eliminate pollutants in stormwater runoff from certain municipal storm sewer systems and industrial activities. Phase II Stormwater rules became effective for North Carolina communities in March 2005.

Municipal Stormwater Permits - Phase I of the stormwater permitting process requires all municipal separate storm sewer systems (MS4) in municipal areas with populations of 100,000 or greater to obtain a permit from Department of Environmental Management to discharge stormwater. Phase II of the stormwater program requires all MS4s serving a population less than 100,000 to establish an ordinance that will manage stormwater. These in turn require land clearing activities of one acre or more to submit a stormwater management plan to the local government for approval. The NC Department of Transportation works directly with the NC Division of Water Quality through a statewide NPDES stormwater permit covering their various activities.



Industrial Stormwater Permits – Several categories of “industrial activities” are required to obtain permits and develop Stormwater Pollution Prevention Plans. Industrial activities include certain manufacturing, transportation, oil and gas, hazardous waste and other facilities. Some government facilities, such as landfills, airports and large wastewater treatment plants may also need permits.

Water Supply Watershed Protection Act

The North Carolina Water Supply Watershed Protection Act requires local governments to adopt water supply watershed protection ordinances to protect the quality of surface drinking water supplies. Ordinances must meet or exceed the minimum state rules. Ordinances regulate various land use activities, restrict development density, require vegetative buffers along perennial waters and require engineered stormwater controls such as wet retention ponds, for High Density developments.

Coastal, Outstanding Resource Waters & High Quality Waters Stormwater Rules

State stormwater regulations also apply to certain developments within the 20 coastal counties and within watersheds of Outstanding Resource Waters and High Quality Waters. The rules offer compliance through Low and High Density development options.



Some Stormwater Discharges Are Covered By NPDES Permits.

Other Stormwater Related Programs

- **Sedimentation Pollution Control Act** - The NC Division of Land Resources administers programs to control soil erosion and sedimentation caused by land disturbing activities. This agency manages the construction permits related to the Phase II Stormwater rules.

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Cumulative Impacts

The cumulative effects of stormwater runoff on water bodies are evident across the state. Streams draining urbanized areas have fair to poor water quality due to stormwater runoff and leaking sewer lines. Some shellfish waters along North Carolina's coast have been contaminated and closed due to stormwater runoff and other pollution sources. Uncontrolled stormwater runoff has many impacts on humans and the environment including:

- Floods - Damage to public and private property, including infrastructure
- Eroded Stream banks - Sediment clogs waterways, fills lakes, reservoirs
- Widened Stream Channels - Loss of valuable property
- Aesthetics - Dirty water, increased trash and debris, and foul odors
- Damaged Fish and Aquatic Life - Impairment/destruction
- Impaired Recreational Uses - Decreased opportunities for swimming, fishing, boating, and other water sports
- Threatens Public Health - Contamination of drinking water, fish/shellfish, and increased exposure to harmful pollutants
- Threatens Public Safety - Drowning in flood waters
- Negative Economic Impacts - Reduction in fisheries and shellfish harvest, tourism, recreation related businesses
- Increased Cost of Water and Wastewater Treatment - Stormwater pollution increases raw water treatment costs and reduced the assimilative capacity of water bodies.

For more information

- Appropriate Local Government Officials www.seris.info/RiverLink/techinfo.shtml
- Land of Sky Regional Council 251-6622.

- Center for Watershed Protection. www.cwp.org.
- North Carolina Division of Water Quality Stormwater Unit: Manuals and Factsheets
www.h2o.enr.state.nc.us/su
- North Carolina Division of Water Quality Stormwater Permitting Unit: Stormwater Permitting Unit Home
h2o.enr.state.nc.us/su/stormwater.html
- North Carolina Phase II Stormwater www.ncphase2sw.org/
- North Carolina State University www.bae.ncsu.edu/stormwater/
- RiverLink www.seris.info/RiverLink/techinfo.shtml or www.riverlink.org