

How To Minimize Nonpoint Source Pollution When It Does Rain After a Long Dry Period

Introduction

This guidance is provided by the Georgia Environmental Protection Division's NonPoint Source Program to assist those responsible for ensuring that discharges of stormwater do not adversely impact waters of the state following extended periods of drought.

During a period of drought, pollutants from a variety of sources accumulate on the ground. Nonpoint source pollution occurs when stormwater runs over the ground and picks up these pollutants, which are then carried into our streams, rivers, lakes wetlands and estuaries. Areas such as roads, parking lots, other impervious surfaces, lawns, agricultural lands, construction sites, and forestry operations may all be sources of "nonpoint source pollutants." Such pollutants include fertilizers; pesticides; oil, grease and other petroleum products; pet and livestock waste; trash, litter and dumpster seepage; and sediment and mud. During a prolonged dry spell, these "nonpoint source pollutants" accumulate on our lands, and when rains do occur, the pollutants are washed into our storm drains, the majority of which are connected directly to our streams. This means the water picking up these nonpoint source pollutants is not treated before it enters our surface waters. When rains do occur, this "first flush" of stormwater carrying nonpoint source pollutants is especially stressful and harmful to our surface waters. Below are ways we can minimize this build up of pollutants on the land (during a drought and always!) to lessen the nonpoint source impacts and to prevent a severe pollutant load to Georgia's precious water resources.

Urban/Residential

Continue or accelerate actions to reduce the accumulation of pollutants on land surfaces or in the stormwater collection system (and thus reduce "first flush" effects), which could otherwise be delivered directly to the nearest waterway. Such actions include but are not limited to:

- Street and parking lot sweeping to remove materials that have accumulated on streets, parking lots and gutters;
- Avoid disposal and accumulation of grass trimmings, leaves and yard wastes in gutters, drainage courses and along stream banks;
- Clean out materials that have accumulated in storm sewer manholes and catch basins, and in sinkholes which could drain to underlying aquifers;
- Increase the emphasis on residential, commercial and industrial source control and pollution prevention to minimize the accumulation of potential pollutants on surfaces or in the drainage system;
- Use low stream flow situation as an opportunity to clean out materials that have accumulated in stormwater retention/detention ponds.
- Redirect downspouts away from driveways and streets.

In addition, initiate additional Best Management Practices (BMPs) for new developments. Such steps include but are not limited to:

- Provide critical area cover (mulch, hay, plantings if feasible);
- Parking lot BMP installations/retrofits (retention areas, grassed parking);
- Install stormwater inlet/manhole screens and filters;
- Install oil and grit separators;
- Identify the 5 to 10 most significant nonpoint source inputs of potential pollutants in a particular watershed (based on current land uses, maintenance/clean-out records, sensitive/at risk waterways, citizen water quality complaints, etc) and require the installation of appropriate BMPs (e.g. dry or wet detention pond, infiltration basins, rain barrels, rain garden, commercial storm drain filter inserts, roofed material storage areas, etc);
- Encourage the use of Green Infrastructure and/or Low Impact Development techniques to manage stormwater.

Construction

Continue to emphasize the implementation of proper erosion and sedimentation control strategies, including daily/weekly/monthly inspections. Consider installing temporary stabilization measures sooner than required by the state or local permit.

Roads and Bridges

Increase the inspection and clean out of storm drains on State highways, Federal interstates and local roads. This not only prevents flooding, but also improves water quality of the stormwater runoff from large areas of impervious surface.

Education

Increased emphasis on actions that can be undertaken by citizens across the State to address potential contaminants that could accumulate and be made available for transport with stormwater runoff. These actions include but are not limited to:

- Continue to publicize the Governor's anti-littering campaign;
- Minimize the application of lawn chemicals during times of drought; prevent the application of chemicals to impervious surfaces such as sidewalks, roadways and parking lots, and to ditches, streambanks and other areas. If such application inadvertently occurs, chemicals should be swept up and removed;
- Avoid disposal and accumulation of grass trimmings, leaves and yard wastes in streets, gutters, drainage courses and along stream banks;
- Clean up pet wastes;
- Repair and properly maintain septic tanks and drain fields;

- Utilize rain water harvesting to decrease rate of runoff (rain barrels, cisterns, rain gardens, etc.)
- Use all available media outlets to provide links to websites with information on the reduction of non-point source pollution:
 - www.georgiaadoptastream.org
 - www.cleanwatercampaign.com/html/563.htm
 - www.conservewatergeorgia.net/Documents/index_c.html
 - www.rivercenter.uga.edu

Commercial Forestry

Continue applying current recommended management practices, as delineated in *Georgia's Best Management Practices for Forestry*. Continue to manage streamside management zones and other special management areas, and to identify perennial and intermittent streams as called for in *Georgia's Best Management Practices for Forestry* or otherwise noted by the Georgia Forestry Commission, and apply BMPs or waterway avoidance practices accordingly. Avoid controlled burning when local conditions are not appropriate and conditions set forth in above manual are not met.

Agriculture

Continue and increase the application of the *Agricultural Best Management Practices for Protecting Water Quality in Georgia* and subsequent agricultural management practice documents. Avoid accumulations of nutrients, agricultural chemicals, sediments or fecal contaminants in streambeds, streambanks, ditches or other areas where pollutants could be readily washed into waterbodies with stormwater runoff. Keep livestock out of dry (and wet) streambeds through fence outs and alternative watering devices.

Long Term Funding

Cities and counties are encouraged to establish local stormwater utilities and other ordinances to help implement all of the above suggestions as well as to comply with various State and Federal stormwater runoff requirements.

For More Information

Contact EPD's NonPoint Source Program at 404-675-6240.