



# BCD NEMO PROGRAM

## Key Finding

The best way to protect your local waters from polluted runoff is to address the issue through your town or county's land use regulation process. In most communities, this regulation is done through planning and zoning commissions. The public meetings of these commissions provide an opportunity for concerned individuals to raise important environmental issues whenever development is proposed. By asking a few simple questions, you can ensure that water quality impacts are duly considered by the proper authorities.

## The Problem

Water quality is greatly influenced by land use. Stormwater runoff carries contaminants such as pathogens, nutrients, sediment, toxic materials, and debris from the land to your local waterways. This is known as polluted runoff, or nonpoint source pollution (see BCD NEMO Fact Sheet #2). Land use policies can, therefore, have a great impact on the health of local waterways, and because land use decisions are often made on a case-by-case basis, each individual development proposal counts. We've all heard it said that in America, one person *can* make a difference. Although this axiom may be a little shop-worn, it is nevertheless true when talking about local land use decisions. When development is proposed in your town or county, it is important that someone ask questions about the water quality aspects of that project. If that "someone" is not one of your local land use boards, then it might have to be you!

While each proposal is different, there are some basic water quality considerations that need to be taken into account. Until you hear otherwise, you can't assume that these issues have been addressed by either the applicant or the commission. Don't be afraid to ask questions - the land use regulatory system was set up specifically to allow you to participate in the process, and lack of expertise on stormwater engineering should not deter you from exercising that right. Remember that the people on your land use boards probably aren't experts on polluted runoff either - they're volunteers and your neighbors, and no matter how conscientious, they can't be expected to always understand the environmental impact of each decision.

## Questions to Ask

Here are some basic questions that should be asked concerning proposed development and its possible effects on water resources. They are roughly organized according to the three-tiered NEMO Project strategy of natural resource planning, environmentally sound site design, and use of best management practices (see BCD NEMO Fact Sheet #4). Although there is no guarantee that asking these questions will always result in stopping polluted runoff, there is no better way to ensure that, at the very least, the issue will be put on the table for discussion.

### **Planning with an Eye to Natural Resource Protection**

1. Does the Comprehensive Plan address watershed management and/or polluted runoff?
2. Where is the project located with respect to your water resources? For instance, is the project located within a watershed that drains into an estuary, reservoir, or aquifer?
3. Does the proposed development encroach upon, or through its runoff, affect, any recognized priority natural resource areas (e.g., wetlands, aquifer recharge areas, wildlife areas, dedicated open space)?

### **Minimizing Impacts through Sensitive Site Design**

1. Is the natural topography and drainage system retained, or is the stormwater collected and piped off site? Where will the stormwater runoff ultimately be discharged? Does it go directly into any wetlands or waterways?
2. Is natural vegetation retained wherever possible?
3. Does the design minimize disturbance of water resources (e.g., road and driveway crossings and bridges; piped or channelized sections)?
4. Are impervious areas minimized? Are parking and other paved areas larger than truly needed? Have pavement alternatives (concrete latticework, pervious pavement, crushed stone) been considered for use in low traffic areas?
5. Are wetlands or waterways insulated from the development through buffer strips or open areas?
6. Is the project within any "setback" or "buffer" zone around wetlands and waterways that restricts certain types of development or activities? If so, who will be charged with enforcing the restrictions? Will signs be posted to inform residents/owners of the restrictions?

### **Mitigating Impacts through Best Management Practices (BMPs)**

1. What erosion control measures will be used during the construction phase? Who will make sure that they are effective?
2. Will stormwater be contained on site, or will it be allowed off site?
3. How is the stormwater runoff going to be treated? What BMPs (biofiltration, detention ponds, etc.) will be used? What pollutants, specifically, are they designed to remove? What volume of water are they designed to hold or treat?
4. Who will maintain the BMPs and how often? What is their projected life span?

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