Enforcing the Clean Water Act: TMDLs and Water Quality Limited Segments

Today's most significant source of water pollution is non-point source pollution -- pollution which is washed from the land and the air during rain events. While the Clean Water Act has successfully been used to address point source pollution (end of pipe pollution) the provisions for addressing non-point source pollution have been largely ignored by both state and federal governments across the nation. Citizen suits and court rulings are finally forcing the implementation of this essential Clean Water Act mandate.

What does the Clean Water Act require?

After putting into place technology-based controls on point source pollution discharges, the Clean Water Act requires a second strategy. Section 303 of the Act requires states to establish water quality standards for waterways, to identify those streams failing to meet the standards, and to take action to clean them up. The problem is that both the states and the federal Environmental Protection Agency (EPA) have failed to implement this 1972 requirement of the Clean Water Act.

In the watershed states of Pennsylvania, Maryland and New York, the initial work of determining which streams are degraded is far from complete. MD has assessed at least 1/2, PA less than 1/7, and NY perhaps 1/4; only MD has begun wetlands assessments. Those waterways which have been assessed demonstrate the serious pollution threats facing our waterways -- in Pennsylvania 36% of streams do not meet water quality standards.

Across the country, citizen lawsuits are forcing EPA to require the states to fulfill the requirements of Section 303 of the Clean Water Act. Citizens will play an essential role in the success of this effort. Citizens are needed to help identify polluted waters -- providing history, monitoring data, visual surveys -- to insure the listing process is not marred by financial or political considerations and that the resulting implementation is strong enough to accomplish the job. You don't need to be an expert to participate. All you need is to care about your local stream and be willing to take the time to read the documents and share your thoughts.

Step one: The states must establish water quality standards

Water quality standards are developed to protect and maintain the chemical, physical and biological integrity of waters. Water Quality Standards, which may be numerical, narrative or prevent degradation, ensure that designated and existing uses of waters, such as fishing, boating and swimming, are met at all times.

Step Two: Identifying Water Quality Limited Segments -- i.e. polluted waters

The States are required to identify those waterways which fail to meet state water quality standards even after technology controls for point sources have been implemented. These waters are called Water Quality Limited Segments or WQLSs. A WQLS doesn't have to be an entire stream -- it is usually just a segment of a stream, and may also be a lake, bay or estuary. States must update their identification of WQLSs every two years, circulate it to the public for comment, and then submit it to the EPA for approval.
Step Three: Establishing Pollution Loads

Once the WQLSs are identified the state has to follow up by calculating Total Maximum Daily Loads (TMDLs). A TMDL identifies the amount of an offending pollutant (whether a nutrient or a toxic) a stream can assimilate without violating its water quality standards. TMDLs must include a margin of safety to protect against mathematical or data errors. TMDLs are set on a pollutant by pollutant basis. Thermal pollution loads must also be set.

Step Four: Allocating Pollution Limitations

Once the TMDL is complete the state has to allocate the allowable pollution load amongst all of the pollution sources in the WQLS segment. All point and non-point pollution sources are considered: dry air deposition, rainfall, benthic deposits, farm runoff and other "non-point" sources -- not simply point source/permitted discharges.

What Can I Do to Get Involved?

There are a number of critical roles you can play to help ensure the integrity and success of the over-due section 303 process.

• **Help us** make sure that the WQLS list includes all polluted waterways. The states are required to make this decision by considering all "existing and readily available information." Citizen input is a key source of information in this process. If you are a water quality monitor, if you walk your stream regularly, if you use your stream for fishing, boating or swimming you have information that is important to the process.

• **Read through any TMDLs issued for your waterway or region** -- do the explanations, information and back-up given by the agencies make sense? While special knowledge and skills can help in this review, they are far from essential. Common sense can play a significant role in identifying and solving TMDL shortcomings.

• **Send your information** to the Water Quality Division of your state environmental protection agency and carbon copy the Environmental Protection Agency (Region III in Philadelphia for PA, DE, MD and VA; Region II in New York for NJ and NY).

• **Make sure your neighbors are aware** when this critical process is taking place in their community. Everybody has a body of knowledge to bring to the table. Everybody needs to be informed and involved.

• **Sign up as a Home Waters Activist** with Riverkeeper to get regular, up-to-date information about the WQLS and TMDL lists being proposed for your waterways. Email riverkeeper@lowsusriverkeeper.org.