The Florida Watershed Restoration Act and TMDL Program

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The 1999 legislative session produced a TMDL bill, called the Florida Watershed Restoration Act, that establishes the Total Maximum Daily Load (TMDL) process for the state. This paper presents a summary of the bill that establishes the means and mechanism by which Florida will comply with federal law.

The 1972 Clean Water Act (CWA) established a goal of attaining "swimable and fishable" surface waters throughout the U.S. To this end, the NPDES program for permitting point and non-point sources was developed. The point source permits granted under the NPDES program primarily imposed technology-based effluent limitations (TBEL) on point source dischargers. Because of enforcement of the point source program, water quality improvements have been impressive; however, there are still many surface waters that have not attained their designated uses, some because the non-point sources have not been adequately addressed.

The Clean Water Act [Section 303(d)] requires both EPA and states to identify those water segments that are currently unable to (or are not expected to) meet water quality standards through the use of technology-based effluent limitations. The CWA also requires that these water segments be ranked according to the severity of their water quality problems and use attainment. Water segments that do not meet their water quality limits (WQLs) are typically identified when states develop their Section 305(b) reports to EPA and Congress on the status of quality and use attainment. States are to address these WQLs by establishing TMDLs for those pollutants that impair their designated uses. In the absence of action by the states, EPA is required to establish TMDLs. EPA has established a policy that requires states to establish a schedule for completing TMDLs, with expectations that these schedules not exceed 8 to 15 years.

EPA and a number of states are currently faced with legal actions by environmental groups that contend EPA and the states have failed to meet the requirements of Section 303(d) of the CWA. The legal actions include notices of intent to sue, active lawsuits, and court orders and consent decrees. On April 22, 1998, Earthjustice (formerly the Sierra Club Legal Defense Fund) filed suit in Florida alleging that the state is moving too slowly in developing the TMDLs, and they desire a broader approach to water quality improvements.

Clearly, the establishment of TMDLs can have serious implications for the Florida water industry. With increasing populations comes the necessity for new or expanded wastewater treatment facilities and stormwater management controls that, together with land use changes, may severely impact receiving water quality. In other states where TMDL suits have been brought, the courts have been asked to modify, revoke, reissue, or terminate existing permits as necessary to meet established TMDLs. Further requests have also been made to prohibit any new sources or dischargers into water quality limited segments.

Because of the ramifications of setting TMDLs on existing and new sources of pollutant loading, local stormwater programs must provide input to EPA and DEP at every stage in the TMDL-setting process. Those communities which hesitate until their permits are up for renewal may find it too late to have any influence on the outcome of the process.

Following is a summary of Florida Watershed Restoration Act that establishes the Total Maximum Daily Load (TMDL) process for Florida. All point source and non-point source discharges within the state may be directly affected by this legislation. Blake Guillory, P.E., and Tom Sear, P.E., are PBS&J Water Resources Program Managers for West and Central/North Florida, respectively.

- The bill designates DEP as the lead agency and requires it to perform a complex capacity analysis before calculating and allocating the amount of a pollutant which a water body may receive without violating water quality standards.
- Previous lists of impaired waters cannot be used in any regulatory program in Florida, and any TMDL calculations or allocations established prior to this act must undergo all of the rule adoption procedures identified in the bill.
- Before revising and prioritizing the list of impaired waters, DEP must first adopt by rule a methodology that outlines the analysis that will be used to determine whether a water body is impaired.
- If a water body is determined to be impaired due to narrative or biological criterion, DEP is required to first isolate and identify the pollutant causing the impairment prior to proceeding to develop a TMDL for that pollutant.
- Water bodies on the revised list may be dropped or added as additional information becomes available.
- If impairment is due solely to activities other than point and non-point sources, no TMDL is required.
- If existing programs such as technology-based effluent limits or other pollution control programs including the National Estuary Program or the Everglades restoration are deemed sufficient to achieve water quality compliance no further TMDL compliance will be required.
- A pollution load reduction goal (PLRG) developed by a water management district can be used as a TMDL as long as the PLRG was developed with the same requirements as the TMDL process given in this bill.
- TMDL allocations are to be based on the following eight specific criteria:
 - 1. Existing treatment levels and management practices;
 - 2. Differing impacts pollutant sources may have on water quality;
 - 3. The availability of treatment technologies, management practices, or other pollutant reduction measures;

4. Environmental, economic, and technological feasibility or achieving allocation;

- 5. The cost benefit associated with achieving the allocation;
- 6. Reasonable time frames for implementation;
- 7. Potential applicability of any moderating provisions such as variances, exemptions, and mixing zones; and

8. The extent to which nonattainment of water quality standards is caused by pollution outside of Florida, discharges that have ceased, or alterations to water bodies prior to the date of this act.

- By February 1, 2001, DEP must submit a report with draft legislation recommending any addition criteria that should be considered in making TMDL allocations.
- TMDLs for point sources will be implemented through the NPDES permitting process.
- Non-point source allocations will be implemented through incentive based programs such as public works projects, land acquisitions, pollutant trading, and development of best management practices.
- The bill presumes that best management practices provide compliance with state water quality standards and limits

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DEP's right to institute a proceeding against an owner for contamination where best management practices have been properly implemented.

Conclusions

Proper and thoughtful implementation of a watershed management program that addresses establishment of a TMDL offers a great opportunity for local governments and industry to control their destiny. Affected parties can influence the outcome only if they actively participate in the process of TMDL determination, which is generally used to address violations of chemical standards in rivers and streams. A broader watershed approach creates opportunities to bundle TMDLs, to strike a balance between controls over point sources and non-point sources, and to consider other water-related problems in the watershed. These include wetland loss, sediment contamination, aquatic species habitat degradation, drinking water protection, and health of riparian areas.

At the core of the process to establish specific TMDL limits is good science, which immediately becomes the pressure point whereby arguments for and against rational decisions will be made.

On one side, arguments will be made that there is insufficient data, or that the data is statistically invalid or suspect. The other scientific extreme will argue that there will never be enough data, and that we have to use our best judgement. Both positions are correct. We are left with a dilemma, the resolution of which rests in the active participation by all those who have an interest in sound governmental decision-making. EPA recognizes this and has coined the phrase "stakeholder involvement" to describe those individuals, industries, and third parties who have a vested interest in the outcome. Like exercising your right as a citizen to vote, becoming an active stakeholder participant is the duty of local stormwater managers.

It is expected that the TMDL process will be long-term. For this reason, the legislature has directed DEP to provide a report describing the evaluation criteria by February 2001, and a summary report on the program's effectiveness by January 1, 2005. At present DEP is beginning to develop the methodology rule for determining whether a water body is impaired. It will then prepare a revised list of impaired waters along with a priority ranking and schedule relating to basin assessment and the calculation and allocation of TMDLs.

DEP is currently identifying technically qualified individuals who have the means and desire to participate in a technical advisory committee that will address TMDL methodologies. Of particular importance is the selection of individuals with proven expertise in the fields of statistics and water quality. Stakeholders and the general public will be able to provide input to methodology development at public workshops that will present interim work products created by the TMDL committee.

Further information regarding the state's TMDL program can be obtained from DEP by contacting Jan Mandrup-Poulsen (850-921-9488), or by visiting the DEP TMDL Web site (www.dep.state.fl.us/water/division/tmdl).