

Stakeholder involvement key component of BMAP process

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By now, we're all familiar with the nuts and bolts of Total Maximum Daily Load development. TMDLs are developed for each parameter impairing finely delineated waterbodies in Florida.

These TMDLs allocate the amount of pollutants that a waterbody can assimilate while meeting the water quality standards assigned for their designated use.

But once these reductions are calculated and generally allocated between point and nonpoint sources, how will they be implemented?

While the Florida Department of Environmental Protection leads the development of TMDLs directed at improving the quality of Florida's waterbodies, successfully achieving these reductions is dependent on the contributions of watershed stakeholders such as local governments, representatives of affected agencies such as the soil and water conservation districts, water management districts, agricultural interests, utilities, industries, community groups, environmental groups and other groups.

TMDL implementation consists of two major steps. The first step is determining specific pollutant load allocations. TMDLs include an initial allocation of pollutant load reductions between point and nonpoint sources, but during the implementation phase, these allocations must be further divided into more detail, assigning each individual discharger a specific load in order to achieve reductions. The involvement of individual dischargers in an impaired basin is critical to achieving these reductions, as the individual allocations must be based on equitability among dischargers, treatment levels, available technologies and feasibility.

The second step is the development of a Basin Management Action Plan, or BMAP, that contains short- and long-term projects and activities to achieve the applicable TMDL reductions throughout the entire basin. As the name suggests, these plans focus on specific action items that will lead to improved water quality for the parameters of concern.

The process of developing such a plan brings together stakeholders in each basin to decide what problems affect the basin, prioritize these problems and collaborate on solutions. This also helps to coordinate individual activities and ensure the most efficient distribution of resources.

The BMAP contains the detailed pollutant load allocations associated with all TMDLs in the larger major basin together with a strategy for water quality monitoring to ensure that reliable data is generated. Such data are imperative to tracking progress against water quality improvement goals.

According to Terry Pride of DEP's Watershed Planning and Coordination Section, "The department's approach to implementing its rule-adopted TMDLs is to involve all affected parties in a basin in developing a consensus BMAP, which will map out cost-effective strategies to achieve and maintain TMDLs."

The BMAP is jointly developed by DEP staff and basin stakeholders. This is an opportunity for affected stakeholders to cooperate, coordinate and negotiate on the best and most cost-effective ways to achieve a TMDL.

The BMAP incorporates existing management activities, such as specific best management practices, capital improvement projects such as plans for future drainage improvements or stormwater retrofits, pollutant source identification programs, other action items from watershed plans generated by local governments, and Surface Water Improvement Program plans directed by the water management districts and community initiatives.

The reductions that result from existing BMPs or watershed activities are projected and may be credited to the overall reductions necessary to meet the TMDL for a given waterbody.

After these credits are subtracted from the overall reductions, stakeholders formulate a series of actions and initiatives to achieve the reductions not addressed by existing or planned management activities.

Action items require an activity such as an agriculture or stormwater BMP, habitat or watershed restoration initiative, or environmental study, as well as projected reductions associated with that activity, involvement of responsible stakeholders committed to that activity, required funding and potential funding sources.

Identification of funding mechanisms is an important component of the BMAP, requiring coordination of projects to utilize state and federal programs. Incorporating priority projects and funding opportunities into the BMAP ensures local coordination of funding applications, benefiting integrated programs rather than small, isolated projects.

Programs that are included in a watershed plan such as the BMAP are also more likely to achieve funding due to increased chances for successful overall watershed restoration.

DEP has built on just this kind of stakeholder organization in the Orange Creek Basin, located within the Upper Ocklawaha River Basin and including the communities surrounding Gainesville. This is one of the first basins to apply DEP's rotating basin approach, which is the basis for monitoring, TMDL development and implementation.

The stakeholders in this group are working to formulate a consensus-based BMAP to implement TMDLs for a variety of parameters, including nutrients, metals and coliform. They have formed a formal working group that will meet approximately six times a year to develop strategies for identifying and prioritizing projects that will achieve pollutant reductions.

The group includes the local governments, Alachua and Marion county, the city of Gainesville, Gainesville Regional Utilities, the Florida Department of Transportation, the Florida Department of Health, the University of Florida, local environmental groups including the Sierra Club and Women for Wise Growth, and the county and city citizen advisory boards in addition to DEP.

The dissemination of information about the Orange Creek BMAP is a group priority. Group meetings are open to all interested parties and input is always welcome.

Public hearings and workshops are held as needed, and presentations to interested parties can be arranged. Local government staff and citizen advisory committees are periodically briefed on the status of the BMAP formulation.

A key component of the Orange Creek BMAP will be the development of a monitoring and evaluation plan to provide a measure of the effectiveness of specific management activities that are planned.

Stakeholders will evaluate current water quality monitoring sites and will reach consensus on monitoring contributions of state and local agencies. This portion of the plan will include interim goals in the form of performance measures, to enable stakeholders to periodically evaluate these goals and provide feedback on how best to modify future management activities.

"The BMAP approach is well-suited to the Orange Creek basin," says Terry Pride, "where DEP has been working with a growing group of energetic and knowledgeable stakeholders for more than a year to share information and ideas on TMDL implementation. We will begin the BMAP process more formally there in October."

With the goal of restoring local water quality, stakeholders in the Orange Creek basin as well as throughout Florida will be anxious to see if the plan works.

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