Guiding Light

By Chris French

EPA provides new options for meeting TMDL goals

The goal of the TMDL program is arguably simple—to develop watershed-level conservation plans designed to restore impaired waters and attain applicable water quality standards—but its development and implementation have not been simple. In an attempt to bring new clarity to the process of incorporating TMDLs into storm water permits, the U.S. Environmental Protection Agency (EPA) issued a revised guidance document in November 2014 titled, "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs."

This new policy is a revision of agency guidance originally issued in 2002 and revised in 2010, and supersedes both. It now incorporates changes due to recent legal rulings and agency policy shifts, and appears to incorporate responses from an informal public comment period held in 2011 related to the 2010 document.

The 2010 guidance placed a greater emphasis on utilizing numeric water quality limits for storm water discharges, reinforced the use of storm water pollutant surrogates (e.g., storm water flows) in storm water permits and moved away from a prior emphasis on using an iterative approach for best management practice (BMP) implementation to meet TMDL requirements.

A number of changes have occurred since the issuance of the 2010 guidance. In 2013, the U.S. District Court stated in the Accotink Creek TMDL case (Virginia Department of Transportation v. EPA) that surrogates such as storm water flow could not be used in place of applicable water quality standards in the TMDL program. EPA also indefinitely deferred action on developing a national storm water rule, favoring a more localized approach that will incorporate increased incentives, greater emphasis on the use of green storm water infrastructure, and enhancing and strengthening municipal permit programs.

The new guidance has removed reference to the use of TMDL surrogate pollutant parameters such as storm water flows. The use of numeric water quality-based effluent limits where feasible remains, but elements from the 2002 guidance that promote the implementation of storm water BMPs using an iterative approach also are incorporated. When utilizing this BMP-based compliance approach, it must be demonstrated that implementation of specific BMPs can be reasonably expected to achieve the TMDL water quality goal.

The new guidance also discusses disaggregating elements of a WLA when opportunity exists, allowing for localized targeting of "hot spot areas," establishing target goals at the sub-watershed level and/or assigning WLAs for individual MS4s within a geographic area. New to this guidance is the inclusion of permitted industrial discharges and additional guidance on how TMDL effluent limits should be applied and implemented within that regulatory construct.

As storm water permits are renewed in coordination with the regional EPA offices, we may continue to see TMDL-based effluent limits and restoration goals being incorporated, and already see the result of such actions in parts of the U.S. For example, activities once considered voluntary—such as urban tree planting—now are being listed in storm water permits with numeric goals for tree establishment. Regional permit program inspections and enforcement activities are increasing as well.

At the end of the day, it is clear that this guidance promotes a number of options states and local resource managers can refer to on how to meet TMDL requirements. While there is greater emphasis on meeting water quality standards with the use of water quality-based effluent limits, the flexibility of utilizing the historical iterative approach for implementing storm water BMPs remains. Such an approach offers the best of both worlds in an increasingly regulated sector where the ultimate measure of success remains the satisfaction of water quality standards. SWS

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