U.S. Environmental Protection Agency Office of Inspector General

2007-P-00031 September 10, 2007

At a Glance

Catalyst for Improving the Environment

Why We Did This Review

This review is one of several conducted by the Office of Inspector General in response to a congressional request. We sought to determine how well the U.S. Environmental Protection Agency (EPA) is assisting its Chesapeake Bay partners in restoring the Bay. This report focuses on progress to reduce nutrient and sediment loads from developed and developing land sources.

Background

Over 64,000 square miles of land drain to the Chesapeake Bay. Population in the watershed exceeds 16 million and is projected to surpass 19 million before 2030. Excessive loads of nutrients and sediments have been identified as primary causes of Bay degradation. From 1985 to 2005, EPA estimated loads from developed land sources increased up to 16 percent, while loads from wastewater disposal and agriculture decreased.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link: www.epa.gov/oig/reports/2007/20070910-2007-P-00031.pdf

Development Growth Outpacing Progress in Watershed Efforts to Restore the Chesapeake Bay

What We Found

EPA and its Chesapeake Bay watershed partners will not meet load reduction goals for developed lands by 2010 as established in the *Chesapeake 2000* Agreement. In fact, new development is increasing nutrient and sediment loads at rates faster than restoration efforts are reducing them. Developed lands contribute less than one-third of the Bay loads but would require about two-thirds of the overall estimated restoration costs. Consequently, EPA and its Bay partners focused on more cost-effective approaches, such as upgrading wastewater facilities and implementing agricultural best practices. Additional challenges impeding progress include:

- Lack of community-level loading caps.
- Shortage of up-to-date information on development patterns.
- Ineffective use of regulatory program to achieve reductions.
- Limited information and guidance on planning and applying environmentally sensitive development practices.
- Limited funding available for costly practices.

A cost-effective start to reversing the trend of increasing loads from developed land is for communities to concentrate on new development. Opportunities abound for EPA to show greater leadership in identifying practices that result in no-net increases in nutrient and sediment loads from new development and assisting communities in implementing these practices. If communities do not sufficiently address runoff from new development, loads from developed lands will continue to increase rather than diminish. As a result, restoration costs will increase, and the Bay will not be restored to the health envisioned in the *Chesapeake 2000* Agreement because water quality degradation and loss of aquatic life will continue.

What We Recommend

We recommend that the EPA Chesapeake Bay Program Office Director prepare and implement a strategy that demonstrates leadership in reversing the trend of increasing nutrient and sediment loads from developed and developing lands. The strategy should include developing a set of environmentally sensitive design practices and support for the use of those practices. The Chesapeake Bay Program Office Director should also work with Bay partners to set realistic, community-level goals for reducing loads from developed and developing lands. In addition, the EPA Region 3 Water Protection Division Director should establish a stormwater permitting approach that achieves greater nutrient and sediment reductions. EPA concurred with the recommendations in this report.