



**CHESAPEAKE BAY
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Saving a National Treasure

Maryland's Eastern Shore Milestones

2012/2013 FINAL ASSESSMENT



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Clean Water for Maryland's Eastern Shore: Is the Region on Track?

Maryland's Eastern Shore has a special connection to the Chesapeake Bay and its rivers and creeks. These waters provide the foundation of a strong working economy and a unique identity that attracts residents and visitors alike. While poor water quality here contributes to a Bay ecosystem hanging dangerously out of balance, the Chesapeake Clean Water Blueprint, with its clear goals and specific clean-up plans, provides an unprecedented strategy for implementing local efforts that can restore these waters and the region to health.

Maryland's nine Eastern Shore counties account for roughly one-third of the state's total nitrogen and phosphorus pollution. A majority of this pollution comes from agriculture, with sources from developed land also contributing to the problem. Maryland's clean-up plan calls on Eastern Shore counties to reduce excess nitrogen and phosphorus from polluted runoff and septic systems by about 30 and 40 percent, respectively, in addition to substantial reductions from agriculture.

Increased efforts by local governments, citizens, businesses, and farmers will be critical to meeting water-quality goals and restoring the Bay's health under the Blueprint. In 2011, localities were charged with implementing Best Management Practices (BMPs) by June 30, 2013, to keep pace with clean-up targets. Because some practices require more resources to reach these targets, milestones for funding and program capacity in the local government were to be developed and then met by December 31, 2013. Together, these sets of milestones stand as the two-year benchmarks intended to allow for a reliable assessment of progress towards 2025 pollution-reduction targets.

This report examines progress in reducing pollution on Maryland's Eastern Shore over the 2012-2013 timeframe, based on a combination of local reporting to the Maryland Department of the Environment and nitrogen and phosphorus pollution-reduction data from the Chesapeake Bay Program.

Findings

For many jurisdictions, developing clean-up strategies and milestones was a challenging task. Timeframes were short. There was little prior experience to draw upon. And guidance from federal and state agencies was still evolving. Local plans varied with respect to completeness, rigor, and clarity. In general, implementation of milestones were modest in ambition, and actions that local governments would need to take to prepare for future work were often vague with indeterminate deliverables.

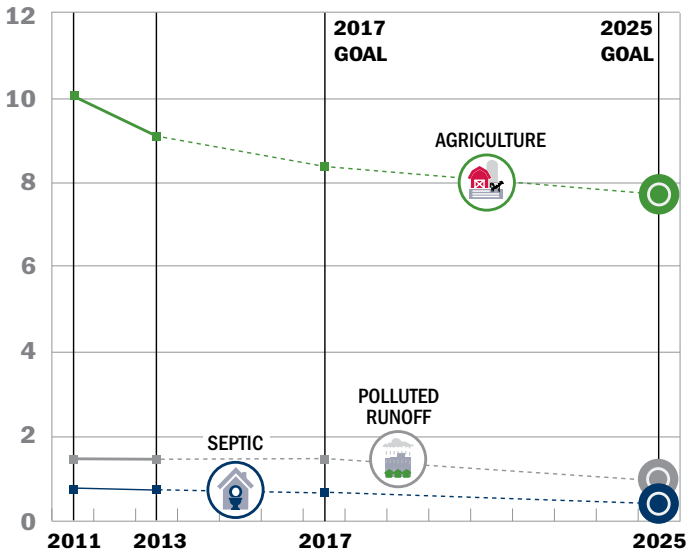
The inconsistent rigor of local milestones and lack of specific county-by-county data on pollution-control implementation precludes a full assessment of 2013 local milestone progress. The failure of some counties to report on 2013 progress or to submit new milestones for 2015 is particularly troubling. A state review now underway is expected to provide additional information on county performance. In the meantime, nutrient pollution trend data provided by EPA offers an alternative measure of progress that partially reflects the local implementation effort. Through this data, modest progress was observed across the Eastern Shore, but accelerated efforts are needed to reduce pollution from developed land and excess phosphorus on farms.

In summary, improvements in the development and implementation of local milestones, consistent reporting, better access to data, and strengthened state guidance are critical as progress on the Eastern Shore has been slow for some sources and pollutants.

Recommendations

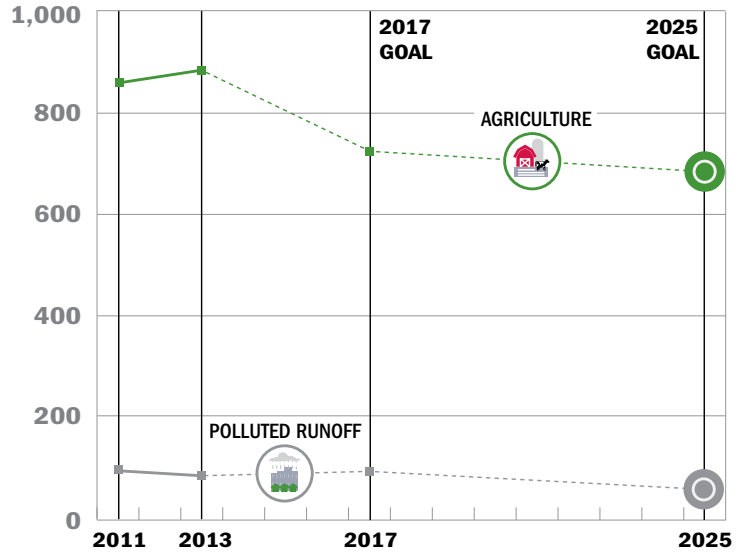
1. Local jurisdictions should develop specific commitments to address pollution from septic systems and urban and suburban runoff, and submit timely reports that account for progress towards pollution-reduction goals.
2. State and federal agencies should provide stronger guidance for local clean-up efforts, including comprehensive performance measures and reporting requirements.
3. Local elected officials should formally adopt a pollution-reduction strategy to be consistent with Maryland's interim (2017) and final (2025) pollution-reduction targets.

Modeled Nitrogen Loads and Long Term Goals on the Eastern Shore by Sector (millions of pounds)



Source: Chesapeake Bay Program Watershed Model 5.3.2

Modeled Phosphorus Loads and Long Term Goals on the Eastern Shore by Sector (thousands of pounds)



Pollution Reduction on the Eastern Shore by Source Sector

The above charts use the best available data from the Chesapeake Bay Model to show nitrogen and phosphorus reductions for the Eastern Shore “basin” from key sources through 2013. They also compare current progress with the 2017 and 2025 nutrient-reduction targets established for Maryland’s Eastern Shore by the Chesapeake Clean Water Blueprint.

Agriculture is making steady progress towards the 2025 nitrogen-reduction target, primarily through increases in cover crops and other annual practices. Maintaining this progress will require additional investment in permanent practices such as forested buffers and tree planting. Strong measures and alternatives based on the best available science are needed to address the legacy of phosphorus saturated soils on the Shore.

Nitrogen-reduction efforts must be stepped up significantly to reduce impacts to local rivers and the Bay from polluted urban and suburban runoff and septic systems. Similarly, accelerated effort is needed to meet the phosphorus target for runoff (treated effluent from septic systems does not include significant amounts of phosphorus). In addition, with no policy in place to offset new loads, growth is steadily increasing the pollution-reduction burden on state and local governments.

Seeds of Progress

Many Eastern Shore towns and counties are working hard to ramp up local investments in clean water. Highlights include:

- Somerset and Wicomico Counties used grants to identify and prioritize projects to stop polluted runoff. Wicomico County leveraged \$200,000 in local funding to secure more than \$600,000 from outside the county in grants for the design and installation of conservation practices.
- Talbot County is developing an innovative roadside ditch retrofit partnership that has helped reduce pollution-control cost estimates by 90 percent and could provide a model for other jurisdictions.
- Queen Anne’s County is partnering with non-profits to explore nutrient trading to reduce pollution-control costs.
- Salisbury, Berlin, Oxford, and Centreville have adopted or are considering polluted runoff fees to fund needed projects. Several towns and counties have forged collaborative relationships to reduce pollution.

These promising efforts begin to show the potential of working in partnership, the importance of local funding, and the role of innovation in advancing clean-water solutions. New sources of grant funding will soon help local governments with milestone commitments. Commitments like these from local jurisdictions, in collaboration with residents, farmers, state and federal governments, and the private sector, can successfully implement the Blueprint and clean up our rivers, creeks, and the Chesapeake Bay.



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