EPA review finds Pennsylvania significantly off track to meet Bay goals

* *By* Karl Blankenship *on* June 12, 2015

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*Dave Harp (The Susquehanna River near Wrightsville, Pa.)*

Pennsylvania this year needs to double the number of farm acres under nutrient management and plant seven times as many acres of forest and grass buffers as it did last year to help it get back on track to meet Chesapeake Bay nutrient reduction targets, but it lacks programs or policies to achieve either, according to an EPA review released Thursday.

The review also cast doubt on whether the state could ever meet its pollution reduction goals for urban stormwater.

Those points illustrate how far off track the watershed’s largest contributor of nutrient and sediment pollution is from meeting its goals. The EPA review warned Pennsylvania that if it does not ramp up efforts, the agency could take actions such as requiring greater pollution reductions from wastewater treatment plants — something that would be hugely expensive in Pennsylvania where plants tend to be smaller and more costly to upgrade.

While other states have issues, the annual review of state programs shows the greatest concerns are clearly in Pennsylvania. In the next three years, that state would have to reduce nitrogen loads almost four times as much as the rest of the watershed states combined to meet the goals set for the end of 2017.

“The situation with Pennsylvania is obviously what we are focused on right now,” said Nick DiPasquale, director of the EPA’s Chesapeake Bay Program Office.

Reflecting that concern, the EPA last month warned in a letter to Pennsylvania officials that they needed to use the $6 million to $8 million in annual Bay-related EPA grants to fix problems and accelerate progress, or the agency would consider bypassing state agencies and give that money to others working on Bay issues in the state.

The six-page letter outlined numerous actions the state should take to improve compliance with agricultural regulatory programs, accelerate implementation of “high priority” runoff control practices, and improve its stormwater programs.

“We are clearly indicating to them that they need to use grant programs to address those issues, and if they don’t we will,” DiPasquale said.

If the EPA were to take action with its grants, it would be the first time since December 2010 when it issued the Chesapeake Bay Total Maximum Daily Load, or pollution diet, that it took action against a state for falling short of cleanup goals.

Unlike past cleanup goals which were repeatedly missed, the TMDL framework set a series of clear deadlines to monitor progress. Besides setting an overall goal to implement by 2025 all cleanup actions needed to restore Bay water quality, the TMDL framework calls for achieving 60 percent of those actions by 2017. In addition, all states set interim two-year milestones which identify what actions they will take, and the amount of nutrient reductions they will achieve. The current milestone period covers 2014-15.

If states fall behind schedule, the EPA can take a variety of actions to try to put them back on course. The actions can range from redirecting grant funds, as suggested in the EPA’s letter, to more substantive actions, such as forcing greater nutrient reductions from permitted facilities, such as wastewater treatment plants, as suggested in the state review.

Chesapeake Bay Foundation President William Baker said if Pennsylvania fails to show greater results soon, EPA needs to act.

“It is past time for Pennsylvania to take meaningful actions that will accelerate pollution reduction,” he said. “If Pennsylvania does not significantly advance their efforts to reduce pollution, then CBF calls on EPA to specify the actions it intends to take to ensure pollution is reduced. Unless there are consequences for failure, we are in danger of repeating the decades of failed Bay restoration efforts of the first three Bay agreements.”

While some other states are also off track toward meeting pollution reduction goals set for 2017 and 2025, the Pennsylvania gap is huge: the watershed needs to reduce 29 million pounds of nitrogen pollution in the next three years; 23 million pounds of that needs to come from Pennsylvania.

About 46 percent of the nitrogen entering the Bay comes from the Susquehanna, and the vast majority of that is from Pennsylvania.

The shortfall is particularly troubling because nitrogen from the Susquehanna River, which drains much of Pennsylvania, has a disproportionately large impact on Bay water quality — a pound of nitrogen from the Susquehanna contributes more to the Chesapeake’s oxygen-starved summertime dead zone than the same amount from most other rivers. Therefore, shortfalls from Pennsylvania are not easily offset by greater reductions elsewhere.

In April, a dozen Maryland lawmakers also called for the EPA to take greater action to ensure that pollution from Pennsylvania is reduced.

“As a result of Pennsylvania’s shortcomings in compliance with its regulations, Maryland’s environment, economy, farmers, watermen and citizens continue to be severely adversely affected by the pollution from Pennsylvania that flows into the Bay,” they wrote.

John Quigley, who was recently confirmed as secretary of the Pennsylvania Department of the Environment in the new administration of Gov. Tom Wolf, said the state “recognizes the volume of work that still needs to be done, and the size of the problem that the Wolf administration has inherited” but noted the state has made overall progress on nutrient reduction efforts started in the mid-1980s.

He said the state was piloting an initiative to work with all farmers within small, targeted watersheds, and working to improve coordination among programs and striving to re-engage stakeholders to identify effective nutrient control efforts that could be scaled up across the state.

Nonetheless, Quigley acknowledged “an urgent need for renewed focus on the Chesapeake Bay.”

To get on track, Pennsylvania would need to need to reduce nearly 8 million pounds of nitrogen pollution annually from 2015-17, an amount unprecedented for the region. Nitrogen reductions from the entire Bay watershed, including Pennsylvania, typically average 3– to 4-million pounds a year.

Compounding the problem, according to the EPA review, is the state’s lack of adequate programs to implement highly effective nutrient control practices.

For instance, the state would need to plant 22,000 additional acres of forest and grass buffers this year to meet its 2014-15 interim buffer-planting goal because only 3,000 acres were planted last year. “It is unclear what programs, policies and initiatives are in place to achieve the 2015 and future targets for forest and grass buffers,” the review said.

Similarly, the state needs to double its acreage under nutrient management, but the EPA said “it is not clear what mechanisms or strategies” the state would use to accomplish that.

Agriculture is not the only sector with problems.

The state was counting on stormwater systems to achieve a 41 percent nitrogen reduction, a 45 percent phosphorus reduction and a 50 percent sediment reduction by 2025, but so far the state has only achieved reductions of 1 percent for nitrogen, 10 percent for phosphorus and less than 1 percent for sediment.

EPA said it wanted the state to accelerate implementation of high priority runoff control practices, such as forested buffers and urban stream restoration, but expressed skepticism that the state could meet its urban stormwater goals and said it expected Pennsylvania to shift some of those reductions to other sectors, either agriculture or wastewater.

EPA continues to have concerns about the state’s nutrient trading program, and has not been approving permits that rely on trading to meet discharge limits. The agency said it expects the state to revise its programs to make them consistent with EPA recommendations and the Bay TMDL.

It also wants the state to show how it plans to offset growing nutrient sources, such as the state’s poultry industry, where the number of egg laying chickens has increased 38 percent since 2007.

The review did note progress in some programs. The state’s wastewater treatment plant upgrades are on schedule, and it has begun assessments in targeted watersheds to ensure that all farms in those areas conform with permits and best management practices are being implemented.

Also, the state is on track to meet its phosphorus goals, though the EPA cautioned that those estimates, generated from computer modeling, could be in error, as water quality monitoring has shown increasing phosphorus trends from the Susquehanna.

“It is certainly going to be an uphill climb for them to do it by 2017,” DiPasquale said. “But what we are going to be looking at is, Are they making progress? Are they moving forward in a deliberate manner with those things they told us they are going to do to close that gap, and getting that done? That is going to have to be a determination that we make a little bit further down the road.”

In other state reviews, the EPA found:

• Virginia is on track to meet 2017 goals for nitrogen and phosphorus, but not sediment.

• Maryland is on track to meet 2017 goals for phosphorus and sediment, but not nitrogen.

• The District of Columbia is on track to meet all 2017 goals.

• Delaware is on track to meet 2017 goals for nitrogen, phosphorus and sediment.

• West Virginia is on track to meet 2017 goals for nitrogen, phosphorus and sediment.

• New York is on track to meet phosphorus goals, slightly off track of sediment goals, and significantly off track for nitrogen goals.

All the state reviews can be found on the EPA’s Chesapeake Bay TMDL website: [www.epa.gov/chesapeakebaytmdl/](http://www.epa.gov/chesapeakebaytmdl/)

* Category:  Pollution

About Karl Blankenship

Karl Blankenship is editor of the Bay Journal and Executive Director of Chesapeake Media Service. He has served as editor of the Bay Journal since its inception in 1991. Send Karl an e-mail.

**Comments**

**John Arway** on June 15, 2015:

<http://www.fishandboat.com/news/2015pr/sos-bass.htm> Perhaps the Susquehanna's smallmouth bass may be the best indicator of whether we are meeting the goals to restore the Bay?

**Steve Todd, PE - Secretary Stewards of Lower Susqu** on June 16, 2015:

Headline should more specifically delineate the problem, described in the article: "All tributory watershed states except PA on track to meet nutrient reduction requirements to Chesapeake".