



CHESAPEAKE BAY  
FOUNDATION

Saving a National Treasure

# THE CONOWINGO DAM: CLEAR FACTS ON A MUDDY ISSUE

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Recently, some people have been broadcasting an alarming message: the effort to restore the Chesapeake has failed because one major source of pollution has been ignored—the Conowingo Dam on the Susquehanna River.

This is a powerful message. It's simple, frightening. It's also wrong. It's designed to confuse and derail any meaningful discussion about restoring water quality. We've heard this type of rhetoric for decades. The biggest threat to the Bay is finger pointing. We each need to take responsibility for our mess.

Here are some facts:

## How the Problem Started

Pollution runs off farms, suburbs, and cities in Pennsylvania and New York into the Susquehanna River. Pollution also runs off rural and urban landscapes into rivers and creeks in Maryland, Virginia, Delaware, West Virginia, and the District of Columbia. The Bay suffers from all of this pollution. The Susquehanna delivers the greatest volume of water to the main stem of the Chesapeake Bay, as well as about half the nitrogen pollution and a quarter of phosphorus and sediment pollution. Other rivers provide the remaining pollution load.

Under normal weather conditions, the Conowingo Dam traps much of the sediment and phosphorus pollution flowing down the Susquehanna. It traps only a tiny bit of nitrogen. But scientists estimate the reservoir behind the dam is nearly full. Recent large storms such as Tropical Storm Lee and Hurricane Irene have flushed plumes of sediment down the Susquehanna (and other Bay tributaries) and scoured out, or dislodged, some of the sediment trapped behind the dam. This sediment, and associated nutrient pollution, washed into the Bay.

## Impacts: Not as Bad as Originally Thought, but Worrisome

While scouring of sediments and nutrients from behind the Conowingo Dam does deliver additional pollution to the Bay during storms, this pollution by no means “dooms” the Bay or overrides the efforts of countless citizens, leaders, and communities to clean up the Bay. Preliminary results of a 2014 Army Corps of En-

gineers (ACOE) study indicate that sediment and nutrients flowing past the dam during large storms have a relatively minor impact on dissolved oxygen in the Bay's main stem and little to no impact on other tributaries in Maryland and Virginia. Those studies show that during storms, 80 percent of the sediment pollution is from the Susquehanna watershed above the dam, with only 20 percent coming from behind the dam.

## The Solution: A Blueprint for Reducing Pollution

Since 2010, the six states in the Bay watershed, as well as the District of Columbia, have agreed to follow a regional plan to reduce pollution levels by 25 percent to make the Bay once more a productive estuary safe for swimming and fishing. We call this plan the Chesapeake Clean Water Blueprint. It's working. Pollution levels are shrinking in the Susquehanna. In the past four years, practices have been put in place to reduce nitrogen, phosphorus, and sediment pollution by 20 million, two million, and 497 million pounds a year respectively. Reducing pollution that reaches the dam from sources upstream should remain our chief focus.

Meanwhile, we also must find the most effective means of dealing with pollution trapped at the Conowingo Dam. The final ACOE report will be released in late October and will describe what we know about the impacts of scouring and the costs of various remediation options. The University of Maryland is also conducting additional studies to fill information gaps identified by the ACOE study. Once those results are available, a more informed discussion of remediation options can occur. CBF believes Exelon Corporation, the owner-operator of the dam, should be required to contribute to a solution.

## Misinformation about the Dam

Opposition to the Clean Water Blueprint and concern over the cost of cleaning up local waters has led some to argue that focus should be on the dam, not local clean-up measures. The ACOE, the University of Maryland Center for Environmental Science, and other experts disagree. Nearly all nitrogen pollution in the Bay comes from sources other than Conowingo scouring, so fixing the scouring will do nothing to reduce the Bay's worst type of pollution. The



*After a heavy rain, polluted runoff dirties rivers throughout the region and the Chesapeake Bay.*

ACOE preliminary study also estimated dredging costs of \$50 to \$270 million annually just to keep up with the sediment flowing into the dam. This dredging would have minimal impact on the Bay's health and would do nothing to meet the requirements of the Blueprint. Also, local Maryland and Virginia creeks are fouled by local farms, sewage plant spills, and other local sources, not by pollution from the Susquehanna. Finally, common sense tells us to solve a problem at its source. We can't focus on the dam at the expense of local clean-up efforts. Costs for that work already are coming down dramatically in many counties that have rolled up their sleeves. Programs to share the costs and help subsidize clean-up efforts are growing. The Blueprint presents the best plan to restore the Chesapeake and all its tributaries.

In short, the fact that our children or dogs can't swim in our local creeks after a rain storm has absolutely nothing to do with Conowingo. It has everything to do with local pollution. Is there a problem at the dam? Yes. Is it a big enough problem to derail Bay restoration? Scientists say no. We must not get distracted. We have a Blueprint for success, and it's working. The Blueprint asks each of us to do our part. Those who alarm us with distorted messages must not feel a shared responsibility. That's really sad.

**A Time for Action**

The current license for the Conowingo Dam expired in September 2014. Exelon Corporation has applied for a new license. The current license was extended until September 2015 while the Federal Energy Regulatory Commission (FERC) finishes an exhaustive en-



*Runoff flowing downstream from the Susquehanna watershed affects the Bay's main stem, but has little impact on Maryland and Virginia's local waters.*

vironmental review process. FERC must include provisions in the new permit to minimize impacts to water quality in the Bay and to fish in the Susquehanna, among other issues. Maryland will hold its own separate assessment to ensure the conditions of the new license set by FERC mitigate impacts on downstream waters. CBF and other environmental groups have intervened legally to ensure there is ample opportunity for the public to give input in this process.

**What You Can Do**

Progress is being made towards restoring fishable, swimmable waters in the Chesapeake Bay, but there is much more to do. States and municipalities below the Conowingo Dam have important work of their own and need to stay on course:

- 1) Urge your community to press ahead with water-quality improvement efforts, continuing to reduce pollution to local waterways using proven strategies like upgrading waste management infrastructure and reducing polluted runoff from agricultural and urban areas.
- 2) Urge leaders and communities in the Susquehanna Watershed to continue to do their part. Although Pennsylvania and New York are making progress, both are still falling short of some of their Blueprint pollution-reduction goals. Everyone in the Chesapeake Bay watershed must do their part in order to achieve clean, healthy waters in our backyards and the Bay. 🐦

**For more information, visit [cbf.org/conowingo](http://cbf.org/conowingo).**