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FACT SHEET

Lower Susquehanna River Watershed Assessment

The Lower Susquehanna River Watershed Assessment (LSRWA) report was designed to analyze the movement of sediment through the series of hydroelectric dams on the lower Susquehanna River. The LSRWA was conducted through a partnership between the U.S. Army Corps of Engineers, the Maryland Department of the Environment, The Nature Conservancy and the Susquehanna River Basin Commission. The draft LSRWA report was recently released and is open for public comment.

WHAT THE DRAFT REPORT FOUND:

- For most of its existence, the Conowingo Dam has trapped sediment from the Susquehanna River watershed and stored it in the reservoir behind the dam.
- As sediment has continued to accumulate behind the dam, the reservoir behind Conowingo has exhausted its long-term ability to capture and store sediment coming down the river – a condition that scientists call “dynamic equilibrium.” The reservoirs behind the other dams upriver from Conowingo are in the same condition.
- While sediment itself has a negative impact to the Chesapeake Bay ecosystem, the larger threat to water quality and aquatic life is the nutrient pollution that is attached to the sediment. Nutrient pollution causes algae blooms, which in turn cause low oxygen conditions and poor water clarity, contributing to the “dead zones” that harm aquatic life.
- The majority of the sediment load from the lower Susquehanna River originates from the 27,000 square mile watershed above the dam, not the reservoir behind Conowingo. Between 2008 and 2011, only 13% of the sediment load from the Susquehanna River came from the dam’s reservoir – the rest came from local sources in the Susquehanna River watershed.
- Further study is needed on several issues. The report identifies future needs and opportunities, including investigating nutrient management strategies in detail, and suggests that nutrient management and mitigation could be more effective than sediment management alone.



WHERE WE GO FROM HERE:

The Conowingo Dam is not the biggest problem facing the Chesapeake Bay. Local pollution drives local water quality, and managing pollution at its source is the best way to achieve water quality improvements for the Bay and its many rivers, creeks and streams.

Exelon isn't responsible for cleaning up the Bay, but it is responsible for bringing its dam up to modern environmental standards. Conowingo is a source of pollution, and Exelon is responsible for reducing that pollution and mitigating its environmental impact.

Our organizations believe that there is an opportunity to achieve water quality improvements for the Chesapeake Bay through the federal relicensing of the Conowingo Dam, because provisions in the federal Clean Water Act give Maryland a once-in-a-generation chance to require Exelon to meet state water quality standards at the dam. Making these improvements alone won't clean up the Bay, but insisting that Exelon do its fair share will help the overall Bay restoration effort.

More information is needed to help scientists measure the impacts of Conowingo Dam on water quality and natural resources in the Chesapeake Bay. We support the Watershed Assessment report's recommendations:

- Quantify the full impact of the lower Susquehanna River dams on the health of the Bay
- Incorporate these findings into the larger Chesapeake Bay cleanup plan
- Develop management options that reduce impacts to the upper Chesapeake Bay ecosystem
- Commit to further monitoring and analysis of the sediment and nutrient processes.

ABOUT THE SUSQUEHANNA RIVER:

- The Susquehanna River provides nearly half of the Bay's freshwater, 41% of the nitrogen, 25% of the phosphorus and 27% of the sediment load.
- The Susquehanna is the largest river flowing into the Chesapeake Bay. The drainage area behind the dam is more than 27,000 square miles, includes much of Pennsylvania and extends all the way to Cooperstown, New York.



ABOUT THE CONOWINGO DAM:

- The Conowingo Dam was built in 1928 in Maryland near the Pennsylvania border. Located near Havre-de-Grace, it is the first Susquehanna River dam upriver from the Chesapeake Bay. The dam is owned and operated by Exelon Corporation, which has requested a new 46-year federal license to operate the dam.
- There are nearly 200 million tons of sediment, nutrients and other pollutants from the Susquehanna River watershed trapped behind the Dam.



For more information, and to see a Fact Sheet and an Infographic on Conowingo Dam, please visit our website at www.ConowingoDam.org