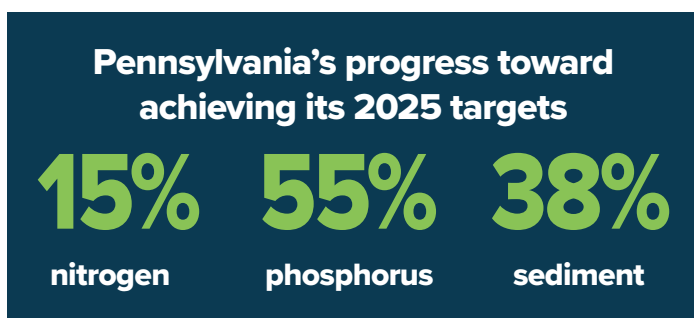


## Health and Restoration in Pennsylvania (2017-2018)

More than 22,000 square miles of Pennsylvania sit within the Chesapeake Bay watershed, and one of the Commonwealth's major rivers—the Susquehanna—flows into the Bay. The Susquehanna River is the Bay's largest tributary, and contributes about half of the Bay's freshwater (about 19 million gallons per minute). Pennsylvania has committed to achieving 25 of the outcomes in the *Chesapeake Bay Watershed Agreement*. Its progress toward 10 of these outcomes is highlighted here.

### Estimated Nitrogen, Phosphorus and Sediment Pollution Reduced

The Chesapeake Bay Program uses its Watershed Model to estimate reductions in nitrogen, phosphorus and sediment pollution that is flowing into the Bay. By the end of 2017, Pennsylvania had achieved 15 percent of its 2025 target for nitrogen, 55 percent for phosphorus and 38 percent for sediment. Collectively, Bay Program partners have achieved 36 percent of their nitrogen target, 87 percent of their phosphorus target and 67 percent of their sediment target.



A trailer spreads liquid manure on a field owned by Mercer Vu Farms in Mercersburg, Pa. Processes that separate out solids from the manure have reduced transportation costs and allowed the farm to more precisely apply nutrients, reducing pollution and its carbon footprint. (Photo by Will Parson/Chesapeake Bay Program)

### Protected Lands

According to preliminary data collected in 2018, more than 1.3 million acres of land in the Chesapeake Bay watershed have been permanently protected from development since 2010. Of this total, more than 317,000 acres are in Pennsylvania. This brings the total amount of protected land in the watershed portion of the Commonwealth to 3.5 million acres: 39 percent of all the protected land in the watershed.

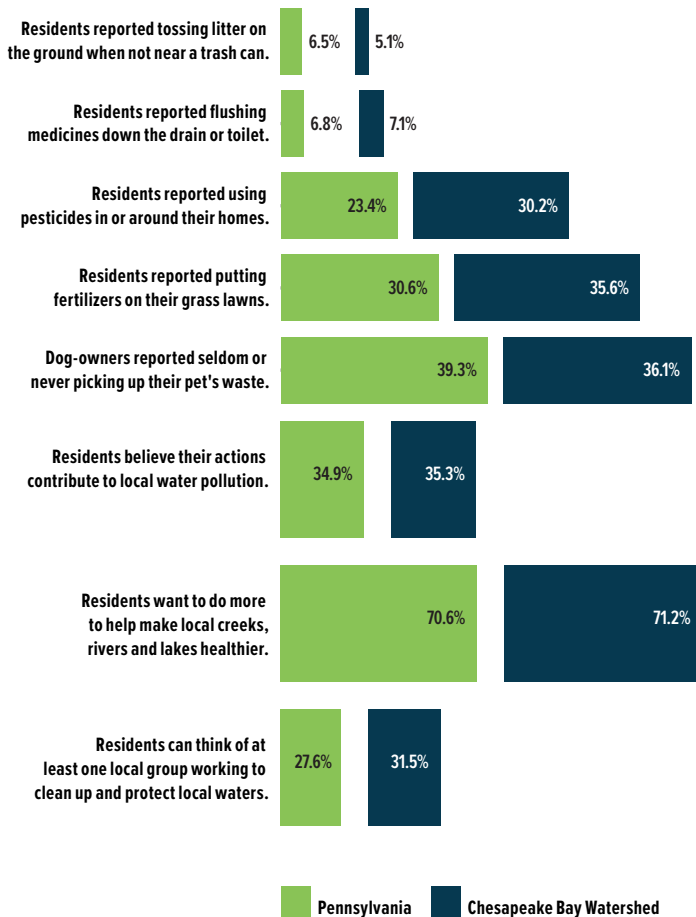
### Fish Passage

Progress toward this outcome is measured against a 2011 baseline of 2,510 stream miles open to the migration of fish. Between 2012 and 2017, 1,236 additional miles were opened across the watershed, marking a 124 percent achievement of our 1,000-mile goal. Of this, 52 percent (648 miles) are in Pennsylvania.

## Citizen Stewardship Outcome

In 2017, residents of the Chesapeake Bay region scored a 24 out of 100 on the Citizen Stewardship Index: the first comprehensive survey of stewardship actions and attitudes in the watershed. Residents of Pennsylvania also scored a 24. To score a 100 on the Citizen Stewardship Index, everyone in the region would need to do everything they could in their daily lives to improve water quality and environmental health.

## Pennsylvania's Stewardship Compared to the Watershed



## Forest Buffers

Between 2010 and 2017, 1,391 miles of forest buffers were planted along rivers and streams in Pennsylvania; during this time more than 2,050 miles of forest buffers were planted across all watershed jurisdictions.

## Wetlands

Between 2010 and 2017, 52 acres of wetlands were restored on agricultural lands in Pennsylvania; a total of 9,103 acres of wetlands were restored on agricultural lands across all watershed jurisdictions.

## Environmental Literacy Planning

In 2017, the Chesapeake Bay Program issued its second survey to measure environmental literacy preparedness in public schools. Of the 132 responding school districts, 29 identified as well-prepared and 76 identified as somewhat prepared to deliver high-quality environmental literacy programming to their students. Sixteen "somewhat prepared" school districts are located in Pennsylvania.

## Student Meaningful Watershed Educational Experiences

In 2017, the Chesapeake Bay Program issued its second survey to measure the extent of MWEEs in public schools. Of the school districts that responded to this survey, 39 percent reported providing system-wide MWEEs to their elementary school students, 43 percent reported providing system-wide MWEEs to their middle school students and 31 percent reported providing system-wide MWEEs to their high school students. Five Pennsylvania school districts reported providing system-wide MWEEs to their elementary school students, five reported doing so for their middle school students and 10 reported doing so for their high school students. (Pennsylvania is home to 193 school districts in the watershed.)