



Chesapeake Bay Program
A Watershed Partnership

Background

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Forests in the Chesapeake Bay Watershed

Forests once covered 95 percent of the Chesapeake Bay watershed. Today, they cover only about 58 percent, performing vital functions that benefit air and water quality.

The Chesapeake Bay Program coordinates with its partners to conserve and restore watershed forests by focusing on building and sustaining partnerships, delivering forestry education and information, promoting the conservation of forest land, protecting and restoring forest buffers, and enhancing urban watershed health through forestry.

Bay Fact: Near the Juniata River in Perry County, Pennsylvania, a stand of the box-huckleberry shrub measures more than a mile wide and is 8,000 to 13,000 years old. This patch is the oldest known living thing in the Bay watershed and is one of the oldest plants on Earth.

Chesapeake forests are crucial to maintaining the water quality of the Bay and its tributaries. They also safeguard wildlife habitat, contribute billions of dollars to the economy, protect public health, provide recreation opportunities, and enhance the quality of life for the watershed's 17 million residents.

Despite these benefits, forests in the Chesapeake Bay watershed are at risk. By 2030, 9.5 million acres of forest will see increased development pressure. In the Bay region alone, some 750,000 acres—equivalent to 20 Washington, DCs—have been developed since the early 1980s, and the Bay watershed has lost forestland at the rate of 100 acres each day since the mid 1980's.

Chesapeake forests also lack sustainability policies that integrate with state and regional programs, making them more vulnerable to fragmentation, haphazard development, and invasive species, as well as less likely to be well managed.

While forest conditions have changed considerably over the past 400 years, Chesapeake forests remain critical to the health of the Bay and its watershed. People are more dependent than they realize on the varied benefits provided by forests. When it comes to forests, we are likely getting much more than we pay for.

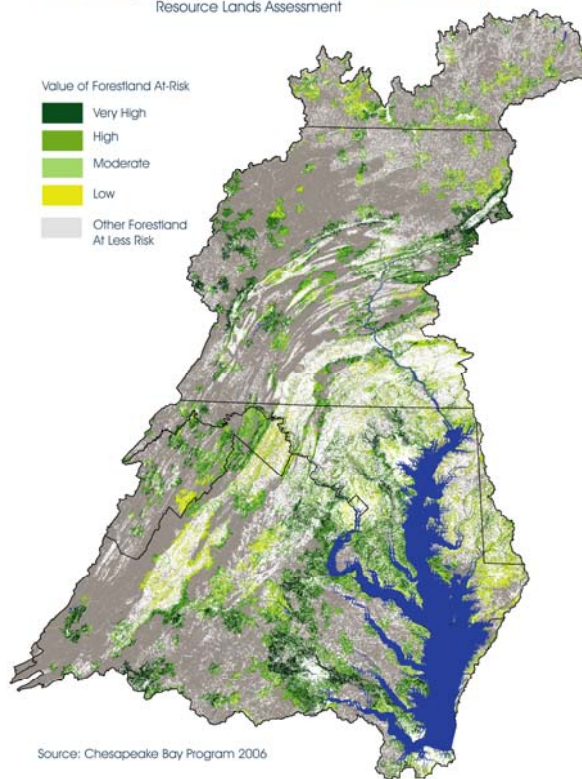
Forests are the best land cover for improving water quality in the Chesapeake Bay

- Forests are responsible for less nitrogen (15 percent) and less phosphorus (2 percent) than any other land cover. The Bay's two primary pollutants, nitrogen and phosphorus, fuel algal blooms, starving aquatic flora and fauna by reducing available oxygen.
- Forests protect and filter drinking water for 75 percent of the Bay watershed's residents (more than 11 million people).

Vulnerability of Forestland Important to Water Quality
Resource Lands Assessment

Value of Forestland At-Risk

- Very High
- High
- Moderate
- Low
- Other Forestland At Less Risk



Source: Chesapeake Bay Program 2006

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The Chesapeake Bay Program is restoring the Bay through a partnership among the U.S. Environmental Protection Agency representing the federal government, the State of Maryland, the Commonwealth of Virginia, the District of Columbia, the Chesapeake Bay Commission, and participating citizen advisory groups.

Chesapeake forests protect public health

- As they grow, forests and tree canopies absorb and store air pollutants that can induce asthma, cancer, and other health problems.
- Forests provide many benefits that improve the physical health and quality of life of Bay watershed residents including recreational opportunities, enhanced community desirability, and reduced stress.

**Forestland pays**

- Each year, Chesapeake forests contribute at least \$24 billion to the Bay watershed in ecological services such as wildlife habitat, recreation, air and water filtration, and flood control.
- The forest products industry annually contributes \$22 billion to the Bay watershed economy and is an important source of jobs and income for many communities.

Chesapeake forests are increasingly threatened by conversion to development

- While forests now cover 58 percent, or 24 million acres, of the Chesapeake Bay watershed, the watershed has lost 100 acres of forestland each day since the mid-1980's.

Chesapeake forests are more heavily fragmented than ever before

- Sixty percent of the Bay watershed's forests are fragmented—crossed by roads, power lines, or near developed areas. Forests covering larger, undisturbed areas provide healthier habitat.

Shifting ownership trends threaten sustainable management on private lands

- Changing ownership trends and a lack of incentives for sustainable management have resulted in private forests being managed primarily for short-term economic gains, not managed at all, or sold for development.
 - Owners of private forestland, particularly families, own nearly 80 percent of all Chesapeake forests.
 - More than 70 percent of family forest owners in the Chesapeake Bay watershed are older than 55; the watershed faces its largest intergenerational transfer of land.

Habitat health and diversity in Chesapeake forests are declining

- An upsurge in invasive species, overbrowsing by deer, forestland fragmentation, forest homogeneity and the suppression of fire are key factors in the degradation of native habitat diversity.

Chesapeake forests lack sustainable forestry policies

- Where conservation does occur, it is often haphazard, non-strategic, and on a small scale.
- A lack of public awareness and policy has resulted in insufficient financial support for the large-scale protection of Chesapeake forests.

The Need for Riparian Forest Buffers

- Riparian forest buffers are areas of forested land adjacent to streams, rivers, marshes or shoreline that form the transition between land and water environments. Although riparian areas comprise only about 5 to 10 percent of the land in the watershed, they play an important role in maintaining the health of the Bay.
- Forests are the most effective type of riparian buffer available. Riparian forest buffers improve water quality while providing habitat for wildlife and fish.