



NOAA CHESAPEAKE BAY OFFICE

Working to Restore Habitat

The Chesapeake Bay provides habitat—a place to live, find food, escape predators, and reproduce—to more than 3,600 different kinds of plants and animals.

When Captain John Smith first arrived in the Chesapeake Bay in 1607, he saw an abundance of unspoiled underwater grasses, oyster reefs so large that navigation through the Bay was a challenge, and water so clear that the Bay bottom appeared close enough to touch.

Today, the Bay faces serious ecological problems. In recent years, human population growth has led to increased amounts of sediment and pollution in the Bay, which in turn has destroyed many acres of natural habitat. As a result, valuable habitats including wetlands, underwater grasses, natural shorelines and oyster reefs have drastically declined.

Why Is NOAA Involved?

As a leading provider of funding and expertise for habitat research and restoration in the Chesapeake Bay, the NOAA Chesapeake Bay Office is working closely with other federal, state, and local partners to restore habitat and prevent further loss and damage.

For example, NOAA is a partner in the Chesapeake Bay Program, a regional partnership that has led and directed the restoration of the Chesapeake Bay since 1983.

NOAA plays a particularly significant role in achieving two key habitat goals of the Chesapeake Bay Program:

- Accelerate the protection and restoration of beds of underwater grasses in areas of critical importance to the Bay's living resources; by 2008, plant 1,000 acres of underwater grasses, and by 2010, increase grass coverage to 185,000 acres.
- By 2010, achieve at least a tenfold increase in native oysters in the Chesapeake Bay, and further science and innovation of restoration techniques and strategies.



Our core values...

- Science*
- Service*
- Stewardship*
- Teamwork*
- Focus*
- Communication*



What Is NOAA Doing to Restore Habitat?

Native Oyster Restoration

Oysters are important because they filter water, form reefs that provide habitat for many Bay animals, and are a valuable seafood product. But in the Chesapeake Bay, the oyster that is native to the region, *Crassostrea virginica* (also called the eastern, American, or Atlantic oyster), is almost gone. Overharvesting, habitat destruction, pollution, and disease have reduced native oyster populations to less than one percent of historic levels in the Bay.

The NOAA Chesapeake Bay Office provides funding and technical assistance to support native oyster restoration in the Bay. The Chesapeake Bay Office uses state-of-the-art bottom mapping and assessment instruments to help select the best sites for restoration. Funding supports hatchery production and planting of young oysters, the placement of oyster shell for oysters to grow on, evaluation of other materials that oysters might live on, and monitoring of restoration projects. Some project sites are set aside as permanent sanctuaries, while others are closed for a period of time before being opened for managed harvest.

Restoring Underwater Grasses

Underwater grasses are important to the health of the Bay because they produce oxygen, provide food for animals including waterfowl, are a place for young fish and shellfish to grow, reduce wave action and shoreline erosion, absorb nutrients, and improve water clarity by capturing sediment from the water. Because acreage of underwater grass in the Bay is far below historic levels, restoration of these grasses is key to restoring the Bay.

The NOAA Chesapeake Bay Office provides funding to carry out large-scale grass plantings, develop more efficient ways to collect and plant seeds, and evaluate new locations suitable for future plantings. The Office also provides technical support to local groups that conduct small-scale underwater grass restoration and surveys.

Community-Based Restoration

The NOAA Chesapeake Bay Office also helps implement the NOAA Community-Based Restoration Program, which brings together citizens, organizations, industry, students, landowners, and local, state, and federal agencies to restore habitat around the coastal United States. In the Bay area, this program has led to many successful restoration projects. Staff provide technical assistance with project planning, development of restoration methods, identifying additional funding sources, obtaining approval and permits, construction, and post-project monitoring. The Community-Based Restoration Program has funded more than 100 projects Baywide and more than 1,000 projects nationwide.

Visit the NOAA Chesapeake Bay Office web site for habitat-related information on underwater grasses, oyster restoration, and grant opportunities.

NCBO Mission

To understand, predict, and explain changes in the Chesapeake Bay's environment, and conserve and manage coastal and estuarine resources to meet the Region's economic, social, educational and environmental needs.

