



Chesapeake Bay

THE CHESAPEAKE BAY WATERSHED

The Chesapeake Bay watershed covers an astounding 64,000 square miles and includes six states and the District of Columbia. It begins in Cooperstown, New York and travels south into Virginia. There are more than 100,000 major rivers, streams and creeks within the watershed. These bodies of water contribute fresh water to the Bay while salt water from the Atlantic Ocean mixes to form an estuary.

THE IMPORTANCE OF THE BAY

The Chesapeake Bay serves humans, animals and plants alike. The estuarine ecosystem of the Chesapeake Bay is so rich in nutrients that over 3,600 species of plants and animals call it home. Plant life flourishes in this habitat because runoff from the land often carries essential, natural nutrients for plant growth. Many fish, shellfish and birds find the estuary to be an excellent location to raise young. In addition, many migratory birds find the Chesapeake Bay to be a good resting spot during migration trips. Humans also benefit greatly from the Bay. The Bay provides mankind with about 500 million pounds of food per year and also serves as a transportation route for cargo ships. If the Bay is not properly maintained, plants, animals and humans could suffer from the effects.

HABITATS OF THE WATERSHED

The Chesapeake Bay and its watershed offer a variety of habitats allowing for a diverse population of animals and plants. The Bay is filled with vegetation characteristic of an estuarine ecosystem, including a variety of submerged aquatic vegetation, and is home to animals such as the blue crab, the American bald eagle and the diamondback terrapin.

Riparian Forests

This habitat includes forests next to streams that act as sponges or filters. Riparian forests capture rainfall, reducing runoff and filtering harmful chemicals out of the water. Organisms both in and out of the water benefit from the effects of riparian forests.

Islands

Islands serve as a safe place for a variety of residential and migratory bird species. Some bird species found in the Chesapeake Bay region that utilize islands include, heron, osprey and bald eagles. As the Earth's temperature increases, glaciers melt resulting in an increase in sea level. Unfortunately, islands are quickly eroding due to this sea level rise.

Freshwater Tributaries

Rivers, streams and creeks make up this freshwater habitat which is especially essential for certain species of fish that

HOW YOU CAN HELP!

Here are some ways you can help protect Chesapeake Bay habitats:

Reduce Nutrient Use

Plant native plants to avoid using large amounts of fertilizer. They do not require as much fertilizer or water as non-native plants. In addition, maintain your septic system to ensure that it is working efficiently and properly.

Reduce the Use of Toxic Materials

Pesticides, anti-freeze, motor oil and paint are toxic to animals and the environment. If you use these chemicals, be sure to dispose of them properly. Decrease pesticide use by employing alternative methods of pest control, such as planting native plants.

Get Involved

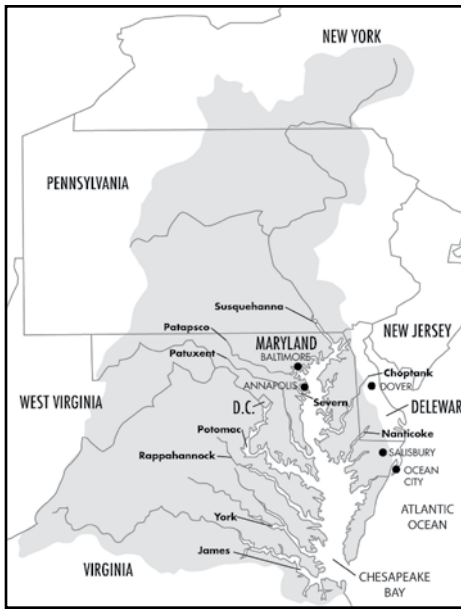
Take action by involving yourself in efforts to restore the Bay. To learn about clean-ups, tree plantings and oyster restoration projects, visit:

- Chesapeake Bay Foundation
cbf.org
- Alliance for the Chesapeake Bay
alliancechesbay.org

You can make a difference!

Visit aqua.org for more information.





The word “Chesapeake” is derived from the Native American word “Tschismapeki,” which loosely translates into “great shellfish bay.”

live their adult lives in the salt water, but return to fresh water to spawn. Freshwater tributaries offer an excellent spawning ground for these fish species that include striped bass and Atlantic sturgeon.

Shallow Water

Shallow water offers a suitable habitat for many small invertebrates. This small invertebrate population serves as a food source for larger predators including certain species of birds, fish and crabs. In addition, animals find that the Bay grasses that thrive in this habitat serve as an appropriate nursery ground for offspring. The Chesapeake Bay offers a variety of habitats to diverse wildlife. If we do not take action to preserve this natural wonder we risk losing the habitats, plants and animals within the Chesapeake Bay watershed.

WHAT IS THE PROBLEM?

The 100,000 rivers, creeks and streams that comprise the watershed often carry in them various pollutants that flow into the Bay. These pollutants enter the water when excess water cannot be absorbed by the soil. This excess is referred to as runoff. Runoff carries nutrients such as phosphorus and nitrogen, chemicals frequently found in fertilizers, as well as sediment. An abundance of these chemicals can cause algal blooms that

block sunlight from submerged aquatic vegetation. In addition, excess sediment settles on the Bay floor, killing bottom dwelling organisms such as oysters. If the sediment remains suspended in water, it can also block sunlight from vegetation. When sunlight is blocked due to algal blooms or sediment build up, vegetation is unable to carry out the process of photosynthesis. This leads to the death of many plant organisms. In addition, when the plants die, valuable oxygen is used by bacteria for their decomposition. These two factors lead to areas with very low oxygen levels referred to as “dead zones.” Unfortunately, many areas of the Bay are now suffering from extremely low oxygen levels. Other sources of pollution, including pesticides, bacteria and heavy metals, are also negatively impacting the Bay. In 2006, the Chesapeake Bay Foundation’s *State of the Bay* report gave the Bay a health rating of a D.

FAST FACTS

- The Chesapeake Bay is North America’s largest estuary and the third largest in the world.
- About 16 million people live within the Chesapeake Bay watershed.
- The Bay holds 18 trillion gallons of water.

KEY TERMS

Watershed

An area of land whose water drains into a specific body of water.

Estuary

A semi-enclosed body of water composed of fresh water from rivers and streams, as well as salt water from the ocean.

Dead Zones

Areas too low in oxygen to support a healthy ecosystem.



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