The Chesapeake Bay is listed among the nation’s “impaired waters” because too much nitrogen and phosphorus pollute the entire Bay ecosystem. CBF is promoting efforts to halve the amount of nitrogen that enters the Bay through improved sewage treatment and methods to reduce nitrogen from running off farmland. CBF’s plan would help the Bay reach a score of 40 by 2010. Reaching our goal would provide tremendous benefits to the plants, animals, and humans that depend on the Bay.

Average

Habitat
Wetlands 42
Forested Buffers 54
Underwater Grasses 12
Resource Lands 30
Pollution
Toxins 28
Water Clarity 16
Phosphorus 16
Nitrogen 16
Dissolved Oxygen 16
Fisheries
Crab 40
Rockfish 75
Oysters 2
Shad 7
Average 27

The State of the Bay Report tells us how far we have fallen from Smith’s Bay and how great our challenge is to create a “saved” Bay. With your help, and commitment from our political leaders, we will see a Bay that reaches 40 by 2010 and 70 by 2050.

To create the State of the Bay Report, CBF scientists examine the best available current and historical information for indicators in three categories: pollution, habitat, and fishery health. Although we seek advice from other Bay scientists, ultimately the best professional judgment of CBF scientists determines the value assigned each factor.
NITROGEN POLLUTION PREVENTS BAY IMPROVEMENTS

Each year roughly 300 million pounds of nitrogen enters the Chesapeake Bay system through livestock feedlots, urban and rural-based nutrient sources (power plants, fertilizers, sewage treatment), and stormwater run-off and adversely affect water clarity.

30 percent of the nitrogen that enters the Bay system is considered to be discharged from agricultural sources. Nitrogen eventually finds its way to the Bay through nitrogen fixation in which nitrogen enters the system mostly through livestock feedlots, urban and rural-based nutrient sources (power plants, fertilizers, sewage treatment), and stormwater run-off and adversely affect water clarity.

Toxins

Among all threats to the Bay, toxic chemicals are the most difficult to measure. The index dropped this year because of the substantial increase in toxic substances released in Virginia and West Virginia. The index dropped in 2001 and the increased toxics value is a reflection of the increased toxicity of discharged pollutants. It is important to note that this index is based on reported chemical releases and as such does not capture all chemicals discharged to the Bay.

Rockfish

The index of 16 chemicals solubilized water quality when compared to the Bay of 400 square miles a year is reduced to 1 million pounds of nitrogen annually. The index value of 2000 was 7.0 but the average of the Chesapeake Bay has improved significantly enough to meet today's nitrogen standards and a still significant adverse impact to economic resources. The index value of 2000 was 7.0 but the average of the Chesapeake Bay has improved significantly enough to meet today's nitrogen standards and a still significant adverse impact to economic resources.

Shad

CBF’s original health index scores of 15 for nitrogen and phosphorus was based on estimates that placed nitrogen loading to the Bay at seven times what it was in pre-colonial times. As a result of this year’s drought, nutrient pollution loads to the Bay have decreased. Pollutants continue to be deposited on the land and will, of course, enter the Bay when the area receives rain. Based upon this year’s drought, nutrient pollution loads to the Bay have decreased. Pollutants continue to be deposited on the land and will, of course, enter the Bay when the area receives rain.

Oysters

As a result of this year’s drought, nutrient pollution loads to the Bay have decreased. Pollutants continue to be deposited on the land and will, of course, enter the Bay when the area receives rain.

Crabs

The Bay’s blue crab fishery is suffering through its third consecutive year of poor harvests with bad news continuing. For 2001 the fishery index is calculated as the mean between final estimates. For this year’s fishery, the stock is considered to be overfished and the overfished status will be maintained for the next several years. This means that the stock is overfished and the overfished status will be maintained for the next several years. This means that the stock is overfished.

FISHERIES

The Chesapeake Bay Program's 2001 State of the Bay report indicates that the index is down from the 2000 index and that the index value of 2000 was 7.0 but the average of the Chesapeake Bay has improved significantly enough to meet today's nitrogen standards and a still significant adverse impact to economic resources.