CHESAPEAKE BAY FOUNDATION
OWL
Online Watershed Learning

STATE OF THE BAY:

Exploring the State of the Bay

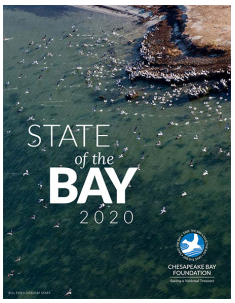
Introduction

The Chesapeake Bay Foundation's State of the Bay report is an biennial report on the Bay's health. CBF scientists create the report by looking at different indicators of environmental health. To understand what an indicator is, you can think of each of these indicators as if they were subjects on a report card.

A report card includes all of the subjects taught in school in order to create an overall description of a student's achievements. In CBF's State of the Bay Report, all of the indicators describe the current overall health of the Bay. Each year scientists look at the 13 different indicators divided into three categories: pollution, habitat, and fisheries. Each indicator is assigned a score between 1 and 100. A score of 100 is the pristine Bay of 400 years ago. The Chesapeake Bay Foundation believes a Bay with a score of 70 is achievable by 2050.

When scientists look for indicators of environmental health, they don't just look at the numbers they get on one day but also how the numbers have or haven't changed over time. This is described as looking at what the trends suggest over time. By looking at what the trends suggest, we can think about not just what the health of the Bay is right now but also what direction the health of the Bay is headed. We can also consider what we can do to help improve trends of each of those indicators.

Explore



Read the most recent State of the Bay Report.

cbf.org/document-library/cbf-reports/2020-state-of-the-bay-report.pdf

Record this year's scores and as you read about each of the indicators consider the trend you are observing. Decide what the trend suggests about each of the categories. Do you see improvement or decline? What are some details that have learned about that may be impacting that improvement or decline?

Space is provided to include comments on how the Bay could improve.

POLLUTION	**Scores**		What might these trends suggest? Why?
Toxics	2000 30	This Year	
Water Clarity	2000 15	This Year	
Phosphorus	2000 15	This Year	
Nitrogen	2000 15	This Year	
Disolved Oxygen	2000 15	This Year	

Comments or suggestions for reducing pollution in the Bay:

FISHERIES	**Scores**		What might these trends suggest? Why?
Rockfish	2000 75	This Year	
Crabs	2000 46	This Year	
Shad	2000 5	This Year	
Oysters	2000 2	This Year	
Comments or suggestions for improving the fisheries of the Bay:			

HABITAT	**Scores**		What might these trends suggest? Why?
Wetlands	2000 42	This Year	
Forested Buffers	2000 53	This Year	
Underwater Grasses	2000 12	This Year	
Resource Lands	2000 33	This Year	
Comments or suggestions for improving habitat of the Bay:			

Explain

As you are reading and thinking about the Bay's health you can see how many of the indicators are connected. For example: a significant increase in wetlands might create an increase in water clarity.

Imagine if the forested buffers of the Bay increased to such a level where the score was increased to a 70.

What other indicators might that effect and how?

Elaborate

Imagine you were assigned the task of creating a big 'extra credit' project for the Bay to raise its overall score a full 10 points.

Describe what and where this project could be done that would dramatically improve the Bay's grade.

Why do you feel confident that it would work?

Evaluate

Think about what you have learned about how the health of the Bay is measured and the efforts currently in place to improve the health of the Bay. Also consider the values of you and your generation and how that might impact the health of the Bay.

In 20 years, what do you think the score will be and why?

Which specific indicators do you think will change and why?