SCB November Newsletter



November 2023



01/03

Highlighting the current crisis

Our current ocean conservation crisis is an urgent global challenge driven by overfishing, habitat destruction, pollution, climate change, and a lack of effective management. This multifaceted crisis threatens marine ecosystems, biodiversity, and the livelihoods of millions of people who depend on the ocean for sustenance and income. Urgent and coordinated efforts are needed to mitigate these threats, promote sustainable practices, and protect the oceans for future generations. This newsletter will be focused on water conservation and pollution, in lieu of World Basking Shark Day (Nov 3), America Recycles Day (Nov 15), World Fisheries Day (Nov 21).





Microplastics

Microplastics, tiny fragments of plastic from the breakdown of larger plastics, can accumulate anywhere from the sediment to the surface of water bodies. They are found in aquatic plants and animals at every level of the food chain, and pose a serious risk to the health of ecosystems. You can take steps to reduce the microplastics in your everyday life. Washers and dryers are a major source for microplastics: wearing clothes made from organic materials and air drying can reduce the amount of microplastics, buying plastic free cosmetics, and using public transportation (tires are a big source of microplastics) are all ways you can help reduce microplastic pollution and consumption!

Chemical Pollutants

Chemical pollutants are a big issue in marine ecosystems. Many chemicals such as agricultural fertilizers, oil products, industrial materials, and sewage are some examples of the most common chemical pollutants found in bodies of water. Chemical pollutants can be very harmful to marine ecosystems and wildlife as they can form algal blooms due to the increased chemical content in the water. This results in the algae absorbing a lot of the oxygen in the water, not leaving enough for the marine organisms.

Impacts on Wildlife



Anthropogenic activities like overfishing, habitat destruction and climate change are all major threats to marine ecosystems and the wildlife that inhabits them. These factors lead to the gradual loss of marine biodiversity. A massive issue has been pollution and run-off from the land as it has been slowly shifting the pH of the ocean (ocean acidification). This acidification has resulted in the death of many marine species and the creation of ocean dead zones.

02/03



The Great Lakes

There is a total of 5 Great Lakes that combined provide 18% of the world's surface fresh water and 85% of North America's surface fresh water. The Great Lakes include Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario. Since they provide so much surface fresh water it is important that they stay healthy and clean.

Health of the Lakes

There are many factors that helps scientist determine the health and quality of each lake. Some of those factors include drinking water quality, recreational use, amount of pollutants that can harm people, wildlife, and organisms, support of healthy and productive habitats that can sustain native species, free of toxic blooms, amount of invasive species (both aquatic and terrestrial), and the contamination of groundwater.

Based on these criteria experts gave each lake a good, fair, and poor rating which are as follows Lake Superior is in good condition, Lake Michigan is in fair condition, Lake Huron is in good condition, Lake Erie is in poor condition, and Lake Ontario is in fair condition. If you want to learn more then check out <u>this link</u>

UPCOMING EVENTS WITH SCB KINGSTON

- November 14: Garden Cleanup
- November 21: Documentary Night
- On-going: Merch Sale

Policies of the Great Lakes



- Great Lakes Water Quality Agreement: An agreement that commits both Canada and the United States to prepare and issue Lakewide Action Management Plans (LAMPs) for each of the 5 Great Lakes every 5 years (and a new one just got released for 2023-2027).
- **Great Lakes Action Plan**: The Great Lakes Action Plan is the federal commitment to ensure the sustainability of the Great Lakes Basin ecosystem and provides funding to carry out actions to protect the Great Lakes.

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