

# The Charles River Floating Wetland



## Hello!

Learn more and check out the fun ways to explore the Floating Wetland together outside of the classroom!

Explore the CRC's website to learn more about the story of the floating wetland, how it was planted, and the science behind it all!



## Activities to Support the Health of the Charles River

- Compost your food waste at home and use it as a natural fertilizer for your garden or lawn! Fun
- Fact: Natural fertilizer is a healthier choice for the environment than commercial fertilizer, which causes runoff with high phosphorous/nitrogen levels that will support algal blooms. Explore the CRC's floating wetland native plant guide to better understand the plants of the Charles river. When gardening, include plants that are native to the area. This will create a healthier environment for the river
- and the ecosystems that surround it.

## Charles River Land Acknowledgment

The Charles River Conservancy and the land and waters it supports are situated on the stolen homelands of the Pawtucket peoples and the Massachusetts and Wampanoag tribal nations. For more information and resources on Native conservation, read our full statement at [thecharles.org/about/history/](http://thecharles.org/about/history/)

## Health of Charles River Today

The Charles River is one of the cleanest urban rivers in the United States. However, cyanobacteria blooms have become uncontrollable as a result of both a "broken food chain" and an increase in nutrient pollution in the Charles River. During heavy rainfalls, which are increasingly common as an effect of climate change, the urban landscape provides a surface for the rain to pick up pollutants that cannot be absorbed or filtered adequately. These pollutants, heavy in nitrogen and phosphorus content, are transported directly into the river and feed the cyanobacteria blooms.

Cyanobacteria blooms are typically controlled by zooplankton, which eat the blue green algae. Zooplankton are under too much pressure from small predatory fish, as they do not have enough safe places to seek refuge. Without zooplankton the food chain is "broken" and the algae blooms are in excess.

## History

In 1995, the U.S. Environmental Protection Agency launched the Clean Charles River Initiative to address pollution caused by the Industrial Revolution, with a goal of making the Charles fishable and swimmable. While significant improvement to the health of the Charles has been made in the years since, the river remains closed to swimming and currently faces a new threat, toxic cyanobacteria blooms (blue green algae) in the river.

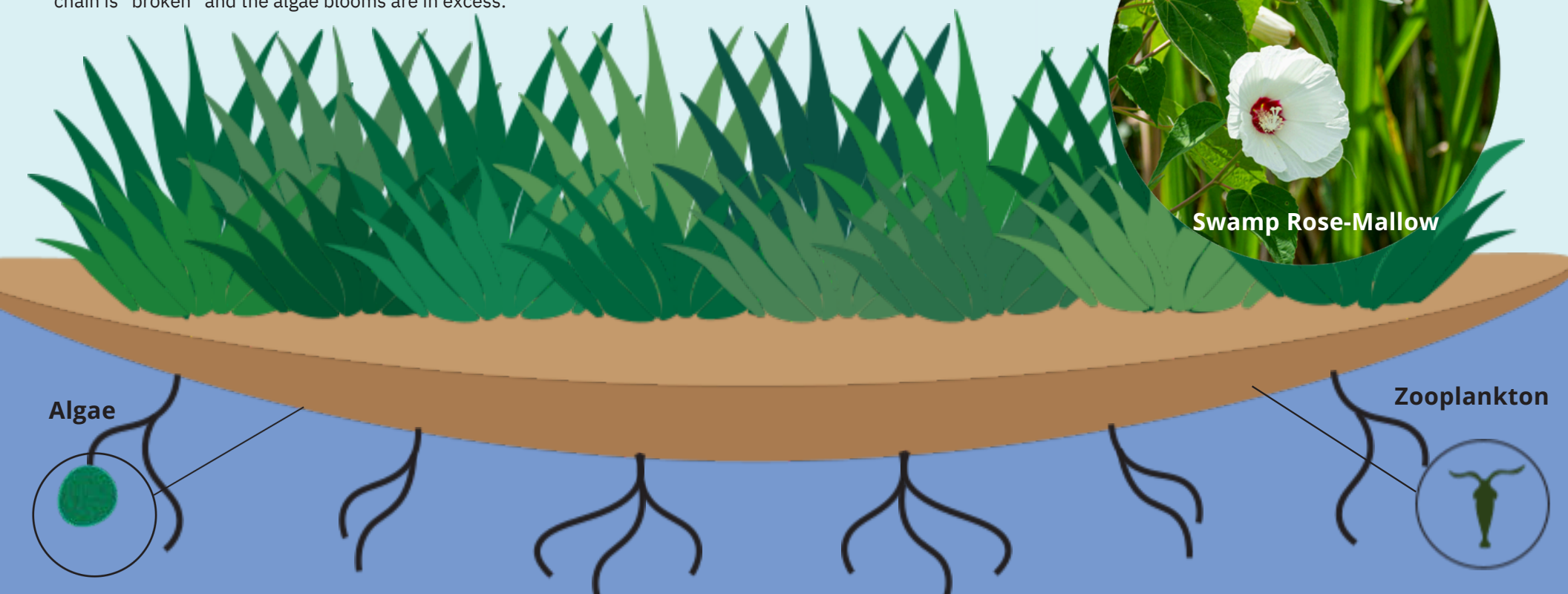
## The Floating Wetland as a Solution

The Charles River Floating Wetland and the native plants that comprise it help restore the river's health in two ways:

1. The floating wetland native plant roots can absorb and remove **nutrient pollution** from the water!
2. The native plant roots underneath the wetland provide a habitat for zooplankton to live and reduce cyanobacteria blooms by eating the blue green algae.

## Wetland Fun Facts

- A wetland is an area of land that is generally on or near water and experiences frequent floodings, like a swamp, marsh or bog.
- The Charles River used to be a free-flowing tidal estuary, a complex habitat of wetlands that supports a diversity of species including shellfish, birds, and anadromous fish.
- The Charles River Floating Wetland is a human made wetland designed to add more wetland habitat back to the river to support the river's ecosystem.



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