Living Shoreline: Shoreline Park in Sandusky

The Project

Shoreline park is a popular multi-use park for picnics, fishing, and viewing Sandusky Bay in downtown Sandusky, Ohio. Unfortunately the shoreline was degrading and losing its visual aesthetic from erosion and the fouling from Canada geese droppings. As an alternative to adding more rip rap to the shoreline to prevent further erosion, it was decided to enhance the park with a living shoreline to protect the shore and reduce the geese use of the park.

Living shorelines consist of planting native wetland plants along the water’s edge and transition to grasses, shrubs, and trees as you move up the shore’s slope. Native plants set deep roots into the bank which helps protect the soil from wave action and surface drainage that would erode the shoreline. Living shorelines are creative approaches to safeguarding coastal areas from erosion by creating natural buffers along the shore. These techniques can range from installations of just plants or a combination of large stone and plants where more structural protection is needed.

This project utilized switchgrass (*Panicum virgatum*), prairie cordgrass (*Spartina pectinata*) and little bluestem (*Schizachyrium scoparium*) grown from seed in the municipal greenhouse by volunteers to save on cost. The City of Sandusky and Erie Soil and Water Conservation District staff along with volunteers worked together to amend the soil, install erosion control practices, and plant the native grasses. The project was completed in sections, which allowed for the reuse of goose barrier fencing to protect the plants as they became established.

This project demonstrates the power of collaboration between the City of Sandusky, Erie SWCD, and local volunteers as well as an attractive alternative to managing our shoreline, providing wildlife habitat and improving water quality.

Benefits

**Erosion Control**
The use of turf grass on slopes often does not provide strong enough roots to hold soil in place. Living shorelines use native vegetation that are better adapted and deeper rooted to prevent erosion.

**Canada Geese Control**
Canada geese love open lawns and easy access to water. Living shorelines use taller grasses to create a barrier between the water and lawn to deter geese using their fear of hiding predators.

**Native Wildlife Habitat**
Most turf grass is not native to our area and is not a preferred habitat to our native wildlife. Living shorelines use native plants to enhance an area for both people and wildlife alike.

**Visual Enhancement**
Erosion and overgrown weeds are not a desirable look for our coastal landscape. Living shorelines help to beautify our coasts naturally creating a softer transition from the city to the water.

For more info on this project or living shorelines, please contact Breann Hohman at bhohman@eriecounty.oh.gov
Floating wetlands: Shoreline Park in Sandusky

The Project

Wetlands are truly nature's kidneys; serving as a natural filter for removing nutrients and setting out sediments that pollute our water. Floating wetlands are a type of engineered native enhancement planting that can be used in stormwater ponds, private ponds, and low energy coastal areas to enhance the shoreline's ability to remove excessive nutrients and increase wildlife habitat. Their isolated design allows them to be a useful addition to the aquatic landscape as an island or nearshore buffer.

City of Sandusky and Erie Soil and Water Conservation District staff worked together to install two 35 square foot Biohavens Floating wetlands in each boat slip area of Shoreline Park between the shore and the bridge crossings. The wetlands were planted using a combination of native plants and annuals grown in the City of Sandusky Greenhouse. The wetlands was planted on site and towed into position using kayaks. Chains and cinder blocks were used to anchor the enhancement in place while leaving some room for changes in water levels. Once installed, the floating wetland required little maintenance and is expected to last for over 10 years. The wetland did receive some goose predation within the first weeks of deployment but quickly outgrew the browsing.

We hope this demonstration will serve to showcase natural solutions to environmental issues in the Lake Erie watershed.

Benefits

Pollutant filter
Like natural wetlands these floating wetlands help to filter pollutants from our water. A combination of the plants themselves and the microbes associated with their roots help to remove nutrients like nitrogen and phosphorous from the water.

Native Wildlife Habitat
The unique design of the floating wetland mat allows for plant roots to grow into the water providing habitat for fish, amphibians, and macroinvertebrates. The island design also provides habitat and food source for song birds, coastal birds, and pollinating insects like butterflies.

Visual Enhancement
The island effect of these wetlands provides a visual appeal to the open water. A large list of suitable plants that can be used in these enhancements to peak visual interest throughout the growing season and attract wildlife for viewing.

For more info on this project or floating wetlands, please contact Breann Hohman at bhohman@eriecounty.oh.gov