

The areas of eroded shoreline highlighted in red are where I propose installing coir logs and wetland plants. Completing these repairs in the spring is ideal, as it allows the plants a full growing season to establish before winter.

The **240-foot section** is the most severely affected and requires the highest priority. The **20-foot section**, located adjacent to the OCS, should also be repaired to prevent potential damage to the structure. While the **60-foot section** is of lesser concern, implementing repairs would still provide long-term benefits for shoreline stabilization.

240ft Section Pictured Below



60ft Section pictured below



20ft Section pictured below



Example of a Shoreline Repaired With Coir logs and Wetland Plants



Example of a healthy Vegetated buffer



You also should change your mowing practices to allow for a vegetated buffer.

A **vegetated buffer** around a pond provides numerous environmental, ecological, and aesthetic benefits, including:

1. Water Quality Improvement

- **Reduces runoff pollution**: The vegetation helps filter out pollutants like fertilizers, pesticides, and sediments before they enter the pond.
- **Prevents nutrient overload**: Excess nitrogen and phosphorus from runoff can cause harmful algal blooms, which degrade water quality.

2. Erosion Control

- **Stabilizes shorelines**: Deep-rooted plants help hold soil in place, preventing erosion and reducing sediment buildup in the pond.
- **Reduces wave impact**: Plants absorb the energy of wind and water movement, minimizing shoreline wear.

3. Wildlife Habitat

- **Supports biodiversity**: A variety of plants provide food, shelter, and breeding grounds for birds, amphibians, fish, and beneficial insects.
- Enhances aquatic ecosystem: Buffer zones encourage a healthier balance between aquatic and terrestrial life.

4. Temperature Regulation

• **Provides shade**: Overhanging vegetation can reduce water temperature, which helps maintain oxygen levels and supports aquatic life.

5. Aesthetic and Recreational Benefits

- Enhances natural beauty: A well-maintained buffer adds to the visual appeal of a pond.
- **Creates a natural barrier**: It can provide privacy and reduce noise from surrounding areas.

6. Flood and Stormwater Management

- **Absorbs excess water**: Vegetation slows down runoff, reducing the risk of flooding and helping groundwater recharge.
- **Improves soil infiltration**: Plants promote water absorption into the ground rather than direct runoff into the pond.

7. Reduces Maintenance Costs

- Limits algae and weed growth: By filtering out excess nutrients, vegetated buffers reduce the need for chemical treatments.
- **Minimizes dredging needs**: Less sediment and organic matter entering the pond means less buildup and fewer dredging requirements.

Overall, a vegetated buffer acts as a natural filtration system, erosion control measure, and wildlife habitat, contributing to the long-term health and sustainability of the pond.