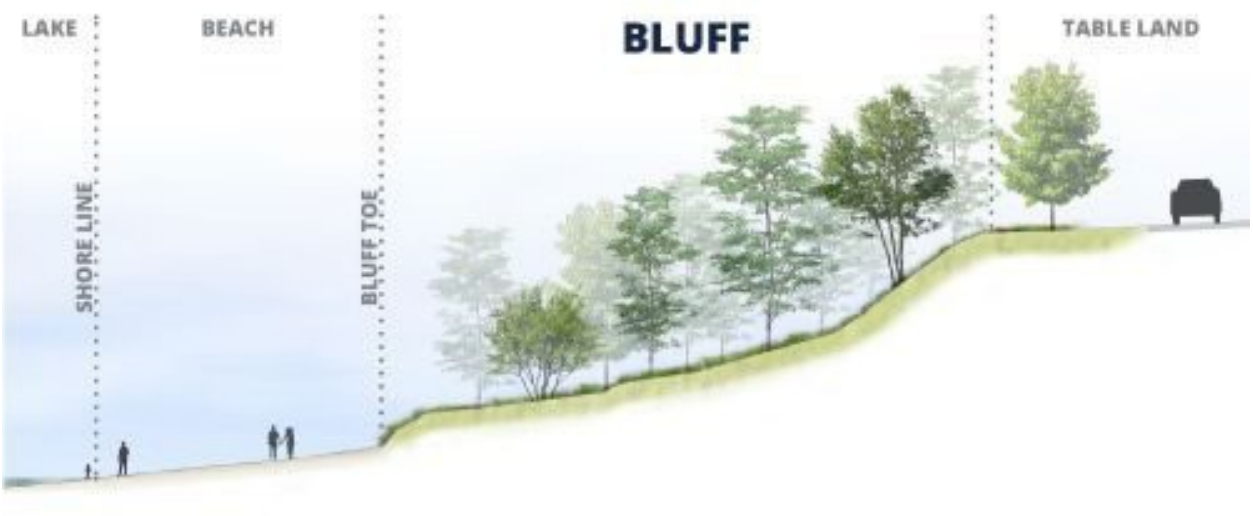
Waterfront 2030: How It Works

Bluff Restoration + Shoreline Protection

Bluff Improvements

Bluff Restoration + Stabilization

The bluff is the area of the park spanning from the edge of the table land down to the sand.



The bluffs along Lake Michigan are vital ecosystems that support plant and wildlife not found elsewhere. Because of the bluff's juxtaposition along the lake and generally steep landscape, it is subject to erosion from stormwater, waves, wind, and rain.

Overtime, these vital ecosystems can become overgrown and infiltrated with invasive species that inhibit the growth of native understory plants whose deep root systems play a crucial role in preventing the oversaturation of soil and stability of the bluff. Coupled with improper drainage, the bluff becomes unstable and more susceptible to erosion.

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While bluff erosion is a natural process that can't be stopped, it can be slowed by implementing the following restoration measures:

- Removing invasive plants and trees to give understory vegetation room, sunlight, and nutrients to grow
- Replanting deep-rooted native understory vegetation to create a habitat crucial for bird and insect life and make the bluff more stable
- Improving drainage to reduce oversaturation of the soil and erosion from stormwater

In addition to stabilizing the bluff and returning them to their natural state, these measures will make the bluff more attractive and enhance the views of the lake from the table land.

Bluff restoration will take place on Centennial Beach, Elder Land Beach, Lloyd Beach, Maple Beach, and Tower Roach Beach.

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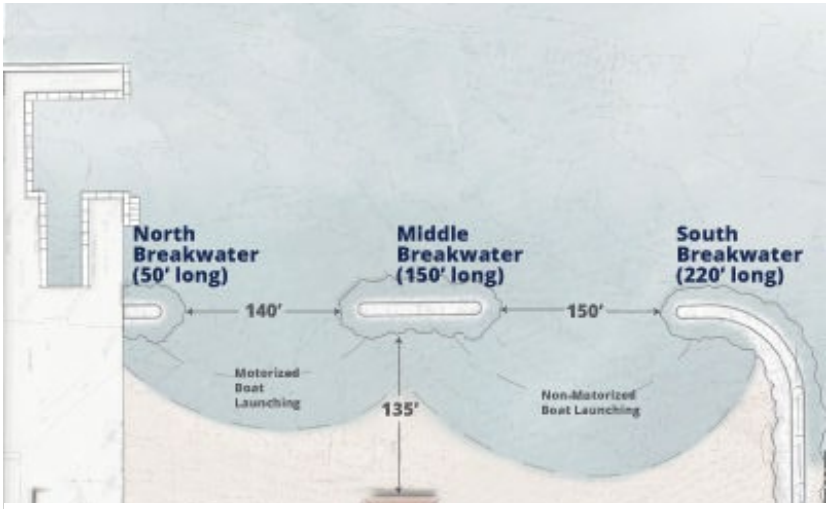
Shoreline Protection

Breakwater Systems

Breakwaters work in several ways:

- Breaking or intercepting the waves to dissipate wave energy before reaching the shoreline, which decreases erosion and makes the beach safer
- Creating a basin that keeps sand in so a usable beach is maintained during high and low water levels

Breakwaters are made of piles of stone in the lake. During average lake levels, approximately five feet of stone will be visible above the lake's surface. This is high enough to protect the beach during periods of high waves but low enough that the view of the horizon from the beach will not be impeded.



CONCEPTUAL RENDERING OF NEW BREAKWATER SYSTEM APPROVED BY THE PARK BOARD IN 2019.