

Live Staking for Shoreline Stabilization

Shoreline stabilization techniques are used to protect the shoreline from erosion caused by lake-effect wave action, high water levels and strong storm events. The shoreline can be stabilized using multiple techniques including shoreline hardening and bioengineering.

Shoreline hardening, such as the installation of seawalls, revetments, retaining walls, rock riprap and gabions, are techniques used to provide immediate protection to shorelines. Although these techniques are commonly used, they are expensive, weaken with age and provide no natural habitat for wildlife.

Bioengineering incorporates natural vegetation into the shoreline to stabilize the bank using the extensive root systems associated with the vegetation. Benefits include:

- cost effective
- provides habitat to wildlife
- naturally filters contaminants and pollutants from surface water
- supports natural processes including the movement of water and sediment
- root systems continue to grow and stabilize through time



What is live staking? Live staking is a bioengineering technique that involves the installation of live, woody cuttings into the bank as shown on the photo at left. Each live stake will grow into a shrub as shown on the photo at right. Live stakes are sourced from native shrubs and trees that are adapted to local conditions. Live staking is being incorporated into the North Shore Road and the Miramichi Bay Trail Rehabilitation Projects completed by the Town of Saugeen Shores. Once established, the vegetation will provide erosion protection and natural habitat for these sections of shoreline. Removal and trimming of shrubs and vegetation along the shoreline is not permitted.

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