



Living Shorelines Monitoring Guide

Purpose: To get a basic quantitative sense of the rate of erosion on your property.

Equipment Needed:

- Surveying tape, long enough to measure at least 5m in meters
- Sturdy wooden stakes (cedar works great)
- Flagging tape

Step 1. Walk along your bank or shoreline and determine which areas are more stable or less stable. You'll want to monitor in areas which seem to be eroding quickly and in areas, if any where erosion seems slower.

Step 2. Determine the number and locations of stakes you wish to place based on the length and variety of your shoreline. You'll want to have more stakes if you have a very long shoreline or a very diverse shoreline. For reference, a pilot site that is 250m long with three distinct zones has six stakes.

Step 3. Measure from the edge of the bank straight back (perpendicular to the bank edge) 5m and pound a stake into the ground. **Double check that the stake is still at 5m.** Take a photo while you measure from the edge so you can see what you counted as "the edge" to minimize variation from human error in your data points over time. Also take a photo of the stake to help you find it again. Draw a simple map with key features around the stake and the stake number. Flag the stake with flagging tape and a number on the tape. If you have a GPS, record the stake's position with your GPS unit.

Step 4. Record below that first date the stake was placed, and the distance from the edge of the bank. If your stake is actually at 4.98m, record that, so that you don't think you've lost 2 cm the next time you measure when really it started at 4.98m.

Step 5. Visit your stakes once in the fall, after heavy rains, and strong winds that bring large waves, and once in the early spring. Try to choose consistent dates for the fall and late winter/early spring times so that you will be able to calculate the erosion rate per year.

Stake #	Date:	Date:	Date:	Date:	Date:	Date:
1						
Notes						
2						
Notes						
3						
Notes						
4						
Notes						
5						
Notes						
6						
Notes						