

CSLAP SHORELINE AND RIPARIAN ZONE ASSESSMENT FORM INSTRUCTIONS

The National Lake Assessment has identified a strong connection between the biological communities in lakes, from fish to rooted plants to benthic (bottom) communities near the shoreline, and the disturbance of shorelines and the areas immediately upland (the riparian zone) from the shoreline. Unfortunately, there is little information about the extent of shoreline disturbance and the habitat for fish, plants, and benthic communities in most New York state lakes. This shoreline assessment provides an opportunity to evaluate shoreline conditions in your lake at a few locations. This survey will also evaluate the extent of periphyton (algae on rocks) growth in the lake and compare it to the extent of shoreline and riparian zone disturbance. Ideally, this assessment form would be completed in 10 locations along the shoreline, but even 5 locations would provide useful information.

You have been provided a map that shows 10 randomly chosen locations, including their GPS coordinates, along the shoreline. Complete one survey form (on the other side of these instructions) for each site, starting with site #1 listed on the map. If you do not have a GPS to navigate to the exact location, conduct your evaluation at the approximate location based on the provided map. If this location corresponds to a dock, conduct the survey next to the dock. Either GPS coordinates or a narrative description of the location (“at John Smith’s cottage”) can be used to identify the site. At each location, complete the form by assessing a 15 meter (50 foot, approximately 3 boat lengths) area of the shoreline. The “riparian zone” assessment should extend to a distance 15 meters (50 feet) back from the shoreline.

When evaluating surface film, shoreline disturbance, shoreline debris, and pipes, check all choices that apply. When evaluating land slope, bottom substrate, bottom cover, and fish cover, check only one choice in each category (dominant and secondary type). When evaluating shoreline characteristics and riparian zone characteristics, check only one choice for each category (forest, grass, etc.). After completing the shoreline and riparian zone assessments, make sure that the total range of percentages does not exceed 100%. For example, “extensive” forest (> 75% cover), “moderate” grass (>25% cover) and “moderate” shrub (>25% cover) would exceed 100%.

At each site, reach down and randomly collect 10 rocks submerged in 1 meter (3 feet) of water (or any shallower depth that stays submerged throughout the summer growing season). This should include a mix of large gravel (approximately the size of a tennis ball) and cobble (up to the size of a basketball). Measure the maximum depth of the periphyton attached to the upper side of each rock, and record it to the nearest millimeter on the form.

Once you have completed all of your forms, please include them with one of your CSLAP samples, or send it to:

Scott Kishbaugh, CSLAP Director
NYSDEC Division of Water
625 Broadway, 4th Floor
Albany, NY 12233-3502

CSLAP SHORELINE AND RIPARIAN ZONE ASSESSMENT FORM

LAKE NAME _____ DATE _____

SAMPLER NAME _____

SAMPLING SITE # _____ DESCRIPTION OF LOCATION _____

PHYSICAL HABITAT CHARACTERISTICS AT LOCATION

Surface Film: None Algal Scum Foam Oil Sheen Pollen Macrophytes/duckweed

Shoreline Disturbance: None Dock Breakwall Sand Boulders Riprap
 Railroad Ties Concrete Boat launch Inlet Stream Other _____

Shoreline Debris: None Weeds Algae/Green Scum Foam Fish/snails
 Downed Trees Driftwood Trash/Detritus

Land Slope Entering Lake: Flat (<5%) Moderate (5-25%) Steep (> 25%)

Pipes: None Water intake Stormwater outfall Other

Lake Bottom Substrate (check one for dominant type and one for secondary type): See definitions below

Dominant Type: Bedrock Boulders Cobble Gravel Sand Silt/Clay/Muck

Secondary Type: Bedrock Boulders Cobble Gravel Sand Silt/Clay/Muck

Lake Bottom Cover (check one for dominant type and one for secondary type):

Dominant Type: Macrophytes Woody Debris Leaf Pack Benthic Algae Other None

Secondary Type: Macrophytes Woody Debris Leaf Pack Benthic Algae Other None

Fish Cover (check one for dominant type and one for secondary type):

Dominant Type: Vegetation Woody Debris Inundated Trees Hanging veg. Boulders Human Struct.

Secondary Type: Vegetation Woody Debris Inundated Trees Hanging veg. Boulders Human Struct.

SHORELINE CHARACTERISTICS AT LOCATION

Forest	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Grass	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Shrub	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Wetland	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Bare Ground	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Agriculture	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Shore Modific.	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Docks	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Houses	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Other	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)

RIPARIAN ZONE CHARACTERISTICS AT LOCATION

Forest	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Grass / Shrub	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Manic. Lawn	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Wetland	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Agriculture	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Houses	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Roads	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Industrial	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)
Other	<input type="radio"/> None	<input type="radio"/> Rare (<5%)	<input type="radio"/> Sparse (5-25%)	<input type="radio"/> Moderate (25-75%)	<input type="radio"/> Extensive (>75%)

PERIPHYTON DEPTH: Rock 1 ___ mm Rock 2 ___ mm Rock 3 ___ mm
 Rock 4 ___ mm Rock 5 ___ mm Rock 6 ___ mm Rock 7 ___ mm
 Rock 8 ___ mm Rock 9 ___ mm Rock 10 ___ mm

Definitions: Bedrock- size = larger than a car Gravel- size = ladybug to tennis ball
 Boulders- size = basketball to car Sand - size = gritty
 Cobble- size = tennis ball to basketball