

Lake Cascade Lake Vegetation Index Results (8-23-2013)

The Lake Vegetation Index score for Lake Cascade was 89, placing the lake's vegetative community in the exceptional category.

The Lake Vegetation Index (LVI) is a multi-metric index that evaluates how closely a lake's plant community resembles one that would be expected in a condition of minimal human disturbance. It is based on a rapid field assessment of aquatic and wetland plants as indicators of various effects of human disturbance over time. Plants respond to physical disturbances such as introduction

of exotic species or lakeshore alterations, and chemical disturbance such as introduction of excess nutrients, particulates, or herbicides from the surrounding land uses.

The LVI method is performed from a boat, and involves dividing a lake into 12 units and identifying plants in 4 of the 12 units. Plants are identified in the selected unit by a visual boat "drive by" and also via a transect approach. The resulting data is used to calculate the LVI and is evaluated according to the scoring system in Table 1. County staff are available to discuss this information as desired.

TABLE 1. Category names, ranges of values for LVI, and example descriptions of biological conditions typically found for that category.

<i>Aquatic life use category</i>	<i>LVI Range</i>	<i>Description</i>
Exceptional	78–100	Nearly every plant present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance.
Healthy	43–77	About 85% of plant taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15%.
Impaired	0–42	About 70% of plant taxa are native to Florida. Invasive taxa may represent up to 33% of total taxa. Less than 10% of the taxa are sensitive.

Forty plant species were found during the survey. The native species, pond cypress (*Taxodium ascendens*), was the most dominant species in the lake. Other native shoreline vegetation included; red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*) and swamp tupelo (*Nyssa sylvatica* var. *biflora*).

Unfortunately, Chinese tallow tree (*Sapium sebiferum*), listed as a Category I Invasive Exotic by the Florida Exotic Pest Control Council, is an invasive exotic that was found at Lake Cascade.

For a complete list of plants found during the LVI survey, please see Table 2.

TABLE 2. Scientific and common names of the plants identified during the Lake Carr LVI survey (8-30-13).

Scientific Name	Common Name
<i>Acer rubrum</i>	red maple
<i>Ambrosia artemisiifolia</i>	common ragweed
<i>Andropogon virginicus</i>	broomsedge bluestem
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Cyrilla racemiflora</i>	swamp titi
<i>Dichantheium</i> sp.	witch grass
<i>Diodia virginiana</i>	Virginia buttonweed
<i>Diospyros virginiana</i>	common persimmon
<i>Eleocharis baldwinii</i>	road-grass
<i>Erechtites hieracifolia</i>	American burnweed
<i>Eupatorium</i> sp.	Eupatorium
<i>Gelsemium sempervirens</i>	evening trumpet flower
<i>Hypericum hypericoides</i>	St. Andrew's cross
<i>Ilex myrtifolia</i>	myrtle dahoon
<i>Leersia hexandra</i>	southern cutgrass
<i>Leucothoe racemosa</i>	sweetbells
<i>Liquidambar styraciflua</i>	American sweetgum
<i>Litsea aestivalis</i>	pond spice
<i>Luziola fluitans</i>	southern watergrass
<i>Lycopus rubellus</i>	taperleaf water horehound
<i>Myrica cerifera</i>	wax myrtle
<i>Nyssa sylvatica</i> var. <i>biflora</i>	swamp tupelo
<i>Panicum hemitomon</i>	maidencane
<i>Parthenocissus quinquefolia</i>	Virginia creeper
<i>Pinus taeda</i>	loblolly pine
<i>Quercus nigra</i>	water oak
<i>Quercus virginiana</i>	southern live oak
<i>Rhynchospora decurrens</i>	swamp forest beaksedge
<i>Rhynchospora inundata</i>	narrowfruit horned beaksedge
<i>Saccharum giganteum</i>	sugarcane plumegrass
<i>Sapium sebiferum</i> (I)	Chinese tallow tree
<i>Smilax rotundifolia</i>	bullbrier
<i>Taxodium ascendens</i>	pond cypress
<i>Toxicodendron radicans</i>	eastern poison ivy
<i>Triadenum virginicum</i>	Virginia marsh St. John's wort
<i>Vaccinium arboreum</i>	sparkleberry
<i>Vaccinium corymbosum</i>	highbush blueberry
<i>Vitis rotundifolia</i>	muscadine
<i>Xyris</i> sp.	yellow-eyed grass

I - Category I Invasive Exotics
II - Category II Invasive Exotics

For additional information about the LVI, please review the Florida Department of Environmental Protection's [LVI Primer document](#).

For more detailed information about the above species, please visit the [Atlas of Florida Vascular Plants](#) website.

For additional information about Category I and II invasive exotic plants, please visit the [Florida Exotic Pest Plant Council](#) webpage.