

DEPARTMENT OF NATURAL RESOURCES
Division of Fisheries

County: LAKE

T 43N R 10E S NE1/4

SUPPLEMENTAL SURVEY

Directions from nearest town: .25 MILES NE OF
LAKE ZURICH

Date of Inspection: 8/31/2012

Water (Name): ECHO LAKE

Owner: VARIOUS

Address of Owner:

Phone of Owner:

Lessee: ---

Person(s) Contacted: JEFF KANKLE (jeff_kankle@yahoo.com) or
Allan O'Leary (847/209-8896)

Identification: LAKE
PRESIDENT

Address of Contact:

Phone of Contact:

Water Classification: ORGANIZATION

1. **Survey initiated by:** FRANK JAKUBICEK
2. **Water Size:** 26.0
3. **Date of last inspection or work on water:** 1997
4. **Purpose of Survey:** EVALUATE EXTENT OF FISH KILL

5. Observation, comment, recommendations: Following a second report of a summer fish kill on Echo Lake we conducted an observational electrofishing survey with our 5000 watt A/C electrofishing gear to see what was alive following the events. In 30 minutes of electrofishing (roughly once around the lake) we observed one adult largemouth bass (15"), 3 young of the year largemouth bass (4"), 2 channel catfish (20"), 12 common carp (adult size roughly (22"), 1 juvenile common carp (12"), several dozen adult green sunfish (4"- 5"), and thousands of young of the year bluegill (1"- 2"). Dead along the shoreline were grass carp, common carp, bluegill, and largemouth bass. This event was detected on Monday August 27, our electrofishing survey was conducted on Friday August 31, 2012.

Echo Lake is a relatively shallow lake so being down approximately 1 foot because of the severe drought reduces the lakes volume by almost 20%. This is a significant reduction in volume so it appears that instead of the lake being in a state of equilibrium the lower volume has resulted in an oxygen demand greater than the lake could sustain. Cooler water temperatures and rain will return the lake to what your use too and will allow the fishery to move forward.

Following a major restructuring the fishery (a major fish kill) it's important to add predatory pressure pretty quickly to keep surviving fish populations in check. If left unchecked, the surviving species will quickly overpopulate the lake and balancing the fishery will become a whole lot more difficult, take a lot longer and cost more money. Common carp and bluegill are prolific species so keeping them in check is important. Enough predation is difficult to achieve on most stocking budgets so think big and be consistent for a couple years.

Adult common carp root around on the bottom looking for food and stir up soft sediments. The suspended soft sediments reduce water clarity and reduces light penetration so aquatic plants have a hard time growing. Since most carp have died you're likely to notice clearer water and next year you're likely to see more aquatic vegetation. Nuisance levels of aquatic vegetation may take a couple years to reach but it's never too late to begin learning about your options and to begin working toward an aquatic plant management plan.

Stocking recommendations following this event:

100 largemouth bass per acre (usually available in 3"-5" or 4"-6" sizes)

25 catchable size channel catfish per acre (usually available by the pound 2 to 4 pound fish are usually available)

5 northern pike per acre as an initial stocking (usually available in fall at 10"-12" sizes)

2 grass carp per acre if you feel you've had success with them in the past. There should be no need to stock grass carp unless aquatic vegetation takes off like predicted.

There's no need to stock fathead minnows for bass or panfish (bluegill, crappie or hybrid sunfish), there is an over abundance of small bluegill right now which will provide forage for predator fish. With the proper amount of predation their population will stabilize and your lake will return to what your use too in a couple years.

Frank Jakubicek

Date of Report: 8/31/2012

Distribution: If classification of State, Public, or Stream: District, Area, Central
All others: District

FM 5.0