LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI –C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

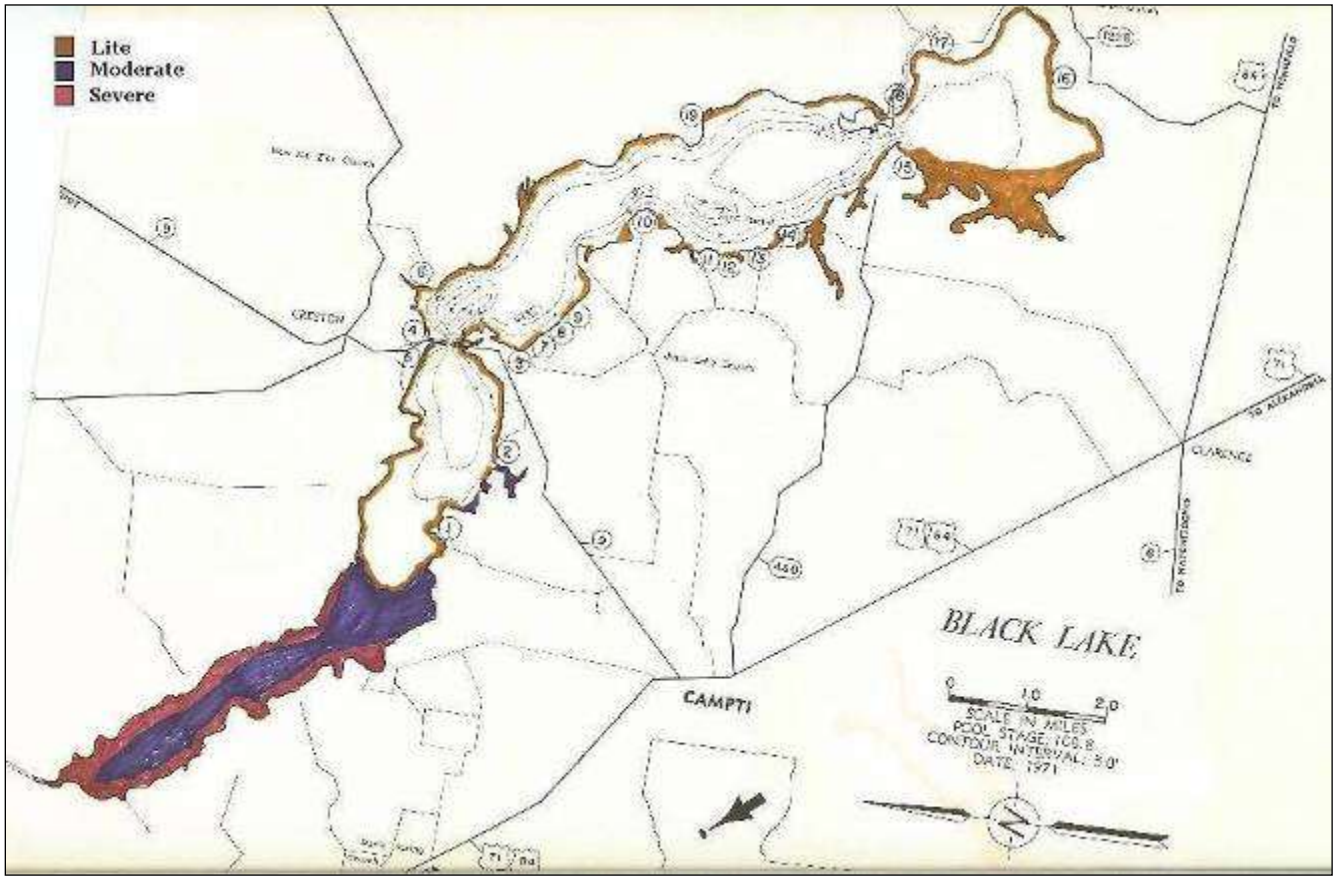
BLACK-CLEAR LAKE

AQUATIC VEGETATION TYPE MAPS
AND NARRATIVES

AQUATIC VEGETATION TYPE MAPS AND NARRATIVES

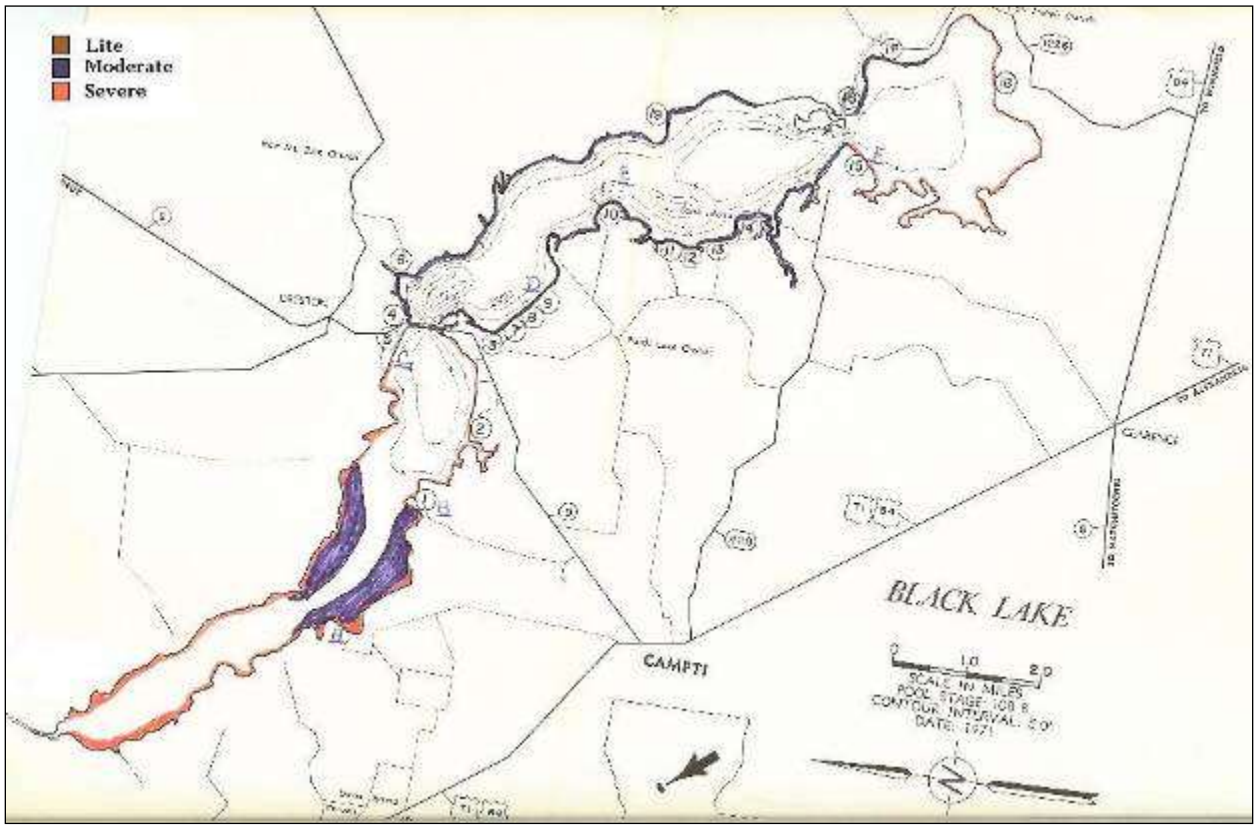
1980 - 2013

BLACK LAKE
1980



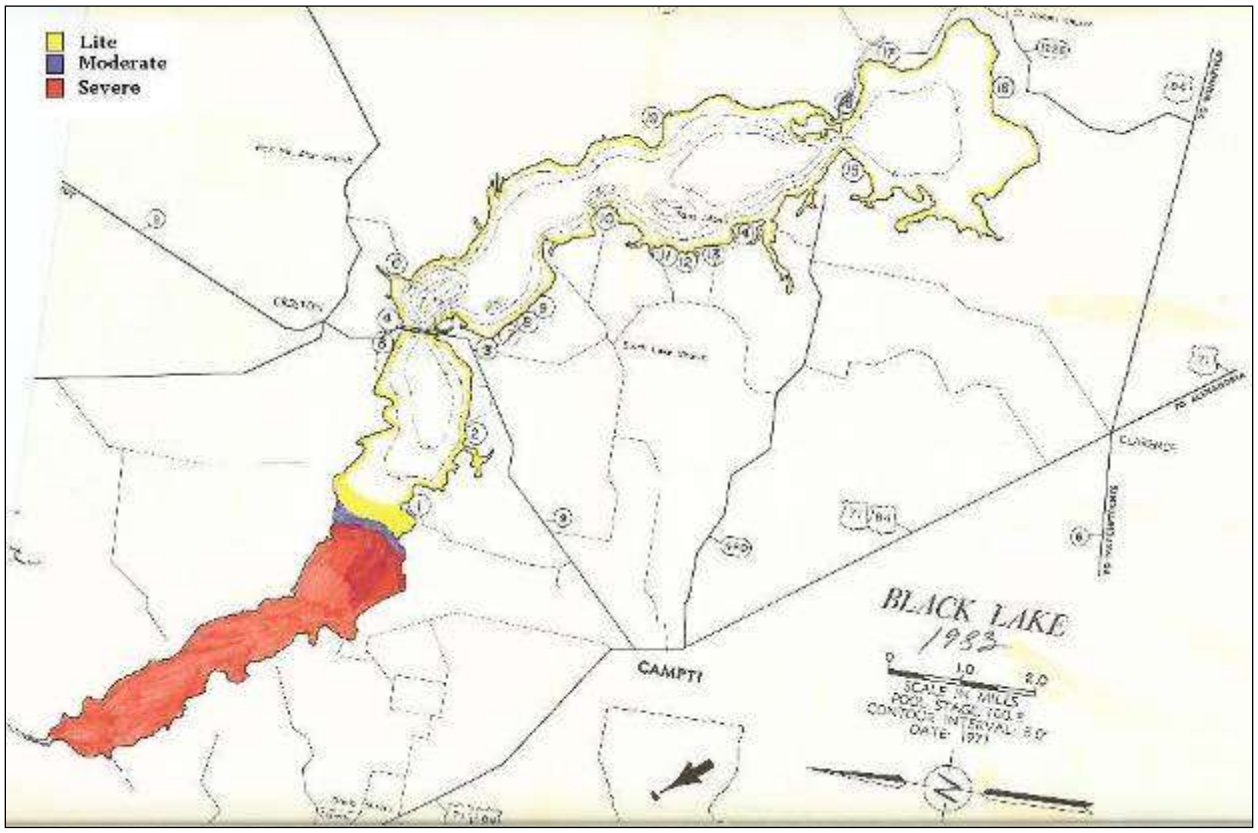
BLACK LAKE
August, 1982

At the time of assessment Black Lake was one foot below pool stage. The lake appeared to be in excellent condition. No severe infestations of water hyacinth were observed; scattered plants and small mats were noted in the southwest end. A severe Lotus infestation was noted in the prairie. The only submersed plant creating any problem was Chara. Overall the Chara problem would be classed as light to moderate and maximum bio-mass of Chara was found from 1 ½ to 3 ½ foot depths. Cabomba was light to moderate in the southwest end with scattered plants just below Clouds Crossing.
Allen Dam failed in early January 1982 and quickly reduced the lake level about 10 feet (not an exact level). The lake was down for a short period of time and was refilled in approximately two months.
There was a significant reduction in rooted submersed weeds as compared to 1981. Cabomba was reduced 75 plus percent. Chara infestations were increased due to the drawdown.



BLACK LAKE
1983

At the time of assessment Black Lake was at pool stage. The color of the water was fairly clear. Some plankton bloom was noted in all areas of the lake.
The severe infestations indicated on the type map were comprised of Cabomba, mixed with Myriophyllum, Utricularia, and Ceratophyllum.
The moderate infestations were primarily Cabomba. The light infestations were Utricularia, Filamentous algae, Eleocharis and Potomogeton and on the upper end plants were Cabomba.
The floating plants noted were Eichhornia and Lemna. The water hyacinth and were all isolated in the upper end in a band from Cloud Crossing North Rapheale Camp. Most water hyacinth were single small plants.
The emergent plants noted were Nelumbo and Nymphaea. Nelumbo was found in a small patch on the north side of the upper end and in a large area of the prairie.
In summary Black Lake is in fair condition. There has been an increase in submersed plants in the upper end. Submersed plants in other areas are unchanged. There has been an increase in water hyacinth since last year, but spray crews should be able to control them. There seems to be some decrease in hyacinth in the area mentioned. Marginal plants are in tolerable numbers.



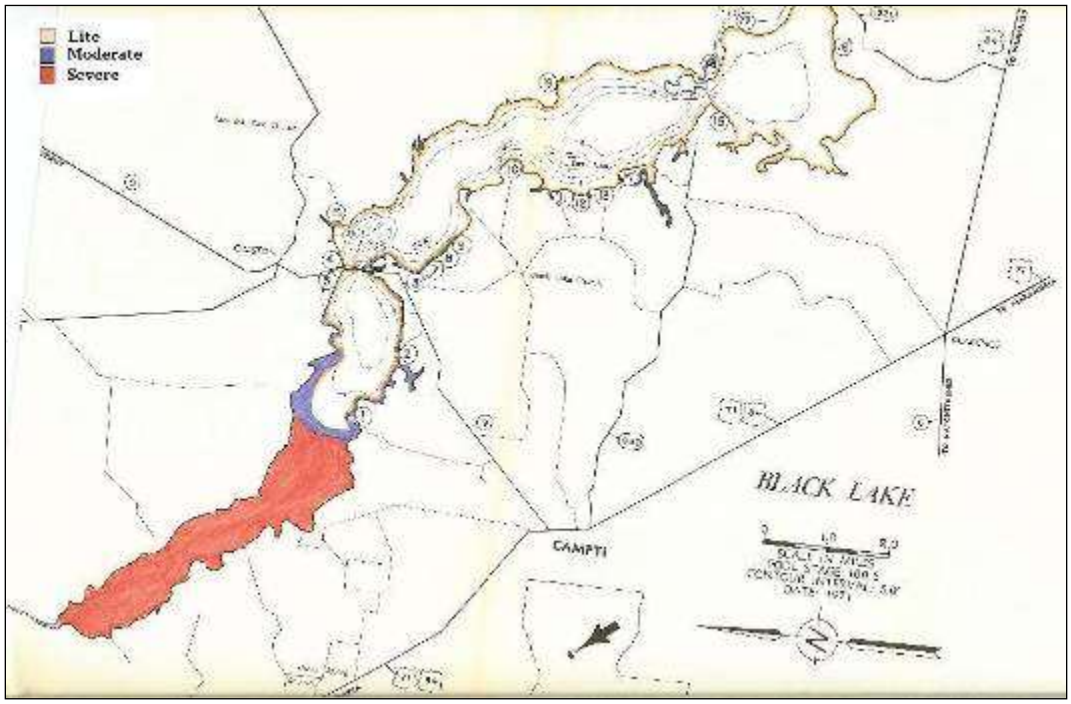
BLACK LAKE
1984

At the time of assessment Black Lake was 6 to 8 inches below normal. The area from the bridge on highway 9 south to the dam had a good plankton bloom. North of the highway 9 bridge had a poor plankton bloom.
The submersed aquatic plant infestations ranged from severe to light. The severest infestation was on the upper end and the infestation was comprised of Cabomba, Milfoil, Utricularia and Ceratophyllum. The moderate infestations noted on the type map consisted of Utricularia as the primary plant and Najas, Ceratophyllum and Eleocharis being the secondary plant. The light infestations consisted of Utricularia and Ceratophyllum being the primary plants and Eleocharis and filamentous algae being the secondary plants.

The marginal plants noted were Polygonum, Ludwigia, Sagittaria, Cephalanthus, Taxodium and Salix.

In summary there has been a significant increase in density of submersed aquatic plants since last year. There has also been a significant spread of plants down the lake. Lemna is also increasing to some extent in the area of severe infestation. Nelumbo is a problem plant in the prairie area of Black Lake. This year there was a aerial application on Nelumbo in the prairie area and on the upper end. There has been no increase in marginal plants since last year.

Melvin Bagwell



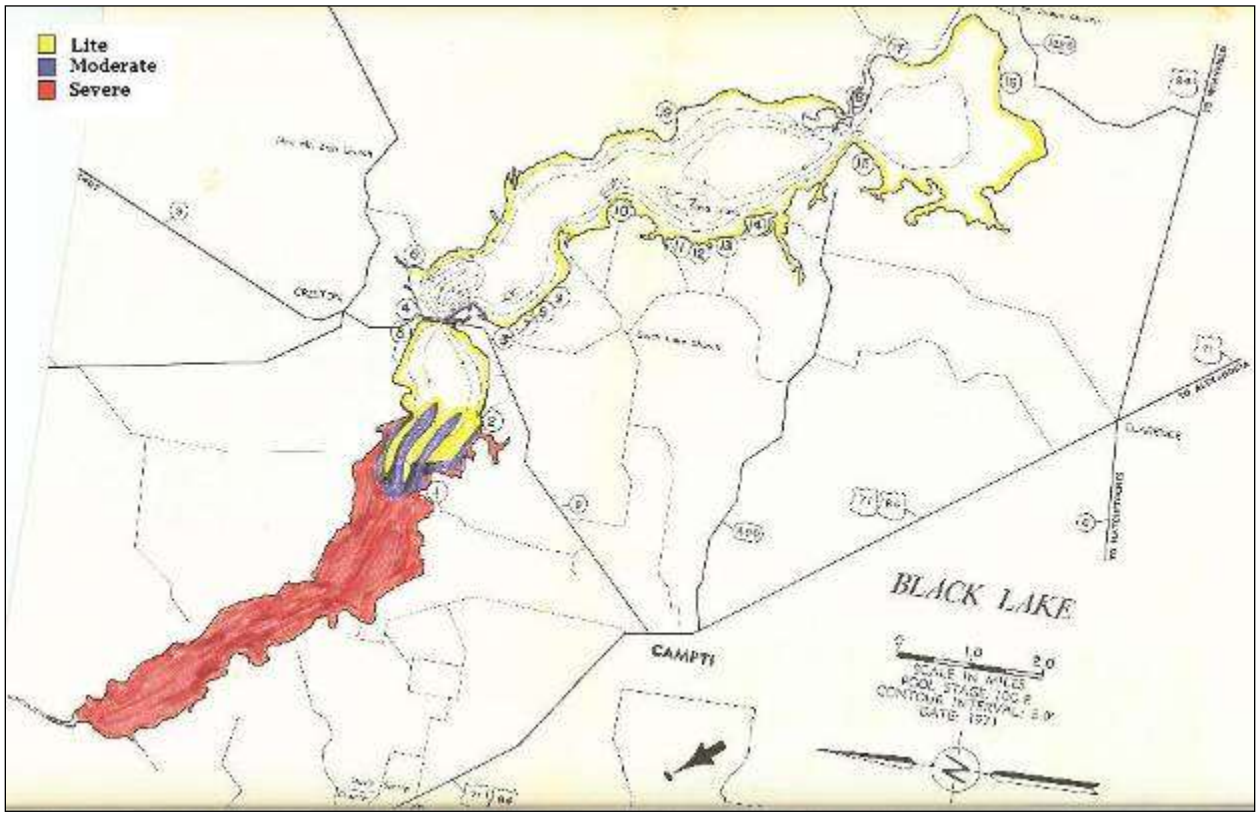
BLACK LAKE
1988

At the time of assessment Black Lake was at pool stage. The area above the highway and bridge had very little plankton bloom. The area south of the bridge had a fair plankton bloom. The prairie area was turbid.

The submersed aquatic plants noted were Cabomba, Utricularia, Ceratophyllum, Southern niad, Eleocharis, and Chara.

The emersed aquatic plants noted were American Lotus and white waterlily.

In summary Black Lake has a severe submersed aquatic plant problem comprising approximately on third of the lake. There has been some increase in plants in the lower portion of the lake, but infestations are all light. The Lotus in the prairie has not spread as anticipated but spraying has controlled some areas.



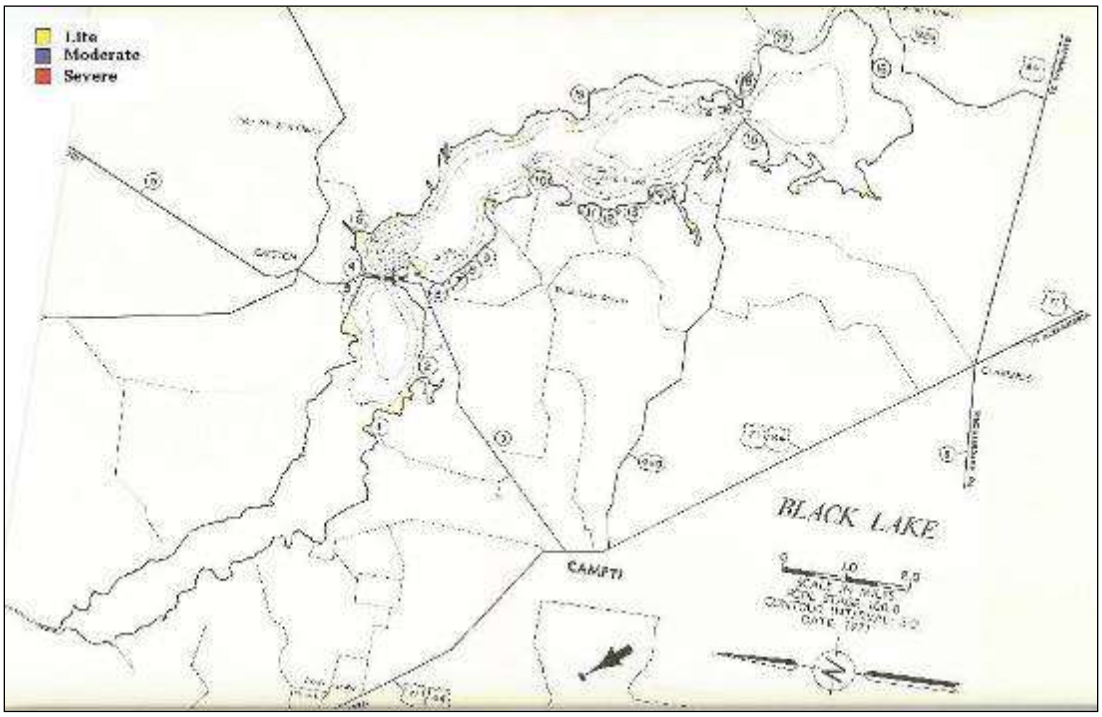
BLACK LAKE
1989

Black Lake, Natchitoches Parish, was assessed for aquatic plants in August, 1989. The water color was a turbid brown color and the lake is at pool stage. The Secchi disc reading was thirty one (31") inches.

Black Lake was subjected to a high water fluctuation in the spring and early summer. Water levels reached fifteen feet (15) above pool stage. Water levels remained high for a period of three to four weeks because of high rain levels.

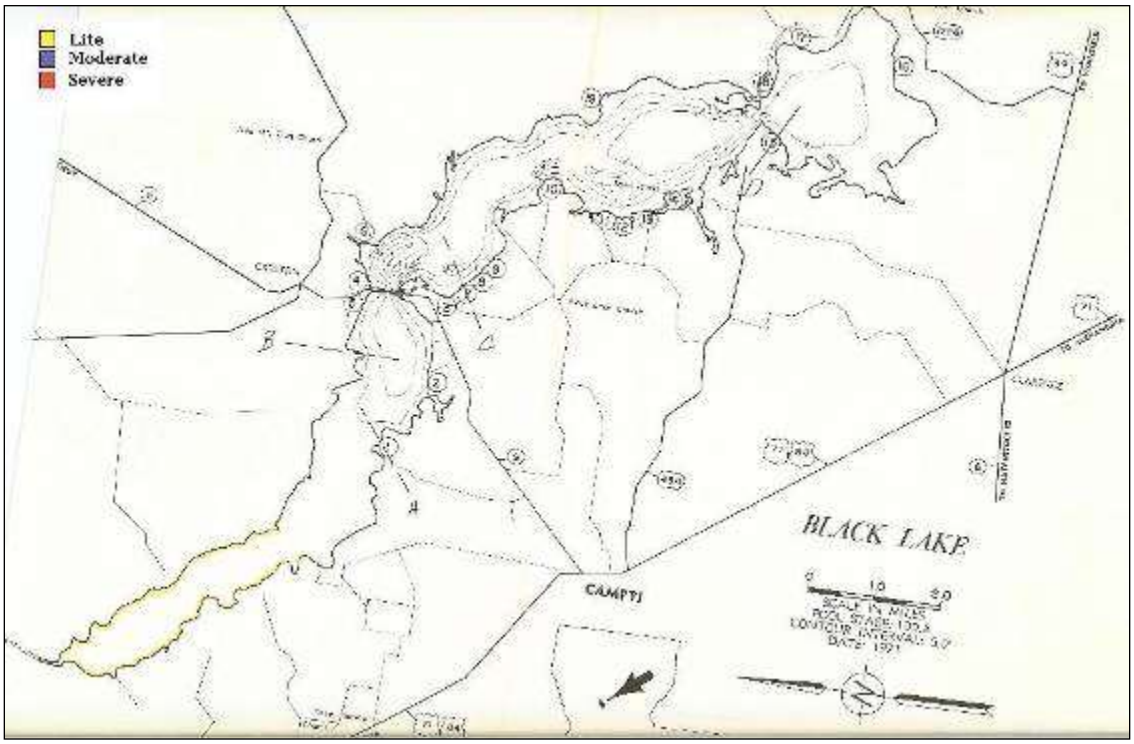
At this assessment, Black Lake has very small amounts of vegetation. The dominant plant in the upper half of Black Lake is Southern Niad (*Najas*). Chara was also noted in small amounts. A fragment of *Egeria densa* was noted at Clouds Crossing. The dominant plant in the lower half of Black Lake was Southern Niad. All infestations were light to sparse.

Most areas of Black Lake are devoid of vegetation. The above mentioned plants were in very light infestations. There was an area of water hyacinths on the north bank across from Clouds Crossing. There was come scattered hyacinths on the north bank from Clouds Crossing to the highway 9 bridge. The Louts (Nelumbo) in the prairie are not present because of high water.



BLACK LAKE
1991

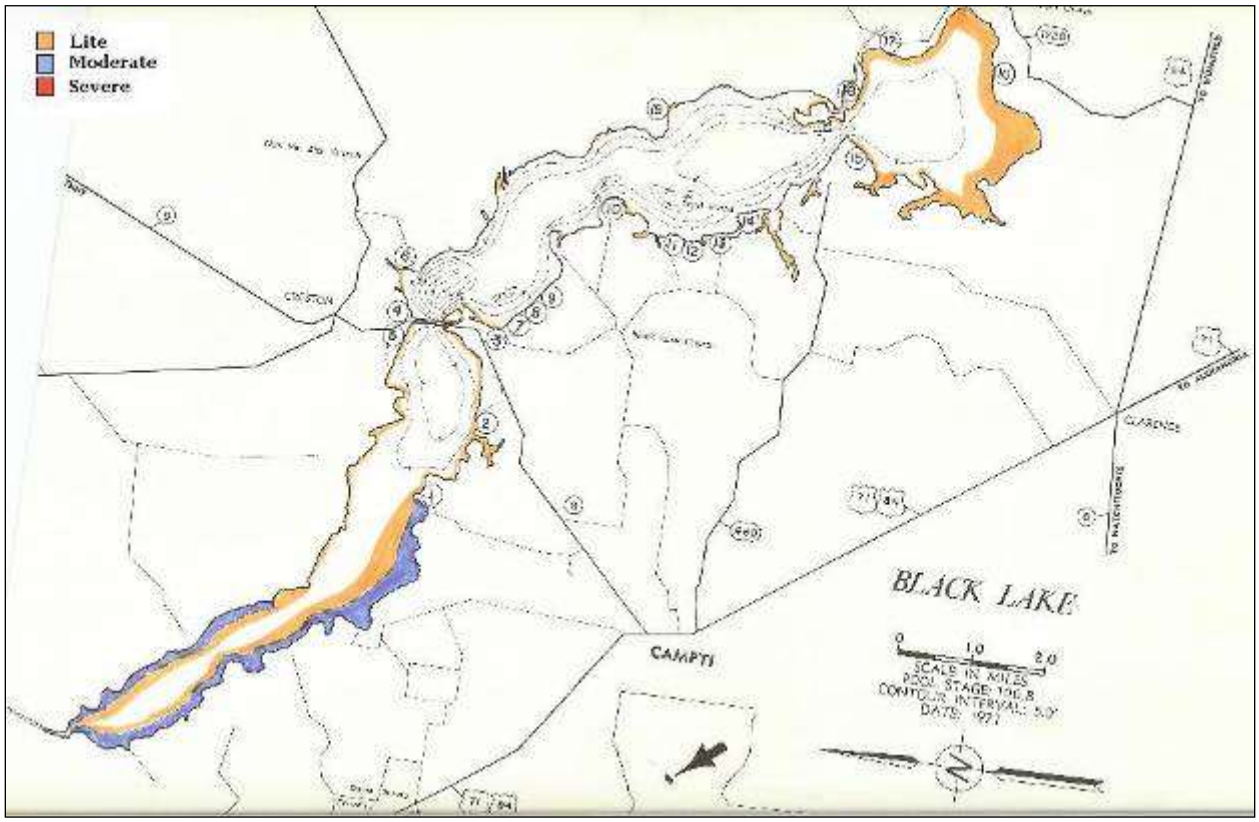
At the time of assessment Black Lake was at pool stage. The water color was very good. Turbidity was low and the upper and mid portion of the lake had an extremely high amount of plankton. Water visibility was very low. The Secchi disc reading in the upper end was 10 inches and 18 inches in the lower end. Filamentous algae was present almost everywhere. The only visible submersed aquatic plants noted were Utricularia spp. and filamentous algae. The emersed plants noted were Polygonum, Ludwigia, and Nelumbo.
In summary Black Lake had only very light infestations of plants in the upper end. The mid and lower portion had no infestations. Black Lake was subjected to flooding in early spring. Water levels reached 7 feet above pool stage.



BLACK LAKE
1992

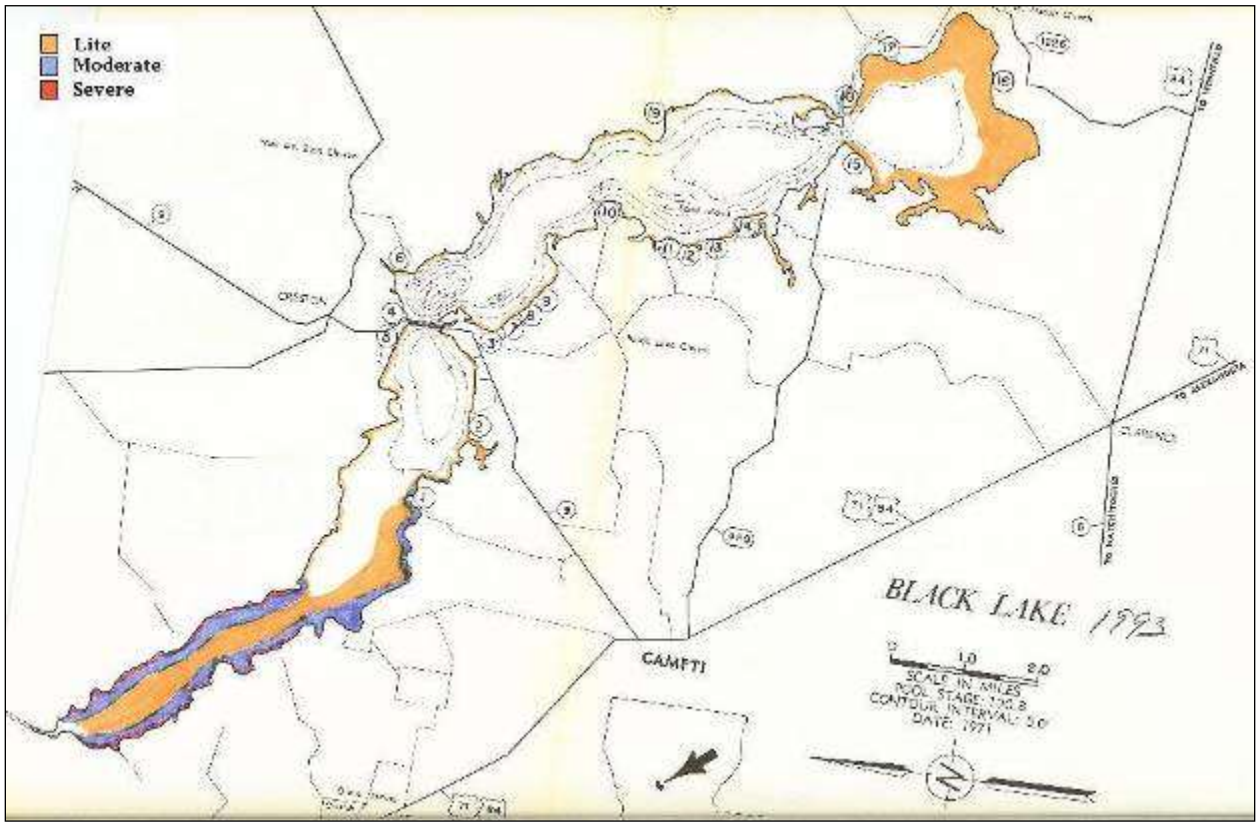
Black Lake was surveyed for aquatic plants in June, 1992.

At the time of assessment Black Lake was at pool stage. The water color ranged from Turbid to clean. The upper end had a great deal of turbidity. The turbidity steadily decreased from the mid to lower portions.
The primary aquatic plant noted was Utricularia. The secondary plants were Cabomba, coontail and Southern niad.
The infestations in the upper end ranged from moderate to light and were severe in the extreme upper end. These infestations were composed of Cabomba and coontail in depths to 9' feet.
The infestations in the mid and lower portions were light and composed of Utricularia, coontail and Cabomba. The prairie area had infestations of Utricularia, southern niad and coontail. All infestations in the prairie were light.



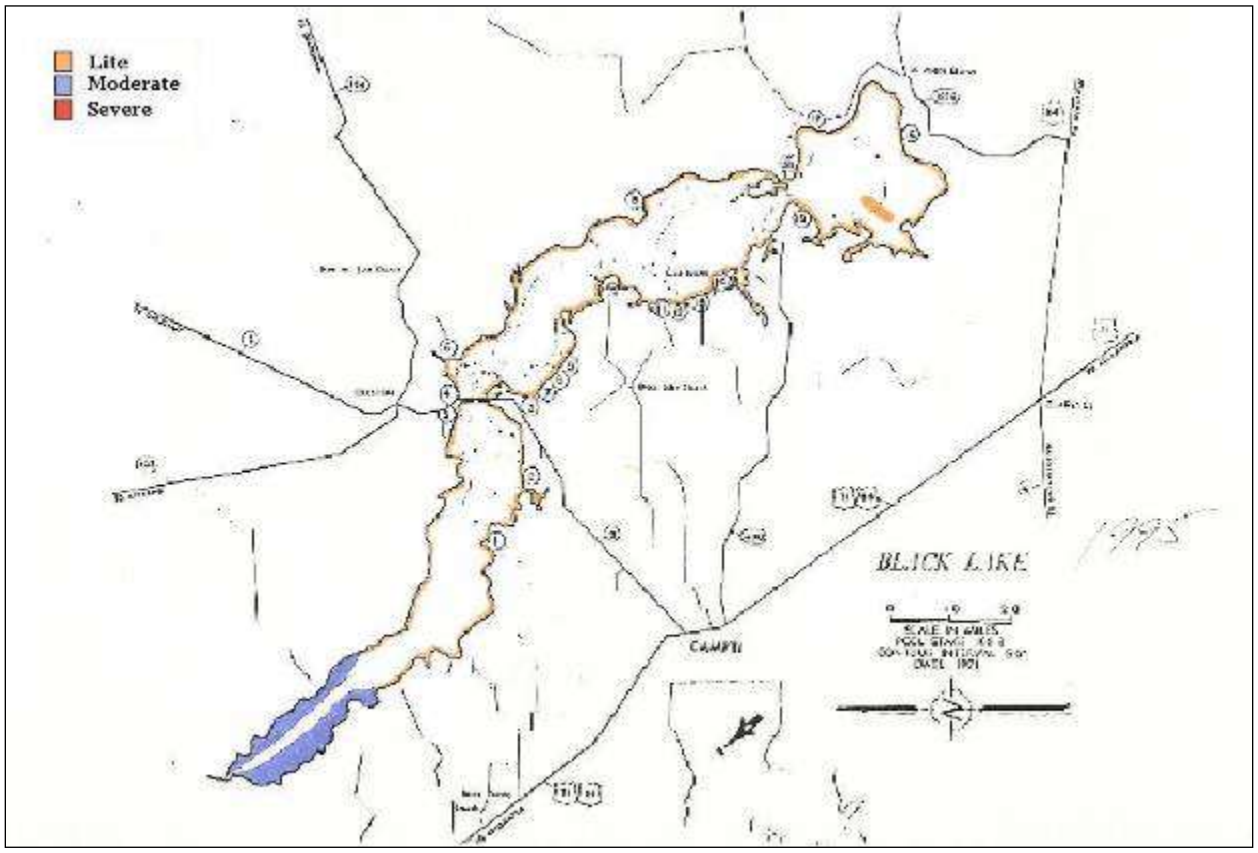
BLACK LAKE
1993

At the time of assessment Black Lake was at pool stage. The weather was clear. The water color ranged from very turbid in the upper end to fairly clear in the mid and lower portions. The Secchi disc reading in the channel in the upper end was 55". My observations are that the Bayou feeding the lake was carrying a load of clay particles, red in color. The Secchi disc reading in the mid portion of the lake was 76". The ph reading in the upper end was 6.8 and in the mid portion 6.9 and in the lower end 7.
The upper end of Black Lake had light to moderate infestations of Cabomba, Ceratophyllum southern niad and Utricularia.
The mid and lower portion of Black Lake had light infestations of Utricularia, Southern Niad and small leaf Potomogeton. Most infestations were Marginal and very light. Hydrilla was found in 8 colonies in the prairie and many fragments.
In Summary Black Lake has a 20% total area infestation. The total infestation is 10% severe, 30% moderate and 60% light.



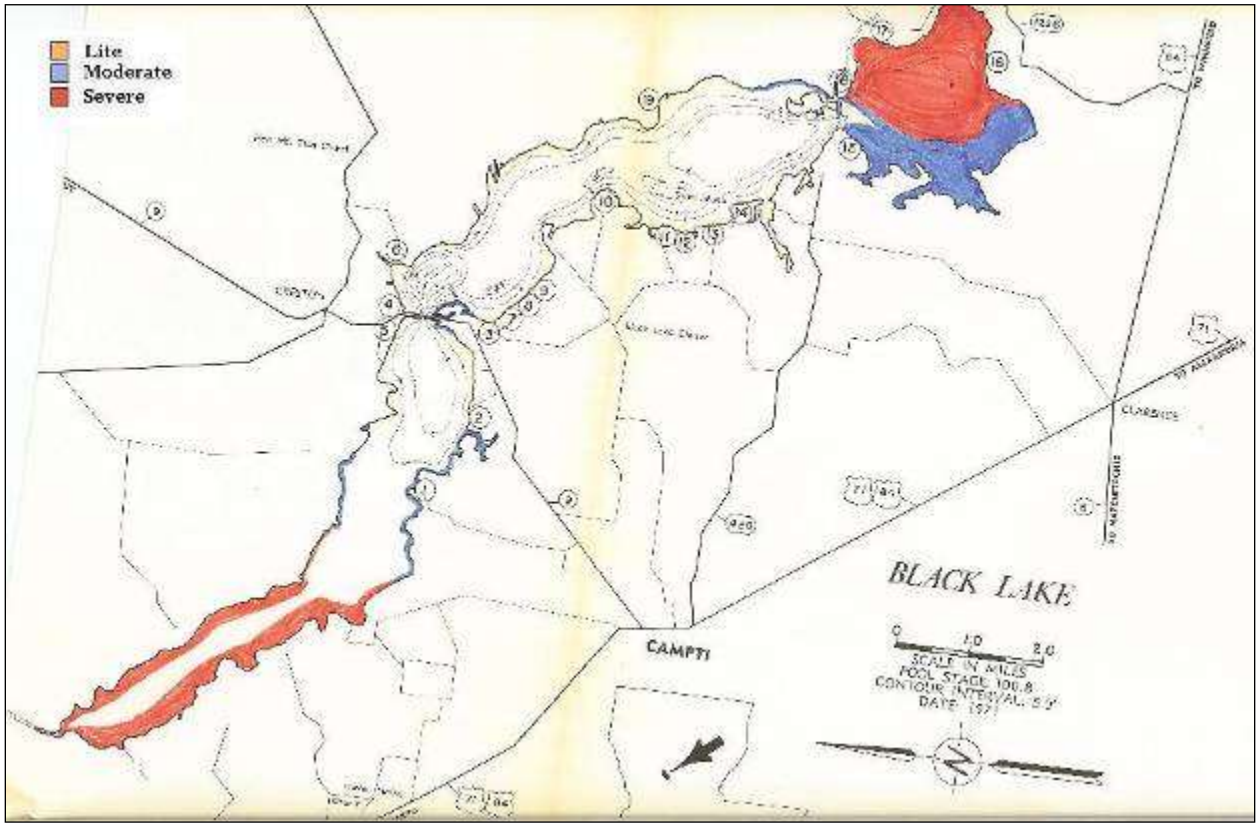
BLACK LAKE
1995

At the time of assessment Black Lake was at pool stage. The water color was clear and slightly turbid. The Secchi disc reading was 46 inches.
The submersed aquatic plants noted was Utricularia, filamentous algae, Chara, Ceratophyllum and Hydrilla. Most infestations of submersed plants were light to moderate and in depths of 1-4 feet. Hydrilla is in the prairie area and has an area of approximately 5 acres occupied. Many fragments were present and drifting.
The emersed plants noted were Primrose, alligatorweed smart weed and Saururus.



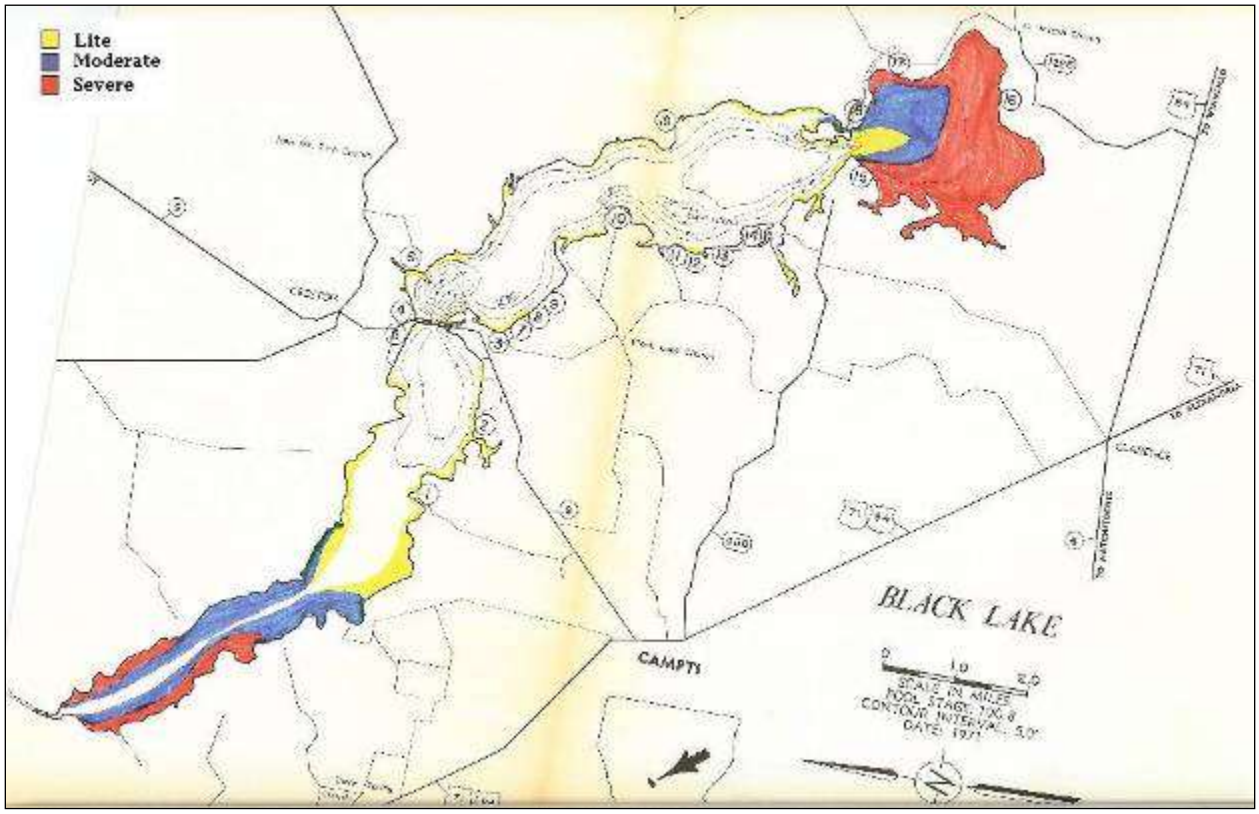
BLACK LAKE
1997

At the time of assessment Black Lake was (15) fifteen inches below pool stage. There was a problem with the shad gates on the dam that caused the low water level. The water color was fairly clear to stained.
The submersed aquatic plants noted were Cabomba coontail, Utricularia, Hydrilla, Chara, Potomogeton, Southern Niad and filamentous algae.
The floating and emersed aquatic plants noted were water hyacinth, Lotus, duckweed, white water lily, primrose, Bulrush, alligatorweed, smartweed and miscellaneous grasses. Black Lake has a (20) twenty percent infestation of aquatic plants.



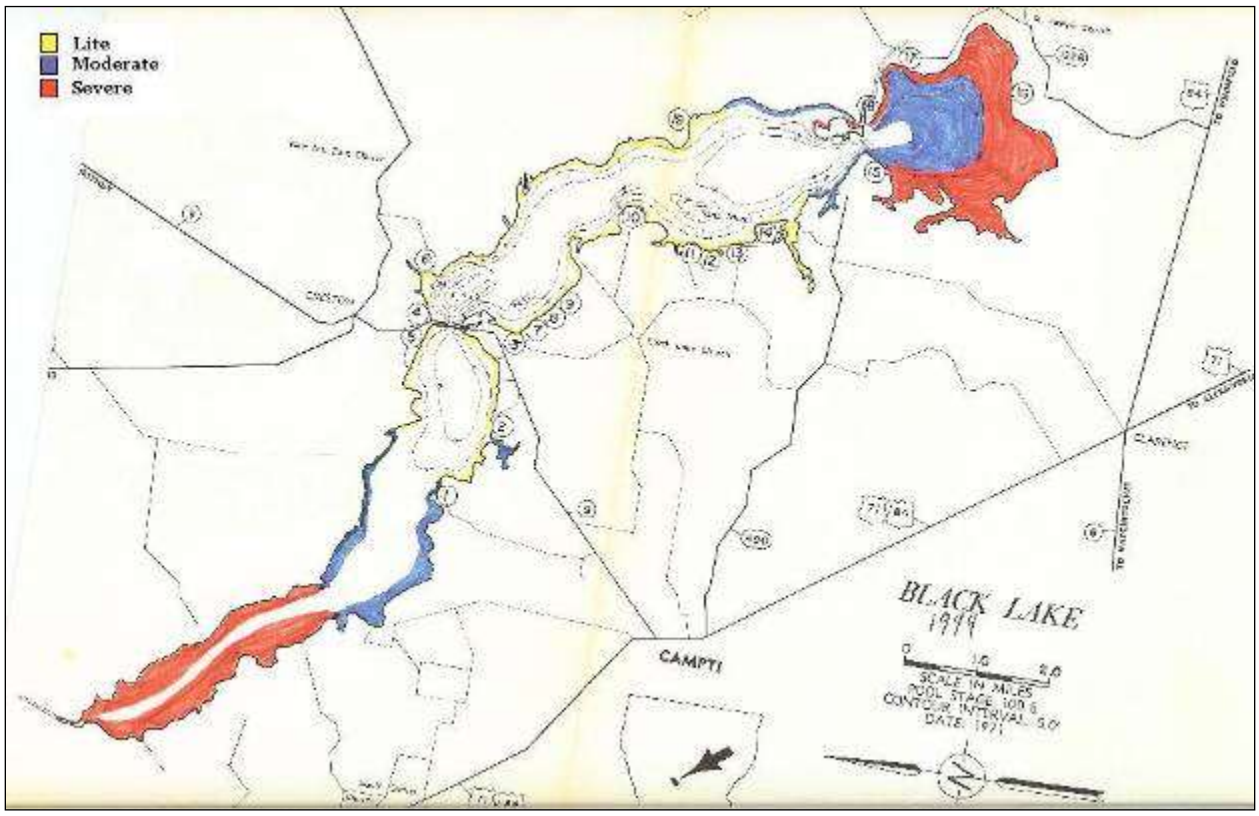
BLACK LAKE
1998

At the time of assessment, Black Lake was at pool stage. The water color was stained. The aquatic plants surveyed were fanwort, coontail, pondweed, chara, hydrilla, spike rush, filamentous algae and southern niad. The floating and emersed plants surveyed were water hyacinth, lotus, white water lily, water primrose, smartweed, alligatorweed, bulrush, and miscellaneous sedges.
The distribution of aquatic plants was moderate to severe in the upper end to light in the lower and mid portion and severe in the prairie area. The total infestation was an estimated 20%.



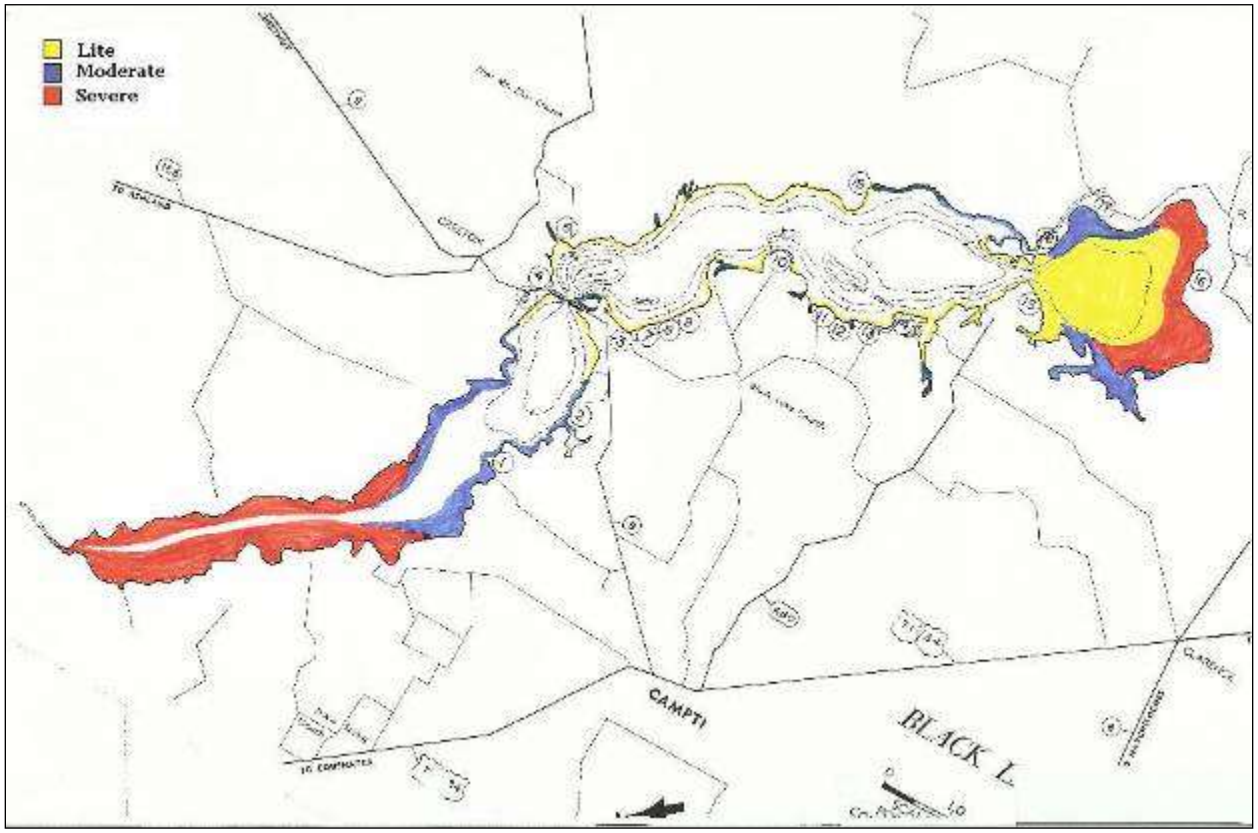
BLACK LAKE
1999
Melvin Bagwell

At the time of assessment, Black Lake was twenty inches below pool stage. The water color was clear.
The submersed aquatic plants noted were coontail (Ceratophyllum demersum), bladderwort (Utricularia sp.), fanwort (Cabomba caroliniana), hydrilla (Hydrilla verticillata), southern niad (Najas guadalupensis), and milfoil (Myriophyllum sp.). The emersed aquatic plants noted were lotus (Nelumbo lutea), water hyacinth (Eichhornia crassipes), white water lily (Nymphaea odorata), smartweed (Polygonum sp.), alligatorweed (Alternanthera philoxeroides), and Bacopa sp.
The infestations of submersed aquatic plants ranged from light in the lower and middle portions to moderate in the upper end. The infestations of emersed aquatic plants were light and marginal. The lotus infestation in the prairie was severe. The hydrilla in the prairie has thinned out since the herbicide application in the spring, but is still severe in adjacent areas.



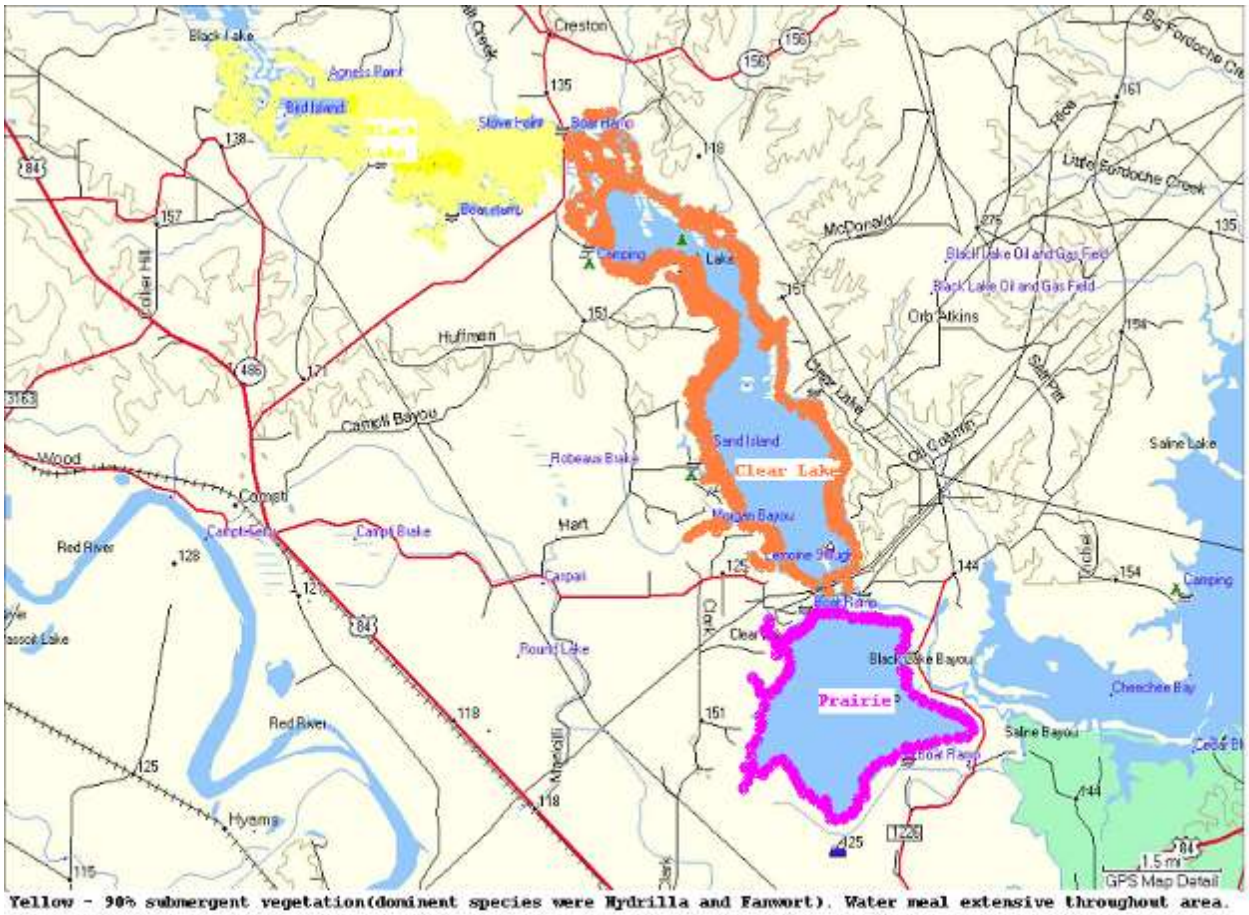
BLACK LAKE
June 2000
Melvin Bagwell

At the time of assessment Black Lake was at pool stage. The water color was a clear brown. This assessment was prior to a drawdown.
The submersed aquatic plants noted were Cabomba, hydrilla, Utricularia, Ceratophyllum, milfoil, southern niad, Chara and filamentous algae.
The emersed aquatic plants noted were lotus, white water lily, bulrush, Brasenia, water primrose, and alligatorweed.
The estimated percent infestation was 20 percent.



Black Lake / Clear Lake Complex (Natchitoches Parish)
Vegetative Type Map
Date Conducted: 7-25-06 & 7-27-06

Conducted By: Ricky Moses
Bill Martin
Jason Corbitt

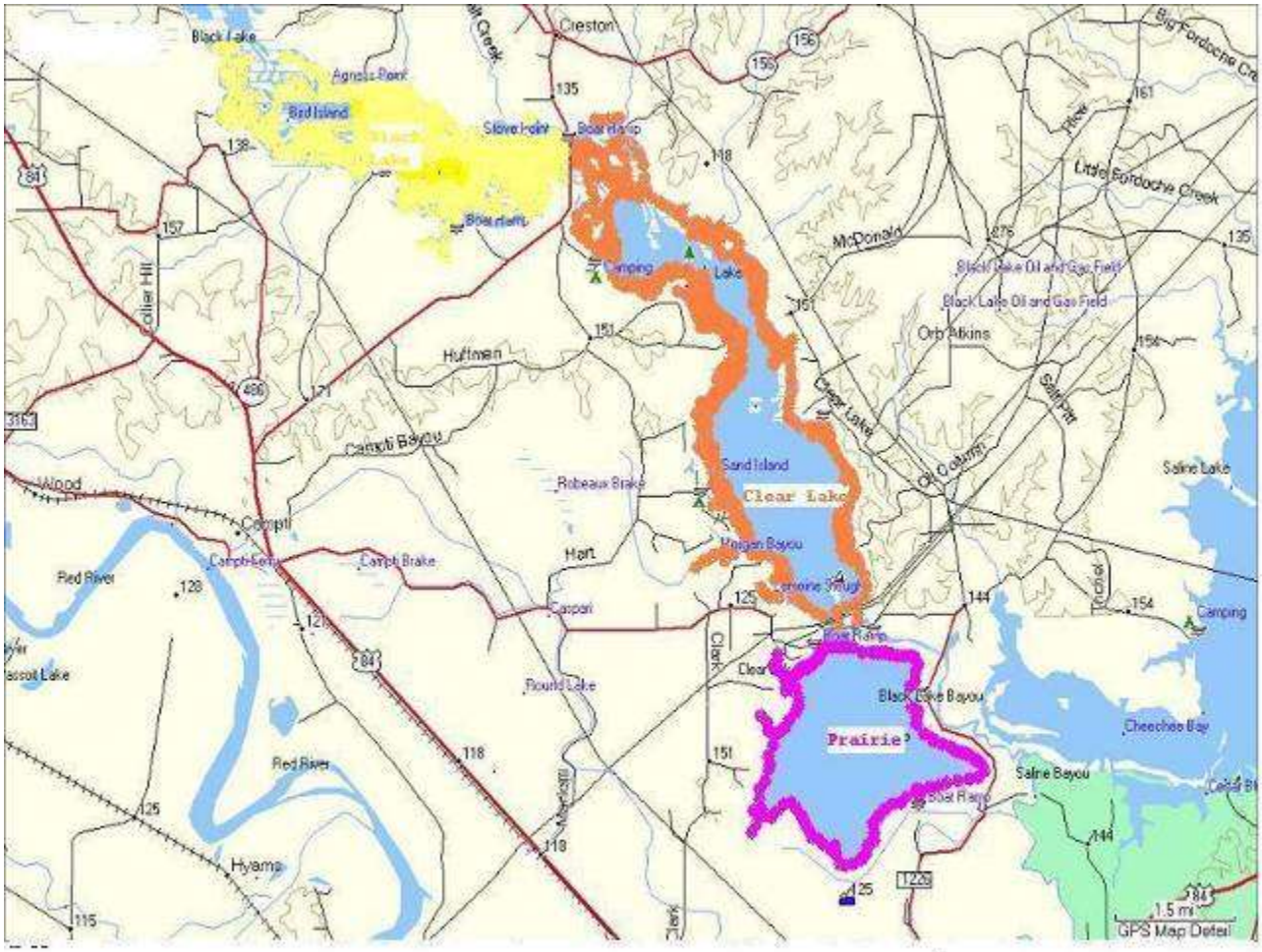


Yellow - 90% submergent vegetation(dominent species were Hydrilla and Fanwort). Water meal extensive throughout area. Water hyacinth found throughout area in small to large mats.Alligator weed, white water lily, American lotus southern water grass found along bank.

Orange - Hydrilla was the most prominent submergent (severe in the north and lessened farther south). Less dominent were bladderwort, fanwort, and musk-grass. Scattered water hyacinth.

Purple - Amer Lotus, Alligator weed and White water lily found along shoreline. Submergent were musk-grass and algae.

Aquatic Vegetation Survey
July 2009
Ricky Moses



Purple: 40 % coverage of submergents primarily hydrilla, mixed with bladderwort and fanwort. Entire area has fringe of alligator weed and 200 acres of American lotus. Also scattered clumps of giant salvinia

Orange: Submergents on the perimeter out to the 8 ft contour hydrilla, mixed with bladderwort, fanwort and coontail. There are also isolated areas of giant salvinia.

Yellow: 30 % coverage of submergents primarily hydrilla, mixed with bladderwort, fanwort and coontail. Most of the area has light re-growth of hydrilla. Emergent vegetation included scattered alligator weed, water hyacinth, common salvinia, American lotus, white water lily, duck weed and water meal.

Aquatic Vegetation Typemap 2012

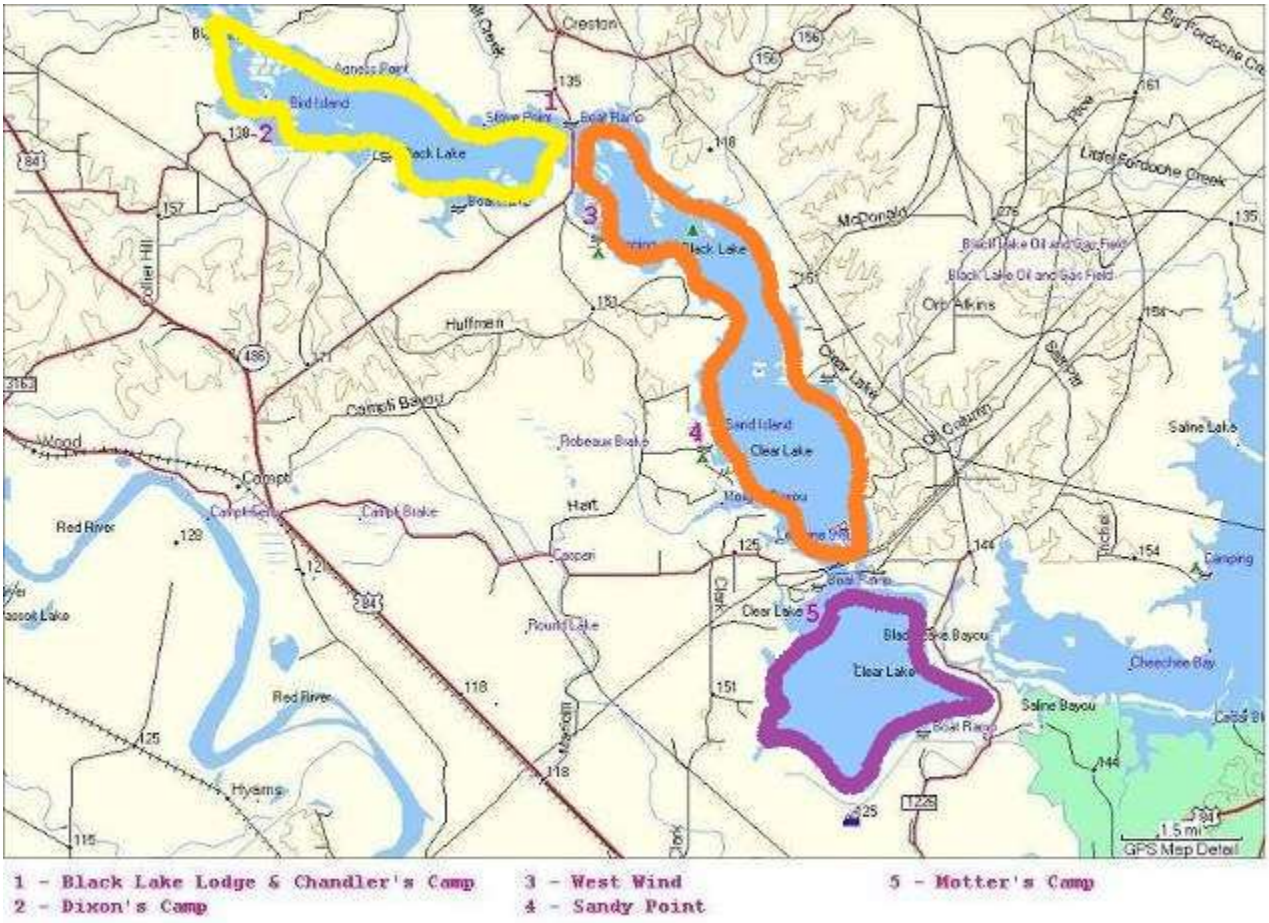


Figure 2. Vegetation Typemap, Black/Clear Lake, Natchitoches Parish, LA, for November, 2012.

Purple: 20 % coverage of submerged vegetation, primarily hydrilla, mixed with bladderwort and fanwort. Entire area has fringe of alligator weed and 150 acres of American lotus. Giant salvinia present in scattered mats totaling approximately 200 acres.
Orange: Submerged vegetation from shoreline out to the 8 ft contour resulting in the major creek beds being the only open water in this section of the lake. Vegetation types include mostly hydrilla, mixed with bladderwort, fanwort and coontail. There are also isolated areas of giant salvinia.
Yellow: 30 % coverage of submerged vegetation. Primarily vegetation type is hydrilla mixed with bladderwort, fanwort and coontail. Emergent vegetation included scattered alligator weed, water hyacinth, common salvinia, American lotus, white water lily, duck weed and water meal.

Aquatic Vegetation Typemap 2013

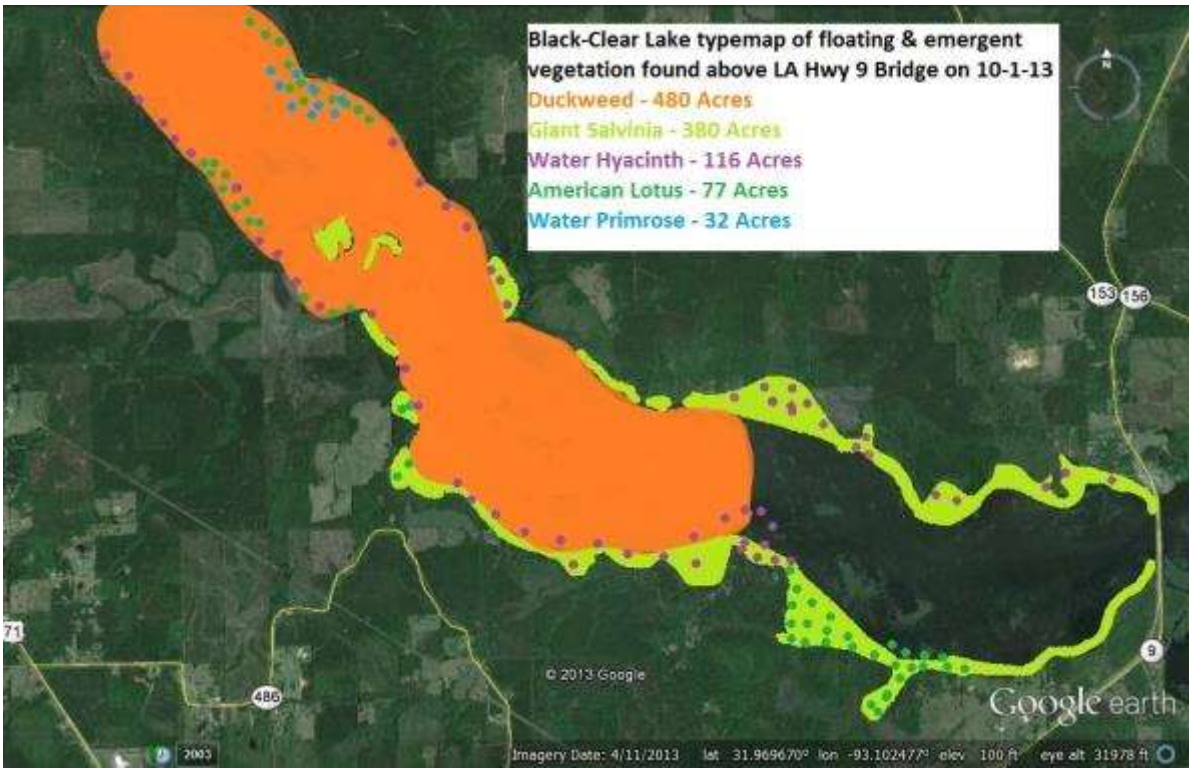


Figure 1. Vegetation typemap of floating and emergent vegetation found above the LA Hwy 9 Bridge at Black/Clear Lake, Natchitoches Parish, LA on October 1, 2013.

Figure 2. Vegetation typemap of floating and emergent vegetation found below the LA Hwy 9 Bridge at Black/Clear Lake, Natchitoches Parish, LA on October 1, 2013.

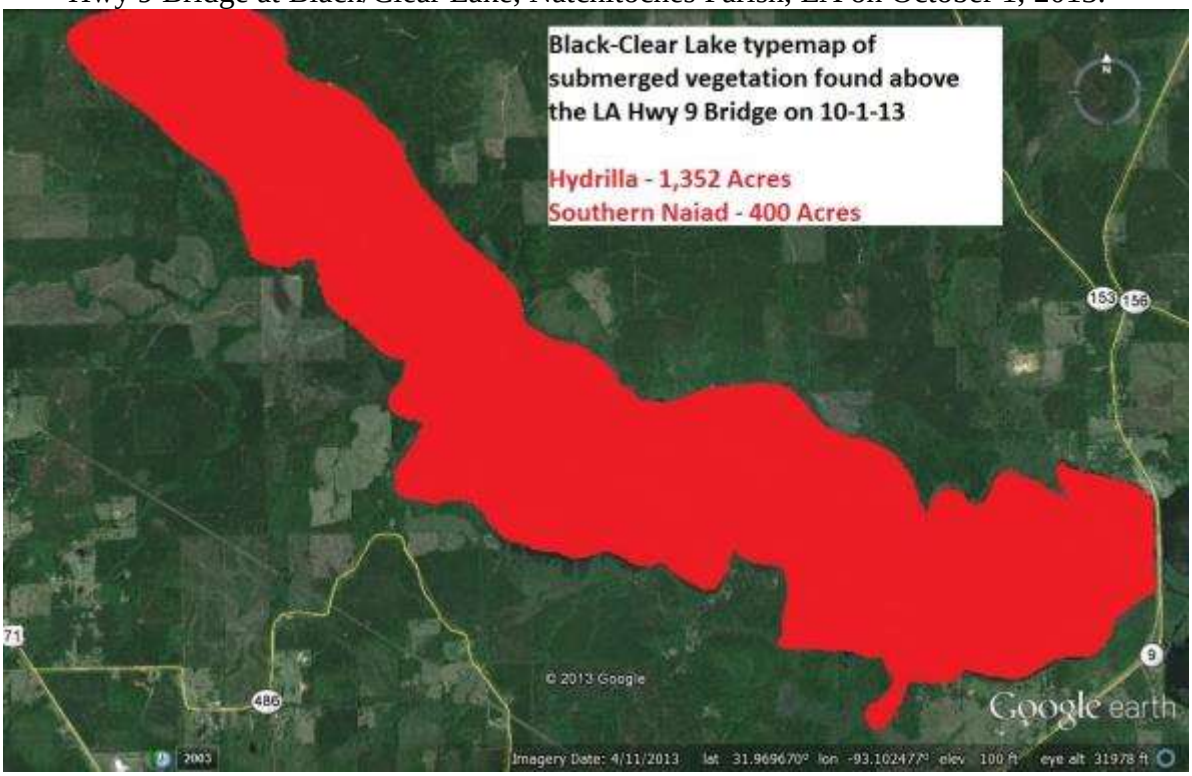


Figure 3. Vegetation typemap of submerged vegetation found above the LA Hwy 9 Bridge at Black/Clear Lake, Natchitoches Parish, LA on October 1, 2013.

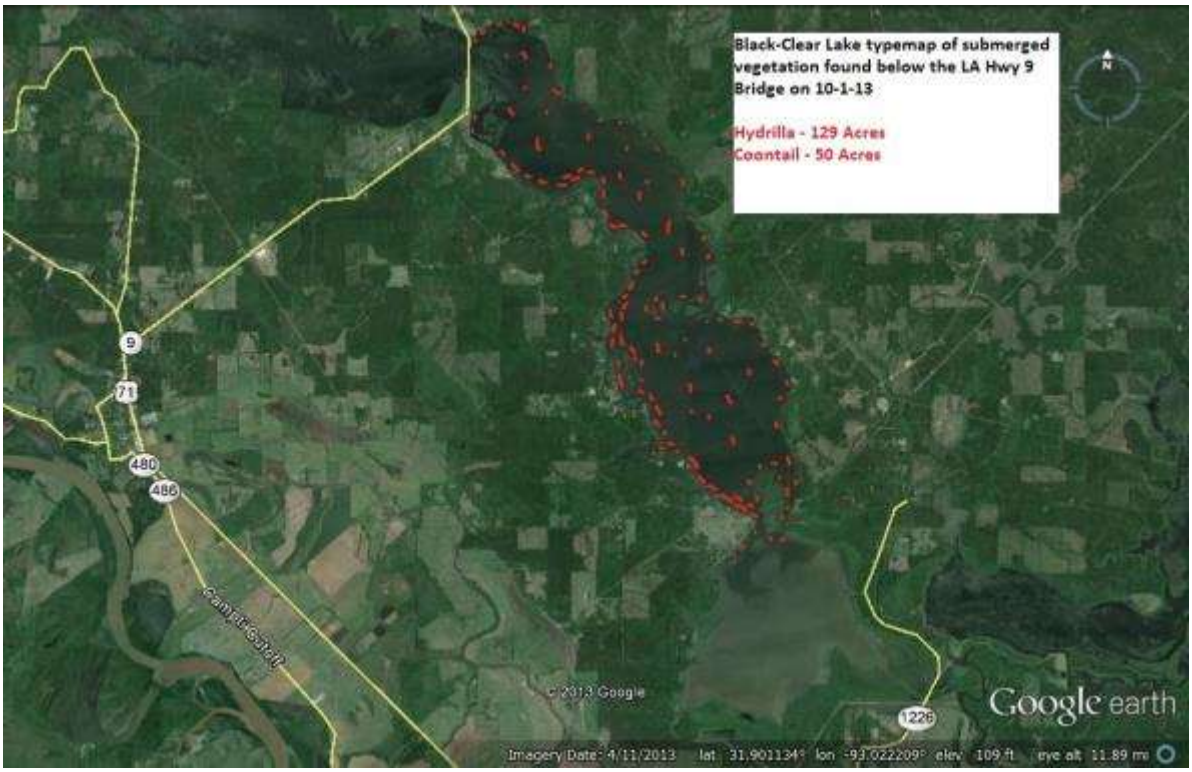


Figure 4. Vegetation typemap of submerged vegetation found below the LA Hwy 9 Bridge at Black/Clear Lake, Natchitoches Parish, LA on October 1, 2013.