LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

OFFICE OF FISHERIES

INLAND FISHERIES SECTION

2021 AQUATIC VEGETATION CONTROL PLAN

CHICOT LAKE

Date reservoir formed

Work on the lake site began in 1938 with partial clearing of the lake bottom, building of service roads and bridges, and construction of a one-mile levee and concrete spillway along the northeast boundary of the State Park. The lake was impounded in the late winter of 1942 by closing the dam alongside the spillway across Chicot Bayou, south of St. Landry, LA. A drawdown structure and system of drainage channels were constructed in 1963. In 1985, it was determined that the original floodgate structure needed to be replaced. In late 1985, the lake was drained to the main channel. The original spillway and floodgate were demolished. Construction of the new spillway and floodgate began in 1986. The spillway construction project was completed in December of 1987 and the lake allowed to refill.

Impoundment

Owners – Louisiana State Parks

Purposes for creation – Recreational Activities (fishing, boating, site seeing). On July 6, 1936, House Bill 338 was passed by the Louisiana Legislature, which authorized and directed the State Parks Commission to purchase a site for development of a state park in Evangeline Parish: (Chicot State Park). The legislature would appropriate $25,000 for the purchase of not less than a 4,000-acre park site, including all of Chicot Lake.

Size

1,642 acres

Watershed

Watershed size is approximately 24,000 acres

Watershed ratio is 14:1

Land cover in the watershed is composed of rolling upland forest hills (pine/hardwood). There is little or no agricultural run-off.

Pool stage

46.2’ above mean sea level (MSL)

Parish/s located

Located seven miles north of Ville Platte, Louisiana in Evangeline Parish on Hwy 3042. (Latitude – 30^0 47’ 27’’ N Longitude – 92^0 16’ 13’’ W)

Drawdown description

There is a 200-foot spillway with three gates used to conduct drawdowns.

Spillway – 200 ft.

Gate size – 3-4 ft. x 4 ft. openings

Number of gates - Three

Condition –Good

Flow rate – Two gates opened 24 inches each can drop the lake 4 inches per day.

Sluiceway location – N/A
Sluiceway opening - N/A
Condition – N/A
Flow rate – N/A

Who controls
Louisiana Department of Transportation and Development (DOTD)

LAKE AUTHORITY

Louisiana State Parks owns and operates Chicot State Park
Louisiana Department of Wildlife & Fisheries (LDWF) manages the fish population in Chicot Lake, which lies entirely within the park
LDWF - Opelousas, LA (337) 948–0255

Authorization
Louisiana State Parks – Chicot State Park (337) 363 – 2403 or
http://www.crt.state.la.us/parks/

Anyone fishing on OSP property must adhere to all state and federal laws and criteria regarding fresh and/or salt-water fishing. The taking of fish by nets, traps or any means other than hook or line is prohibited at any and all sites, except for management purposes as authorized by special permit.: AUTHORITY NOTE: Promulgated in accordance with R.S. 56:1681-1690 and R.S. 36:204.

Aquatic Vegetation Status:

Plant growth projections for summer **2021**:

Hydrilla - 350 acres on the north end of the lake
Other submersed vegetation coontail: (*Ceratophyllum demersum*), fanwort (*Cabomba caroliniana*) and southern naiad (*Najas guadalupensis*) – 300 acres
Water hyacinth, water pennywort (*Hydrocotyle spp.)* & American lotus - 250 acres located throughout the lake
Common salvinia - 50 acres located mainly on the south end of the lake
Giant salvinia –700 acres located mainly on the north end of the lake and the very southern end of the lake.

Past Control Measures:

Hydrilla was first discovered in Chicot Lake in 1996. Since that time, herbicide applications and drawdowns have been conducted to control the spread of the invasive submersed plant. In 2013, 600 TGC were stocked to control the spread of hydrilla.

In 2013, foliar herbicide applications were made on nuisance plants such as water hyacinth

(*Pontederia crassipes*), alligator weed (*Alternanthera philoxeroides*) and common salvinia (*Salvinia minima*) in Chicot Lake. A total of 224 gallons were used to control 596 acres of aquatic vegetation. To control water hyacinth and alligator weed, 2, 4-D was applied at a rate of 0.5 gallons per acre. Diquat and glyphosate were applied at 0.25 and 0.75 gallons per acre, respectively, to control common salvinia.

In October of 2013, 600 triploid grass carp (*Ctenopharyngodon idella*) were released in Chicot Lake. Triploid grass carp (TGC) are sterile and are effective in the control of hydrilla (*Hydrilla verticillata*) when stocked in appropriate numbers and contained within the waterbody. A stocking rate of three fish per vegetated acre was selected. To reduce potential for loss through predation, the minimum size for the stocked TGC was 12 inches in length.

A 3-foot drawdown in the fall of 2013 helped to impede aquatic plant growth in Chicot Lake. The control structure was opened on September 11, 2013 to allow dewatering at a rate of 3.0 inches per day. The control structure was closed on September 19, 2013 when water levels reached three feet below pool stage.

In 2014, foliar herbicide applications were made on nuisance plants such as water hyacinth and common salvinia in Chicot Lake. A total of 41 gallons were used to control 58 acres of vegetation. Diquat (0.75 gal/acre) and glyphosate (0.75 gal/acre) were applied to control common salvinia and water hyacinth.

In May of 2014, an in-water herbicide treatment using granular fluridone was applied near the North Fishing Pier in Chicot Lake to control hydrilla growth. This growth was hindering fishing opportunities from the pier. Twenty acres of hydrilla were treated near the North Fishing Pier with 120 pounds of Sonar Q & Sonar PR granular herbicide. Results from this application were minimal, as hydrilla continued to be present after the application.

A 3-foot drawdown in the fall of 2014 continued to help minimize the submersed aquatic plant growth in Chicot Lake. The control structure was opened on September 2, 2014 to allow dewatering at a rate of 3.0 inches per day. The control structure was closed on September 10, 2014 when water levels reached three feet below pool stage.

Giant salvinia was discovered in 2015 and since that time, 127,716 giant salvinia weevils (*Cyrtobagous salviniae*) have been stocked in Chicot Lake to combat the spread of this invasive plant. LDWF collected these weevils from the LSU St. Gabriel Research Station near Baton Rouge. In April of 2018, an additional 38,700 giant salvinia weevils were released in Chicot Lake. These weevils were from USACE in Texas and distributed throughout the lake.

In 2015, foliar herbicide applications were made on nuisance plants such as water hyacinth, giant salvinia (*Salvinia molesta*) and common salvinia in Chicot Lake. A total of 52 gallons were used to control 63 acres of vegetation. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Aqua King Plus (0.25 gal/acre) and Air Cover (12 oz./acre) surfactants was used to

control these plants from April 1 – October 31.

In May of 2015, an Aquathol K herbicide treatment was applied near the North Fishing Pier in Chicot Lake to control hydrilla growth. This growth was hindering fishing opportunities from the pier. Approximately 10 acres of hydrilla were treated near the North Fishing Pier with 45 gallons of Aquathol K herbicide. Results from this application were minimal, as hydrilla continued to be present after the application.

A 3-foot drawdown in the fall of 2015 continued to help minimize the submersed aquatic plant growth in Chicot Lake. The control structure was opened on September 8, 2015 to allow dewatering at a rate of 3 inches per day. The control structure was closed on September 15, 2015 when water levels reached three feet below pool stage.

In 2016, foliar herbicide applications were used to target nuisance plants such as water hyacinth, American lotus (*Nelumbo lutea*), giant salvinia and common salvinia in Chicot Lake. A total of 264 gallons were used to control 354 acres of vegetation. The herbicide 2, 4-D (0.5 gal/acre) was applied to control water hyacinth and American lotus. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Aqua King Plus (0.25 gal/acre) and Air Cover (12 oz. /acre) surfactants was used to control these plants from April 1 – October 31. Diquat (0.75 gal/acre) was used to control common/giant salvinia outside of that time.

In April of 2016, a Sonar PR and Q treatment was applied near the North Fishing Pier in Chicot Lake to control hydrilla growth. This growth was hindering fishing opportunities from the pier. Approximately 15 acres of hydrilla were treated near the North Fishing Pier with 180 pounds of Sonar PR and 200 pounds of Sonar Q. Results from this application were minimal, as hydrilla continued to be present after the application.

A drawdown was conducted in 2016. The control structures were opened on September 12, 2016 to allow dewatering at a rate of 2-3 inches per day. The control structures were closed on October 3, 2016, and all boating activity was prohibited due to unsafe boating access.
The Louisiana Department of Transportation and Development (DOTD) needed to replace a number of support pilings, and the lake was drawn down approximately 5-6 feet for these repairs. This DOTD drawdown coincided with a Louisiana Department of Wildlife and Fisheries (LDWF) recommended drawdown to control aquatic vegetation. Water level fluctuation is an important tool for lake management. Drawdowns mimic natural low water periods of the fall, can provide many of the same benefits including aquatic vegetation control, and improved fish habitat. In addition, exposure to air is critical for decomposition of organic materials on the lake bottom. The re-flooded habitat is an improved and more productive spawning substrate for nesting fish.

Aerial photo of Chicot Lake drawdown – October 2016

In 2017, foliar herbicide applications were used to target nuisance plants such as water hyacinth, giant salvinia and common salvinia in Chicot Lake. A total of 447 gallons were used to control 579 acres of vegetation, mainly giant salvinia. Of the 579 acres, 154 acres of giant salvinia were treated by a private applicator. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Turbulence (0.25 gal/acre) surfactant was used to control common and giant salvinia from April 1 – October 31. Diquat (0.75 gal/acre) was applied to control common/giant salvinia outside of that time frame.

To continue to control the spread of submersed aquatic plants, an additional 1,000 TGC were stocked in Chicot Lake in December of 2017. In November 2018, an additional 280 TGC, 12 inches in length, were stocked in the lake. Annual sampling will be conducted to determine the effects of the TGC stocking.

In 2018, foliar herbicide applications were used to target nuisance plants such as water hyacinth, American Lotus and giant and common salvinia in Chicot Lake. A total of 819 gallons were used to control 797 acres of vegetation, mainly giant salvinia. Of the 797 acres, 279 acres of giant salvinia were treated by a private applicator. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Turbulence (0.25 gal/acre) surfactant was used to control common and giant salvinia from April 1 – October 31. Diquat (0.75 gal/acre) was applied to control common/giant salvinia outside of that time frame.

In 2018, 2,200 feet of boom were deployed in areas throughout the lake to control the spread of giant salvinia.

In 2019, LDWF conducted a three-foot drawdown to control nuisance aquatic vegetation. In addition to controlling aquatic vegetation, the drawdown was able to benefit the fish population by promoting the predator/prey relationship making the forage fish more available to the predators. The dewatering also improved spawning habitat by the decomposition of organic materials such as leaf litter and submersed vegetation.

Cooler fall water temperatures reduce the potential for fish kills. Therefore, the control structure was opened September 9, 2019 allowing the water level to recede 3.0 inches per day. The control structure was closed when three feet below pool stage was reached. The target water level was maintained in early January 2020. The lake remained open to fishing and other recreational activities.

Photo of Chicot Lake drawdown – December 2019

Photo of Chicot Lake drawdown – December 2019

In 2019, foliar herbicide applications were used to target nuisance plants such as water hyacinth, American Lotus, duckweed and giant and common salvinia in Chicot Lake. A total of 398.5 gallons were used to control 455 acres of vegetation, mainly giant salvinia. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Turbulence (0.25 gal/acre) surfactant was used to control common and giant salvinia from April 1 – October 31. Diquat (0.75 gal/acre) was applied to control common/giant salvinia outside of that time frame.

In 2020, foliar herbicide applications were used to target nuisance plants such as water hyacinth, American Lotus and giant/common salvinia in Chicot Lake. A total of 328 gallons were used to control 457 acres of vegetation, mainly giant salvinia. A mixture of diquat (0.25 gal/acre) and glyphosate (0.75 gal/acre) with Turbulence (0.25 gal/acre) surfactant was used to control common and giant salvinia from April 1 – October 31. Also used to control salvinia was glyphosate (0.75 gal/acre) and clipper SC (2 oz./acre) mixed with Turbulence (0.25 gl./acre) surfactant. Diquat (0.75 gal/acre) was applied to control common/giant salvinia outside of that time frame.

In June of 2020, 64,260 giant salvinia weevils were stocked in Chicot Lake to combat the spread of this invasive plant. LDWF collected these weevils from the LSU St. Gabriel Research Station near Baton Rouge.

Recommendations:

An integrated management plan has been developed to control the spread of submersed vegetation, primarily hydrilla, in Chicot Lake. The advantage of integrated management is the ability to achieve a combined benefit from several control methods and not be completely dependent on the success of any one approach. Continued herbicide applications will be conducted as needed. LDWF personnel will continue to perform type map surveys and sampling to monitor aquatic vegetation and will update recommendations as necessary.

Chemical Control

Foliar herbicide applications on Chicot Lake will be conducted as needed by LDWF and private contractor spray crews in accordance with LDWF Aquatic Herbicide Application Procedures:

Plant Species	Herbicide	Surfactant
***Salvinia spp*. Alternative 1** Common/Giant Salvinia (April 1 to October 31)	Glyphosate (0.75 gal/acre) Diquat (0.25 gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
***Salvinia spp*. Alternative 2** Common/Giant Salvinia (April 1 to October 31)	Glyphosate (0.75 gal/acre) Flumioxazin (2 oz./acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
***Salvinia spp*. Alternative 3** Common/Giant Salvinia (April 1 to October 31)	MSM (1 oz./acre) Flumioxazin (1 oz./acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
***Salvinia spp*. Alternative 4** Common/Giant Salvinia (November 1 to March 31)	Diquat (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
***Salvinia spp*. Alternative 5** Common/Giant Salvinia (November 1 to March 31)	Flumioxazin (12 oz./acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Water Hyacinth	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
Water Hyacinth in waiver areas (March 15 to September 15)	Glyphosate (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Alligator Weed/Giant Cut Grass (undeveloped areas)	Imazapyr (0.5 gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Alligator Weed/Giant Cut Grass (developed areas)	Imazamox (0.5 gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
American Lotus	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
American Lotus in waiver areas (March 15 to September 15)	Glyphosate (0.5 gal/acre)	Nonionic surfactant (0.25 gal/acre)
American Lotus in waiver areas with potable water intakes (March 15 to September 15)	Triclopyr (0.5gal/acre)	Turbulence (or approved equivalent, 0.25 gal/acre)
Duckweed	Diquat (1.0 gal/acre) or Flumioxazin (8 oz./acre)	Nonionic surfactant (0.25 gal/acre) or Turbulence (or approved equivalent, 0.25 gal/acre)
Cuban Bulrush (sedge)	2, 4-D (0.5 gal/acre)	Nonionic surfactant (1 pint/acre)
Cuban Bulrush (sedge) in waiver areas (March 15 to September 15)	Glyphosate (0.75 gal/acre)	Nonionic surfactant (0.25 gal/acre)
Water Lettuce	Diquat (1.0 gal/acre) or Flumioxazin (6 oz./acre)	Nonionic surfactant (0.25 gal/acre) or Turbulence (or approved equivalent, 0.25 gal/acre)

Physical Control

None at this time.

Biological Control

Salvinia weevils will continue to be stocked during the growing season for control of giant salvinia depending on availability.

Typemaps:

Chicot Lake Aquatic Vegetation Survey August 20, 2019

Personnel: B. Launey, J. David

Report by: B. Launey

A survey of aquatic vegetation conducted on Chicot Lake revealed a moderate to heavy infestation of vegetation on the north end and southern tip of the lake. A light to moderate infestation was observed around the Walker Branch Bridge. The remainder of the system was mostly free of aquatic vegetation.

The north area of Chicot lake in the vicinity of the North Boat Launch, spillway structure, center portion of Ski Lake, and North Fishing Pier flats continue to be heavily infested with submerged vegetation consisting of hydrilla (*Hydrilla verticillata*), fanwort (*Cabomba caroliniana)*, coontail (*Ceratophyllum demersum)*, and light patches of bladderwort (*Utricularia spp.)*. Some light to moderate areas of filamentous algae were also observed in this area. American Lotus (*Nelumbo lutea)* was observed in a small area just east of the North Landing. Giant salvinia (*Salvinia molesta)* has completely infested the northern most tip of the lake. A floating boom has been deployed in this area to help contain Salvinia from spreading. A moderate to severe infestation of salvinia and submerged vegetation was observed in the wooded area between the North Fishing Pier and Conservation Cove. Herbicide applications, by LDWF and contracted sprayers, are still being conducted to prevent an infestation of giant salvinia throughout the system. There has been little to no reduction of vegetation in this area.

Moderate to heavy amounts of submerged vegetation, hydrilla, fanwort, and coontail, were observed in Conservation Cove and in the wooded area just north of the mouth of the cove. A light vegetative fringe of common salvinia (*Salvinia minima)*, giant salvinia, water hyacinth and alligator weed (*Alternanthera philoxeroides)* was observed in Conservation Cove. The shallow end of the cove had a light to moderate infestation of aquatic vegetation consisting of filamentous algae (*Spirogyra)*, fanwort, coontail, giant salvinia and some hydrilla. The area known as “the Living Room”, between Conservation Cove and the

North Fishing Pier, continues to be heavily infested with giant salvinia.

Turtle Island Cove and Walker’s Branch contained light to moderate amounts of hydrilla, fanwort and coontail. A moderate amount of submerged vegetation was observed in the open water area near the bridge in Walker’s Branch. Dominate submerged species found in this area were hydrilla and coontail. A moderate infestation of giant salvinia was observed in the western portion of Turtle Island Cove with a light fringe around the remainder of the cove. The heavily wooded area west of the Walkers’ Branch Bridge showed a significant reduction of giant salvinia

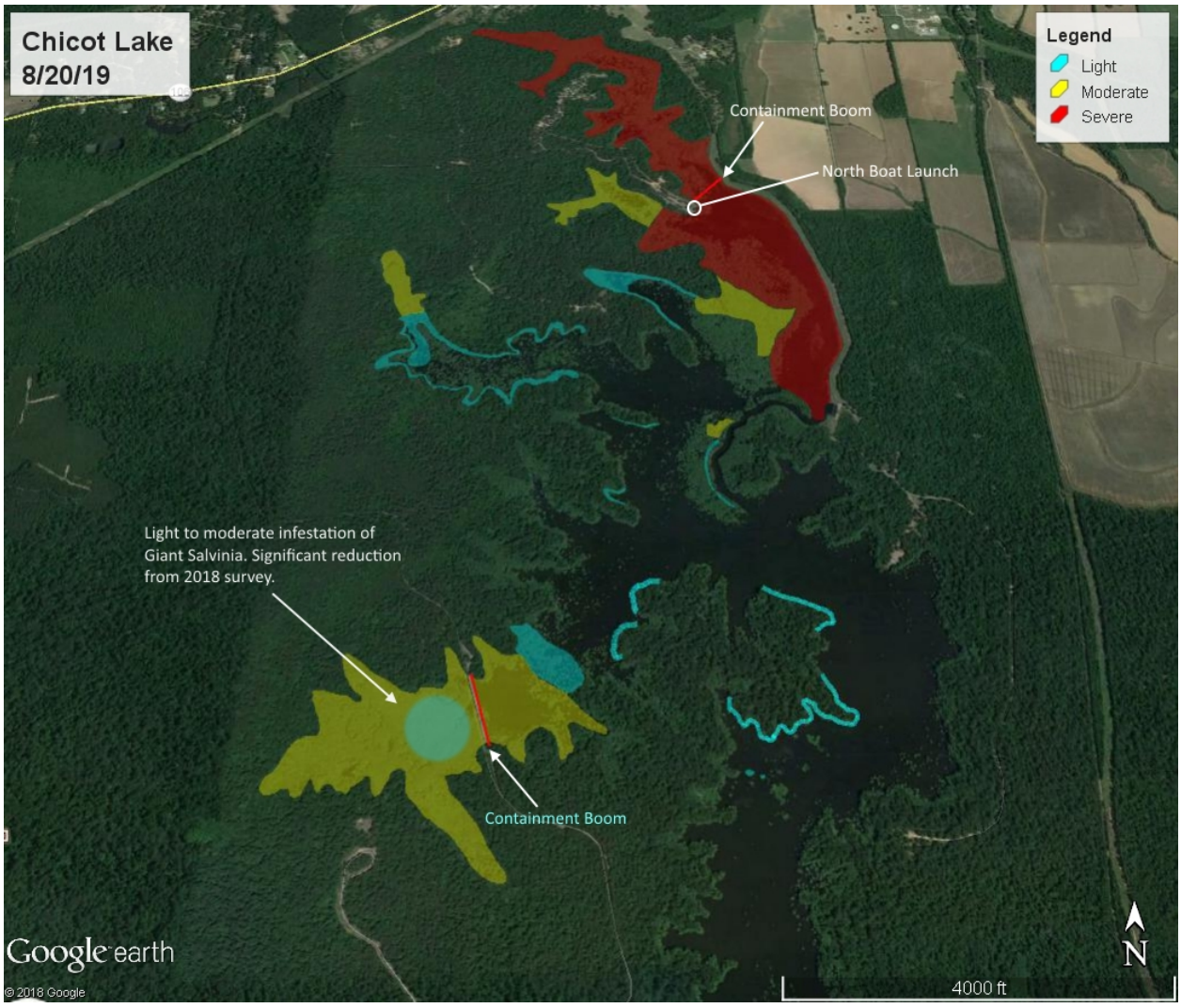
due to heavy stockings of salvinia weevils. Primrose, taro (*Colocasia esculenta),* giant salvinia, and alligator weed are also found in moderate to heavy amounts on the western bank of the spoil mounds separating Turtle Island Cove from the spillway canal (boat channel). This area near the spoil mounds is lightly treated annually. Being this is a popular fishing location, not all of this vegetation is eradicated, and it provides fish cover and fishing success.

As you move south towards the vicinity of the Area 2 boat launch the occurrence of submerged vegetation quickly diminishes. Light patches of giant cutgrass and water hyacinth can be found on points off the main lake. Very light patches of submerged vegetation and moderate patches of giant salvinia were observed in the shallow terminal ends of some small coves off the main lake. Very little submerged vegetation was observed south of Area 2 boat launch with the majority being a light fringe near the south boat launch and a light to moderate infestation of coontail and fanwort on the southern end near the Blue Springs area. A Light fringe of common and giant salvinia was observed across from the south launch heading north in the boat channel towards Area 2 launch.

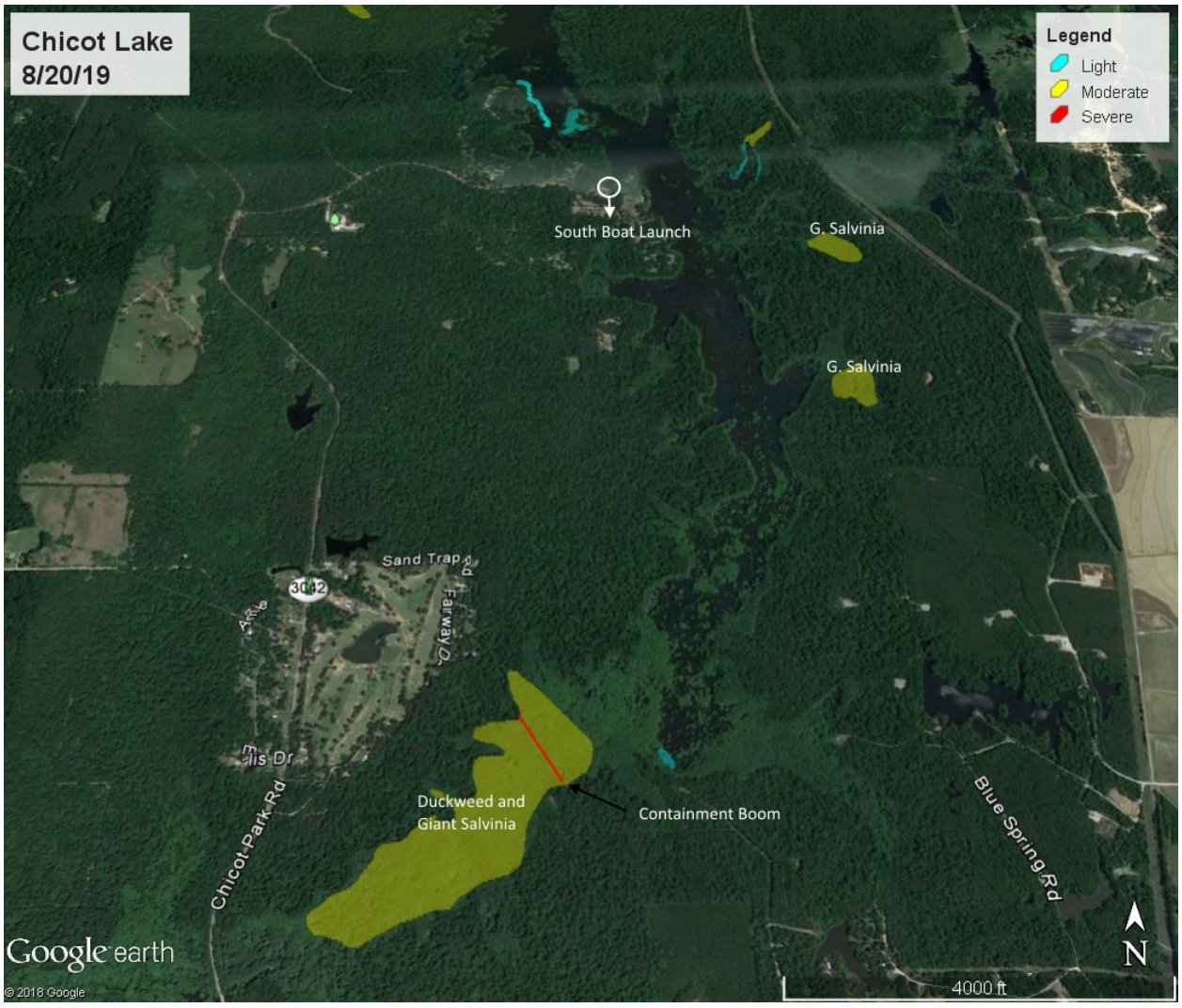
A light amount of water primrose (*Ludwigia spp.)*, alligator weed, swamp smartweed (*Polygonum hydropiperoides)* and taro continue to exist upon the shallow spoil bank area of the mid lake between Area 2 boat launch and the South Boat Launch. This vegetation is also lightly treated annually to keep it under control. Not all of this vegetation is eradicated since it is a popular fishing location and does provide successful fish cover.

Light patches of primrose, water hyacinth, and alligator weed mats were seen in the terminal south end of Chicot Lake in the Blue Springs area and near the Indian Hills Bridge. A light fringe of duckweed and common/giant salvinia was observed in the big wooded cove in the Blue Springs area. A severe amount of duckweed, common salvinia, and giant salvinia was observed in the wooded area towards the Indian Hills Bridge behind the containment boom.

Due to biological, physical, and chemical control methods, LDWF Biologists are starting to see a light reduction of aquatic vegetation over the last couple of years. Salvinia weevils are beginning to reduce giant salvinia acreage throughout portions of the lake. In addition, grass carp stockings have helped reduce submerged vegetation in the Walkers' Branch area.



Chicot Lake North End



Chicot Lake South End

Chicot Lake Aquatic Vegetation Survey September 7, 2018

Personnel: B. Launey, J. David

Report by: B. Launey

A survey of aquatic vegetation conducted on Chicot Lake revealed a moderate to heavy infestation of vegetation on the north end, southern tip of the lake, and around the Walker Branch Bridge. A very light infestation was observed in the remainder of the system. Water level in the lake on the day of the survey was a couple of inches below pool.

The north area of Chicot Lake near the North Boat Launch, spillway structure, center portion of Ski Lake, and North Fishing Pier flats continue to be heavily infested with submersed vegetation consisting of hydrilla, fanwort, coontail, and light patches of bladderwort (*Utricularia spp.)*. Some light to moderate areas of filamentous algae were also observed in this area. American lotus was observed in a small area just east of the North Landing. Giant salvinia has completely infested the northern most tip of the lake. A floating boom has been deployed in this area to help contain it from spreading. A moderate to severe infestation of giant salvinia and submersed vegetation was observed in the wooded area between the North Fishing Pier and Conservation Cove. Herbicide applications, by LDWF and contracted sprayers, are being conducted to prevent an infestation of giant salvinia throughout the system.

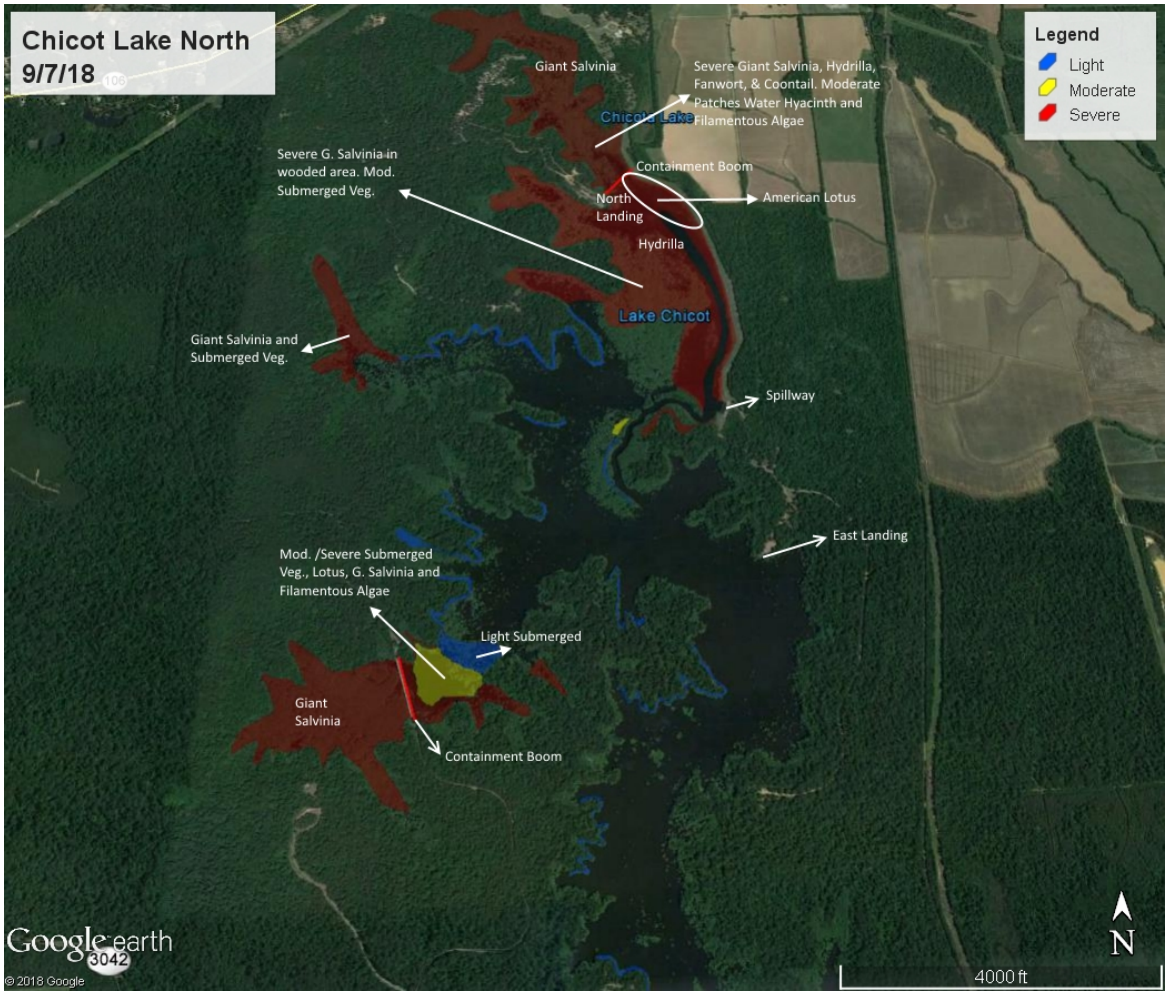
Moderate to heavy amounts of submersed vegetation, hydrilla, fanwort, whorled leaf watermilfoil (*Myriophyllum verticillatum)*, and coontail, were observed in Conservation Cove and in the wooded area just north of the mouth of the cove. A light vegetative fringe of common salvinia, giant salvinia, water hyacinth, and alligator weed was seen in Conservation Cove. The shallow end of the cove had a light to moderate infestation of aquatic vegetation consisting of filamentous algae (*Spirogyra)*, fanwort, coontail, and some hydrilla. The area known as "the Living Room", between conservation cove and the North Fishing Pier, continues to be heavily infested with giant salvinia.

Turtle Island Cove and Walker's Branch contained light to moderate amounts of hydrilla, fanwort and coontail. A moderate amount of submersed vegetation and filamentous algae was observed in the open water area near the bridge in Walker's Branch. The dominant submersed species found in this area were hydrilla and coontail. A severe infestation of giant salvinia was observed in the western portion of turtle island cove and in the heavily wooded area west of the Walker's Branch Bridge. Water primrose (*Ludwigia spp*.), taro (*Colocasia esculenta),* giant salvinia, and alligator weed were also found in moderate to heavy amounts on the western bank of the spoil mounds separating Turtle Island Cove from the spillway canal (boat channel). This area near the spoil mounds is lightly treated annually. Being this is a popular fishing location, not all of this vegetation is eradicated, and it provides fish cover and contributes to fishing success.

As you move south towards the vicinity of the Area 2 boat launch, the occurrence of submersed vegetation quickly diminishes. Light patches of salvinia, mostly common and some giant, were seen in the coves directly west of Area 2 boat launch. Very light patches of submersed vegetation and moderate patches of giant salvinia were observed in the shallow terminal ends of some small coves off the main lake. Very little submersed vegetation was observed south of the Area 2 boat launch, with the majority being a light fringe near the south boat launch and a light to moderate infestation of coontail and fanwort on the southern end near the Blue Springs area. A Light fringe of common and giant salvinia was observed across from the south launch heading north in the boat channel towards the Area 2 launch.

A small amount of water primrose, alligator weed, swamp smartweed (*Polygonum hydropiperoides)* and taro continue to exist upon the shallow spoil bank area of the mid lake between Area 2 boat launch and the south boat launch. This vegetation is also lightly treated annually to keep it under control. Not all of this vegetation is eradicated since it is a popular fishing location and does provide successful fish cover.

Light to moderate patches of water primrose, water hyacinth, and alligator weed mats were seen in the terminal south end of Chicot Lake in the Blue Springs area and near the Indian Hills Bridge. A moderate to severe blanket of duckweed and common/giant salvinia also infested the big wooded cove in the Blue Springs area. A severe amount of duckweed, common salvinia, and giant salvinia was observed in the wooded area towards the Indian Hills Bridge and in the thick tupelo trees heading to Blue Springs.


Chicot Lake North
9/7/18
Legend
Light
Moderate
Severe
Giant Salvinia
Severe Giant Salvinia, Hydrilla, Fanwort, & Coontail. Moderate Patches Water Hyacinth and Filamentous Algae
Chicot Lake
Containment Boom
Severe G. Salvinia in wooded area. Mod. Submerged Veg.
North Landing
American Lotus
Hydrilla
Lake Chicot
Giant Salvinia and Submerged Veg.
Spillway
East Landing
Mod. /Severe Submerged Veg., Lotus, G. Salvinia and Filamentous Algae
Light Submerged
Giant Salvinia
Containment Boom
Google earth
© 2018 Google
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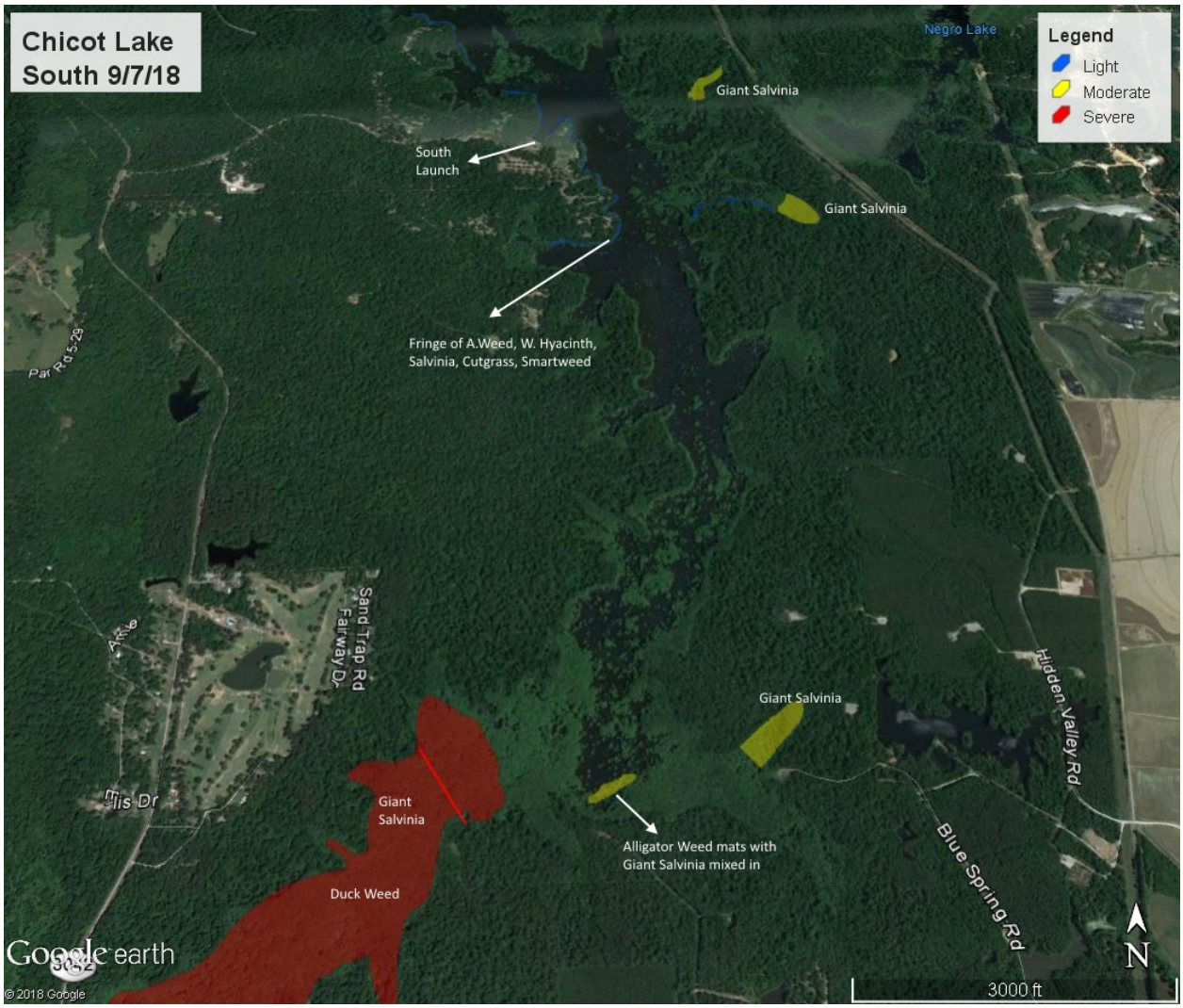
4000 ft


Chicot Lake
South 9/7/18
Negro Lake
Legend
Light
Moderate
Severe
Giant Salvinia
South
Launch
Giant Salvinia
Fringe of A.Weed, W. Hyacinth,
Salvinia, Cutgrass, Smartweed
Pat Rd 529
Sand Trap Rd
Fairway Dr
Giant Salvinia
Hidden Valley Rd
Giant
Salvinia
Alligator Weed mats with
Giant Salvinia mixed in
Duck Weed
Blue Spring Rd
Google earth
© 2018 Google
N
3000 ft

Chicot Lake Aquatic Vegetation Survey September 6, 2017

Personnel: B. Launey, J. David

Report by: B. Launey

A survey of aquatic vegetation conducted on Chicot Lake revealed a moderate to heavy infestation of vegetation on the north end, southern tip of the lake, and around the Walker Branch Bridge. A very light infestation was observed in the remainder of the system. Water level in the lake on the day of the survey was approximately 2 inches above pool.

The north area of Chicot Lake in the vicinity of the North Boat Launch, spillway structure, center portion of Ski Lake, and the North Fishing Pier flats continue to be heavily infested with submerged vegetation consisting of hydrilla (*Hydrilla verticillata*), fanwort (*Cabomba caroliniana)*, coontail (*Ceratophyllum demersum)*, and light patches of bladderwort (*Utricularia spp.)*. Some light to moderate areas of filamentous algae (various species) were also observed in this area. Giant salvinia (*Salvinia molesta)* has yet to infest the majority of the system, but has spread some throughout the year. Giant salvinia has completely infested the northern most tip of the lake. A floating boom has been deployed in this area to help contain it from spreading. A moderate to severe infestation of salvinia and submerged vegetation was observed in the wooded area between the North Fishing Pier and Conservation Cove. Herbicide applications, by LDWF and contracted sprayers, are being conducted to prevent an infestation of giant salvinia throughout the system.

Moderate to heavy amounts of submerged vegetation, hydrilla, fanwort, whorled watermilfoil (*Myriophyllum verticillatum)*, and coontail, were observed in Conservation Cove and in the wooded area just north of the mouth. A light vegetative fringe of common salvinia (*Salvinia minima)*, giant salvinia, water hyacinth (*Eichhornia crassipes)*, and alligator weed (*Alternanthera philoxeroides)* was seen in Conservation Cove. The shallow end of the cove had a light to moderate infestation of aquatic vegetation consisting of filamentous algae (*Spirogyra)*, fanwort, coontail, and some hydrilla. The area known as “the living room”, between Conservation Cove and the North Fishing Pier, continues to be heavily infested with duck weed (*Lemna minor*) and giant salvinia.

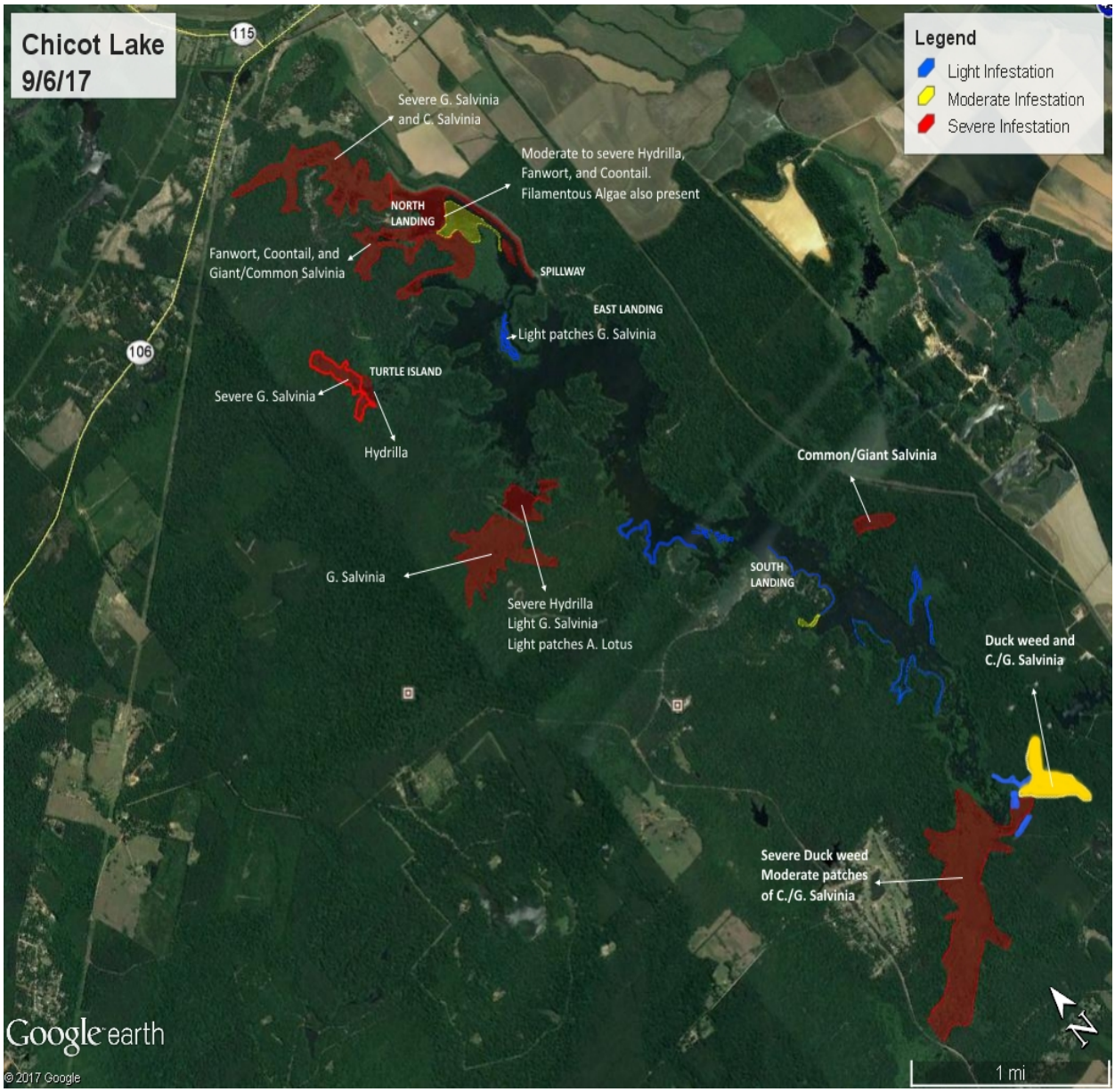
Turtle Island Cove and Walker’s Branch contained light to moderate amounts of hydrilla, fanwort and coontail. A moderate amount of submerged vegetation and filamentous algae was observed in the open water area near the bridge in Walker’s Branch. Dominate submerged species found in this area were hydrilla and coontail. A severe infestation of giant salvinia was observed in the western portion of Turtle Island Cove and in the heavily wooded area west of the Walker’s Branch Bridge. Primrose, taro (*Colocasia esculenta),* salvinia, and alligator weed are also found in moderate to heavy amounts on the western bank of the spoil mounds separating Turtle Island Cove from the spillway canal (boat channel). This area near the spoil mounds is

lightly treated annually. Being this is a popular fishing location, not all of this vegetation is eradicated, and it provides fish cover and fishing success.

As you move south towards the vicinity of the Area 2 boat launch, the occurrence of submerged vegetation quickly diminishes. Light patches of salvinia, mostly common and some giant, were seen in the coves directly north and south of Area 2 boat launch. Very light patches of submerged vegetation and common/giant salvinia were only observed in the shallow terminal ends of some small coves off the main lake. Very little submerged vegetation was observed south of Area 2 boat launch with the majority being a light fringe near the south boat launch and a light to moderate infestation of coontail and fanwort on the southern end near the Blue Springs area. A Light fringe of common salvinia, with some sprigs of giant salvinia mixed in, was observed across from the south launch heading north in the boat channel towards Area 2 launch.

A light amount of water primrose (*Ludwigia spp.)*, alligator weed, swamp smartweed (*Polygonum hydropiperoides)* and taro continue to exist upon the shallow spoil bank area of the mid lake between the Area 2 boat launch and the South boat launch. This vegetation is also lightly treated annually to keep it under control. Not all of this vegetation is eradicated since it is a popular fishing location and does provide excellent fish cover.

Light to moderate patches of primrose, water hyacinth, and alligator weed mats were seen in the terminal south end of Chicot Lake in the Blue Springs area and near the Indian Hills Bridge. A moderate to severe blanket of salvinia, common and some giant also infested the big wooded cove in the Blue Springs area. A significant amount of duckweed, common salvinia, and giant salvinia was observed in the wooded area towards the Indian Hills Bridge and in the thick water tupelo (Nyssa aquatica) stands heading to Blue Springs.


Chicot Lake
9/6/17
115
106
Legend
Light Infestation
Moderate Infestation
Severe Infestation
Severe G. Salvinia
and C. Salvinia
Moderate to severe Hydrilla,
Fanwort, and Coontail.
Filamentous Algae also present
NORTH
LANDING
Fanwort, Coontail, and
Giant/Common Salvinia
SPILLWAY
EAST LANDING
Light patches G. Salvinia
TURTLE ISLAND
Severe G. Salvinia
Hydrilla
Common/Giant Salvinia
G. Salvinia
Severe Hydrilla
Light G. Salvinia
Light patches A. Lotus
SOUTH
LANDING
Duck weed and
C./G. Salvinia
Severe Duck weed
Moderate patches
of C./G. Salvinia
Google earth
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Chicot Lake Aquatic Vegetation Survey August 5, 2016

Personnel: B. Launey, J. David

Report by: B. Launey

A survey of aquatic vegetation conducted on Chicot Lake revealed a moderate to heavy infestation of vegetation on the north end and southern tip of the lake. A very light infestation was observed in the remainder of the system. Water level in the lake on the day of the survey was approx. 7.0 inches below pool.

The north area of Chicot lake in the vicinity of the North Boat Launch, spillway structure, center portion of Ski Lake, and North Fishing Pier flats continue to be heavily infested with submerged vegetation consisting of hydrilla (*Hydrilla verticillata*), fanwort (*Cabomba caroliniana)*, coontail (*Ceratophyllum demersum)*, and light patches of bladderwort (*Utricularia spp.)*. Some light to moderate areas of filamentous algae were also observed in this area. A significant amount of American lotus (*Nelumbo lutea)* also exists from the spillway structure to the flats near the North Boat Launch. The spread of giant salvinia has yet to infest the majority of the system, with a moderate to severe infestation being contained in the wooded area between the North Fishing Pier and Conservation Cove. Monthly herbicide applications are being conducted to prevent an infestation of giant salvinia throughout the system.

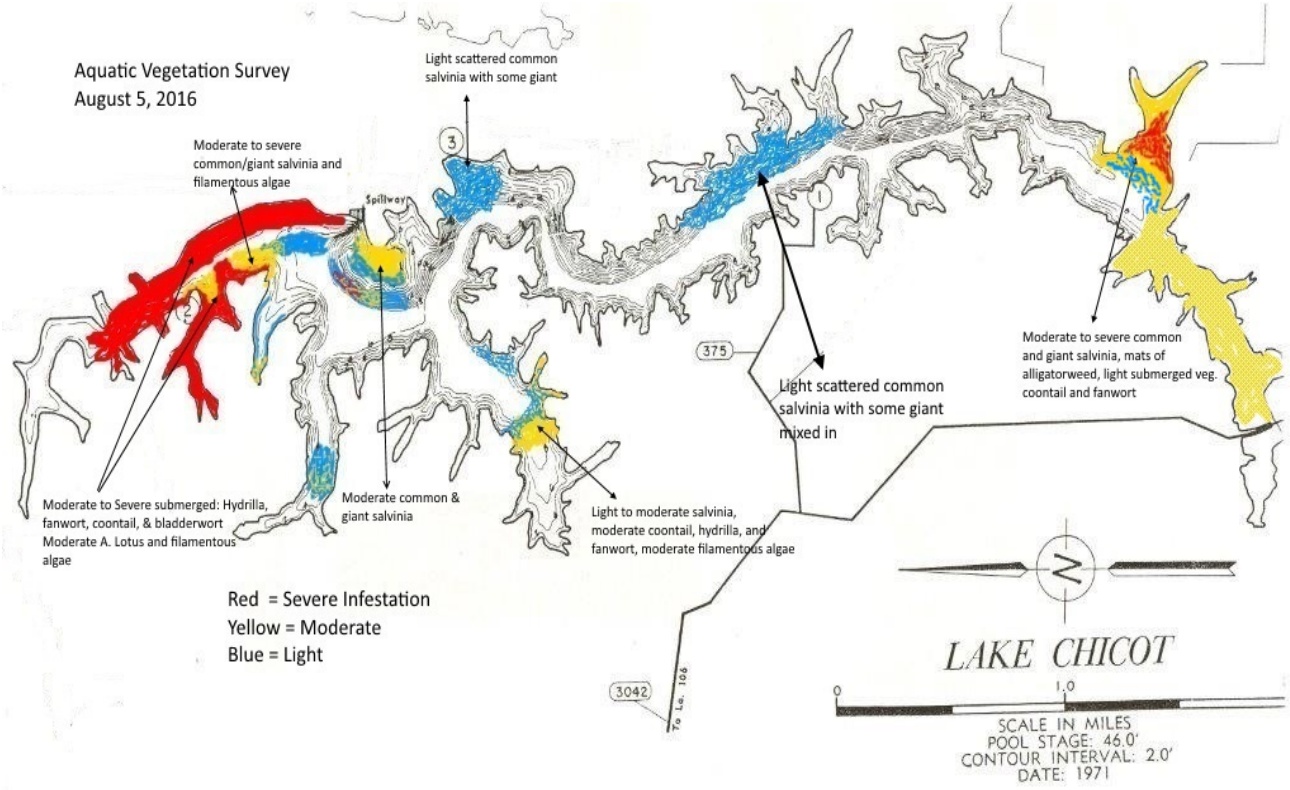
Light to moderate amounts of submerged vegetation, hydrilla, fanwort, water milfoil (*Myriophyllum verticillatum)*, and coontail, were observed in conservation cove and in the wooded area just north of the mouth of Conservation Cove. A light vegetative fringe of common salvinia (*Salvinia minima)*, giant salvinia, water hyacinth (*Eichhornia crassipes)*, and alligator weed (*Alternanthera philoxeroides)* was seen in Conservation Cove. The shallow end of the cove had a light to moderate infestation of aquatic vegetation consisting of filamentous algae, fanwort, coontail, and some hydrilla. A light amount of common salvinia with very light patches of giant salvinia was observed in the wooded area.

Turtle Island Cove and Walker's Branch contain light amounts of hydrilla, fanwort and coontail. A moderate amount of submerged vegetation and filamentous algae was observed in the open water area near the bridge in Walker's Branch. Dominate submerged species found in this area were fanwort and coontail. No bladderwort observed. Primrose, taro (*Colocasia esculenta),* salvinia, and alligator weed are also found in moderate to heavy amounts on the western bank of the spoil mounds separating Turtle Island Cove from the spillway canal (boat channel). This area near the spoil mounds is lightly treated annually. Being this is a popular fishing location, not all of this vegetation is eradicated. It provides fish cover and fishing success.

As you move south towards the vicinity of the Area 2 boat launch the occurrence of submerged vegetation quickly diminishes. Light patches of salvinia, mostly common some giant, were seen in the coves directly north and south of Area 2 boat launch. Very light patches of submerged vegetation were only observed in the shallow terminal ends of some small coves off the main lake. Area 2 boat launch was mostly free of submerged vegetation with only light patches of hydrilla being visible. Very little submerged vegetation was observed south of Area 2 boat launch with the majority being a light fringe near the south boat launch and a light to moderate infestation of coontail and fanwort on the southern end near the Blue Springs area. A Light film of common salvinia, with some sprigs of giant salvinia mixed in, was observed across from the south launch heading north in the boat channel towards Area 2 launch.

A moderate amount of water primrose (*Ludwigia spp.)*, alligator weed, swamp smartweed (*Polygonum hydropiperoides)* and taro continue to exist upon the shallow spoil bank area of the mid lake between Area 2 boat launch and the south boat launch. This vegetation is also lightly treated annually to keep it under control. Not all of this vegetation is eradicated since it is a popular fishing location and does provide successful fish cover.

Light to moderate patches of primrose, water hyacinth, and alligator weed mats were seen in the terminal south end of Chicot Lake in the Blue Springs area and near the Indian Hills Bridge. A moderate to severe blanket of salvinia, common and some giant also infested the big wooded cove in the Blue Springs area. A significant amount of duckweed was also observed near the Indian Hills Bridge and in the thick tupelo trees heading to Blue Springs.



Chicot Vegetation Type Map

Chicot Lake Aquatic Vegetation Survey August 20, 2015

Personnel; B.Launey, P. Allemond

A survey of aquatic vegetation conducted on Chicot Lake revealed a moderate to heavy infestation of vegetation on the north end and southern tip of the lake. A very light infestation was observed in the remainder of the system. Water level in the lake on the day of the survey was five inches below pool.

The north area of Chicot lake in the vicinity of the North boat launch, spillway structure, center portion of Ski Lake, and north fishing pier flats continue to be heavily infested with submerged vegetation consisting of hydrilla (*Hydrilla verticillata*), fanwort (*Cabomba caroliniana)*, coontail (*Ceratophyllum demersum)*, and light patches of bladderwort (*Utricularia spp.)*. Some light to moderate areas of filamentous algae were also observed in this area. A significant amount of American lotus (*Nelumbo lutea)* also exists from the spillway structure to the flats near the North Boat Launch.

Light to moderate amounts of submerged vegetation, hydrilla, fanwort, water milfoil (*Myriophyllum verticillatum)*, and coontail, were observed in Conservation Cove and in the wooded area just north of the mouth of Conservation Cove. A light fringe of common salvinia (*Salvinia minima)*, water hyacinth (*Eichhornia crassipes)*, and alligator weed (*Alternanthera philoxeroides)* was seen in Conservation Cove. The shallow end of the cove was heavily infested with aquatic vegetation. A significant amount of common salvinia with very light patches of giant salvinia was observed in the wooded area. Giant salvinia was also seen in the vegetative fringe of Conservation Cove. **This was the first discovery of giant salvinia in Chicot Lake to this date.**

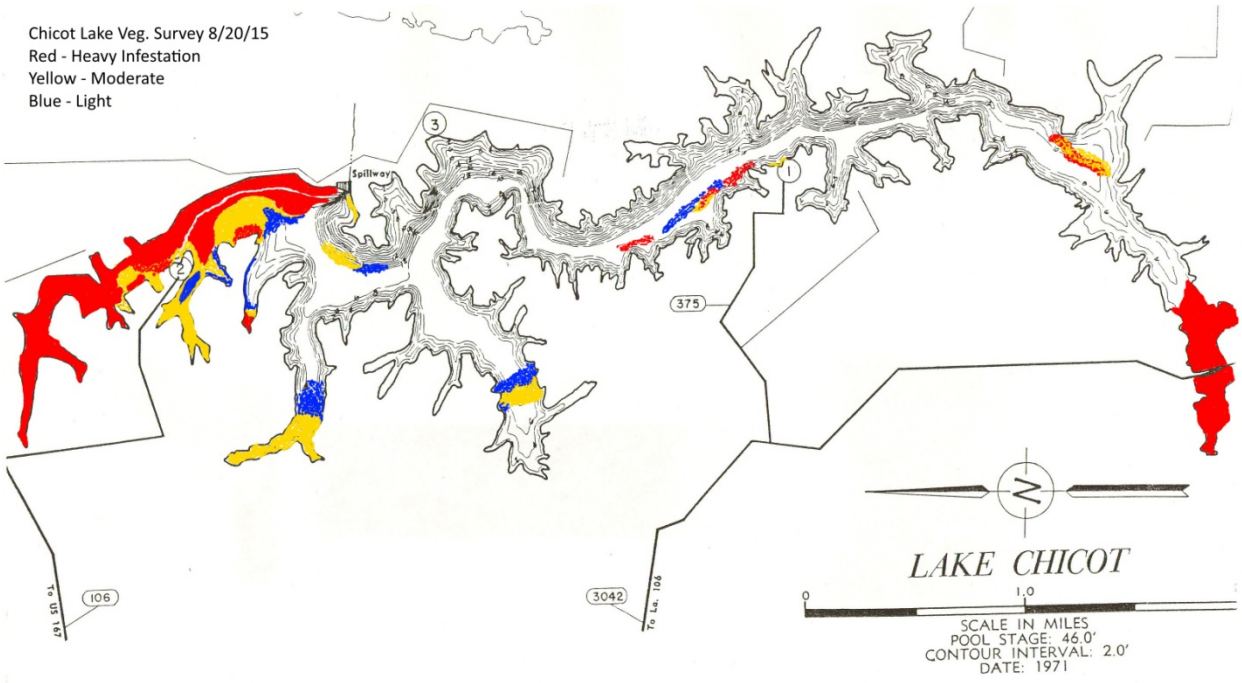
Turtle Island Cove and Walker's Branch contain light amounts of hydrilla, fanwort and coontail. A moderate amount of submerged vegetation and filamentous algae was observed in the open water area near the bridge in Walker's Branch. Dominate submerged species found in this area were fanwort and coontail. No bladderwort observed. Primrose, taro (*Colocasia esculenta)* and alligator weed are also found in moderate to heavy amounts on the western bank of the spoil mounds separating Turtle Island Cove from the spillway canal (boat channel). This area near the spoil mounds is lightly treated annually. Being this is a popular fishing location, not all of this vegetation is eradicated. It provides fish cover and fishing success.

As you move south towards the vicinity of the Area 2 boat launch the occurrence of submerged vegetation quickly diminishes. Very light patches of submerged vegetation were only observed in the shallow terminal ends of some small coves off the main lake. Area 2-boat launch was mostly free of vegetation with only light patches of hydrilla being visible. No hydrilla was observed south of Area 2 boat launch except for a light fringe near the south boat launch. Light to moderate patches of common salvinia were also seen near the south boat launch.

A moderate amount of water primrose (*Ludwigia spp.)*, alligator weed, swamp smartweed (*Polygonum hydropiperoides)* and taro continue to exist upon the shallow spoil bank area of the mid lake between Area 2 boat launch and the south boat launch. This vegetation is also lightly treated annually to keep it under control. Not all of this vegetation is eradicated since it is a popular fishing location and does provide successful fish cover.

Light to moderate patches of primrose, water hyacinth, and alligator weed were seen in the terminal south end of Chicot Lake in the Blue Springs area and near the Indian Hills Bridge. A significant amount of duckweed was also observed near the Indian Hills Bridge.

Unfortunately, GIANT SALVINIA has made its way into Chicot Lake!



Map of where giant salvinia was observed


Chicota Lake
173
North Landing
Light patches of Giant Salvinia
observed Aug. 20, 2015
Conservation
Cove
Lake Chicot
Turtle Island Cove
Ski
Lake
Spillway Rd
Spillway
Google earth
© 2015 Google
N
1000 ft