LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

BLACK / CLEAR LAKE

LAKE HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

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LAKE HISTORY

GENERAL INFORMATION

Date reservoir formed
1933 - Black-Clear Lake was formed by the construction of the Allen Dam across Saline Bayou downstream of its confluence with Black Bayou. Prior to that time, there existed a chain of three swampy areas known as Black Lake, Clear Lake and the Prairie. The Allen Dam inundated all three of these areas and formed what is now Black-Clear Lake known locally as Black Lake. Construction of the Allen Dam also created Saline Lake and water levels in both lakes were regulated in unison.

1934 - The Chivery Dam was constructed and continues to serve as an overflow weir for Black-Clear Lake. This structure is necessary to hold water levels at the current pool stage of 99.0 MSL.

1959 - The Chee Chee Dam was constructed and served to separate Saline Lake from Black-Clear Lake.

1981 – The Allen Dam failed and was washed away.

1990 – Black Lake Bayou Reservoir Dam was constructed to provide control of Black-Clear Lake waters following the failure of the Allen Dam. This structure was placed across Black Bayou above its confluence with Saline Bayou.

1992 – Saline Dam was constructed to provide control of waters from Saline Lake. Subsequently, the Chee Chee Dam was removed.

The locations of current and former control structures mentioned above are shown in Figure 1.

Impoundment
Owner – State of Louisiana

Purposes for Creation – The Northwest Louisiana Game and Fish Preserve, including Black Lake, Clear Lake, and Saline Lake was created solely to enhance wildlife, fishing and recreational opportunities for the citizens of the state as per Act 191 of 1926. (See History of the Northwest Louisiana Game and Fish Preserve). Note: The Preserve includes two lakes, known collectively as Black Lake.

Size (surface area)
13,800 acres

Watershed
920 square miles (ratio 42.7:1) of hardwood-pinelands in Red River, Bienville and Natchitoches Parishes

Pool stage
99.0 Mean Sea Level (MSL)

Parishes located
Natchitoches and Red River

Spillway Description
Black Lake Bayou Reservoir Dam Length - 350’ Condition: Fair as per Louisiana Department of Transportation and Development (DOTD) Dam Inspection and Evaluation Report dated March 27, 2013.

Chivery Dam
Length - 101’ Condition: Fair condition as per DOTD Dam Inspection and Evaluation Report dated March 27, 2013.

Chivery spillway functions as static overflow weir for Black-Clear Lake. Chivery Dam is an earthen plug overlaid with large rocks located in Chivery Bayou which flows out of the southeast end of the Prairie. The crest of Chivery Dam is at the same elevation as Black Lake Bayou Reservoir Dam. This structure is necessary because Chivery Bayou flows into Saline Bayou below Black Lake Bayou Reservoir Dam. Without this structure, Black-Clear Lake water level would drop several feet below the desired pool elevation. Structure locations are indicated in Figure 1 below.

Figure 1. Location of Black/Clear Lake, LA water control structures. Structures depicted are 1. Allen Dam, 2. Chivery Dam, 3. Former Chee Chee Dam, 4. Black Lake Dam, 5. Saline Lake Dam.

A map of Black – Clear Lake and the surrounding area is shown in Figure 2.

Figure 2. Area map of Black - Clear Lake, Natchitoches and Red River Parishes, Louisiana.

Drawdown Structure

Location – Incorporated into the Black/Clear Lake Dam

Number of gates - 4 (plus two fish gates that are located on each end of the spillway). The fish gates are designed to open from the surface down from the top of the spillway. These gates are designed to allow fish movement into the lake during periods of high water flow.

Gate size - 6' X 6' (fish gates – 3' X 3')

Condition – Fair condition and fulfilling its intended purpose per Louisiana Department of Transportation and Development (DOTD) Dam Inspection and Evaluation Report dated March 27, 2013.

Max flow rate - 50,035 cfs

Under optimum conditions – 14 days are required to draw down 4.5 feet @ 3-5 inches/day (maximum drawdown is 6 inches/day)

Prior to completion of Red River Navigation Project, the water level of Black-Clear Lake could be lowered by 8 feet. Following completion of Lock #3 in 1995, a new pool stage of 94.5' MSL

was established for the Red River downstream of the Black Lake Dam. The maximum drawdown potential of the Black-Clear Lake is now limited to 4.5 feet. At 94.5' MSL, an estimated 30 % of the lake bottom is exposed.

Who controls

DOTD is responsible for maintenance and operation of the gates. Primary purpose of the gates is water level manipulation for habitat management. DOTD operates the gates for lake management as per written requests by LDWF.

LAKE AUTHORITY

History of the Northwest Louisiana Game and Fish Preserve

The Northwest Louisiana Game and Fish Preserve (Preserve) was established by the Louisiana Legislature and was initially placed under the control of the Louisiana Conservation Commission through Act 191 of 1926. The Preserve was initially comprised of three artificially created lakes (Black Lake, Clear Lake, and Saline Lake) and the surrounding lands. It was developed for recreation and for the preservation of wildlife and fisheries. After creation of the Preserve, the State constructed a dam, known as the Allen Dam, to keep water in the lakes from draining. In 1928, the Preserve was placed under the control of the Louisiana Department of Conservation through Act 69 of 1928. In 1946, the Louisiana Legislature created the Northwest Louisiana Game and Fish Preserve Commission (Commission) and granted it authority to administer the Preserve and adopt rules and regulations thereof through Act 120 of 1946. While the Commission was originally placed under the supervision of the Department of Wildlife and Fisheries, the Commission was vested with the *"right, power and authority to sue and be sued as a subdivision of the State"* and to *"purchase, lease or expropriate all property necessary to the erection and maintenance of the Preserve"*. The State of Louisiana retained title to the lakes, as well as surrounding land and lake bottom. Act 105 of 1976 placed the Commission under control of the Louisiana Wildlife and Fisheries Commission. Additionally, the Act removed Saline Lake from the authority of the Commission.

Northwest Louisiana Fish & Game Preserve Commission
P O Box 181
Natchitoches, LA 71457

Members

Arthur Brown Jr. (Chairman)
Steven D. Crews (Asst. Secretary-Treasurer)
Durwood Wilson
Ernest Self
Johnny Stewart
Tom Runyon
Randy Thomas, Sr.
Shawn Beard

Contact information (address, phone etc.)

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P O Box 181
Natchitoches, LA 71457
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ACCESS

Boat Ramps
There are 6 boat ramps available to the public on Black/Clear Lake, including privately owned ramps located at the LA 9 Bridge and at Motter's Landing in the Prairie. A launch fee is charged at the privately owned ramps. Use of the remaining launches is at no charge. No restroom or vendor facilities are available at those ramps. (SEE **APPENDIX I**)

Piers
One public "pier" exists in the form of the abandoned Hwy. 9 roadbed. Public access is allowed along the length of this former highway roadbed. The roadbed is elevated and the original asphalt surface remains in place. No lighting or facilities are found at this location.

State/Federal facilities
No state or federal facilities

Artificial Reefs
Due to extensive natural cover, no artificial reefs have been built.

SHORELINE DEVELOPMENT

State/National Parks
None

Shoreline Development by landowner
Approximately 40% of the shoreline is developed with camps and residential homes. The remainder is wetlands habitat, prone to frequent flooding. There are boat launches at many of the private shoreline camps and homes. Two full service marinas are located at the LA 9 Bridge, each offering amenities that include bait, tackle, lodging, and guides.

PHYSICAL DESCRIPTION

Shoreline length
50.5 miles

Timber type
The Black-Clear Lake watershed consists primarily of mixed upland timber and pine silviculture. The portion of the waterbody above the LA Hwy 9 Bridge has extensive cypress/tupelo

coverage. The portion of the lake between the LA Hwy 9 Bridge and the Prairie has less dense cypress/tupelo coverage. The lower end of the lake, known as the Prairie is open water with few trees.

Average depth
8 feet

Maximum depth
18 feet

Natural seasonal water fluctuation
Annual fluctuations of 3' to 4' are typical.

EVENTS / PROBLEMS

Water Level
Water level fluctuations are occasionally significant due to both the lake's high watershed ratio (42.7:1) and its physical connection to the Red River. These two factors may act independently or in conjunction to raise water levels. In March of 2001, rainfall within the watershed raised the lake level to 108' MSL which was 8.5 feet above the lake pool level and 13 feet above the pool level of the Red River. It is possible for the Red River to back flow into the lake. The Red River rises in the panhandle of Texas and its watershed may receive high inflows while Black Lake's watershed does not.

Aquatic Vegetation
Hydrilla *(Hydrilla verticillata)* was discovered in the Prairie portion of the lake in 1993. Since that time, hydrilla has been problematic lake wide but especially in the upper 1/3 of the lake. Fanwort *(Cabomba caroliniana)* is also present in the submerged plant community. Common salvinia *(Salvinia minima)* is found in the lake but has not been problematic to date. Giant salvinia *(Salvinia molesta)* has been present since 2008 and has necessitated annual control measures since that time. Water hyacinth *(Eichhornia crassipes)* is found at Black Lake and coverage by this species is sometimes heavy although usually isolated to areas protected from wind and water currents.

Hydrologic Changes
The failure of the Allen Dam in 1981 resulted in the construction of the Black Lake Bayou Reservoir Dam in 1990. The top elevation of the new dam is 99.0 MSL. This structure discharges into Black Bayou which drains into Saline Bayou. Saline Bayou drains into the Red River near St. Maurice, Louisiana.

On December 9, 1991 the pool stage of the Red River near St. Maurice was 85.5 MSL. Construction of Lock #3 of the Red River Navigation Project was completed in March 1993. This structure established a pool stage level of 94.5 MSL for Red River Pool #3 and subsequently for Saline Bayou which drains the waters of Black/Clear Lake. The new pool stage

of 94.5 was reached on December 9, 1994. Since that time the drawdown capability of the Black Lake Bayou Reservoir Dam has been restricted to 4.5 feet. That capability exists only between the 95 MSL elevation of the dam and the 94.4 MSL pool stage of Red River Pool #3.

The Northwest Louisiana Fish and Game Preserve Commission sought legal ruling regarding the reduction of drawdown capability on the basis. A court decision and appeal resulted from this action. The United States Court of Federal Claims dismissed the Northwest Louisiana Fish & Game Preserve Commission's claim. The commission appealed to the United States Court of Appeals for the Federal Circuit. The ruling given by that court appears in **APPENDIX II**.

MANAGEMENT ISSUES

AQUATIC VEGETATION

Black Lake/Clear Lake has had a longstanding problem with submerged aquatic vegetation. Although native plants were originally problematic, exotic plant species have overshadowed natives in recent years.

Changes in vegetative types can be tracked by reviewing historical LDWF vegetation surveys. In August of 1982, water hyacinth *(Eichhornia crassipes)* was found in scattered mats in the southwestern area of the lake and lotus was noted to be severe in the Prairie area. The predominant submerged plant noted was chara and its coverage was classified as light to moderate. Fanwort was also noted as being light to moderate in the southwestern end of the lake.

In June of 1992, the primary aquatic plant noted was bladderwort *(Utricularia spp.)*. The secondary plants were fanwort, coontail *(Ceratophyllum demersum)* and southern naiad *(Najas guadalupensis).*

By July of 2006, submerged aquatic vegetation coverage in the Black Lake or upper lake area had increased to 90% with hydrilla being the dominant species followed in abundance by fanwort. The Black Lake area also had alligator weed *(Alternanthera philoxeroides*), lotus *(Nelumbo lutea)* and water hyacinth present. The Clear Lake area or middle section of the lake was also dominated by hydrilla *(Hydrilla verticillata)* along with bladderwort, fanwort and chara. Lotus and alligatorweed were also found in this section. The lower lake or Prairie area was dominated by lotus along with alligator weed and water lily *(Nymphaea odorata).*

In 2008, giant salvinia, *(Salvinia molesta)* was identified at Black-Clear Lake. Efforts to control this species are ongoing.

In November, 2011, 7,000 acres of hydrilla were noted in the lake. Coontail and southern naiad *(Najas guadalupensis)* were also found in abundance. Giant salvinia continued to increase in coverage but was not problematic lake-wide. Water hyacinth coverage was noted as severe in some locations.

In July, 2012, it was estimated that 50% of the lake was covered by some form of aquatic vegetation.

On November 1, 2012, the total infestation of problem plant species was:
Hydrilla – 5,000 acres (36% coverage)
Bladderwort – 1,200 acres (9% coverage)
Fanwort – 850 acres (6% coverage)
Giant salvinia – 500 acres (3.6% coverage)
American lotus – 250 acres (1.8% coverage)
Total infestation = 7,800 acres (57% coverage)

In October, 2013, the submerged aquatic vegetation community was comprised mostly of hydrilla, coontail, and southern naiad. The Black Lake and Clear Lake areas were moderately covered by submerged aquatic vegetation with little SAV found in the Prairie area. Problematic species found in 2013 were giant salvinia, lotus, hydrilla, and water hyacinth. Of these, giant salvinia was most problematic. Giant salvinia was first treated chemically at Black Lake/Clear Lake in 2008. Since that time this invasive species has been problematic in areas of the lake that are heavily forested or protected from wind or water currents. Although common salvinia is known to occur on this lake it has not been problematic to date. Water hyacinth remains present on this lake and occasionally hampers boating and angling access.

Black-Clear Lake was surveyed for areal coverage of aquatic plants on October 1, 2013. The total infestation of problem plant species was:

Hydrilla – 1,447 acres (10.5%)
Giant salvinia – 755 acres (5.5%)
Duckweed – 480 acres (3.5%)
American lotus – 259 acres (1.9%)
Water hyacinth – 209 acres (1.5%)
Coontail – 95 acres (0.7%)
Water primrose – 32 acres (0.02%)
Smartweed – 8 acres (0.06%)
Alligator weed – 6 acres (0.04%)
Total infestation = 3,291 acres or 24% of total surface acreage

(SEE **APPENDIX III** - 2013 Aquatic Management Plan)

Vegetation Type Map Sampling

Type mapping on Black/Clear Lake began in 1980. Due to extensive aquatic vegetation the lake has been type mapped eighteen times. Black-Clear Lake was last surveyed for vegetative type and areal coverage on October 1, 2013. The resulting typemap appears as APPENDIX IV.

Vegetation Biomass Sampling

Biomass sampling was conducted from 1998 through 2003 in Black/Clear Lake as indicated in Figure 1 below. The results document the introduction and expansion of hydrilla. The use of biomass sampling was discontinued in 2003 in favor of other vegetation sampling methods.

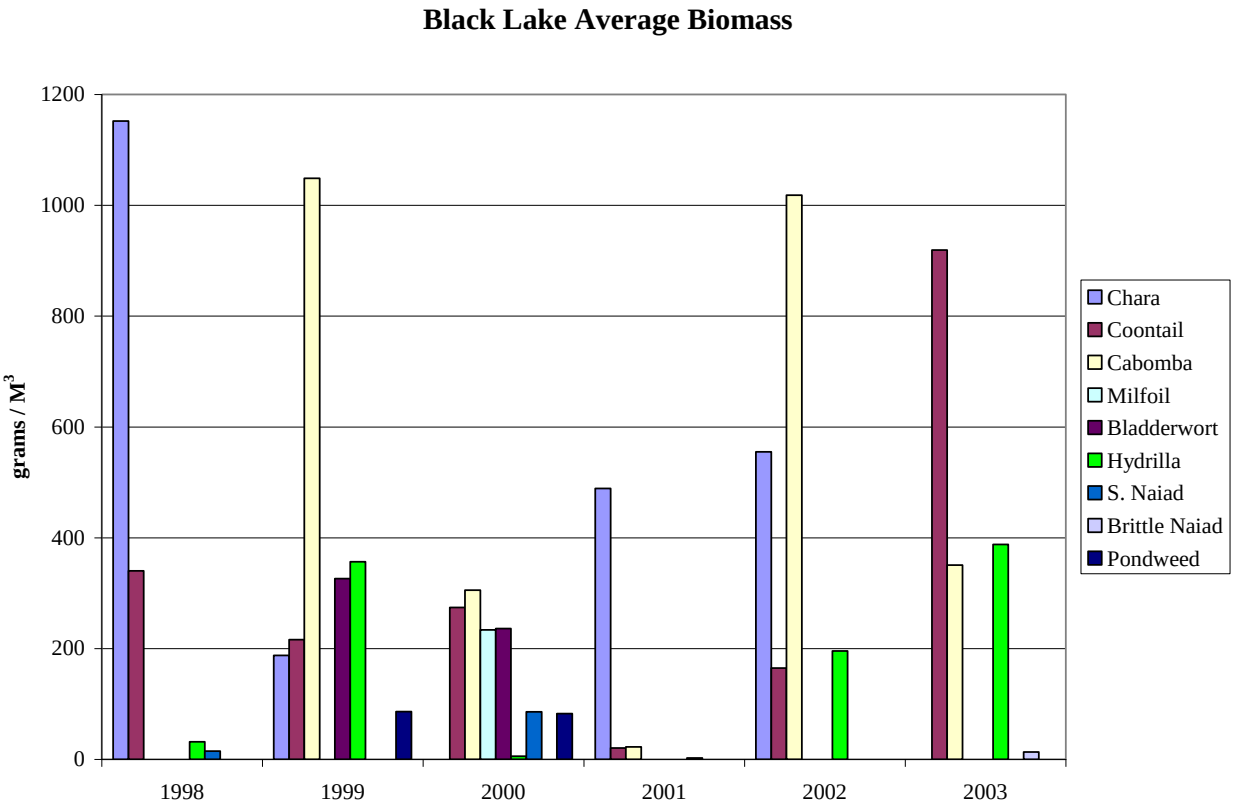

Figure 2. Biomass sampling was conducted from 1998 through 2003 in Black/Clear Lake

Treatment history by year available

Biological

In the spring of 2010, 12,000 Triploid grass carp were stocked into Black Lake/Clear Lake. These fish were purchased by the Northwest Louisiana Fish & Game Preserve Commission and permitted by the Louisiana Department of Wildlife & Fisheries.

In the fall of 2013, LDWF provided and released 13,671 triploid grass carp into Black-Clear Lake. At the time of this writing (12-17-13), an additional 424 triploid grass carp are scheduled for release.

Hydrilla coverage of Black-Clear Lake has reduced in recent years. Areal coverage by hydrilla in years 2011, 2012 and 2013 was 7,000 acres, 5,000 acres and 1,447 acres respectively. Chemical treatment acreage values for hydrilla have been reduced in recent years from a high of 4,040 acres in 2010 to 200 acres in 2011 and zero acres in years 2012 and 2013.

It is likely that the significant reduction in hydrilla coverage was caused by the repeated chemical treatments in years 2010 and 2011. It is possible that the triploid grass carp stocked in 2010 may currently be impacting regrowth of hydrilla. It is also possible that those fish along with the additional triploid grass carp released in 2013 will have a measurable effect upon

hydrilla coverage in the coming years. Areal coverage of aquatic vegetation will be monitored from this point forward to determine efficacy of triploid grass carp as a biological control agent for submerged aquatic vegetation.

Chemical

Table 1. Chemical treatments made by LDWF at Black/Clear Lake by year.

Treatment Year	Chemical	Vegetation	Acres Treated	Rate
1984	2, 4-D	American Lotus	300	0.5 gal./Acre
1999	Sonar	Hydrilla	1117	80 ppb
2002	Sonar	Hydrilla	1117	80 ppb
2005	2, 4-D	Water Hyacinth	817	0.5 gal./Acre
	2, 4-D	American Lotus	47	0.5 gal./Acre
2006	2, 4-D	Water Hyacinth	326	0.5 gal./Acre
	2, 4-D	American Lotus	14	0.5 gal./Acre
	2, 4-D	Water Lilly	2	0.5 gal./Acre
	2, 4-D	Alligator weed	1	0.5 gal./Acre
2007	2, 4-D	Water Hyacinth	878	0.5 gal./Acre
	2, 4-D	American Lotus	54	0.5 gal./Acre
	Reward	Common Salvinia	107	0.75 gal./Acre
	Reward	Water Hyacinth	31	0.75 gal./Acre
2008	2, 4-D	Water Hyacinth	949	0.5 gal./Acre
	2, 4-D	Common Salvinia	17	0.5 gal./Acre
	2, 4-D	Giant Salvinia	1	0.5 gal./Acre
	Aquamaster	Alligator weed	4	0.75 gal./Acre
	Aquamaster	Common Salvinia	2	0.75 gal./Acre
	Aquamaster	Giant Salvinia	1	0.75 gal./Acre
	Aquamaster	Torpedograss	6	0.75 gal./Acre
	Aquamaster	Water Hyacinth	8	0.75 gal./Acre
	Diquat E Pro 2L	Common Salvinia	9	0.75 gal./Acre
	Diquat E Pro 2L	Water Hyacinth	14	0.75 gal./Acre
	Reward	Common Salvinia	63	0.75 gal./Acre
	Reward	Water Hyacinth	142	0.75 gal./Acre
	Sonar PR	Fanwort	273	45 ppb
	Sonar PR	Hydrilla	3,332	45 ppb
	Sonar Q	Hydrilla	3,324	45 ppb

	Sonar Q	Willow Tree	273	45 ppb
	Sonar SPR	Hydrilla	2,231	45 ppb
2009	2, 4-D	Water Hyacinth	130	0.5 gal./Acre
	Aquamaster	Alligator weed	14	0.75 gal./Acre
	Aquamaster	American Lotus	211	0.75 gal./Acre
	Aquamaster	Common Salvinia	5	0.75 gal./Acre
	Aquamaster	Giant Salvinia	2	0.75 gal./Acre
	Aquamaster	Water Hyacinth	61	0.75 gal./Acre
	Aquamaster	Water Lilly	2	0.75 gal./Acre
	Clearcast	Alligator weed	121	0.5 gal./Acre
	Clearcast	Primrose	28	0.5 gal./Acre
	Clearcast	Smartweed	27	0.5 gal./Acre
	Diquat E Pro 2L	Alligator weed	82	0.75 gal./Acre
	Diquat E Pro 2L	Common Salvinia	74	0.75 gal./Acre
	Diquat E Pro 2L	Giant Salvinia	60	0.75 gal./Acre
	Diquat E Pro 2L	Water Hyacinth	290	0.75 gal./Acre
	Ecomazapyr 2 SL	Alligator weed	155	0.75 gal./Acre
	Ecomazapyr 2 SL	Primrose	31	0.75 gal./Acre
	Ecomazapyr 2 SL	Smartweed	30	0.75 gal./Acre
2010	Aquamaster	Alligator weed	18	0.75 gal./Acre
	Aquamaster	American Lotus	7	0.75 gal./Acre
	Aquamaster	Giant Salvinia	18	0.75 gal./Acre
	Aquamaster	Water Hyacinth	12	0.75 gal./Acre
	Aquamaster	Water Meal	10	0.75 gal./Acre
	Aquathol K	Hydrilla	40	17.6 lbs./Acre foot
	Diquat E Pro 2L	Alligator weed	3	0.75 gal./Acre
	Diquat E Pro 2L	Giant Salvinia	44	0.75 gal./Acre
	Diquat E Pro 2L	Water Hyacinth	8	0.75 gal./Acre
	Knockout	Alligator weed	11	0.75 gal./Acre
	Knockout	Giant Salvinia	41	0.75 gal./Acre
	Knockout	Water Hyacinth	21	0.75 gal./Acre
	Renovate	Alligator weed	13	0.75 gal./Acre
	Sonar PR	Hydrilla	2,000	45 ppb
	Sonar Q	Hydrilla	2,000	45 ppb
2011	Aquamaster	Alligator weed	32	0.75 gal./Acre
	Aquamaster	American Lotus	5	0.75 gal./Acre
	Aquamaster	Pennywort	8	0.75 gal./Acre
	Aquamaster	Giant Salvinia	13	0.75 gal./Acre
	Aquamaster	Sawgrass	7	0.75 gal./Acre
	Aquamaster	Water Hyacinth	3	0.75 gal./Acre
	Aquathol K	Hydrilla	20	17.6 lbs./Acre

				foot
	Diquat E Pro 2L	Alligator weed	31	0.75 gal./Acre
	Diquat E Pro 2L	Pennywort	8	0.75 gal./Acre
	Diquat E Pro 2L	Giant Salvinia	80	0.75 gal./Acre
	Diquat E Pro 2L	Water Hyacinth	10	0.75 gal./Acre
	Knockout	Alligator weed	112	0.75 gal./Acre
	Knockout	American Lotus	29	0.75 gal./Acre
	Knockout	Bladderwort	7	0.75 gal./Acre
	Knockout	Duckweed	18	0.75 gal./Acre
	Knockout	Mosquito Fern	3	0.75 gal./Acre
	Knockout	Pennywort	13	0.75 gal./Acre
	Knockout	Primrose	18	0.75 gal./Acre
	Knockout	Giant Salvinia	50	0.75 gal./Acre
	Knockout	Water Hyacinth	8	0.75 gal./Acre
	Knockout	Water Lilly	18	0.75 gal./Acre
	Knockout	Watermeal	7	0.75 gal./Acre
	Sonar PR	Hydrilla	40	45 ppb
	Sonar Q	Hydrilla	140	45 ppb
2012	Aquamaster	Alligator weed	8	0.75 gal./Acre
	Aquamaster	Giant Salvinia	19	0.75 gal./Acre
	Ecomazapyr 2 SL	Alligator weed	12	0.75 gal./Acre
	Ecomazapyr 2 SL	American Lotus	12	0.75 gal./Acre
	Tribune	Alligator weed	21	0.75 gal./Acre
	Tribune	Giant Salvinia	718	0.75 gal./Acre
	Tribune	Water Hyacinth	24	0.75 gal./Acre
	Tribune	Water Lilly	2	0.75 gal./Acre
As of 10-22-2013	Aquamaster	American Lotus	298	0.75 gal./Acre
	Aquamaster	Giant Salvinia	742	0.75 gal./Acre
	Aquamaster	Water Hyacinth	15	0.75 gal./Acre
	AquaKleen	Giant Salvinia	3	0.5 gal./Acre
	Ecomazapyr 2 SL	Alligator weed	32	0.75 gal./Acre
	Tribune	American Lotus	11	0.75 gal./Acre
	Tribune	Giant Salvinia	1,593	0.75 gal./Acre
	Tribune	Water Hyacinth	290	0.75 gal./Acre
GRAND TOTAL			25,509	

According to data entered into the LDWF data management system as of December 17, 2013, the LDWF has treated 2,983 acres during year 2013 at a total cost of $50,692.

HISTORY OF REGULATIONS

Recreational

Statewide regulations in effect for all recreation game fish species from impoundment to present. Recreational fishing regulations for 2014 may be viewed at the link below:
http://www.wlf.louisiana.gov/fishing/regulations

Black Bass (Largemouth, spotted): 10 daily of any size
Buffalo Fish or their hybrids: 16 inch min. total length limit, 25 per day
Freshwater Drum (Gaspergou): 12 inch min. total length limit, 25 per day
Bowfin (Choupique, Grinnel): 16 inch min. total length limit
Channel Catfish: 11 inch min. total length limit (see Catfish below for possession limit)
Blue Catfish: 12 inch min. total length limit (see Catfish below for limit)
Flathead Catfish: 14 inch min. total length limit (see Catfish below for limit)
Catfish (Blue, Channel and Flathead): the possession limit for catfish caught on a recreational license shall be 100. The 100 fish may be a single species, or a combination of blue, channel or flathead catfish. Within the 100 fish possession limit, a recreational angler may possess a maximum of 25 undersize catfish of a single or combination of all 3 species.
Crappie: 50 daily
White Bass: 50 daily
Yellow Bass: 50 daily

SPECIAL YO-YO and TROTLINE REGULATIONS (Authority note: Promulgated in accordance with R.S. 56:326.3 and 56:6(32). HISTORICAL NOTE: Promulgated by the Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 39 (September 2013).

Black Lake, Clear Lake, Prairie Lake (Natchitoches Parish)
Yo-Yo Restrictions

- The placement of any artificial object to anchor a yo-yo or trigger device is prohibited.
- No more than 50 yo-yos or trigger devices allowed per person.
- Each yo-yo or trigger device must be clearly tagged with the name, address and telephone number of the owner/user.
- All fish or any other animals caught or hooked must be immediately removed from the device.
- Each yo-yo or trigger device must be re-baited at least once every 24 hours.
- No yo-yo or trigger device is allowed to be attached to any metallic object.
- Except for an object used strictly in the construction of a pier, boathouse, seawall, or dock, no object which is driven into the lake bottom, a stump, tree, or the shoreline shall be used to anchor a yo-yo or trigger device. "Object" means rebar or other metal material, cane, PVC tubing, construction material, or any other type of material.

Trotline Restrictions

- All trotlines must be marked, tagged, and dated with the owner/user's name, address, phone number and date of placement. The trotline must be marked on each end with a floating

object that is readily visible.
- No person is allowed to set more than three trotlines with a maximum of 50 hooks per trotline.
- All trotlines must have an 8-foot cotton leader on each end of the trotline to insure that if the trotline is left unattended, the cotton leader will deteriorate and the line will sink.
- All trotlines must be attended daily while in service.

Commercial

Statewide regulations have existed for all species since impoundment, except that a webbing ban was imposed from 1989-1990 when fisheries studies indicated small numbers of harvestable size buffalo, freshwater drum and carp. The net ban was lifted in 1991 to permit harvest of commercial fish species.

Commercial fishing regulations for 2014 may be viewed at the link below:
http://www.wlf.louisiana.gov/fishing/regulations

Buffalo *(Ictiobus spp.):* 16 inches minimum total length.
Blue Catfish *(Ictalurus furcatus):* 12 inches minimum total length.
Channel Catfish *(Ictalurus punctatus):* 11 inches minimum total length, eight inches collar boned.
Flathead Catfish *(Pylodictis olivaris):* 14 inches minimum total length.
Freshwater Drum *(Aplodinotus grunniens):* 12 inches minimum total length.
Bowfin *(Amia calva):* 22 inches minimum total length. Fishermen are prohibited, while on the water, from possessing bowfin eggs (roe) that are not naturally connected to a whole fish. The taking of bowfin with nets or bowfin body parts, including eggs (roe), is prohibited during the months of December, January and February.

Fishing Gear

All recreational and commercial fishing gear utilized on Black/Clear Lake must meet statewide regulations. Special regulations listed below.

SPECIAL NET REGULATIONS (Enacted in 1995 LA Revised Statutes 56:410.7)

A. No person shall set or use any net for the taking of recreational or commercial fish unless it has been marked with a waterproof tag with the name and address of the fisherman and his fishing license number.
B. No person shall use a gill net or trammel net or leaded gill net which has less than a minimum of three and one-half inch bar mesh and seven inches stretch.

DRAWDOWN HISTORY

Table 2. The description of Black/Clear Lake, Louisiana drawdowns by year.

Date Opened	Date Closed	Purpose	Lowest Level	Results	Issues
1972	1972	Weed Control	91.5 MSL	Good	None
1973	1973	Weed Control	91.5 MSL	Good	None
1979	1979	Weed Control	91.5 MSL	Good	None
1981	1981	Weed Control	91.5 MSL	Good	None
1989	N/A	Shoreline clearing	N/A	N/A	Proposed. No record of occurrence.
05/16/94	Unknown	Weed Control	91.5 MSL (requested)	Good	None
1998	N/A	Weed Control	95.5MSL (requested)	N/A	Requested by NLGFPC. No record of occurrence.
04/14/99	N/A	Weed Control	N/A	N/A	Requested by NLGFPC. No record of occurrence.
07/17/00	Scheduled for 01/15/01. Closed 11/29/00.	Weed Control	95 MSL	Good	Gates closed to prevent back-flooding.
07/15/01	11/15/01	Weed Control	95 MSL	N/A	Planned/Cancelled
09/08/04	Unknown	Weed Control	95 MSL	Good	None
08/01/05	Unknown	Weed Control	95 MSL	Good	None
08/01/06	Unknown	Weed Control	95 MSL	Good	None
07/09/07	Unknown	Weed Control	95 MSL	Good	None

Success

The success of drawdown measures at Black-Clear Lake is limited due to the 95 MSL river stage resulting from the Red River Waterway Project. However, some areas of the lake, particularly the Prairie area, are responsive to drawdown measures. The upper lake area also dewaters sufficiently to achieve positive results from drawdown measures.

Fishing closure

The lake has remained open to fishing during drawdowns. The majority of the lake (~ 70 %) remains flooded during the 4.5 feet drawdowns.

Fish kills

No kills documented during drawdowns

Fish kills / disease history, LMBV

No kills or disease history documented.

Black/Clear Lake has not been sampled for presence of largemouth bass virus (LMBV).

CONTAMINANTS / POLLUTION

Black-Clear Lake is currently listed among waterbodies that have fish consumption advisories. Information regarding this topic can be viewed at:
http://www.deq.louisiana.gov/portal/Portals/0/planning/Fish%20Consumption%20Advisory%20Table%20-%202-18-09.pdf
"Women of childbearing age and children less than seven years of age SHOULD NOT CONSUME BOWFIN (Choupique, Grinnel) and should consume no more than ONE MEAL PER MONTH of largemouth bass, white bass, crappie, or freshwater drum combined from the advisory area.
Other adults and children seven years of age and older should consume no more than TWO MEALS PER MONTH of bowfin (Choupique, Grinnel) and no more than FOUR MEALS PER MONTH of largemouth bass, white bass, crappie, or freshwater drum combined from the advisory area."

Water quality
Black / Clear Lake is currently listed as impaired by the EPA because of mercury concentrations. Water quality concerns noted for the watershed and the related US Environmental Protection Data is provided in the attached LADEQ link:
http://www.deq.louisiana.gov/portal/tabid/2201/Default.aspx

BIOLOGICAL

Table 3. Historical and proposed fisheries sampling on Black/Clear Lake, Louisiana from 1963 to 2016.

Black/Clear Lake Sampling By Year	
1963	Rotenone
1973	Rotenone
1974	Rotenone
1975	Rotenone
1979	Rotenone
1980	Rotenone
1981	Rotenone
1982	Rotenone
1983	Rotenone
1988	Gill netting

1989	Gill netting
1990	Rotenone, Gill nets, Electrofishing, LMB Age and Growth/Genetics
1994	Electrofishing
1995	Gill nets
1999	Seining, Gill nets
2000	Seining, Gill nets, Electrofishing
2001	Seining, Electrofishing, LMB Genetics
2003	Gill netting
2004	Electrofishing
2006	Electrofishing
2008	Gill Netting, Electrofishing, LMB Age and Growth/Genetics
2009	Electrofishing, Lead Nets, Crappie Age and Growth
2010	Electrofishing, Lead Nets, Crappie Age & Growth, LMB Age & Growth/Genetics, Creel
2011	Electrofishing, Lead Nets, Crappie Age & Growth, LMB Age & Growth
2012	Electrofishing, Lead Nets, Crappie Age & Growth, LMB Age & Growth/Genetics
2013	No samples taken
2014	No sampling scheduled.
2015	Electrofishing, Lead Nets, Gill Netting
2016	No sampling scheduled.

Lake records

No trophy fish records maintained

Stocking History

Table 4. Fish Stocking for Black/Clear Lake, Louisiana from 1987 to 2013.

Year	Florida bass (FLMB)	Triploid Grass Carp	Blue Catfish
1987			5,600 (LDWF)
1988	57,000 (LDWF)		
1989	29,000 (LDWF)		
1992	50,000 (NWF&GPC)		
1993	44,000 (NWF&GPC)		
1995	100,000 (NWF&GPC)		
1996	593,000 (NWF&GPC)		
2001	109,200 (LDWF)		
2002	152,076 (LDWF)		
2003	139,957 (LDWF)		
2004	138,339 (LDWF)		
2006	99,960 (LDWF)		
2008	140,388 (LDWF)		
2009	138,273 (LDWF)		
2010	106,800 (LDWF)	12,000 (NWF&GPC)	
2011	111,567 (LDWF)		
2013		13,671 (LDWF)	

Genetics

Table 5. Genetic analyses of largemouth bass populations from Black/Clear Lake, LA.

Year	Number	Northern	Florida	Hybrid	Total Florida Influence
1990	35	100%	0%	0%	0%
2001	135	89%	0%	11%	11%
2008	88	89%	1%	10%	11%

Threatened/Endangered/Exotic Species

No threatened or endangered species documented at this time. Department of Environmental Quality personnel reported observations of grass carp below the Black/Clear Lake Dam while sampling. Asian carps, including silver, bighead, black, and grass carp have been documented in the Red River. During high water events, access into Black/Clear Lake is unrestricted from the Red River.

Species profile

A family and species list of fishes collected by LDWF or are known to occur in the Saline Bayou watershed is found in Table 6 below.

Table 6. Freshwater fishes of Black/Clear Lake, Natchitoches and Winn Parishes, Louisiana.

FRESHWATER FISHES OF BLACK / CLEAR LAKE

Lamprey Family, PETROMYZONTIDAE
- Southern brook lamprey, *Ichthyomyzon gagei* Hubbs and Trautman
- Chestnut lamprey, *Ichthyomyzon castaneus* Girard

Gar Family, LEPISOSTEIDAE
- Spotted gar, *Lepisosteus oculatus* (Winchell)
- Longnose gar, *Lepisosteus osseus* (Linnaeus)
- Shortnose gar, *Lepisosteus platostomus* Rafinesque
- Alligator gar, *Atractosteus spatula* (Lacépède)

Bowfin Family, AMIIDAE
- Bowfin, *Amia calva* Linnaeus

Freshwater Eel Family, ANGUILLIDAE
- American eel, *Anguilla rostrata* (Lesueur)

Herring Family, CLUPEIDAE
- Gizzard shad, *Dorosoma cepedianum* (Lesueur)
- Threadfin shad, *Dorosoma petenense* (Günther)

Minnow Family, CYPRINIDAE
- Blacktail shiner, *Cyprinella venusta* (Girard)
- Common Carp, *Cyprinus carpio* Linnaeus
- Cypress minnow, *Hybognathus hayi* Jordan
- Striped shiner, *Luxilus chrysocephalus* Rafinesque
- Ribbon shiner, *Lythrurus fumeus* Evermann
- Redfin shiner, *Lythrurus umbratilis* (Girard)
- Golden shiner, *Notemigonus crysoleucas* (Mitchill)
- Emerald shiner, *Notropis atherinoides* Rafinesque
- Taillight shiner, *Notropis maculatus* (Hay)
- Weed shiner, *Notropis texanus* (Girard)
- Mimic shiner, *Notropis volucellus* (Cope)
- Bullhead minnow, *Pimephales vigilax* (Baird and Girard)
- Creek chub, *Semotilus atromaculatus* (Mitchill)

Sucker Family, CATOSTOMIDAE
- Lake chubsucker, *Erimyzon sucetta* (Lacépède)
- Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)

Bigmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)
Black buffalo, *Ictiobus niger* (Rafinesque)
Spotted sucker, *Minytrema melanops* (Rafinesque)
Blacktail redhorse, *Moxostoma poecilurum* (Jordan)

Freshwater Catfish Family, ICTALURIDAE
Black bullhead, *Ameiurus melas* (Rafinesque)
Yellow bullhead, *Ameiurus natalis* (Lesueur)
Tadpole madtom, *Noturus gyrinus* (Mitchill)
Brown madtom, *Noturus phaeus* (Taylor)
Channel Catfish, *Ictalurus punctatus* (Rafinesque)
Blue Catfish, *Ictalurus furcatus* (Lesueur)
Flathead Catfish, *Pylodictis olivaris* (Rafinesque)

Pike Family, ESOCIDAE
Grass pickerel, *Esox americanus vermiculatus* (Lesueur)
Chain pickerel, *Esox niger* (Lesueur)

Pirate Perch Family, APHREDODERIDAE
Pirate perch, *Aphredoderus sayanus* (Gilliams)

Killifish Family, CYPRINODONTIDAE
Golden topminnow, *Fundulus chrysotus* (Günther)
Southern starhead topminnow, *Fundulus nottii* (Agassiz)
Blackstripe topminnow, *Fundulus notatus* (Rafinesque)
Blackspotted topminnow, *Fundulus olivaceus* (Storer)

Livebearer Family, POECILIIDAE
Western mosquitofish, *Gambusia affinis* (Baird and Girard)

Silverside Family, ATHERINIDAE
Brook silverside, *Labidesthes sicculus* (Cope)
Mississippi silverside, *Menidia audens* (Hay)

Temperate Bass Family, PERCICHTHYIDAE
White bass, *Morone chrysops* (Rafinesque)
Yellow bass, *Morone mississippiensis* (Jordan and Eigenmann)

Sunfish Family, CENTRARCHIDAE
Flier, *Centrarchus macropterus* (Lacépède)
Banded pygmy sunfish, *Elassoma zonatum* (Jordan)
Green sunfish, *Lepomis cyanellus* (Rafinesque)
Warmouth, *Lepomis gulosus* (Cuvier)
Orangespotted sunfish, *Lepomis humilis* (Girard)
Bluegill, *Lepomis macrochirus* (Rafinesque)
Dollar sunfish, *Lepomis marginatus* (Holbrook)

Longear sunfish, *Lepomis megalotis* (Rafinesque)
Redear sunfish, *Lepomis microlophus* (Günther)
Redspotted sunfish, *Lepomis miniatus* Jordan
Bantam sunfish, *Lepomis symmetricus* (Forbes)
Florida largemouth bass, *Micropterus floridanus* Kassler et al. 2005
Northern largemouth bass, *Micropterus salmoides salmoides* (Lacépède)
Spotted bass, *Micropterus punctulatus* (Rafinesque)
White crappie, *Pomoxis annularis* (Rafinesque)
Black crappie, *Pomoxis nigromaculatus* (Lesueur)

Perch Family, PERCIDAE
Swamp darter, *Etheostoma fusiforme* (Girard)
Slough darter, *Etheostoma gracile* (Girard)
Cypress darter, *Etheostoma proeliare* (Hay)
Logperch, *Percina caprodes* (Rafinesque)

Drum Family, SCIAENIDAE
Freshwater drum, *Aplodinotus grunniens* (Rafinesque)

CREEL

An angler survey was conducted during the period from January 1, 2010 to December 29, 2010. This survey was initiated to compliment an ongoing largemouth bass age and growth study. The creel survey was access point based. Interviews were conducted at boat launches at the conclusion of angler fishing trips. The survey was designed and executed in accordance with the LDWF Inland Fisheries Management Standardized Sampling Protocol.

The creel survey showed that 31,839 anglers utilized this lake during the period and logged 167,378 hours of angling effort. Mean trip length for all anglers was 4.98 hours. Mean number of anglers in a party was 1.5. Mean one way distance traveled by anglers to reach the lake was 37 miles. Estimated totals for largemouth bass were: Number caught - 148,483; Pounds harvested - 86,377.23; Average weight – 1.29 pounds. The estimated catch per hour for largemouth bass was 1.23. The estimated pounds caught per hour for largemouth bass was 0.78

WATER USE

Hunting
Yes- Duck hunting

Skiing
Yes – limited to a small area of open water in the central part of the lake known as Clear Lake.

Scuba Diving
None

Swimming
Yes

Irrigation
Yes – Residential (Lawn and Garden)

Commercial
International Paper Mill, Campti, LA utilizes approximately 257,544,000 gallons annually from Black/Clear Lake. No water is discharged back into the lake. All discharged water is released into the Red River.

Sandy Point Water System/Public water supply
Approximately 300,000 gallons of water per week (15,600,000 gallons annually) is used for municipal water supply. No water is discharged into the lake.

APPENDIX I

(return to boat ramps)

MAP OF THE LAKE WITH PUBLIC BOAT RAMPS

1 - Black Lake Lodge & Chandler's Camp
2 - Dixon's Camp
3 - West Wind
4 - Sandy Point
5 - Motter's Camp

APPENDIX II

(return to hydrologic)

MAY 2006 US COURT OF APPEAL RULING

http://www.ll.georgetown.edu/federal/judicial/fed/opinions/05opinions/05-5031.pdf

United States Court of Appeals for the Federal Circuit

05-5031
NORTHWEST LOUISIANA FISH &
GAME PRESERVE COMMISSION,
Plaintiff-Appellant,
v.
UNITED STATES,
Defendant-Appellee.

DECIDED: May 2, 2006

Before, NEWMAN, LOURIE, and RADER, Circuit Judges.
Opinion for the court filed by Circuit Judge RADER. Dissenting opinion filed by Circuit Judge LOURIE.
RADER, Circuit Judge.
The United States Court of Federal Claims dismissed the Northwest Louisiana Fish and Game Preserve Commission's (the Commission's) takings claim against the United States as filed after the statute of limitations. See 28 U.S.C. § 2501;1 Nw. La. Fish & Game Pres. Commission v. United States, No. 02-1031L, slip op. at 20 (Fed. Cl. Oct. 29, 2004) (Final Decision). The Commission alleged that the United States Corps of Engineers (Corps) Red River Navigation Project (the project) effected the taking. The Corps project limited the ability of the Commission to draw down the level of Louisiana's Black Lake. Accordingly, the Commission could not control the growth of vegetation in the lake. The complaint alleges that the vegetation rendered the northern part of the lake inaccessible, unmanageable, and virtually useless, resulting in a taking.
Because the growth of vegetation was a slow natural process that had not stabilized to cause the taking claim to accrue until at least 1997, this court reverses the decision of the Court of Federal Claims, and remands for further proceedings as appropriate.
I.
This case arises from a conflict between the Commission's responsibility to maintain a natural preserve and the Corps' responsibility to maintain year-round riparian navigation. The Commission manages the Northwest Fish and Game Preserve, a complex of land and lakes maintained for recreation and for preservation of wildlife and fisheries. The Preserve includes two lakes, collectively referred to here as Black Lake. Black Lake is subject to the growth of aquatic weeds. The Commission controls these weeds by draining, or drawing down, the lake into the Red River.
In 1968, Congress authorized the Corps' Red River project to assure year-round navigation on

the Red River. River and Harbor Act of 1968, Pub. L. No. 90-483, § 101, 82 Stat. 731 (1968) (amended by Pub. L. 94-587, § 187, 90 Stat. 2942 (1976)). To achieve this purpose, the Corps constructed a series of locks and dams on the river. This case involves the pool (Pool 3) created by the third lock and dam (L & D 3). The water level in Pool 3 directly affects the draw down potential of Black Lake, which in turn may affect the growth of the aquatic weeds.

In 1984, the Corps approved a design for L & D 3 that would impound water in Pool 3 at ninety-five feet above Mean Sea Level (95), 4.5 feet lower than the ordinary elevation of Black Lake. This impoundment limited the drawdown capability for Black Lake to about 4.5 feet, between 3.5 and 6.5 less than the Commission allegedly requires for weed control. When the construction of L & D 3 began in 1988, the Louisiana Department of Transportation and Development (the Department) notified the Corps that the new water level could impede the Commission's regular lake management activities. The Department requested the Corps to seek alternatives to alleviate the potential detrimental impacts.

In 1988, 1989 and 1991, the Corps conducted studies on the control of hyacinths or water lilies. Hydrilla, a submerged weed, was not a concern at that time. In 1989, the Corps initial studies of Black Lake focused on flood flows, and these studies indicated that Pool 3 would have no adverse effect on the capability of evacuating flood flows. The Corps also stated that it was investigating alternatives to allow an increase in drawdown capability, and made a point of noting that before it would make a final determination on alternatives, that it had continuing authority to study and better define the impact of Pool 3 on the lakes.

In 1991, the Corps performed more studies of Pool 3's impact on Black Lake Complex and gave an assessment that provided various alternatives for each lake, stating that its assessment could still, nevertheless, be revised. In 1991, the Corps also stated that the need for further corrective actions would be evaluated when the data showed a need, and that the Corps would continue to request the Commission's staff's input concerning efforts to minimize the effects of Pool 3.

In 1992, the Corps advised the Commission that it was continuing to study the impact of Pool 3, and it noted that since most weed growth occurred at depths less than about 5 feet that it did not believe that the loss of the drawdown capability would have any measurable impact on the environmental quality of the lake. However, the Corps started a five year lake monitoring study to determine the effects of the operation on the navigation pool, which was scheduled to be completed in 1998. Thus, studies continued beyond December 9, 1994, when the designed elevation of 95 for Pool 3 was reached, and these studies provided conflicting opinions on whether a problem would ultimately develop. After the complete elevation of Pool 3, the Corps continued to study, inter alia, Pool 3 so that it could determine whether additional project requirements should be implemented to minimize the impacts on the lakes.

Nearly two years after Pool 3 reached 95 and after the completion of L & D 3, hydrilla emerged as a problem for the first time in the fall of 1996. Though hydrilla had been discovered in 1993, it was believed killed by a drawdown in May of 1994. It was rediscovered again sometime in 1995, but it was not until 1996 that detailed studies showed it was spreading to an extent that it had become a problem. As a result, on October 4, 1996, the Assistant Secretary-Treasurer of the Commission informed the Red River Waterway Commission (RRWC), a Louisiana entity created to collaborate with the Corps on the project, of the hydrilla problem and the need for another drawdown. The Secretary-Treasurer asked if there was "any possibility" of lowering the water level in Pool 3 to allow such an action. The RRWC passed the question to the Corps. While waiting for a response from the Corps, on December 4, 1996, the Commission meeting minutes noted that the hydrilla had just been reported as breaking up and spreading through the lakes. In January of 1997 the RRWC received a response from the Corps. The RRWC advised the Commission that, though it had requested the Corps to determine if Pool 3 could be manipulated to accommodate the proposed eight-foot drawdown, the Corps flatly responded

that it would not allow the proposed drawdown. Thus, it was not until January of 1997 that the Corps, for the first time, refused a drawdown, and instead suggested that the Commission attempt to control the weed growth with herbicides and a limited available four-foot drawdown.

As a result, in February 1997, the Commission filed in state court a claim for land appropriation and/or inverse condemnation against the RRWC. RRWC, in turn, impleaded the Corps as a third party defendant. The Corps had the suit removed to the United States District Court for the Western District of Louisiana. The district court essentially allowed RRWC to withdraw from the case because the Corps bore sole responsibility for raising the water level in Pool 3. Nw. La. Fish & Game Pres. Commission v. Red River Waterway Commission, No. 97-1984, slip op. at 9 (W.D. La. July 28, 1999).

The Commission then submitted, on December 5, 2000, an administrative claim against the Corps. In this claim, the Commission requested $30,000,000 for "curative work" and "associated damages." The Commission claimed that the new water level in pool 3 as of January 1995 caused the uncontrollable growth of aquatic vegetation. The Commission also claimed that Preserve property contiguous to the lake had been damaged as a result of floods also attributable to the level of pool 3.

On January 12, 2001, the Corps office in Vicksburg, Mississippi rejected the claim as improperly filed. The Vicksburg office noted, inter alia, that the Commission had stated that the date of the incident leading to damage was "January 1995," outside of the two-year statute of limitations for the Federal Tort Claims Act. The Corps' district counsel in Vicksburg added that "none of my comments are to be construed as a final agency decision on your letter." Although the Vicksburg office asked the Commission to "clarify the intent" of its submission, the record does not show any further correspondence between the Commission and Vicksburg.

On July 5, 2001, the Commission filed suit in the District Court for the Western District of Louisiana against the United States, under the Federal Torts Claim Act (28 U.S.C. § 2675), and as a taking. In this suit, the Commission asserted that it had been prevented from carrying out its duties in managing the Preserve, and noted that curative costs would be approximately twenty-six million dollars. The district court found that the tort claim was barred under 28 U.S.C. §, No. 01-1264, slip op. at 1 (W.D. La. June 11, 2002). 2401(b)2; Nw. La. Fish & Game Pres. Commission v. United States, Civil Action No. 01-1264, Report and Recommendation at 11 (Apr. 1, 2002). The district court held that the tort claim had accrued by January 1997, when a committee of the Commission authorized legal action, but the filing date of the suit in July 2001 exceeded the two-year statute of limitations for tort claims. The district court then transferred any possible taking claim to the Court of Federal Claims, which would properly be brought under the Tucker Act (28 U.S.C. § 1491), which has a six year statute of limitations. Nw. La. Fish & Game Pres. Commission v. United States.

In the Court of Federal Claims, the Commission amended its complaint to allege loss of use of land and water, diminution in market value of land, interference with wildlife habitat and recreational purposes, and damage to its property as a result of the raising of the water level of Pool 3 from 87 to 95 . The United States moved for dismissal for lack of subject matter jurisdiction, on the ground that the action, originally filed in July 2001, was barred by the six-year statute of limitations of 28 U.S.C. § 2501. The court granted the motion, holding that "accrual of the plaintiff's cause of action with regard to the alleged taking due to aquatic growth occurred no later than December 1994," when the Corps raised the level of Pool 3 to 95 . Final Decision, slip op. at 20. The court reasoned that at that time the Commission knew "about the damage that was going to occur as a result of raising the pool level."

2 "A tort claim against the United States shall be forever barred unless it is presented in writing to the appropriate federal agency within two years after such claim accrues." 28 U.S.C. § 2401(b) (West 1994).

Further, the court noted that the Commission had calculated, "as early as 1992," the cost of

controlling the aquatic growth over the lifetime of the project—$7,575,000. It, thus, concluded the damages in this case "were not only foreseeable, but foreseen" even before 1994. The Commission appeals the dismissal disputing the accrual date, for purposes of the statute of limitations, that was arrived at by the Court of Federal Claims.

III.

This court has jurisdiction under 28 U.S.C. § 1295(a)(3). "Whether the Court of Federal Claims possesses subject matter jurisdiction is a question of law subject to de novo review." Western Co. v. United States, 323 F.3d 1024, 1029 (Fed. Cir. 2003). In addition, this court reviews de novo whether the Court of Federal Claims properly dismissed a complaint for failure to state a claim. Boise Cascade Corp. v. United States, 296 F.3d 1339, 1343 (Fed.Cir.2002) (citing Dehne v. United States, 970 F.2d 890, 892 (Fed. Cir. 1992)). "[I]n reviewing a dismissal for failure to state a claim, we must assume all well-pled factual allegations are true and indulge in all reasonable inferences in favor of the nonmovant." Gould, Inc. v. United States, 935 F.2d 1271, 1274 (Fed. Cir. 1991).

This appeal only presents the application of the Title 28, section 2501 six-year statute of limitations to the Commission's claim. The Commission filed its tort and takings claims in the Western District of Louisiana on July 5, 2001. The trial court correctly accepted this date as the appropriate filing date for the takings claim. A taking occurs when governmental action deprives the owner of all or most of its property interest. United States v. Gen. Motors Corp., 323 U.S. 373, 378 (1945) (The word "property" "denote[s] the group of rights inhering in the citizen's relation to the physical thing, as the right to possess, use and dispose of it."). For example, "[w]here the government by the construction of a dam or other public works so floods lands belonging to an individual as to substantially destroy their value there is a taking within the scope of the Fifth Amendment." United States v. Lynah, 188 U.S. 445 (1903). The Supreme Court has held that "[t]he backing of water so as to overflow the lands of an individual . . . if done under statutes authorizing it for the public benefit, is such a taking as by the constitutional provision demands compensation." Pumpelly v. Green Bay & Miss. Canal Co., 80 U.S. 166, 172 (1871).

In this case, the accrual date of such a takings claim depends on several factors because the damage occurs gradually both as the water level increases and as the aquatic vegetation becomes uncontrollable.

The Commission argues that its "right to possess, use, regulate, and maintain the property in question was appropriated" by the Corps when the Corps refused to cooperate in a proposed drawdown of Black Lake to mitigate the growth of hydrilla and other aquatic plants. Thus, according to the Commission, the taking accrued in 1997, after both the appearance of significant hydrilla growth and the Corps' first definite refusal to draw down the water level or otherwise help the Commission mitigate its damages.

However, the trial court set the accrual date in 1994. The trial court reasoned that "a takings claim accrues when all events which fix the Government's alleged liability have occurred and the plaintiff was or should have been aware of their existence." Final Decision, slip op. at 11; see also Japanese War Notes Claimants Assn of the Philippines, Inc. v. United States, 178 Ct. Cl. 630, 632 (Ct. Cl. 1967), cert. denied, 389 U.S. 971 (1967). The trial court further reasoned that December 1994 was the proper accrual date because at that time the plaintiff "knew or should have known" that raising the pool level would result in uncontrolled aquatic plant growth.

To the contrary, as revealed by the pleadings, the events that fix the Corps' alleged liability had not occurred by December 1994. The events that fixed the Corps' alleged liability occurred, at the earliest, in 1997. Therefore, this court perceives an error in the reasoning of the Court of Federal Claims. The trial court reasoned that accrual occurred when the Commission "knew or

should have known" of "the damage that was going to occur as a result of raising the pool level." The correct standard recites that accrual occurs when the harmed party knows or should have known of their existence and "all events which fix the government's alleged liability have occurred."

"In general, a takings claim accrues when all events which fix the government's alleged liability have occurred and the plaintiff was or should have been aware of their existence." (citing Hopland Band of Pomo Indians v. United States, 855 F.2d 1573, 1577 (Fed. Cir. 1988))); see also Fallini v. United States, 56 F.3d 1378, 1380 (Fed. Cir. 1995) ("As a general matter, a cause of action accrues when all the events have occurred that fix the defendant's alleged liability and entitle the plaintiff to institute an action."). The harm in this case, the uncontrolled hydrilla growth, did not occur (i.e., was not fixed) until well after the water level in Pool 3 reached its maximum height in December of 1994.

The trial court reasoned that the Corps was responsible only for "the taking of the right to drain water from the Black Lake into the Red River," not for uncontrolled aquatic growth. However, the uncontrolled aquatic growth was the harm that occurred as a consequence of the taking of the right to drain the lake. In the first place, that harm did not instantly occur when Pool 3 reached its maximum level. That December of 1994 event only set in motion the potential for future harm. That harm did not exist until much later. When the damages from a taking only gradually emerge, e.g., as in recurrent flooding, a litigant may postpone a suit for a taking until "the situation becomes stabilized" and "the consequences of inundation have so manifested themselves that a final account may be struck." United States v. Dickinson, 331 U.S. 745, 749 (1947). Dickinson established the principle that, "when the government allows a taking of land to occur by a continuing process of physical events, plaintiffs may postpone filing suit until the nature and extent of the taking is clear." Fallini, 56 Dickinson discouraged a strict application of accrual principles in unique cases involving Fifth Amendment takings by continuous physical processes. Applegate v. United States, 25 F.3d 1579, 1582, and held that the gradual character of the natural erosion process to the beach-front properties south of the Cape Canaveral harbor made accrual of the landowner's claim uncertain. Likewise, in Banks v. United States, 314 F.3d 1304 (Fed. Cir. 2003), this court also applied the stabilization doctrine to another shoreline erosion case. (Fed. Cir. 1994) (citing Dickinson, 331 U.S. at 749). This court followed the Supreme Court's Dickinson mandate in Applegate

This court's predecessor, the United States Court of Claims, also held that a claim does not accrue until the claimant suffers damage. Terteling v. United States, 334 F.2d 250, 254 (Ct. Cl. 1964). Because some growth of hydrilla is normal, the damage in this case, which was uncontrolled overgrowth and the Corps refusal to reduce the water level, did not occur until January 1997. In 1994, when the Corps had not yet issued a final refusal, there was only the possibility or threat of damage or a taking. A possible future taking of property cannot give rise to a present action for damages. United States v. 3,218.9 Acres of Land, 619 F.2d 288 (3rd Cir. 1980). Thus, in this case, until the hydrilla had grown, and had grown to harmful levels, and the Corps refused to drain the lake to alleviate the harm caused by the overgrowth of hydrilla, damages were not "present," i.e. they were still unquantifiable and speculative. See Alder v. United States, 785 F.2d 1004 (Fed. Cir. 1986)(court affirming Claims Court's holding that ranchers' claim accrued in July of 1973 after they lost all grazing permits, and were obliged to discontinue ranching operations, and had no right to use access road across tribal lands, and their fee land had no market or mortgage value). Until damages were quantifiable and present, the potential harm that could be caused by the hydrilla was only a threat. It did not become clear that the gradual process set in motion by the Corps had affected a permanent taking until the situation, i.e. the overgrowth of hydrilla, "stabilized" in 1997.

Thus, though the trial court correctly perceived that the harm in this case was the gradual emergence of uncontrolled aquatic growth, it erred when it fixed the accrual date at the time of

the event that set this gradual growth problem in motion, i.e., the filling of pool 3, as opposed to the time the situation had "stabilized." See Final Decision, slip op. at 19. Because the harm manifested itself only gradually after 1994, and the nature and extent of the harm was not clear in 1994, the accrual date of the taking was later than December 1994.

The Commission could only conjecture about potential harms or the prospect that the Corps may agree to mitigate those harms when until they actually occurred. The Commission's calculation of damages of about eight million dollars in 1992 (before the trial court's erroneous accrual date) does not demonstrate, as the trial court mistakenly held, that "the damages in this case were not only foreseeable, but in fact foreseen." Rather, this calculation, which was apparently too low, shows not only that damage was a potential future occurrence but that early calculation of its extent was premature. Indeed, the Corps might have elected to avoid the damages altogether by allowing a drawdown, which would alleviate the overgrowth of hydrilla. Moreover, the record even disputes whether this premature guess has any validity in light of the competing allegation that damages may rise to almost thirty million dollars. The trial court's decision is not consistent with Dickinson. The harm in this case did not stabilize until well after the first emergence of hydrilla.

Thus, this court concludes that the accrual date for the takings claim was no earlier than January 1997. The trial court erred in dismissing the Commission's claim as untimely filed. Therefore, on remand, the trial court need not further address equitable tolling of the Tucker Act, or a bar on the Commission's claim for failure to exhaust all possible administrative remedies. See, e.g., Martinez v. United States, 333 F.3d 1295, 1318 (Fed. Cir. 2003).

Conclusion

Therefore, the accrual of the Commission's alleged taking could not have occurred before January 2, 1997. This court finds, therefore, that the taking claim is not time-barred. This court does not reach the issue of equitable tolling under 28 U.S.C. § 2501. This court reverses and remands.

COSTS

Each party shall bear its own costs.

REVERSED and REMANDED

APPENDIX III

(return to hydrilla)

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

2013 AQUATIC VEGETATION CONTROL PLAN

BLACK / CLEAR LAKE

Prepared by:
Ricky Yeldell, Biologist Manager
LDWF Inland Fisheries
District 10
February 4, 2013

Waterbody type – Wooded tributary impoundment of Black Bayou.

Age and condition of control structure – Black Lake Dam was completed in 1990 and is in fair condition.

Type of control structure – According to the Louisiana Department of Transportation and Development Dam Inspection Report dated March 16, 2011, Black Bayou Reservoir dam consists of an earthen embankment approximately 1,100 feet on the west side of the spillway, a 350-foot wide spillway, and an earthen embankment approximately 930 feet in length on the east side of the spillway. The total length of the dam is 2,380 feet. Dam height is 37 feet. Structural height is 44 feet. Hydraulic height is 23 feet. Maximum discharge is 50,003 cubic feet per second. Maximum storage is 320,000 acre-feet. Normal discharge is 109,000 acre-feet. Surface area is 13,800 acres. Drainage area is 920 square miles. A photograph of the Black Lake Dam appears in Figure 1.

Figure 1. Black Lake Bayou Reservoir Dam, Natchitoches Parish, Louisiana, August 2, 2011.

Water level range (MSL) – Pool stage is 99.5 feet MSL. High level is 99.5 feet MSL. Low stage is 95 feet MSL.

Surface area range – Surface area at pool stage is 13, 800 acres. Surface area at high stage is 13,800 acres. Surface area at low stage is 9,660 acres.
Average depth – Average depth at pool stage is 8 feet.

Watershed ratio – 42.7:1

Drawdown potential of structure – 4.5 feet.

Waterbody Board or Lake Commission – Northwest Louisiana Game and Fish Preserve Commission (NLGFPC). The Northwest Louisiana Game and Fish Preserve (Preserve) was established by the Louisiana Legislature and was initially placed under the control of the Louisiana Conservation Commission through Act 191 of 1926. The Preserve was initially comprised of three artificially created lakes (Black Lake, Clear Lake, and Saline Lake) and the surrounding lands. It was developed for recreation and for the preservation of wildlife and fisheries. After creation of the Preserve, the State constructed a dam, known as the Allen Dam, to keep water in the lakes from draining. In 1928, the Preserve was placed under the control of the Louisiana Department of Conservation through Act 69 of 1928. In 1946, the Louisiana Legislature created the Northwest Louisiana Game and Fish Preserve Commission (Commission) and granted it authority to administer the Preserve and adopt rules and regulations thereof through Act 120 of 1946. While the Commission was originally placed under the supervision of the Department of Wildlife and Fisheries, the Commission was vested with the *"right, power and authority to sue and be sued as a subdivision of the State"* and to *"purchase, lease or expropriate all property necessary to the erection and maintenance of the Preserve"*. The State of Louisiana retained title to the lakes, as well as surrounding land and lake bottoms. Act 105 of 1976 placed the Commission under control of the Louisiana Wildlife and Fisheries Commission. Additionally, the Act removed Saline Lake from the authority of the Commission.
The commission is made up of 7 members. Five members are from Natchitoches Parish. Two members are from Red River Parish. Both of the Red River Parish members are appointed by the Red River Parish Police Jury. Of the five Natchitoches Parish members, one is appointed by the Natchitoches Parish Police Jury and four are recommended by the state senator and state representative representing Natchitoches Parish and approved by the sitting members of the Northwest Louisiana Game and Fish Preserve Commission. All members serve a four year term.

Primary contact information – Northwest Louisiana Game and Fish Preserve Commission, Mr. Junior Brown, Chairman, 153 Hwy 6 East, Natchitoches, LA 71457. Telephone: 318-357-1110.

Procedure for spillway openings – For lake management objectives, LDWF will present recommendations, or consider recommendations from NLGFPC, for a drawdown. The LDWF Secretary will submit a request to the Secretary of DOTD that includes requested date of opening, water level desired, desired dewater rate, date of gate closure, and purpose for gate operation.

For flood control purposes, operation of the structure gates is directly requested of DOTD by NLGFPC as per statute below.

RS 38:24
§24. Rules and regulations; inspection of dams
A. ***
B. Notwithstanding any other provisions of law or any rules and regulations to the contrary, the legally constituted boards of commissioners of Black Lake, Clear Lake, and Saline Lake in Natchitoches Parish may recommend directly to the Department of Transportation and Development that the dams situated on said lakes should be opened for flood-control purposes only. The chief engineer, or his authorized representative, shall have the final authority for determining the necessity of opening the dams, and no other department of state government shall be involved in these flood-control activities. Acts 1991, No. 532, §1; Acts 1995, No. 1049, §1.

Historical information relative to Black /Clear Lake drawdowns appears in Table 1.

Table 1. Historical drawdowns of Black/Clear Lake, Louisiana.

Date Opened	Date Closed	Purpose	Lowest Level	Results	Issues
1972	1972	Weed Control	91.5 MSL	Good	None
1973	1973	Weed Control	91.5 MSL	Good	None
1979	1979	Weed Control	91.5 MSL	Good	None
1981	1981	Weed Control	91.5 MSL	Good	None
1989	N/A	Shoreline clearing	N/A	N/A	Proposed. No record of occurrence.
05/16/94	Unknown	Weed Control	91.5 MSL (requested)	Good	None
1998	N/A	Weed Control	95.5MSL (requested)	N/A	Requested by NLGFPC. No record of occurrence.
04/14/99	N/A	Weed Control	N/A	N/A	Requested by NLGFPC. No record of occurrence.
07/17/00	Scheduled for 01/15/01. Closed 11/29/00.	Weed Control	95 MSL	Good	Gates closed to prevent back-flooding.
07/15/01	11/15/01	Weed Control	95 MSL	N/A	Planned/Cancelled
09/08/04	Unknown	Weed Control	95 MSL	Good	None
08/01/05	Unknown	Weed Control	95 MSL	Good	None
08/01/06	Unknown	Weed Control	95 MSL	Good	None
07/09/07	Unknown	Weed Control	95 MSL	Good	None

What significant stakeholders use the lake?
Recreational anglers, recreational boaters, water skiers, swimmers, waterfowl hunters and

shoreline property owners constitute the majority of stakeholders at Black/Clear Lake. There are some commercial users including the International Paper Company Mill at Campti, LA, the Sandy Point Water System (public potable water supply), and the Demery Coal Mine near Saline, LA.

What are their needs and concerns?

Recreational anglers, recreational boaters, water skiers, swimmers and waterfowl hunters desire sufficient water levels and aquatic vegetation control to allow pursuit of their interests. Shoreline property owners need reliable water supply for residential irrigation systems. This group also has interest in aesthetic quality of the lake. International Paper Mill, Campti, LA utilizes 490 gallons/minute from Black/Clear Lake - approximately 257,544,000 gallons annually. No water is discharged back into the lake. All discharged water is released into the Red River. Sandy Point Water System utilizes approximately 300,000 gallons of water per week or 15,600,000 gallons annually. No water is discharged into the lake. Demery Coal Mine has recently started operation in the Saline, LA area. Their exact needs are unknown at this time but they have stated that they intend to use some lake water to maintain small ponds on their site. These ponds are to be used for dust control at the mine site.

What is the history of aquatic vegetation complaints?

Historically, Black Lake/Clear Lake has had a chronic problem with submerged aquatic vegetation. Although native plants were originally problematic at this lake, exotic plant species have overshadowed natives in recent years. Currently, Black Lake/Clear Lake is experiencing vegetation problems primarily caused by an overabundance of hydrilla *(Hydrilla verticillata)*. This species has been present in the lake for more than a decade and persists to date. Chronic overabundance of hydrilla occurs in both the upper and lower 1/3's of the lake.

Giant salvinia *(Salvinia molesta)* occurs in the lake with the typical problems associated with this aggressively growing plant.

Common salvinia *(Salvinia minima)* is known to occur in the lake but has not been problematic to date.

Water hyacinth *(Eichhornia crassipes)* is present in the lake and occasionally hampers boating and angling access.

Have there been any controversial issues on the lake?

The Red River Navigation Project created issues. In December of 1994, completion of Pool 3 of the Red River Navigation Project effectively set the pool level of Saline Bayou at 95 MSL. This meant that Black/Clear Lake could typically be lowered only 4.5 feet below its pool level of 99.5 MSL. NLGFPC's legal plea to allow for more dewatering ability was unsuccessful. Details of this matter are given in Appendix I.

Related information on the Court of Appeal ruling can be found in APPENDIX IV.

Aquatic Vegetation Status:

As of January 1, 2013, the total infestation of problem plant species was estimated to be:
Hydrilla – 5,500 acres (40% coverage)
Bladderwort – 1,225 acres (9% coverage)
Fanwort – 900 acres (6% coverage)
Giant salvinia – 275 acres (2% coverage)
American lotus – 200 acres (1.5% coverage)
Total infestation = 7,800 acres (58.5% coverage)

Limitations:

- Average depth of 8 feet and watershed ratio of 42.7:1 precludes use of whole waterbody treatments in all but near drought conditions.
- Dense stands of cypress trees restrict access by boat-based spray crews and limits aerial application options.
- Shallow water /heavily vegetated areas require surface drive type vessels to allow access.
- Natchitoches Parish is located within the Louisiana Department of Agriculture & Forestry's 2, 4-D waiver area. A waiver is needed to apply 2, 4-D between March 15th and September 15th of each year.
- Residential and commercial water withdrawals must be considered when planning chemical applications and drawdowns.

Past Control Measures

Annual herbicide applications have been made at Black/Clear Lake for many years. Details regarding acres treated and vegetation types targeted over the past eight years in Table 2.

Table 2. Herbicide applications made by LDWF at Black/Clear Lake, Natchitoches Parish, LA during years 2005 – 2012.

Year	Acres Treated	Vegetation
2005	864	Water Hyacinth, American Lotus
2006	390	Water Hyacinth, American Lotus, Water Lily, Alligator Weed
2007	1,070	Water Hyacinth, Common Salvinia, American Lotus
2008	10,647	Hydrilla, Water Hyacinth, Fanwort, Common Salvinia, Giant Salvinia
2009	1,322	Water Hyacinth, Alligator Weed, American Lotus, Common Salvinia, Giant Salvinia, Primrose, Smartweed
2010	4,245	Hydrilla, Giant Salvinia, Alligator Weed, Water Hyacinth
2011	680	Hydrilla, Alligator Weed, Giant Salvinia, American Lotus, Duckweed, Water Hyacinth, Water Lily
2012	309	Giant Salvinia, Alligator Weed, Water Hyacinth, American Lotus, Water Lily

Historically, water hyacinth, water lily, and American lotus have been treated with foliar applications of 2, 4-D at a rate of 0.5 gallons per acre. Giant and common salvinia have been treated with foliar applications of diquat at a rate of 0.75 gallons per acre. Alligator weed has been treated with foliar applications of glyphosate at a rate of 0.75 gallons per acre.

In an attempt to control excessive vegetation, primarily hydrilla in Black/Clear Lake, an integrated management plan was initiated in 2008. This plan consisted of a minimal summer drawdown approximately 18 inches followed by a limited herbicide application. This would be followed by aquatic vegetation monitoring and updates to the management plan as needed.

On June 9, 2008 three formulations of Sonar were used to treat 3,300 acres of Black Lake. Six boat crews along with numerous support personnel applied 14,520 pounds of Sonar. Two months later, another 960 pounds of Sonar were applied to the same treatment area to boost herbicide concentration and increase control of the hydrilla. The total amount of Sonar applied during this treatment was 15,480 pounds at an approximate cost of $400,000 dollars.

The results of the treatment were excellent and hydrilla biomass was reduced by 90% in the treatment area. Though the target area was 3,300 acres, the applied Sonar expanded from the treatment area and provided control to a total of approximately 4,000 acres.

In 2010, a 2,000 acre hydrilla treatment was made in the Prairie area of the lake utilizing 4,260 pounds of Sonar PR along with 3,640 pounds of Sonar Q. Good results were noted following this treatment. Anglers expressed satisfaction with the results and reported increased angling opportunities and angler success.

In 2011, a follow up treatment was made in the Prairie area to eliminate regrowth of hydrilla. The follow up treatment was intended to be an early season, low dose application targeted at remaining hydrilla tubers. This treatment used 1,170 pounds of Sonar Q and 648 pounds of Sonar PR. To date, the Prairie remains mostly clear of hydrilla with spotty regrowth noted in the fall season of 2012. Overall effectiveness of this follow up treatment was very good. Regrowth of hydrilla in the Prairie area was much less than what would have been expected without the treatment. It appears that such follow up treatments are a good investment following initial, higher dosage rate applications.

Giant salvinia weevils (*Cyrtobagous salviniae*) have not been introduced at Black/Clear Lake at this time. It is probable that giant salvinia will increase in coverage in the future and giant salvinia weevils will be introduced to provide a biological control agent for this noxious weed.

Triploid grass carp *(Ctenopharyngodon idella)*, have been stocked into Black/Clear Lake to provide a biological control agent for submerged aquatic vegetation. In the spring of 2010, 12,000 triploid grass carp were stocked into Black Lake/Clear Lake. These fish were purchased by the Northwest Louisiana Fish & Game Preserve Commission and permitted by the Louisiana Department of Wildlife & Fisheries. In the fall of 2013, LDWF has planned to release an additional 14,000 triploid grass carp into Black-Clear Lake.

Hydrilla coverage of Black-Clear Lake has reduced in recent years. Areal coverage by hydrilla in

years 2011, 2012 and 2013 was 7,000 acres, 5,000 acres and 1,447 acres respectively. Chemical treatment acreage values for hydrilla have been reduced in recent years from a high of 4,040 acres in 2010 to 200 acres in 2011 and zero acres in years 2012 and 2013.

It is likely that the significant reduction in hydrilla coverage was caused by the repeated chemical treatments in years 2010 and 2011. It is possible that the triploid grass carp stocked in 2010 may currently be impacting regrowth of hydrilla. It is also possible that those fish along with the additional 14,000 triploid grass carp planned for release in 2013 will have a measurable effect upon hydrilla coverage in the coming years. Areal coverage of aquatic vegetation will be monitored from this point forward to determine efficacy of triploid grass carp as a biological control agent for submerged aquatic vegetation.

Recent aquatic plant control efforts at Black/Clear Lake have consisted of foliar herbicide applications of diquat at a rate of 0.75 gallons per acre for giant salvinia *(Salvinia molesta)* and Ecomazapyr2SL at a rate of 0.5 gallons per acre for alligator weed (*Alternanthera philoxeroides*) and American Lotus (*Nelumbo lutea*). Frequency of applications has been determined by availability of spray crews.

Due to factors limiting access by outboard powered spray vessels, LDWF is currently operating surface drive spray vessels to increase access to problem areas within District 10. It is expected that these boats will increase access for spray crews and allow more treatment acreage at Black/Clear Lake in the future.

Recommendations:

A comprehensive vegetation control strategy is recommended for Black/Clear Lake to include chemical, biological and physical control measures.

Continued foliar herbicide applications are recommended for Black/Clear Lake. These applications will be principally directed toward control of giant salvinia *(Salvinia molesta)* and water hyacinth *(Eichhornia crassipes)*, but will also include control of any floating or emergent vegetation as needed. Water hyacinth will be treated by foliar application of 2,4-D herbicide at a rate of 0.5 gallons per acre between September 16th and March 14th of each year. Between March 15th and September 15th of each year, water hyacinth will be treated with glyphosate at a rate of 0.75 gallons per acre. Giant salvinia will be treated by foliar application of a mix of glyphosate (0.75 gal/acre) and diquat (0.25 gal/per acre) with Aqua King Plus (0.25 gal/acre) and Thoroughbred (8 oz/acre) surfactants from April 1 to October 31. All giant salvinia treatments made outside of that time frame will be with diquat (0.75 gal/acre) and an appropriate surfactant (0.25 gal/acre).

It is recommended that in addition to foliar herbicide treatments made by LDWF staff, contract spraying be utilized for control of giant salvinia at Black/Clear Lake beginning in the winter of 2012. Contract spraying should be utilized as needed at Black/Clear for years 2012-2014. At the end of this period, assessment of the contract spraying should determine the effectiveness of such treatments and become the basis for formulation of future vegetation control plans for this

waterbody.

Giant salvinia weevils (*Cyrtobagous salviniae*) will be released in year 2013 to the extent that such are available. Weevil releases will focus on areas with limited access by spray vessels.

Triploid grass carp *(Ctenopharyngodon idella)* will be monitored for presence and efficacy in controlling submerged aquatic vegetation. Additional triploid grass carp should be stocked into Black/Clear Lake in the winter of 2012-2013 at a rate of 2 fingerlings per vegetated acre. Triploid grass carp fingerlings should be a minimum length of twelve inches to reduce likely losses to the existing predatory fish population in Black/Clear Lake. Estimates of November 2012 included 5,000 acres of hydrilla, 1,200 acres of bladderwort and 850 acres of fanwort for a total of 7,050 acres. Consequently, this stocking should total 14,100 phase II Triploid Grass Carp.

Drawdowns for vegetation control are recommended when coverage of submerged and floating aquatic vegetation exceeds 60% of total lake acreage. Although Black/Clear Lake is near this threshold at present, no drawdown is recommended for year 2013. LDWF is currently conducting a two to three year drawdown regime at neighboring Saline Lake. It is not recommended to conduct simultaneous drawdowns on both of these lakes. LDWF instead recommends the aforementioned biological and chemical control methods in lieu of physical control for aquatic vegetation in Black/Clear Lake at this point in time. It is likely that the recommended biological control will require three years to produce measurable results. Therefore, these controls should be monitored annually to determine their efficacy.

As far back as 1971, LDWF biologists have recommended reducing the cypress and tupelo tree forest found in Black/Clear Lake. Discussion of this topic between LDWF and NLGFPC should resume to determine feasibility.

This vegetation control plan will be presented to the NLGFPC upon approval by LDWF staff.

Typemap

Black/Clear Lake has been surveyed for vegetative coverage in years 1980, 1982, 1983, 1984, 1988, 1989, 1991, 1992, 1993, 1995, 1997, 1998, 1999, 2000, 2006, 2009 & 2012.

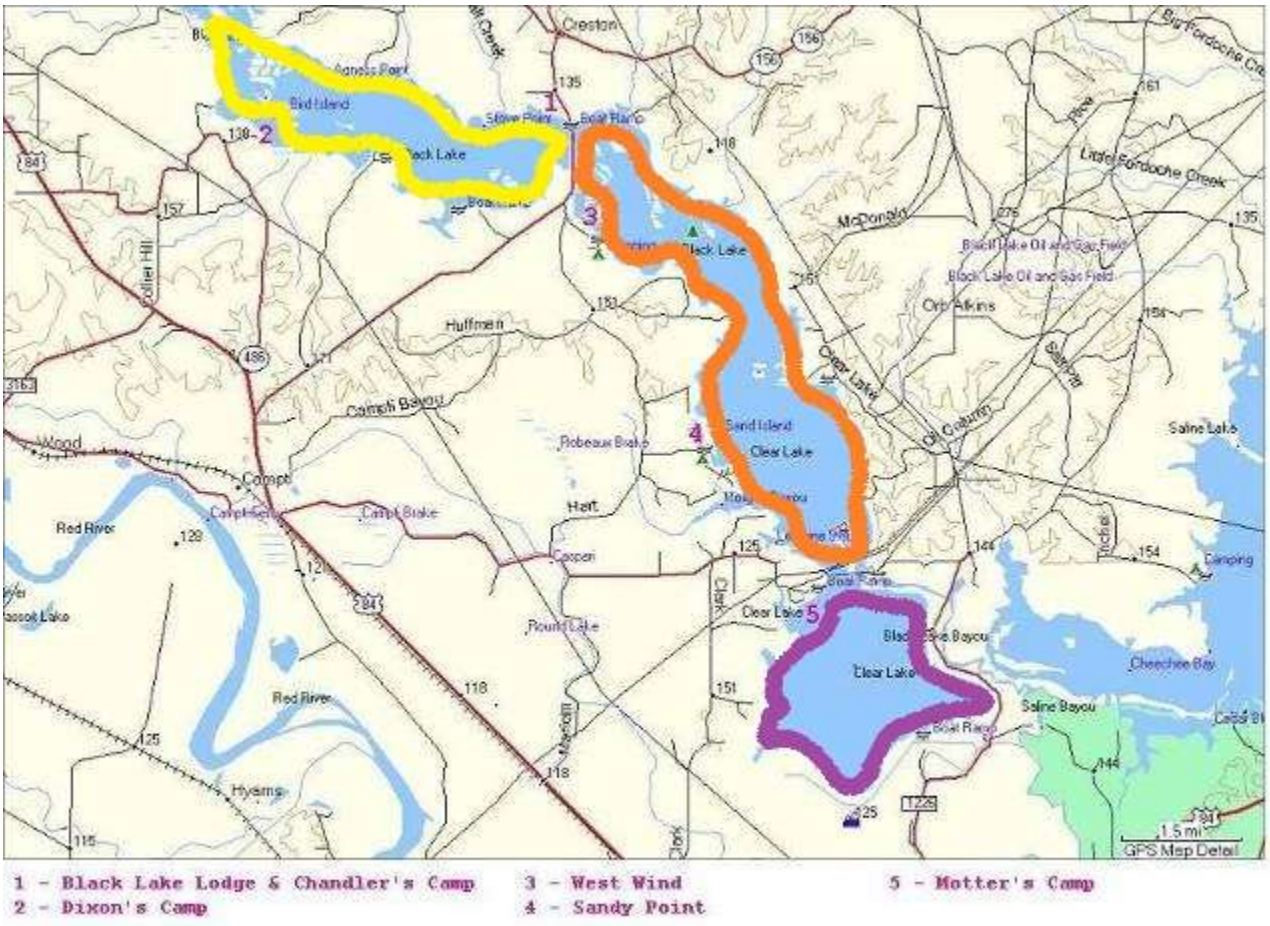

Figure 2. Vegetation Typemap, Black/Clear Lake, Natchitoches Parish, LA, for November, 2012.

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.

APPENDIX I

The Red River Navigation Project

From NORTHWEST LOUISIANA FISH & GAME PRESERVE COMMISSION v. UNITED STATES, decided May 2, 2006.

In 1968, Congress authorized the Red River Navigation Project ("Project") with the intent of improving navigation along the Red River. River and Harbor Act of 1968. Pub. L. No. 90-483, § 101, 82 Stat. 731 (1968). Shortly thereafter, the United States Army Corps of Engineers ("COE"), entered into an agreement with the Red River Waterway Commission ("RRWC") to begin construction on the Project with the goal of improving the navigability of the Red River. The Project provided for the construction of a nine-foot by 200-foot navigation channel, to extend approximately 236 miles from the junction of the Red River with the Mississippi River, to Old River, and upriver to Shreveport, Louisiana. The Project aimed to increase water depths along the Red River with the construction of five locks and dams at various points along the river to maintain pools at specific elevations. The OHWM of the Red River at St. Maurice (where the Red River and the Saline Bayou meet) is 96.1 feet MSL. Lock and Dam 3 is located sixteen miles upstream from Boyce, Louisiana, and Pool 3 extends 52.3 miles upriver, from Lock and Dam 3 to Lock and Dam 4. Black/Clear Lake connects to the Red River through the Saline Bayou at Pool 3. The plans for Lock and Dam 3 were approved in April 1984. Construction of Lock and Dam 3 began on April 20, 1988 and was completed on March 12, 1993. Pool 3 had an initial elevation of 85.5 feet MSL on December 9, 1991; over the next three years, the elevation was gradually increased to 94.5 feet MSL, which was reached on December 9, 1994. Once construction of Pool 3 was complete, Black/Clear Lake could only be lowered by a maximum of 4.5 feet, which the plaintiff contends is not sufficient to allow it to prevent unwanted aquatic growth. The plaintiff contends that the increase in the elevation of Pool 3 has limited the plaintiff's ability to control the growth of unwanted vegetation in Black/Clear Lake, because the plaintiff can no longer utilize the Black/Clear Lake Dam to drain Black/Clear Lake to a level sufficient to manage aquatic growth. In particular, the plaintiff argues that the increased growth of hydrilla and coontail, types of aquatic weeds, has rendered the northern portion of Black/Clear unusable.

Black/Clear Lake was surveyed in October 2003 for the presence of aquatic plants. The results of the survey indicated that the northwest portion of the Lake was severely infested with two species of vegetation: *Cabomba caroliniana* and *Hydrilla verticillata*. The biologist who completed the survey recommended that the area of the Lake between four feet and eight feet (which can no longer be treated by drawing down the Lake) be treated during a drawdown with herbicides. It is not clear whether the Lake has ever been treated with herbicides. The plaintiff also asserts that, because of its inability to control weed growth, portions of Black/Clear Lake are now inaccessible by boat, and the plaintiff's ability to manage fish populations has been impaired as a result. Finally, the plaintiff asserts that, due to the Project, there has been an increase in "undesirable water levels,", and that Black/Clear Lake and the land surrounding the lake has experienced more frequent flooding, which in its briefs the plaintiff contends stems at least in part from the "backwater effect" from Pool 3.

River Navigation Trumps Weed Control, Court Says

By NICK MCCANN (August 5, 2009) Courthouse News Service

(CN) - The Northwest Louisiana Fish & Game Preserve Commission can't stop a river project that prevents it from draining a lake into the nearby Red River, the Federal Circuit ruled. The court said the agency's interest in controlling the lake's aquatic weeds and fish levels conflicts with the government's duty to keep the river navigable. Congress authorized the Red River Navigational Project in 1968 to allow year-round navigation of the river. In the past, the commission controlled the fish population and blocked the growth of aquatic weeds by draining the nearby Black/Clear Lake into the Red River. However, the navigational project allowed the Army Corps of Engineers to raise the lake's water levels so that people could still use the river. This meant that the commission could no longer drain the lake for aquatic weed and fish control. The commission accused the government of violating tort law and the Fifth Amendment's takings clause. The Court of Federal Claims dismissed both claims and explained that the takings claim was barred by the "navigational servitude." The appellate panel in Washington, D.C., affirmed. The commission's interest in draining the lake is "subservient to the navigational servitude" of the government, Judge Randall Rader wrote. Rader also acknowledged the "distressing ambiguity" of the issue, noting that navigation should not receive any more "special protections" than any other Fifth Amendment issue.

APPENDIX II – MAY 2006 US COURT OF APPEAL RULING

http://www.ll.georgetown.edu/federal/judicial/fed/opinions/05opinions/05-5031.pdf

United States Court of Appeals for the Federal Circuit
05-5031
NORTHWEST LOUISIANA FISH &
GAME PRESERVE COMMISSION,
Plaintiff-Appellant,
v.
UNITED STATES,
Defendant-Appellee.

_____

DECIDED: May 2, 2006

_____

Before, NEWMAN, LOURIE, and RADER, Circuit Judges.
Opinion for the court filed by Circuit Judge RADER. Dissenting opinion filed by Circuit Judge LOURIE.
RADER, Circuit Judge.
The United States Court of Federal Claims dismissed the Northwest Louisiana Fish and Game Preserve Commission's (the Commission's) takings claim against the United States as filed after the statute of limitations. See 28 U.S.C. § 2501;1 Nw. La. Fish & Game Pres. Commission v. United States, No. 02-1031L, slip op. at 20 (Fed. Cl. Oct. 29, 2004) (Final Decision). The Commission alleged that the United States Corps of Engineers (Corps) Red River Navigation Project (the project) effected the taking. The Corps project limited the ability of the Commission to draw down the level of Louisiana's Black Lake. Accordingly, the Commission could not control the growth of vegetation in the lake. The complaint alleges that the vegetation rendered the northern part of the lake inaccessible, unmanageable, and virtually useless, resulting in a taking.
Because the growth of vegetation was a slow natural process that had not stabilized to cause the taking claim to accrue until at least 1997, this court reverses the decision of the Court of Federal Claims, and remands for further proceedings as appropriate.
I.
This case arises from a conflict between the Commission's responsibility to maintain a natural preserve and the Corps' responsibility to maintain year-round riparian navigation. The Commission manages the Northwest Fish and Game Preserve, a complex of land and lakes maintained for recreation and for preservation of wildlife and fisheries. The Preserve includes two lakes, collectively referred to here as Black Lake. Black Lake is subject to the growth of aquatic weeds. The Commission controls these weeds by draining, or drawing down, the lake into the Red River.
In 1968, Congress authorized the Corps's Red River project to assure year-round navigation on the Red River. River and Harbor Act of 1968, Pub. L. No. 90-483, § 101, 82 Stat. 731 (1968) (amended by Pub. L. 94-587, § 187, 90 Stat. 2942 (1976)). To achieve this purpose, the Corps constructed a series of locks and dams on the river. This case involves the pool (Pool 3) created by the third lock and dam (L & D 3). The water level in Pool 3 directly affects the draw down potential of Black Lake, which in turn may affect the growth of the aquatic weeds.
In 1984, the Corps approved a design for L & D 3 that would impound water in Pool 3 at ninety-five feet above Mean Sea Level (95), 4.5 feet lower than the ordinary elevation of Black Lake. This impoundment limited the drawdown capability for Black Lake to about 4.5 feet, between 3.5 and 6.5 less than the Commission allegedly requires for weed control. When the construction of L & D 3 began in 1988, the Louisiana Department of Transportation and Development (the Department) notified the Corps that the new water level could impede the Commission's regular lake management activities. The Department requested the Corps to seek alternatives to alleviate the potential detrimental impacts.
In 1988, 1989 and 1991, the Corps conducted studies on the control of hyacinths or water lilies. Hydrilla, a submerged weed, was not a concern at that time. In 1989, the Corps initial studies of Black Lake focused on flood flows, and these studies indicated that Pool 3 would have no adverse effect on the capability of evacuating flood flows. The Corps also stated that it was investigating alternatives to allow an increase in drawdown capability, and made a point of noting that before it would make a final determination on alternatives, that it had

continuing authority to study and better define the impact of Pool 3 on the lakes.
In 1991, the Corps performed more studies of Pool 3's impact on Black Lake Complex and gave an assessment that provided various alternatives for each lake, stating that its assessment could still, nevertheless, be revised. In 1991, the Corps also stated that the need for further corrective actions would be evaluated when the data showed a need, and that the Corps would continue to request the Commission's staff's input concerning efforts to minimize the effects of Pool 3.
In 1992, the Corps advised the Commission that it was continuing to study the impact of Pool 3, and it noted that since most weed growth occurred at depths less than about 5 feet that it did not believe that the loss of the drawdown capability would have any measurable impact on the environmental quality of the lake. However, the Corps started a five year lake monitoring study to determine the effects of the operation on the navigation pool, which was scheduled to be completed in 1998. Thus, studies continued beyond December 9, 1994, when the designed elevation of 95 for Pool 3 was reached, and these studies provided conflicting opinions on whether a problem would ultimately develop. After the complete elevation of Pool 3, the Corps continued to study, inter alia, Pool 3 so that it could determine whether additional project requirements should be implemented to minimize the impacts on the lakes.
Nearly two years after Pool 3 reached 95 and after the completion of L & D 3, hydrilla emerged as a problem for the first time in the fall of 1996. Though hydrilla had been discovered in 1993, it was believed killed by a drawdown in May of 1994. It was rediscovered again sometime in 1995, but it was not until 1996 that detailed studies showed it was spreading to an extent that it had become a problem. As a result, on October 4, 1996, the Assistant Secretary-Treasurer of the Commission informed the Red River Waterway Commission (RRWC), a Louisiana entity created to collaborate with the Corps on the project, of the hydrilla problem and the need for another drawdown. The Secretary-Treasurer asked if there was "any possibility" of lowering the water level in Pool 3 to allow such an action. The RRWC passed the question to the Corps. While waiting for a response from the Corps, on December 4, 1996, the Commission meeting minutes noted that the hydrilla had just been reported as breaking up and spreading through the lakes. In January of 1997 the RRWC received a response from the Corps. The RRWC advised the Commission that, though it had requested the Corps to determine if Pool 3 could be manipulated to accommodate the proposed eight-foot drawdown, the Corps flatly responded that it would not allow the proposed drawdown. Thus, it was not until January of 1997 that the Corps, for the first time, refused a drawdown, and instead suggested that the Commission attempt to control the weed growth with herbicides and a limited available four-foot drawdown.
As a result, in February 1997, the Commission filed in state court a claim for land appropriation and/or inverse condemnation against the RRWC. RRWC, in turn, impleaded the Corps as a third party defendant. The Corps had the suit removed to the United States District Court for the Western District of Louisiana. The district court essentially allowed RRWC to withdraw from the case because the Corps bore sole responsibility for raising the water level in Pool 3. Nw. La. Fish & Game Pres. Commission v. Red River Waterway Commission, No. 97-1984, slip op. at 9 (W.D. La. July 28, 1999).
The Commission then submitted, on December 5, 2000, an administrative claim against the Corps. In this claim, the Commission requested $30,000,000 for "curative work" and "associated damages." The Commission claimed that the new water level in pool 3 as of January 1995 caused the uncontrollable growth of aquatic vegetation. The Commission also claimed that Preserve property contiguous to the lake had been damaged as a result of floods also attributable to the level of pool 3.
On January 12, 2001, the Corps office in Vicksburg, Mississippi rejected the claim as improperly filed. The Vicksburg office noted, inter alia, that the Commission had stated that the date of the incident leading to damage was "January 1995," outside of the two-year statute of limitations for the Federal Tort Claims Act. The Corps' district counsel in Vicksburg added that "none of my comments are to be construed as a final agency decision on your letter." Although the Vicksburg office asked the Commission to "clarify the intent" of its submission, the record does not show any further correspondence between the Commission and Vicksburg.
On July 5, 2001, the Commission filed suit in the District Court for the Western District of Louisiana against the United States, under the Federal Torts Claim Act (28 U.S.C. § 2675), and as a taking. In this suit, the Commission asserted that it had been prevented from carrying out its duties in managing the Preserve, and noted that curative costs would be approximately twenty-six million dollars. The district court found that the tort claim was barred under 28 U.S.C. § , No. 01-1264, slip op. at 1 (W.D. La. June 11, 2002). 2401(b)2; Nw. La. Fish & Game Pres. Commission v. United States, Civil Action No. 01-1264, Report and Recommendation at 11 (Apr. 1, 2002). The district court held that the tort claim had accrued by January 1997, when a committee of the Commission authorized legal action, but the filing date of the suit in July 2001 exceeded the two-year

statute of limitations for tort claims. The district court then transferred any possible taking claim to the Court of Federal Claims, which would properly be brought under the Tucker Act (28 U.S.C. § 1491), which has a six year statute of limitations. Nw. La. Fish & Game Pres. Commission v. United States.

In the Court of Federal Claims, the Commission amended its complaint to allege loss of use of land and water, diminution in market value of land, interference with wildlife habitat and recreational purposes, and damage to its property as a result of the raising of the water level of Pool 3 from 87 to 95 . The United States moved for dismissal for lack of subject matter jurisdiction, on the ground that the action, originally filed in July 2001, was barred by the six-year statute of limitations of 28 U.S.C. § 2501. The court granted the motion, holding that "accrual of the plaintiff's cause of action with regard to the alleged taking due to aquatic growth occurred no later than December 1994," when the Corps raised the level of Pool 3 to 95 . Final Decision, slip op. at 20. The court reasoned that at that time the Commission knew "about the damage that was going to occur as a result of raising the pool level."

2 "A tort claim against the United States shall be forever barred unless it is presented in writing to the appropriate federal agency within two years after such claim accrues." 28 U.S.C. § 2401(b) (West 1994).

Further, the court noted that the Commission had calculated, "as early as 1992," the cost of controlling the aquatic growth over the lifetime of the project—$7,575,000. It, thus, concluded the damages in this case "were not only foreseeable, but foreseen" even before 1994. The Commission appeals the dismissal disputing the accrual date, for purposes of the statute of limitations, that was arrived at by the Court of Federal Claims.

III.

This court has jurisdiction under 28 U.S.C. § 1295(a)(3). "Whether the Court of Federal Claims possesses subject matter jurisdiction is a question of law subject to de novo review." Western Co. v. United States, 323 F.3d 1024, 1029 (Fed. Cir. 2003). In addition, this court reviews de novo whether the Court of Federal Claims properly dismissed a complaint for failure to state a claim. Boise Cascade Corp. v. United States, 296 F.3d 1339, 1343 (Fed.Cir.2002) (citing Dehne v. United States, 970 F.2d 890, 892 (Fed. Cir. 1992)). "[I]n reviewing a dismissal for failure to state a claim, we must assume all well-pled factual allegations are true and indulge in all reasonable inferences in favor of the non-movant." Gould, Inc. v. United States, 935 F.2d 1271, 1274 (Fed. Cir. 1991).

This appeal only presents the application of the Title 28, section 2501 six-year statute of limitations to the Commission's claim. The Commission filed its tort and takings claims in the Western District of Louisiana on July 5, 2001. The trial court correctly accepted this date as the appropriate filing date for the takings claim. A taking occurs when governmental action deprives the owner of all or most of its property interest. United States v. Gen. Motors Corp., 323 U.S. 373, 378 (1945) (The word "property" "denote[s] the group of rights inhering in the citizen's relation to the physical thing, as the right to possess, use and dispose of it."). For example, "[w]here the government by the construction of a dam or other public works so floods lands belonging to an individual as to substantially destroy their value there is a taking within the scope of the Fifth Amendment." United States v. Lynah, 188 U.S. 445 (1903). The Supreme Court has held that "[t]he backing of water so as to overflow the lands of an individual . . . if done under statutes authorizing it for the public benefit, is such a taking as by the constitutional provision demands compensation." Pumpelly v. Green Bay & Miss. Canal Co., 80 U.S. 166, 172 (1871).

In this case, the accrual date of such a takings claim depends on several factors because the damage occurs gradually both as the water level increases and as the aquatic vegetation becomes uncontrollable.

The Commission argues that its "right to possess, use, regulate, and maintain the property in question was appropriated" by the Corps when the Corps refused to cooperate in a proposed drawdown of Black Lake to mitigate the growth of hydrilla and other aquatic plants. Thus, according to the Commission, the taking accrued in 1997, after both the appearance of significant hydrilla growth and the Corps' first definite refusal to draw down the water level or otherwise help the Commission mitigate its damages.

However, the trial court set the accrual date in 1994. The trial court reasoned that "a takings claim accrues when all events which fix the Government's alleged liability have occurred and the plaintiff was or should have been aware of their existence." Final Decision, slip op. at 11; see also Japanese War Notes Claimants Assn. of the Philippines, Inc. v. United States, 178 Ct. Cl. 630, 632 (Ct. Cl. 1967), cert. denied, 389 U.S. 971 (1967). The trial court further reasoned that December 1994 was the proper accrual date because at that time the plaintiff "knew or should have known" that raising the pool level would result in uncontrolled aquatic plant growth.

To the contrary, as revealed by the pleadings, the events that fix the Corps' alleged liability had not occurred by

December 1994. The events that fixed the Corps' alleged liability occurred, at the earliest, in 1997. Therefore, this court perceives an error in the reasoning of the Court of Federal Claims. The trial court reasoned that accrual occurred when the Commission "knew or should have known" of "the damage that was going to occur as a result of raising the pool level." The correct standard recites that accrual occurs when the harmed party knows or should have known of their existence and "all events which fix the government's alleged liability have occurred."

"In general, a takings claim accrues when all events which fix the government's alleged liability have occurred and the plaintiff was or should have been aware of their existence." (citing Hopland Band of Pomo Indians v. United States, 855 F.2d 1573, 1577 (Fed. Cir. 1988))); see also Fallini v. United States, 56 F.3d 1378, 1380 (Fed. Cir. 1995) ("As a general matter, a cause of action accrues when all the events have occurred that fix the defendant's alleged liability and entitle the plaintiff to institute an action."). The harm in this case, the uncontrolled hydrilla growth, did not occur (i.e., was not fixed) until well after the water level in Pool 3 reached its maximum height in December of 1994.

The trial court reasoned that the Corps was responsible only for "the taking of the right to drain water from the Black Lake into the Red River," not for uncontrolled aquatic growth. However, the uncontrolled aquatic growth was the harm that occurred as a consequence of the taking of the right to drain the lake. In the first place, that harm did not instantly occur when Pool 3 reached its maximum level. That December of 1994 event only set in motion the potential for future harm. That harm did not exist until much later. When the damages from a taking only gradually emerge, e.g., as in recurrent flooding, a litigant may postpone a suit for a taking until "the situation becomes stabilized" and "the consequences of inundation have so manifested themselves that a final account may be struck." United States v. Dickinson, 331 U.S. 745, 749 (1947). Dickinson established the principle that, "when the government allows a taking of land to occur by a continuing process of physical events, plaintiffs may postpone filing suit until the nature and extent of the taking is clear." Fallini, 56

Dickinson discouraged a strict application of accrual principles in unique cases involving Fifth Amendment takings by continuous physical processes. Applegate v. United States, 25 F.3d 1579, 1582, and held that the gradual character of the natural erosion process to the beach-front properties south of the Cape Canaveral harbor made accrual of the landowner's claim uncertain. Likewise, in Banks v. United States, 314 F.3d 1304 (Fed. Cir. 2003), this court also applied the stabilization doctrine to another shoreline erosion case. (Fed. Cir. 1994) (citing Dickinson, 331 U.S. at 749). This court followed the Supreme Court's Dickinson mandate in Applegate

This court's predecessor, the United States Court of Claims, also held that a claim does not accrue until the claimant suffers damage. Terteling v. United States, 334 F.2d 250, 254 (Ct. Cl. 1964). Because some growth of hydrilla is normal, the damage in this case, which was uncontrolled overgrowth and the Corps refusal to reduce the water level, did not occur until January 1997. In 1994, when the Corps had not yet issued a final refusal, there was only the possibility or threat of damage or a taking. A possible future taking of property cannot give rise to a present action for damages. United States v. 3,218.9 Acres of Land, 619 F.2d 288 (3rd Cir. 1980). Thus, in this case, until the hydrilla had grown, and had grown to harmful levels, and the Corps refused to drain the lake to alleviate the harm caused by the overgrowth of hydrilla, damages were not "present," i.e. they were still unquantifiable and speculative. See Alder v. United States, 785 F.2d 1004 (Fed. Cir. 1986)(court affirming Claims Court's holding that ranchers' claim accrued in July of 1973 after they lost all grazing permits, and were obliged to discontinue ranching operations, and had no right to use access road across tribal lands, and their fee land had no market or mortgage value). Until damages were quantifiable and present, the potential harm that could be caused by the hydrilla was only a threat. It did not become clear that the gradual process set in motion by the Corps had affected a permanent taking until the situation, i.e. the overgrowth of hydrilla, "stabilized" in 1997.

Thus, though the trial court correctly perceived that the harm in this case was the gradual emergence of uncontrolled aquatic growth, it erred when it fixed the accrual date at the time of the event that set this gradual growth problem in motion, i.e., the filling of pool 3, as opposed to the time the situation had "stabilized." See Final Decision, slip op. at 19. Because the harm manifested itself only gradually after 1994, and the nature and extent of the harm was not clear in 1994, the accrual date of the taking was later than December 1994.

The Commission could only conjecture about potential harms or the prospect that the Corps may agree to mitigate those harms when until they actually occurred. The Commission's calculation of damages of about eight million dollars in 1992 (before the trial court's erroneous accrual date) does not demonstrate, as the trial court mistakenly held, that "the damages in this case were not only foreseeable, but in fact foreseen." Rather, this calculation, which was apparently too low, shows not only that damage was a potential future occurrence but that early calculation of its extent was premature. Indeed, the Corps might have elected to avoid the

damages altogether by allowing a drawdown, which would alleviate the overgrowth of hydrilla. Moreover, the record even disputes whether this premature guess has any validity in light of the competing allegation that damages may rise to almost thirty million dollars. The trial court's decision is not consistent with Dickinson. The harm in this case did not stabilize until well after the first emergence of hydrilla.

Thus, this court concludes that the accrual date for the takings claim was no earlier than January 1997. The trial court erred in dismissing the Commission's claim as untimely filed. Therefore, on remand, the trial court need not further address equitable tolling of the Tucker Act, or a bar on the Commission's claim for failure to exhaust all possible administrative remedies. See, e.g., Martinez v. United States, 333 F.3d 1295, 1318 (Fed. Cir. 2003).

Conclusion

Therefore, the accrual of the Commission's alleged taking could not have occurred before January 2, 1997. This court finds, therefore, that the taking claim is not time-barred. This court does not reach the issue of equitable tolling under 28 U.S.C. § 2501. This court reverses and remands.

COSTS

Each party shall bear its own costs.

REVERSED and REMANDED

APPENDIX IV

(return to typemap)

Typemap

Black/Clear Lake has been surveyed for vegetative coverage in years 1980, 1982, 1983, 1984, 1988, 1989,
1991, 1992, 1993, 1995, 1997, 1998, 1999, 2000, 2006, 2009, 2012 & 2013. Typemaps derived from the
most recent survey conducted on October 1, 2013 are shown in Figures 1 -4.

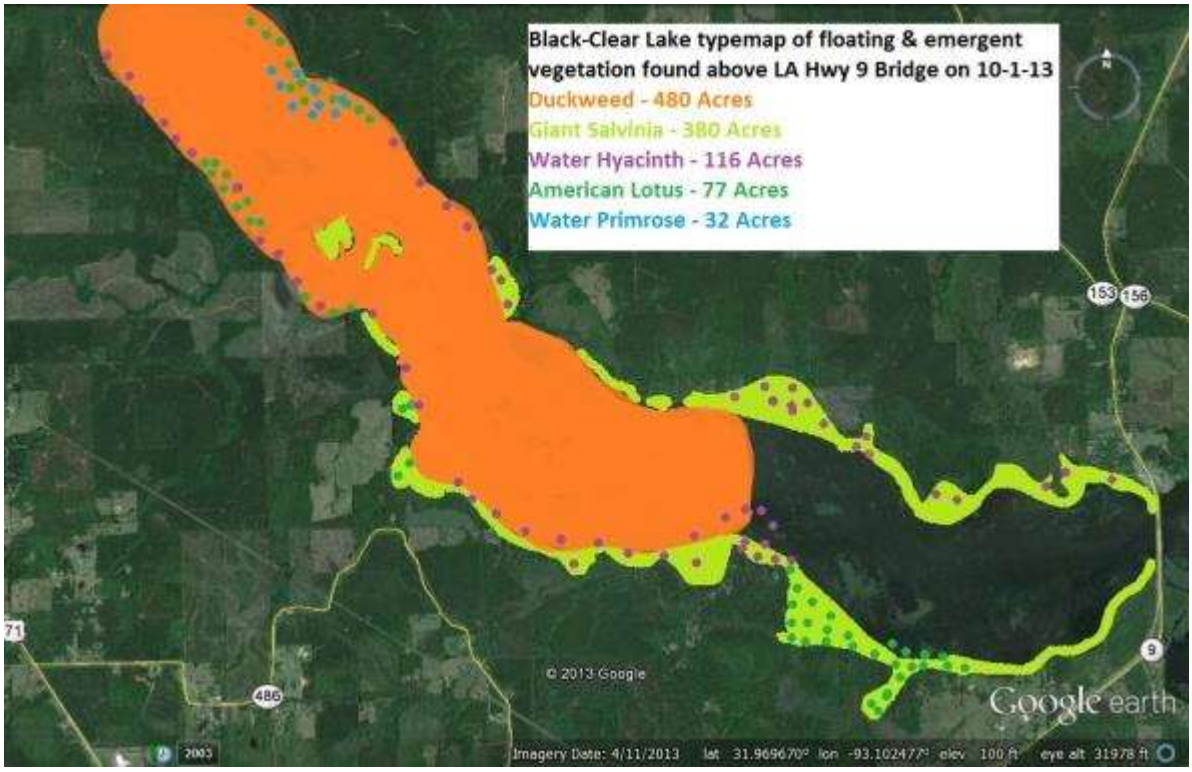

Figure 1. Vegetation typemap of floating and emergent vegetation found above the LA Hwy 9 Bridge at Black/Clear Lake, Natchitoches Parish, LA on October 1, 2013.

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.

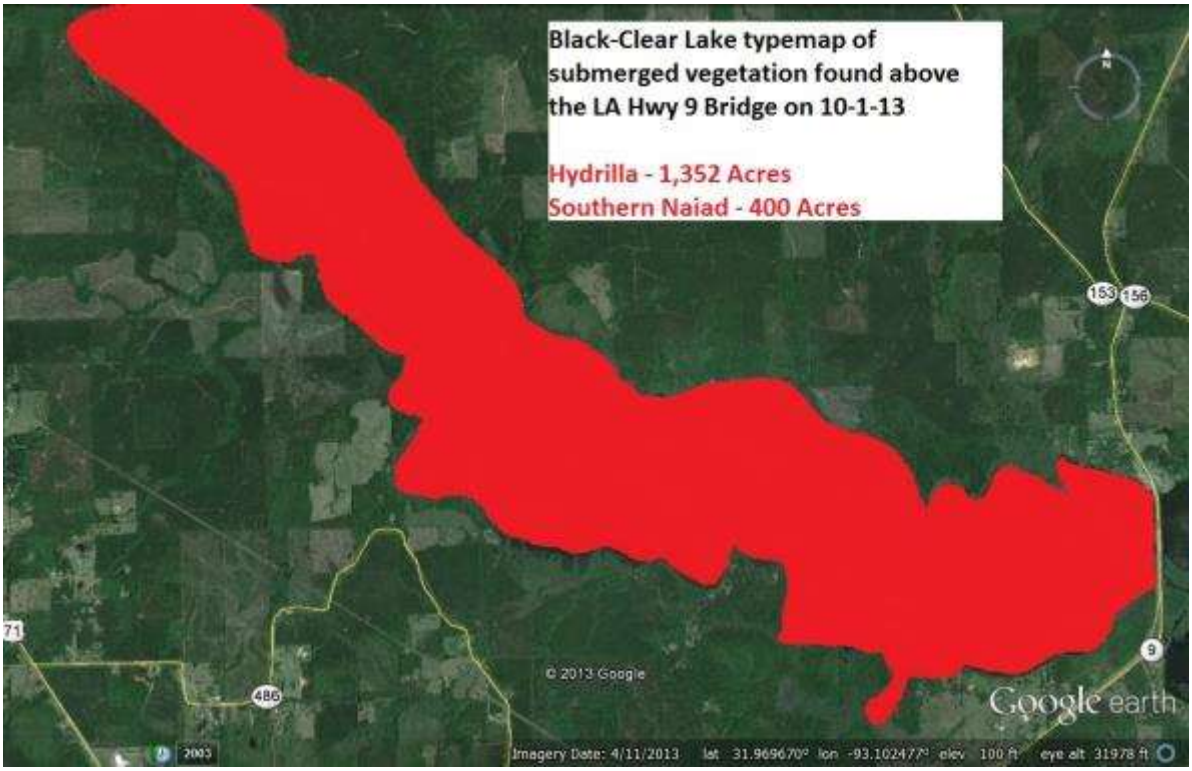

Figure 3. Vegetation typemap of submerged vegetation found above the LA Hwy 9

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.