

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



OFFICE OF FISHERIES

INLAND FISH SECTION

PART VI-A

WATERBODY MANAGEMENT PLAN SERIES

CADDO LAKE

LAKE HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

DOCUMENT SCHEDULED TO BE UPDATED EVERY THREE YEARS

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LAKE HISTORY

GENERAL INFORMATION

Parish / Location:

Caddo Parish – near the town of Mooringsport; the lake encompasses portions of the southern part of Marion County, the northern part of Harrison County, Texas and the western part of Caddo Parish, Louisiana with the state line bisecting the lake into roughly equal portions.

Date Lake Formed:

Caddo Lake is a natural lake formed from the Great Raft of logs and debris which impeded the flow of the Red River and inundated low lying areas upstream. The New Madrid earthquake which occurred in 1811 also may have caused the land in the area to subside aiding in the formation of Caddo Lake. The Great Raft was cleared in 1873 and the water level dropped in Caddo Lake and other raft lakes. The impoundment of Cypress Bayou in 1914 recreated Caddo Lake.

Impoundment:

The Caddo Lake Dam was authorized by the River and Harbor Act on June 25, 1910 as part of the Cypress Bayou and Waterway Navigation Project. The U.S. Army Corps of Engineers completed a dam across Cypress Bayou in 1914 which stabilized the level of Caddo Lake. In June of 1971, a new dam was completed just downstream of the original structure which was aging and cracked.

Size (surface area):

Caddo Lake covers approximately 26,800 acres at normal pool stage. There are approximately 14,000 acres of the lake in Louisiana when the water is at normal pool stage. The size of the lake varies with water levels, ranging from 18,700 acres during normal seasonal low water levels up to 35,000 acres at normal seasonal high water levels.

Watershed:

There are 2,812 square miles of area (1,799,680 acres) that drain into Caddo Lake. The ratio of watershed to lake surface area is 67:1.

Pool Stage:

Normal pool stage for Caddo Lake is 168.5 MSL which is set at the spillway crest. Seasonal water level fluctuations range from approximately 167.5 MSL to 171.5 MSL.

Spillway Width:

Spillway of stepped design with 860 feet of the concrete spillway set at 168.5 MSL and 1540 feet of the concrete spillway set at 170.5 MSL. The spillway is pictured in Figure 1.



Figure 1. Stepped concrete spillway at Caddo Lake, LA.

Drawdown (outlet) Structure Description:

Caddo Lake does not have drawdown capabilities.

Who Controls:

The U.S. Army Corps of Engineers, Vicksburg District, is responsible for maintenance of the dam on Caddo Lake. Local offices involved with Caddo Lake include the Bayou Bodcau Office:

U. S. Army Corps of Engineers, Vicksburg District

Bayou Bodcau Office

1700 Bodcau Dam Road

Haughton, LA 71037

Phone: 318-949-1804

<http://www.mvk.usace.army.mil/Missions/Recreation/CaddoLake.aspx>

The Louisiana Field Office located in Monroe is also involved with Caddo Lake:

U. S. Army Corps of Engineers, Vicksburg District

Louisiana Field Office

3505 South Grand

Monroe, LA 71202-5273

Phone: 318-322-6391

Fax: 318-387-4574

<http://www.mvk.usace.army.mil/Missions/Recreation/LouisianaFieldOffice.aspx>

LAKE AUTHORITY

Association:

Caddo Lake Watershed District Commission (CLWDC)

Authorization:

Created in 1995 by R.S. 38:3087.71 through 38:3087.87 as a political subdivision of the state of Louisiana. See [APPENDIX I](#).

Board of Commissioners – Caddo Lake Watershed District

Members of the Caddo Lake Watershed District Board of Commissioners are appointed by the Caddo Parish Police Jury. All members are nominated by municipalities within the district.

Caddo Lake Watershed District Board of Commissioners

| | |
|----------------|-------------------------|
| Shreveport - | Wes Wyche |
| Oil City - | J. B. “Bob” Roddey |
| Blanchard - | Patsy Lee |
| Mooringsport - | Dale Nix, Jr., Chairman |
| Vivian - | Dr. Charles McCormick |

Website - <http://www.caddo.org/index.aspx?NID=130>

Mailing Address:

Caddo Lake Watershed District
C/O Wes Wyche
P.O. Box 31109
Shreveport, LA 71130

ACCESS

Boat Ramps:

There are two public boat launching facilities available for use on the Louisiana side of Caddo Lake. There is no fee. Each of these areas has boat mooring facilities adjacent to the ramp. Four private commercial marinas offer boat launching for a nominal fee as well. The names of the facilities, physical descriptions and geo-referenced locations are found in Table 1.

Table 1. – Locations and descriptions of Caddo Lake, Louisiana public boat ramps.

| Ramp | Coordinates NAD 83 | Ramp | Parking |
|---------------------------------------|----------------------------|----------|-----------------------------|
| Mooringsport Ramp (Public) | N 32.69522 W -93.95794 | Concrete | Blacktop – 15 Trailers |
| Earl G. Williamson Park (Public) | N 32.72689 W -93.97194 | Concrete | Blacktop – 60 Trailers |
| Shady Acres (Pay to launch) | N 32.736194 W -94.02244 | Concrete | Gravel / Dirt – 50 Trailers |
| Shady Rest (Pay to launch) | N 32.772389 W -93.98969 | Concrete | Gravel / Dirt – 12 Trailers |
| Pelican Lodge (Pay to launch) | N 32.735361 W -94.04130 | Concrete | Gravel / Dirt – 10 Trailers |
| Drift - In Landing (Pay to launch) | N 32.700528 W -93.94380 | Concrete | Gravel / Dirt – 15 Trailers |

See [APPENDIX II](#) - “Caddo Lake Public Boat Ramps” for mapped locations of ramps.

Piers:

There is a public fishing pier at Earl G. Williamson Park. This is a floating pier that extends out into the lake (Figure 2). The Historical Caddo Lake Drawbridge located adjacent to the launch facility at Mooringsport is also utilized as a fishing pier. There are boat mooring piers available at the Mooringsport Ramp and Earl G. Williamson Park boat ramp that can be used for fishing access.



Figure 2. Floating fishing pier at Earl G. Williamson Park on Caddo Lake, LA.

State / Federal Facilities:

The U. S. Army Corps of Engineers operates a day use recreational facility at the Caddo Lake Dam. This is a favorite bank fishing site for many anglers who fish in the outflow channel below the Caddo Lake Dam.

The Texas Parks and Wildlife Department operates Caddo Lake State Park located on the upper end of the lake near Karnack, TX. The website containing information about the park can be viewed at: <http://www.tpwd.state.tx.us/state-parks/caddo-lake>.

Parish Facilities:

The Caddo Parish Parks and Recreation Department operates the Earl G. Williamson Park near Oil City, the Historical Caddo Lake Drawbridge adjacent to the Mooringsport boat ramp, and the Horace M. Downs Park at the Caddo Lake dam.

Caddo Parish Parks and Recreation Department
8012 Blanchard-Furh Rd.
Shreveport, LA 71107
318-929-2806

Website:

<http://www.caddo.org/facilities.aspx?search=1&CID=2&RID=3&Page=detail>

The Earl G. Williamson Park is a 40 acre park which offers a public boat ramp, fishing pier, restrooms, picnic facilities, playgrounds, a swimming area, and tent and RV camping areas. The park is located near Oil City off LA Hwy. 1.

The Horace M. Downs Park on Crouch Dam Rd. near Mooringsport offers bank fishing access, grills, picnic areas, and a portable toilet.

The Historical Caddo Lake Drawbridge at Mooringsport is utilized as a fishing pier and has an adjacent public boat ramp.

Artificial Reefs:

No artificial reefs have been placed in Caddo Lake by LDWF.

SHORELINE DEVELOPMENT

The shoreline of Caddo Lake is moderately developed. Development along the shoreline consists primarily of homes and camps. There is also some industrial development around the lake, primarily in support of the petroleum industry on the lake. The Lieberman Power Plant on the Louisiana side of Caddo Lake is owned and operated by the Southwestern Electric Power Company unit of American Electric Power (AEP SWEPCO). This natural gas fired power plant uses water from Caddo Lake in a once through cooling process.

PHYSICAL DESCRIPTION OF LAKE

Shoreline Length: Approximately 206 Miles

Timber Type: Prior to the formation of Caddo Lake, bottomland hardwoods and overflow cypress swamps were found in the floodplain areas. Once these areas were inundated, the resulting cypress forest developed into one of the largest in the nation.

Average Depth: 4.8 feet at normal pool stage

Maximum Depth: 27 feet

Total Water Volume at Pool Stage: 128,600 acre feet

Natural Seasonal Water Fluctuation: 2-3 feet

EVENTS/ PROBLEMS

The flood plain in the Cypress Bayou basin existed for thousands of years prior to the formation of the natural lake. During that time the Caddo Lake area was a series of bayous, sloughs, creeks, and low lying areas that were often inundated for sustained periods following heavy rains. As the Great Raft formed on the Red River, the water levels rose in these areas and a natural lake was formed. According to an ecological survey conducted by Lionel James between November 5, 1913 and April 12, 1914, Caddo Lake was formed sometime between 1770 and 1780. This estimated time of formation of Caddo Lake was obtained by examination of cross sections of bald cypress trees, several species of hardwood trees and many dead stumps in the area.

During the time from 1835, when Captain Henry Miller Shreve began work on clearing the Great Raft, to the final clearing of the Great Raft in 1873, Caddo Lake or “Ferry Lake” as it was known at that time, was home to several thriving steamboat ports. Once the log jams were cleared and the lake level began to fall, the steamboat traffic on Caddo Lake diminished. Once the water level receded in Caddo Lake following removal of the Great Raft, the habitat in the lake changed and as a result the species composition changed also.

In 1909, a new economic boon was discovered in the lake, freshwater pearls. Freshwater mussels were collected by wading in the shallow flats around Potter’s Point. Tent cities sprang up on the shoreline and hillside around Potter’s Point as people flocked to the area to participate in the “Pearl Rush”. The pearls were purchased on the spot by buyers working for large companies. With the installation of the dam and spillway on Cypress Creek in 1914, the water level was stabilized and the mussel beds were out of reach of the pearl hunters who had previously waded the shallow flats harvesting them. Other methods of harvest were tried but they were not successful and the “Pearl Rush” ended as quickly as it started.

Oil was discovered near Caddo Lake in 1905. The first over-the-water oil well in the world was drilled in 1911 on Caddo Lake. Over the next several years, hundreds of wells were drilled on Caddo Lake and the surrounding landscape. The petroleum industry provided a much needed positive economic impact to the area, but the industry was largely unregulated at that time and threatened the fragile habitats of Caddo Lake. Oil production continues to this day on Caddo Lake, but is strictly regulated and the petroleum industry is able to coexist with the fragile habitats found on the lake (Figure 3).



Figure 3. Work boats tending oil wells in Jeem’s Bayou on Caddo Lake, LA.

Navigation Hazards / Channel Marking

Stumps are a major navigation hazard in much of the lake. Manmade obstructions such as oil wells and other materials placed in the lake in conjunction with the petroleum industry also constitute major navigational hazards in the lake.

Caddo Lake has a complex of boat roads which allow boaters to navigate easily to most areas of the lake. The Caddo Parish Parks and Recreation Department is responsible for maintenance of the boat roads and channel markers on the Louisiana side of the lake and the Cypress Valley Navigation District is responsible for maintenance on the Texas side of Caddo Lake. Boaters are advised to use caution at all times on Caddo Lake due to the underwater obstructions and relatively narrow boat roads on the lake.

The boat roads on Caddo Lake are marked with pilings that are placed on the left side of the navigational path as a boat travels upstream. Channel markers indicating a portion of the “A” Boat Road on Caddo Lake are shown in Figure 4.



Figure 4. Channel markers indicating a boat road on Caddo Lake, LA.

Drawdowns

Caddo Lake does not have drawdown capability.

Ramsar Wetland

On October 23, 1993, approximately 8,000 acres of Caddo Lake were designated as a wetland of international importance in accordance with the Ramsar Treaty. This was the thirteenth Ramsar Site in the United States. In 1998, approximately 11,700 additional acres were added to the site. Thirty-three square miles of Caddo Lake and surrounding lands in Texas have been designated as a Ramsar Site. This designation is significant as Caddo Lake, TX, is one of only seventeen wetlands in the United States that carries this designation.

MANAGEMENT ISSUES

AQUATIC VEGETATION

Caddo Lake has had problems with aquatic vegetation since impoundment. When the first dam was constructed in 1914 and water levels stabilized, native aquatic vegetation flourished. Periodic seasonal flood pulses on Big Cypress Bayou helped control aquatic vegetation in Caddo Lake. When Lake O' the Pines was constructed upstream of Caddo Lake on Big Cypress Bayou in 1959, the natural flow regime into Caddo Lake was altered. The large flood pulses that had previously come down Big Cypress Bayou into Caddo Lake did not occur at the same duration and intensity as before and did not impact aquatic vegetation and bottom sediments to the extent of the natural flow regime.

Water hyacinth (*Eichhornia crassipes*) was introduced into the lake in the 1940's, and despite ongoing control measures, has been problematic since. Primary control measures used for control of water hyacinth have been foliar applications of 2,4-D and glyphosate herbicides. Water hyacinth weevils (*Neochetina spp.*), which are native to Central and South America, were introduced into the U.S. in the 1970's. The mottled water hyacinth weevil (*Neochetina eichhorniae*) and the chevroned water hyacinth weevil (*Neochetina bruchi*) are present on Caddo Lake. Scars on the leaves of the plants indicate their activity, but they have not controlled the water hyacinth problem on Caddo Lake. The weevils may slow the growth of the plants and reduce flower and seed production.

Hydrilla (*Hydrilla verticillata*) was first documented on Caddo Lake in 1993 and quickly spread over large areas of the lake. Chemical control is cost prohibitive on a large scale, but can be useful on a smaller scale such as near boat ramps or swimming areas. Hydrilla growth is cyclical in that it will show signs of decline in coverage in some years and then quickly expand its coverage in subsequent years. The reason for this is not known but is possibly linked to turbid, high water conditions early in the growing season. Grass carp (*Ctenopharyngodon idella*) can provide control of hydrilla in many instances, but have not been used on Caddo Lake to date due to the cyclical growth patterns of the plant on the lake.

Giant Salvinia (*Salvinia molesta*) was discovered in the Jeem's Bayou area (Louisiana) of Caddo Lake in June of 2006. At the time the plant was discovered, the infestation covered approximately 150 acres. By the time a type map survey was performed in mid-August 2006 the coverage area had increased to approximately 300 acres despite ongoing foliar herbicide applications. The following year (2007) the coverage of salvinia had once again doubled to 600 acres despite the ongoing foliar herbicide applications. Cold temperatures and continued herbicide applications reduced the coverage to 50 -100 acres following the winter of 2007 – 2008. By late summer of 2008, coverage of giant salvinia had increased to approximately 1500 acres. There was approximately 50 – 100 acres of giant salvinia on the Louisiana side of Caddo Lake following the winter of 2008 – 2009. Coverage had increased to over 1000 acres prior to a high water event in September and October of 2009 which flushed much of the giant salvinia out of the Jeem's Bayou area and presumably over the spillway as coverage was greatly reduced following this occurrence. Extremely cold temperatures in January of 2010 reduced the plants to less than 1 acre total coverage. By the fall of 2010 the plants had expanded to cover approximately 150 acres primarily in the Jeem's Bayou area. Cold temperatures in January 2011 reduced the coverage of giant salvinia to approximately 2 acres following that winter. In June of 2011 the coverage of giant salvinia on the Louisiana side of the lake was relatively sparse and widely scattered with most plants located in the Jeem's Bayou area. Giant salvinia would cover approximately 5 acres if consolidated. In July of 2012, giant salvinia covered approximately 200 acres on the Louisiana side of the lake mostly in the Jeem's Bayou area. In mid-February of 2013, there was approximately 450 acres in Louisiana.

Estimates made in late summer of 2013 indicate that aquatic vegetation covers approximately 2,000 acres or roughly 15% of the lake on the Louisiana side. Giant salvinia covered about 800 acres. Water hyacinth and hydrilla were present but were

not causing major problems on the Louisiana side of the lake when the observations were made. Alligator weed (*Alternanthera philoxeroides*) was primarily found as a fringe on some of the shoreline areas.

In addition to the exotic invasive species noted above, several species of native aquatic plants are problematic on Caddo Lake. The most troublesome submerged species are fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*) and variable-leaf milfoil (*Myriophyllum heterophyllum*) which covered around 500 acres. Native emergent aquatic species which hinder boating and fishing access are American lotus (*Nelumbo lutea*), Spatterdock (*Nuphar advena*), fragrant water lily (*Nymphaea odorata*) and to some extent Illinois pondweed (*Potamogeton illinoensis*). American lotus has been expanding in coverage especially from Mooringsport to the dam and covered approximately 450 acres. Spatterdock was another predominant plant and coverage was estimated at 200 acres.

In Louisiana, the shoreline areas, Jeem's Bayou, the area between Mooringsport and the dam, and the area along the state line generally have the worst aquatic vegetation problems. In many areas of the lake just across the state line in Texas, access is limited to just the boat roads where boat traffic curtails encroachment from the vegetation. Dense cypress forests and shallow water in many of these areas make foliar herbicide applications difficult. These areas also serve as ideal nursery areas for giant salvinia providing shade and calm water where this plant thrives. The open water areas of the main lake generally don't have severe aquatic vegetation problems due to wind and wave action and turbidity.

The lack of drawdown capabilities on Caddo Lake is a major hindrance in combating aquatic vegetation. Other issues are restrictions on herbicide applications near potable water intakes and dense cypress forests and shallow backwater areas which restrict access for spray boats.

The aquatic vegetation problems on the Texas side of the lake are generally worse than what is found on the Louisiana side as the lake is shallower and generally more heavily forested. The altered water regime following the construction of Lake O' the Pines has had more impact on the upper end of the lake in Texas as the flushing action has been diminished and hypoxic and anoxic zones occur during the summer months in the upper end of the lake from the buildup of organic matter on the bottom.

Aquatic Vegetation Surveys and Type Maps:

Aquatic vegetation type map surveys were initiated on Caddo Lake following the discovery of giant salvinia on the lake in 2006. Assessments of the aquatic vegetation on Caddo Lake were conducted by Inland Fisheries Personnel in 2006, 2007, 2009, and 2011 - 2013.

The latest aquatic vegetation type map conducted in 2013 is contained in [APPENDIX III](#). Type map surveys for previous years are contained in Caddo Lake, Part VI-C (Archives).

Aquatic Vegetation Treatment History:

Biological

Giant salvinia weevils (*Cyrtobagous salviniae*) were first introduced on the Louisiana side of Caddo Lake during 2007. Weevil infested giant salvinia was transported from the Texas side of Toledo Bend and stocked in enclosure that was located in Jeem's Bayou. This area was difficult to access with spray boats. Subsequent introductions were conducted in 2008 and 2009. These introductions were concentrated around potable water intakes in Jeem's Bayou and near Mooringsport. The weevil population in Caddo Lake was devastated by several days of subfreezing weather during January of 2010 followed by another hard freeze in January 2011.

Weevil introductions continued in 2011 utilizing weevils reared in Lewisville, TX at the U.S. Army Corps of Engineers Lewisville Aquatic Ecosystem Research Facility. These weevils were stocked in remote locations throughout the Big Green Brake area near the state line. It is hoped that these weevils may be more cold tolerant than those initially stocked as they are raised at a more northern latitude. Approximately 69,000 adult salvinia weevils have been stocked on the Louisiana side of Caddo Lake from 2007 through October 2013.

The Center for Invasive Species Eradication (CISE) of the Texas A&M Agrilife Extension Service, Texas A&M Agrilife Research and the Texas Water Resources Institute operates the Salvinia Weevil-Rearing Facility at the Caddo Lake National Wildlife Refuge. The facility is located on the decommissioned Longhorn Army Ammunition Plant in Harrison County, TX near Caddo Lake. This facility began production in 2011 and has had good success in raising weevils for release in Caddo Lake.

The weevils have had a slight impact on some areas of the lake thus far, but these are very limited and small in scale. No noticeable results to the overall giant salvinia infestation have been noted on Caddo Lake to be a product of the weevil stocking.

Chemical

The use of herbicides is an important component of the LDWF integrated pest management program. The proper selection and use of herbicides is essential to achieve cost effective benefits and to avoid damage to non-target species. Each product listed has been approved by the Environmental Protection Agency for aquatic use. Aquatic vegetation is treated according to the standard operating procedures for the application of herbicides as adopted by the LDWF Inland Fisheries Section.

Foliar herbicide applications by LDWF spray crews for floating and emergent aquatic vegetation have been ongoing for many years on Caddo Lake. Prior to the discovery of giant salvinia on Caddo Lake in 2006, most applications were directed at water hyacinth, American lotus and alligator weed. Foliar applications for control of giant salvinia have been the primary activity of vegetation control efforts on Caddo Lake since 2006. In 2013, foliar herbicide applications were made to giant salvinia by LDWF spray crews and contractors. A total of 1,059 gallons of herbicides were applied to 1,059 acres of infestations. Table 2 lists the acres treated from 2005 through June 30, 2013

The primary herbicide used for control of American lotus and water hyacinth on Caddo Lake has been a foliar application of 2,4-D, at a rate of 0.5 gal/acre. Alligator weed has generally been treated in the past with a glyphosate herbicide such as Aquamaster or Aquastar at a rate of 0.75 gal/acre or 2,4-D at 0.5 gal/acre. Foliar applications of several different herbicides at varying rates have been tried for control of giant salvinia. Glyphosate herbicides have been used at rates ranging from 0.5 to 1 gal/acre, with most applications made at a rate of 0.75 gal/acre. The contact herbicide diquat, available in several different brand names, has been used at rates from 0.5 to 1 gal/acre with most of the applications being made at the higher rates. In recent years a mixture of glyphosate (0.75 gal/acre) and diquat (0.25 gal/acre) with Aqua King Plus (0.25 gal/acre) and Thoroughbred (8 oz. /acre) surfactants has been used during the warmer months (April 1 – October 31). During the cooler months (November 1 – March 31) foliar applications of diquat are made at a rate of 0.75 gal/acre with 0.25 gal/acre non-ionic surfactant.

Table 2. – Herbicide applications for vegetation control on Caddo Lake, LA

| Treatment Year | Species of Plants | Acres Treated |
|-----------------------|--|----------------------|
| 2005 | American lotus, alligator weed, primrose | 20 |
| 2006 | giant salvinia, American lotus, water hyacinth, alligator weed | 1,171 |
| 2007 | giant salvinia, American lotus, water hyacinth, alligator weed | 1,108 |
| 2008 | giant salvinia, American lotus, water hyacinth, alligator weed | 1,453 |
| 2009 | giant salvinia, American lotus, water hyacinth, alligator weed | 3,247 |
| 2010 | giant salvinia, American lotus, water hyacinth, alligator weed, duckweed, water lily | 1,377 |
| 2011 | giant salvinia, water hyacinth, alligator weed | 112 |
| 2012 | giant salvinia, American lotus, water hyacinth, alligator weed | 2,441 |
| Through June 30, 2013 | giant salvinia | 1,059 |

BORDER WATERS

Caddo Lake is positioned along the Louisiana / Texas border which bisects the lake into roughly equal portions. The political boundary in the lake presents issues which are unique to border waters. Issues such as water rights, fisheries management and aquatic vegetation control must be coordinated by both states.

The Red River Compact was signed by the member states of Arkansas, Louisiana, Oklahoma, and Texas in 1978 to avoid or resolve disputes over the waters of the Red River Basin. The Red River Compact can be found in [APPENDIX IV](#).

The Caddo Lake Compact was negotiated in 1979 to supplement the Red River Compact with regards to issues concerning Caddo Lake. The Red River Compact outlines the water rights of each state. The Caddo Lake Compact was written to preserve the environmental, cultural and natural resources of Caddo Lake and allow for water utilization for the states of Louisiana and Texas. The Caddo Lake Compact has not been approved by the legislature of either Louisiana or Texas, but does function as an informal operating agreement for use of the water from Caddo Lake. The Caddo Lake Compact can be found in [APPENDIX V](#).

The Texas Parks and Wildlife Department (TPWD) is the Texas counterpart to LDWF which is charged with management of the fisheries resources on the Texas side of Caddo Lake. For more information about Caddo Lake from the TPWD you may visit the following link:

<http://www.tpwd.state.tx.us/fishboat/fish/recreational/lakes/caddo/>.

The Cypress Valley Navigation District is charged with maintaining boater access throughout the Texas side of Caddo Lake. The Northeast Texas Municipal Water District (NETMWD) is responsible for protecting the water quality in the Cypress Basin and providing a sufficient supply of water to communities in Northeast Texas. Further information regarding the NETMWD can be found at the following website:

<http://www.netmwd.com/>.

ENVIRONMENTAL GROUPS

There are several environmental groups which are concerned with Caddo Lake. The most active and influential of these is the Caddo Lake Institute (CLI). For more information on the Caddo Lake Institute and their ongoing efforts to preserve and protect Caddo Lake visit their website: <http://www.caddolakeinstitute.us/>

Two other groups which are primarily concerned with Caddo Lake are the Greater Caddo Lake Association of Texas (GCLA), more information about the GCLA can be found at <http://caddolakenews.org/index.htm>; and the Louisiana Greater Caddo Lake Association (LA GCLA), more information can be found on their website: <http://www.caddolakela.com/index.html>.

One other local group which is involved to some extent with Caddo Lake but more involved with the basin as a whole is the Red River Valley Association (RRVA). A link to their website is: <http://www.rrva.org/>.

These local environmental groups especially the CLI, GCLA, and LA GCLA have been very involved with efforts to preserve and protect Caddo Lake; environmental flows issues, and water rights. <http://www.caddolakela.com/index.html>

HISTORY OF REGULATIONS

Recreational

The recreational fishing regulations on Caddo Lake have historically been confusing to anglers due to Caddo Lake being bisected by the state border with approximately one half of the lake lying in Louisiana and the other half in Texas. Each state had its own set of recreational fishing regulations and the state line is not well marked.

Black bass regulations have been of particular concern to anglers and the respective state agencies charged with managing the fisheries resources of Caddo Lake. A joint meeting between LDWF and TPWD was held in 1985 in an effort to unify recreational fishing regulations on Caddo Lake and other border waters. An agreement on uniform regulations could not be reached at this meeting. At the time of the meeting, Louisiana had a 15 fish daily creel with no size limit which had been in place for many years. Texas had a 10 fish daily creel limit and a 10" minimum length limit for black bass in place from 1975 - 1987.

During a meeting between the two agencies conducted in November of 1987, an agreement was reached to have a uniform regulation for black bass with a 12" minimum length limit and a 10 fish creel limit. The TPWD implemented this regulation in 1987. LDWF followed suit in 1988. This unified regulation helped reduce confusion for anglers fishing in Caddo Lake. Following another meeting in 1990, both states adopted a 14" minimum length limit with an 8 fish creel for black bass which went into effect on April 1, 1991.

In 1992, after approximately 5 years of similar regulations for black bass on Caddo Lake both states agreed to replace the minimum length limit with a slot limit. Texas proposed to adopt a 14" – 18" protected slot limit with a 3 fish creel limit, Louisiana proposed a 14" – 17" slot limit with a 10 fish creel limit. The 14" – 18" slot with a 3 fish creel limit was adopted by Texas in 1993. In June of 1993, Louisiana adopted a 14" – 17" slot limit with a 10 fish creel limit with only 4 fish over 17". In September 1995, Texas increased the creel limit from 3 to 5 fish but retained the 14" – 18" slot limit for the Texas side of the lake.

Fisheries biologists from both Texas and Louisiana concurred on uniform regulations for most recreational fish species on Caddo Lake and other border waters during a meeting on October 6, 2010. Following approval from the Louisiana Wildlife and Fisheries Commission and the Texas Parks and Wildlife Commission, the new regulations listed below in Table 3 went into effect on September 1, 2011. This was the first time since 1992 that there were uniform regulations for black bass on Caddo Lake, and the first time ever that uniform regulations were in place for several other species. Both states have not had any bag, possession, or size limits on bream for a number of years.

Table 3. Shared Louisiana-Texas recreational fishing regulations for Caddo Lake.

| | |
|-----------------------|--|
| Channel Catfish | No minimum length limit (MLL) Only 5 fish over 20" |
| Blue Catfish | 50 fish bag limit in aggregate of Blue & Channel Catfish |
| Flathead catfish | MLL 18" 10 fish bag limit |
| White bass | No MLL 25 fish bag limit |
| Yellow bass | No MLL No bag limit |
| Largemouth Bass | 14-18" protected slot limit 8 fish bag limit in aggregate with Spotted Bass Only 4 fish over 18" |
| Spotted bass | No MLL 8 fish bag limit in aggregate with Largemouth Bass |
| Black & White Crappie | No MLL 25 fish bag limit |

The new uniform regulations on Caddo Lake cover most species that recreational anglers seek. These regulations along with other recreational fishing regulations can be viewed at the links below:

Louisiana 2014 recreational fishing regulations:
<http://www.wlf.louisiana.gov/fishing/regulations>

Texas fishing regulations:
http://www.tpwd.state.tx.us/regulations/fish_hunt/

Commercial

Caddo Lake does not support a large commercial fishery. The primary species sought by commercial fishermen on the Louisiana side of the lake are channel catfish, blue catfish, and flathead catfish. These species are also sought by recreational fishermen.

State regulations apply on the Louisiana side of Caddo Lake except that the use of gill nets, trammel nets and fish seines are prohibited.

The 2014 statewide commercial fishing regulations for Louisiana may be viewed at:
<http://www.wlf.louisiana.gov/fishing/regulations>

Texas fishing regulations place much greater restrictions on freshwater commercial fishermen than Louisiana regulations do. In Texas, for instance, channel catfish, blue catfish and flathead catfish are listed as game fish, however; there is an exception for the commercial harvest of channel catfish and blue catfish over 14" in Harrison and Marion Counties where Caddo Lake is found. Texas regulations do not allow for the use of commercial fishing gear such as gill nets; trammel nets, flag nets, hoop nets, and most other types of entanglement or entrapment devices for the capture of fish in

freshwater areas of the state. The only legal methods are those listed in the Texas Commercial Fishing Guide which can be viewed at the following link:

http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_v3400_0074.pdf

DRAWDOWN HISTORY

Caddo Lake does not have drawdown capability. Low water events during periods of drought have simulated the natural water regime in the lake and have been beneficial to fisheries habitats and provided some vegetation control as well.

FISH KILLS/ DISEASE HISTORY, LMBV

A large fish kill occurred in late August of 2011 in Tar Island and Buzzard Bay area of Caddo Lake following a severe storm. Predominant species affected were threadfin shad, gizzard shad, and freshwater drum. Dissolved oxygen levels had returned to normal when the investigation was made on 9-1-2011, but the kill appeared to be oxygen related possibly due to high winds during the storm turning the lake water over and also a possible increase in biological oxygen demand from organic material pushed up near the shoreline from the wind. Approximately 40,000 threadfin shad were killed, 4,000 gizzard shad, and 2,000 freshwater drum. Very few sport fish were involved with only approximately 150 yellow bass, 100 bream, 35 largemouth bass, 30 crappies, and 5 chain pickerel estimated to have been killed.

No fish kills have occurred on Caddo Lake where Largemouth Bass Virus (LMBV) is suspected to be a factor.

Sampling for Largemouth Bass Virus was conducted on Caddo Lake by the TPWD during 2000. No incidence of LMBV was found in the 60 fish tested.

Sampling for Largemouth Bass Virus has not been conducted on Caddo Lake by LDWF.

CONTAMINANTS / POLLUTION

A Fish Consumption Advisory was issued for the Louisiana side of Caddo Lake on 2/11/09. The advisory indicates unacceptable levels of mercury in bowfin. See [APPENDIX VI](#) for complete details of the advisory.

The Texas Department of State Health Services has also issued a fish consumption advisory for largemouth bass and freshwater drum from the Texas side of Caddo Lake. More information can be found at the following link:

http://www.tpwd.state.tx.us/regulations/fish_hunt/fish/consumption_bans.phtml#eastex

BIOLOGICAL

Fish Sampling History:

The Louisiana Department of Wildlife and Fisheries has conducted fisheries sampling on Caddo Lake for many years. Descriptions of historical and proposed fish sampling from 1954 to 2016 is listed in Table 4.

Table 4. Historical and scheduled fish sampling on Caddo Lake, LA.

| YEAR | GEAR |
|-------------|---|
| 1954 | 10 – One Acre Rotenone Sets |
| 1955 | 6 – One Acre Rotenone Sets |
| 1956 | 6 – One Acre Rotenone Sets |
| 1957 | 5 – One Acre Rotenone Sets 16 – 300’ Trammel Net Sets – 1.0” Bar 25 – 300’ Trammel Net Sets – 1.5” Bar 20 – 300’ Trammel Net Sets – 2.0” Bar 11 – 300’ Trammel Net Sets – 2.5” Bar 3 – 300’ Trammel Net Sets – 3.0” Bar 12 – 300’ Trammel Net Sets – 3.5” Bar 12 – 300’ Trammel Net Sets – 4.0” Bar 23 – 300’ Flag Webbing Sets – 1.0” Bar 15 – 300’ Flag Webbing Sets – 1.5” Bar 12 – 300’ Flag Webbing Sets – 2.0” Bar 4 – 300’ Flag Webbing Sets – 2.5” Bar |
| 1958 | 6 – One Acre Rotenone Sets |
| 1973 | 3 – One Acre Rotenone Sets |
| 1983 | 2 – One Acre Rotenone Sets 11 - 300’ Gill Net Sets – 3” Bar 10 - 300’ Gill Net Sets – 3.5” Bar 10 - 300’ Gill Net Sets – 4” Bar |
| 1984 | 2 – One Acre Rotenone Sets 3 - 300’ Gill Net Sets – 3” Bar 8 - 300’ Gill Net Sets – 3.5” Bar 8 - 300’ Gill Net Sets – 4” Bar |
| 1985 | 4 – One Acre Rotenone Sets |
| 1986 | 4 – One Acre Rotenone Sets 25 - 300’ Gill Net Sets – 3” Bar 30 - 300’ Gill Net Sets – 3.5” Bar 25 - 300’ Gill Net Sets – 4” Bar |
| 1987 | 20 - 300’ Gill Net Sets – 3” Bar 6 - 300’ Gill Net Sets – 3.5” Bar 9 - 300’ Gill Net Sets – 4” Bar |
| 1991 | Electrofishing – 201 minutes of sampling – Spring Electrofishing – 117 minutes of sampling – Fall 15 minute Electrofishing Forage Sample – Fall 1 – 300’ Gill Net Set – 2.5” Bar, Mono 1 – 300’ Gill Net Set – 3” Bar, Mono 1 – 300’ Gill Net Set – 3.5” Bar, Mono |

| | |
|------|--|
| | 1 – 300' Gill Net Set – 4" Bar, Mono |
| 1992 | Electrofishing – 197 minutes of sampling - Spring Electrofishing – 152 minutes of sampling – Fall 15 minute Electrofishing Forage Sample – Fall |
| 1993 | Electrofishing – 151 minutes of sampling – Spring Electrofishing – 157 minutes of sampling – Fall 15 minute Electrofishing Forage Sample – Fall |
| 1994 | Electrofishing – 157 minutes of sampling – Spring Electrofishing – 105 minutes of sampling – Fall 15 minute Electrofishing Forage Sample - Fall |
| 1995 | Electrofishing – 162 minutes of sampling – Spring Electrofishing – 214 minutes of sampling – Fall 15 minute Electrofishing Forage Sample – Fall 2 – 300' Gill Nets Sets – 2.5" Bar, Mono 2 – 300' Gill Nets Sets – 3" Bar, Mono 2 – 300' Gill Nets Sets – 3.5" Bar, Mono 2 – 300' Gill Nets Sets – 4" Bar, Mono |
| 1996 | Electrofishing – 150 minutes of sampling – Spring Electrofishing 10 – 15 minute samples – Fall 2 - 15 minute Electrofishing Forage Sample – Fall |
| 1997 | Electrofishing 10 – 15 minute samples – Spring Electrofishing 8 – 15 minute samples – Fall 450 second Electrofishing Forage Sample – Fall |
| 1998 | Electrofishing 10 – 15 minute samples – Spring Electrofishing 10 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 1999 | Electrofishing 10 – 15 minute samples – Spring Electrofishing 8 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2000 | Electrofishing 7 – 15 minute samples – Spring |
| 2001 | Electrofishing 7 – 15 minute samples – Spring Electrofishing 9 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2002 | Electrofishing 8 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2004 | Electrofishing 8 – 15 minute samples – Spring Electrofishing 8 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2006 | Electrofishing 10 – 15 minute samples – Spring Electrofishing 8 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall Gill Nets: 4 – 300' Gill Nets Sets – 2.5" Bar, Mono 4 – 300' Gill Nets Sets – 3" Bar, Mono 4 – 300' Gill Nets Sets – 3.5" Bar, Mono 4 – 300' Gill Nets Sets – 4" Bar, Mono |
| 2007 | Gill Nets: 8 – 300' Gill Nets Sets – 2.5" Bar, Mono |

| | |
|------|---|
| | 8 – 300’ Gill Nets Sets – 3” Bar, Mono 8 – 300’ Gill Nets Sets – 3.5” Bar, Mono 8 – 300’ Gill Nets Sets – 4” Bar, Mono |
| 2008 | Electrofishing 9 – 15 minute samples – Spring Electrofishing 10 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2009 | Electrofishing 11 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall |
| 2010 | Electrofishing 10 – 15 minute samples – Spring Electrofishing 10 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall Gill Nets: 14 – 300’ Gill Nets Sets – 2.5” Bar, Mono 14 – 300’ Gill Nets Sets – 3” Bar, Mono 14 – 300’ Gill Nets Sets – 3.5” Bar, Mono 14 – 300’ Gill Nets Sets – 4” Bar, Mono |
| 2011 | Electrofishing 25 – 15 minute samples – Spring Electrofishing 9 – 15 minute samples – Fall 15 minute Electrofishing Forage Sample – Fall Gill Nets: 12 – 300’ Gill Nets Sets – 2.5” Bar, Mono 12 – 300’ Gill Nets Sets – 3” Bar, Mono 12 – 300’ Gill Nets Sets – 3.5” Bar, Mono 12 – 300’ Gill Nets Sets – 4” Bar, Mono 12 – 1” Bar, 3.5’ dia. Lead Net Sets |
| 2012 | Electrofishing 21 – 15 minute samples – Spring Electrofishing 10 – 15 minute samples – Fall 4 - 225 second Electrofishing Forage Samples – Fall Gill Nets: 12 – 300’ Gill Nets Sets – 2.5” Bar, Mono 12 – 300’ Gill Nets Sets – 3” Bar, Mono 12 – 300’ Gill Nets Sets – 3.5” Bar, Mono 12 – 300’ Gill Nets Sets – 4” Bar, Mono 21 – 1” Bar, 3.5’ dia. Lead Net Sets |
| 2013 | Electrofishing 19 – 15 minute samples – Spring Gill Nets: 10 – 300’ Gill Nets Sets – 2.5” Bar, Mono 10 – 300’ Gill Nets Sets – 3” Bar, Mono 10 – 300’ Gill Nets Sets – 3.5” Bar, Mono 10 – 300’ Gill Nets Sets – 4” Bar, Mono Electrofishing 10 – 15 minute samples – Fall 1 – 900 second Electrofishing Forage Sample – Fall 12 – 1” Bar, 3.5’ dia. Lead Net Sets 12 – 300’ Gill Nets Sets – 2.5” Bar, Mono 12 – 300’ Gill Nets Sets – 3.0” Bar, Mono 12 – 300’ Gill Nets Sets – 3.5” Bar, Mono 12 – 300’ Gill Nets Sets – 4.0” Bar, Mono (Gill Net Sampling may extend into winter 2014) |

| | |
|------|--|
| 2014 | No sampling scheduled |
| 2015 | No sampling scheduled |
| 2016 | Sampling dependent upon outcome of mortality study and discussions with TPWD concerning regulations. |

Lake Records:

There are no records kept specifically for the Louisiana side of Caddo Lake. For more information on Louisiana state records, visit:

<http://www.laoutdoorwriters.com/Records/LouisianaFishRecords/tabid/87/Default.aspx>

The Texas Parks and Wildlife Dept. maintains lake records for the Texas side of Caddo Lake. The lake record largemouth bass for Caddo Lake weighed 16.17 lbs. For more information on Caddo Lake records for fish caught in Texas, visit:

http://www.tpwd.state.tx.us/fishboat/fish/action/waterecords.php?WB_code=0128

Stocking History:

Florida largemouth bass stockings on Caddo Lake were initiated in 1981 by TPWD in an effort to offer anglers a chance to catch a fish of greater than average size. Louisiana began stocking Florida largemouth bass in 1999. To date, nearly 11.4 million Florida bass fingerlings have been stocked in Caddo Lake (Table 5), approximately 8 million in Texas and 3.3 million in Louisiana. In 2012, genetic testing of fish collected in Louisiana indicated a 29% Florida bass genetic introgression. Anglers have reported catching many trophy-size fish following the introduction of Florida largemouth bass into Caddo Lake.

Table 5. The stocking history of Caddo Lake from 1978 to July 2013. List includes fish stocked in both Louisiana and Texas.

| Date | Number / Species stocked | Source |
|------|---|--------|
| 1978 | 86,430 Hybrid striped bass fingerlings | LDWF |
| | 124,000 Hybrid striped bass fingerlings | USFWS |
| 1979 | 305,927 Hybrid striped bass fingerlings | LDWF |
| 1980 | 250,000 Hybrid striped bass fingerlings | USFWS |
| 1981 | 411,215 Florida largemouth bass fingerlings | TPWD |
| | 11,000 Hybrid striped bass fingerlings | CLFH |
| 1982 | 500,550 Florida largemouth bass fingerlings | TPWD |
| | 254,465 Hybrid striped bass fingerlings | LDWF |
| | 38,600 Hybrid striped bass fingerlings | CLFH |
| 1985 | 259,596 Hybrid striped bass fingerlings | LDWF |
| 1988 | 17 Blue catfish adults | TPWD |
| 1991 | 9,000 Channel catfish fingerlings | TPWD |
| 1992 | 12,970 Paddlefish fingerlings | TPWD |
| | 15,415 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | TPWD |
| 1993 | 5,332 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | TPWD |
| | 5,700 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | TPWD |

| | | |
|------|--|--|
| 1994 | 448,955 Florida largemouth bass fingerlings 429,093 Florida largemouth bass fry 2,460 Paddlefish fingerlings 4,488 Paddlefish fingerlings (Stocked in Big Cypress Bayou) 750 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | TPWD TPWD TPWD TPWD TPWD |
| 1995 | 15,000 Largemouth bass fingerlings 650,534 Florida largemouth bass fingerlings 116,000 Florida largemouth bass fry 230,000 Florida largemouth bass fingerlings 4,720 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | LDWF TPWD TPWD CLFH TPWD |
| 1996 | 287,218 Florida largemouth bass fingerlings | TPWD |
| 1997 | 268,000 Florida largemouth bass fingerlings 84,000 Florida largemouth bass fingerlings 12,661 Paddlefish fingerlings (Stocked in Big Cypress Bayou) | TPWD Unknown TPWD |
| 1998 | 673,167 Florida largemouth bass fingerlings 12,254 Paddlefish fingerlings | TPWD TPWD |
| 1999 | 138,375 Florida largemouth bass fingerlings 670,925 Florida largemouth bass fingerlings | LDWF TPWD |
| 2000 | 221,448 Florida largemouth bass fingerlings 683,264 Florida largemouth bass fingerlings | LDWF TPWD |
| 2001 | 194,086 Florida largemouth bass fingerlings | LDWF |
| 2002 | 199,738 Florida largemouth bass fingerlings | LDWF |
| 2003 | 201,750 Florida largemouth bass fingerlings | LDWF |
| 2004 | 195,465 Florida largemouth bass fingerlings | LDWF |
| 2005 | 199,376 Florida largemouth bass fingerlings | LDWF |
| 2006 | 80,335 Florida largemouth bass fingerlings 500,582 Florida largemouth bass fingerlings | LDWF TPWD |
| 2007 | 200,175 Florida largemouth bass fingerlings 501,110 Florida largemouth bass fingerlings | LDWF TPWD |
| 2008 | 220,015 Florida largemouth bass fingerlings | LDWF |
| 2009 | 209,249 Florida largemouth bass fingerlings 706,319 Florida largemouth bass fingerlings 3,408 Florida largemouth bass fingerlings | LDWF TPWD TPWD (SL) |
| 2010 | 218,822 Florida largemouth bass fingerlings 500,790 Florida largemouth bass fingerlings 2,166 Florida largemouth bass fingerlings | LDWF TPWD TPWD (SL) |
| 2011 | 242,978 Florida largemouth bass fingerlings 32,037 Florida largemouth bass fingerlings | LDWF TPWD (SL) |
| 2012 | 380,343 Florida largemouth bass fingerlings 691,408 Florida largemouth bass fingerlings | LDWF TPWD |
| 2013 | 79,292 Florida largemouth bass fingerlings | LDWF |

(SL) indicates fish from the "ShareLunker" Program in Texas.

Species Profile:

Table 6. List of indigenous freshwater fishes found in Caddo Lake through LDWF standardized sampling efforts or noted in “A Preliminary Checklist of the Fishes of Caddo Lake in Northeast Texas” by Clark Hubbs.

Lamprey Family, PETROMYZONTIDAE

Chestnut lamprey, *Ichthyomyzon castaneus* Girard

Paddlefish Family, POLYODONTIDAE

Paddlefish, *Polyodon spathula* (Walbaum)

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

Mooneye Family, HIODONTIDAE

Goldeye, *Hiodon alosoides* (Rafinesque)

Freshwater Eel Family, ANGUILLIDAE

American eel, *Anguilla rostrata* (Lesueur)

Herring Family, CLUPEIDAE

Skipjack herring, *Alosa chrysochloris* (Rafinesque)

Gizzard shad, *Dorosoma cepedianum* (Lesueur)

Threadfin shad, *Dorosoma petenense* (Günther)

Minnow Family, CYPRINIDAE

Red shiner, *Cyprinella lutrensis* (Baird and Girard)

Blacktail shiner, *Cyprinella venusta* (Girard)

Common Carp, *Cyprinus carpio* Linnaeus

Cypress minnow, *Hybognathus hayi* Jordan

Mississippi silvery minnow, *Hybognathus nuchalis* Agassiz

Striped shiner, *Luxilus chrysocephalus* Rafinesque

Ribbon shiner, *Lythrurus fumeus* Evermann

Redfin shiner, *Lythrurus umbratilis* (Girard)

Golden shiner, *Notemigonus crysoleucas* (Mitchill)

Pallid shiner, *Notropis amnis* Hubbs and Greene

Emerald shiner, *Notropis atherinoides* Rafinesque

Blackspot shiner, *Notropis atrocaudalis* Evermann

River shiner, *Notropis blennioides* (Girard)

Ironcolored shiner, *Notropis chalybaeus* (Cope)

Bluehead shiner, *Notropis hubbsi* Bailey and Robison

Taillight shiner, *Notropis maculatus* (Hay)

Weed shiner, *Notropis texanus* (Girard)

Mimic shiner, *Notropis volucellus* (Cope)
Pugnose minnow, *Notropis emiliae* Hay
Bullhead minnow, *Pimephales vigilax* (Baird and Girard)
Creek chub, *Semotilus atromaculatus* (Mitchill)

Sucker Family, CATOSTOMIDAE

River carpsucker, *Carpionodes carpio* (Rafinesque)
Creek chubsucker, *Erimyzon oblongus* (Mitchill)
Lake chubsucker, *Erimyzon sucetta* (Lacépède)
Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)
Bighmouth buffalo, *Ictiobus cyprinellus* (Valenciennes)
Black buffalo, *Ictiobus niger* (Rafinesque)
Spotted sucker, *Minytrema melanops* (Rafinesque)

Freshwater Catfish Family, ICTALURIDAE

Black bullhead, *Ameiurus melas* (Rafinesque)
Yellow bullhead, *Ameiurus natalis* (Lesueur)
Brown bullhead, *Ameiurus nebulosus* (Lesueur)
Blue catfish, *Ictalurus furcatus* (Lesueur)
Channel catfish, *Ictalurus punctatus* (Rafinesque)
Tadpole madtom, *Noturus gyrinus* (Mitchill)
Freckled madtom, *Noturus nocturnus* Jordan and Gilbert
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)
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)

Temperate Bass Family, PERCICHTHYIDAE

White bass, *Morone chrysops* (Rafinesque)
Yellow bass, *Morone mississippiensis* Jordan and Eigenmann
Striped bass, *Morone saxatilis* (Walbaum)
Palmetto bass, *Morone saxatilis* & X *Morone chrysops* %

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
 - Spotted bass, *Micropterus punctulatus* (Rafinesque)
 - Florida largemouth bass, *Micropterus floridanus* Kassler et al.
 - Northern largemouth bass, *Micropterus salmoides salmoides* (Lacépède)
-
- White crappie, *Pomoxis annularis* Rafinesque
 - Black crappie, *Pomoxis nigromaculatus* (Lesueur)

Perch Family, PERCIDAE

- Scaly sand darter, *Ammocrypta vivax* Hay
- Mud darter, *Etheostoma asprigene* (Forbes)
- Bluntnose darter, *Etheostoma chlorosomum* (Hay)
- Swamp darter, *Etheostoma fusiforme* (Girard)
- Slough darter, *Etheostoma gracile* (Girard)
- Harlequin darter, *Etheostoma histrio* Jordan and Gilbert
- Cypress darter, *Etheostoma proeliare* (Hay)
- Logperch, *Percina caprodes* (Rafinesque)
- Bigscale logperch, *Percina macrolepida* Stevenson
- Blackside darter, *Percina maculata* (Girard)
- Dusky darter, *Percina sciera* (Swain)
- River darter, *Percina shumardi* (Girard)
- Walleye, *Stizostedion vitreum* (Mitchill)

Drum Family, SCIAENIDAE

- Freshwater drum, *Aplodinotus grunniens* Rafinesque

Largemouth Bass Genetics:

Genetic analysis of the largemouth bass population on the Louisiana side of Caddo Lake began in 1991. The results are listed in Table 7. The most recent sample taken in 2012 indicates a Florida influence of 29%.

Table 7. – The genetic analysis of largemouth bass from Caddo Lake, LA

| Year | Number | Northern % | Florida % | Hybrid % |
|-------------|---------------|-------------------|------------------|-----------------|
| 1991 | 34 | 100 | 0 | 0 |
| 1993 | 41 | 83 | 5 | 12 |
| 1995 | 30 | 63 | 7 | 30 |
| 1996 | 30 | 86 | 7 | 7 |
| 1997 | 59 | 68 | 3 | 29 |
| 1999 | 74 | 60 | 12 | 28 |
| 2001 | 55 | 69 | 9 | 22 |
| 2002 | 43 | 86 | 0 | 14 |
| 2008 | 70 | 70 | 4 | 26 |
| 2009 | 72 | 77 | 1 | 22 |
| 2011 | 283 | 71 | 7 | 22 |
| 2012 | 207 | 71 | 2 | 27 |

Threatened/Endangered/Exotic Species:

No threatened or endangered fish species are known to inhabit Caddo Lake.

CREEL

An access point creel survey was conducted on the Louisiana side of Caddo Lake in 2011. During this survey, 611 anglers were interviewed during the 67 days that creel surveys were conducted. The average fishing trip length was 4.7 hours in duration, and anglers drove an average of 29 miles one way to reach Caddo Lake. Anglers averaged catching 0.62 largemouth bass per trip, and harvested 0.13 largemouth bass per trip. This equates to a catch rate of 0.13 largemouth bass per hour and a harvest rate of 0.02 largemouth bass per hour.

Anglers which were specifically targeting largemouth bass accounted for over half of the anglers interviewed during the survey period with 352 largemouth bass anglers participating in the survey. Largemouth bass anglers caught 0.28 largemouth bass per hour and harvested 0.05 largemouth bass per hour. This group of anglers fished slightly longer per trip with an average trip length of 5.14 hours and drove significantly further with an average drive of 44 miles one way to reach Caddo Lake.

Sunfish anglers comprised the second largest group of anglers encountered during the creel survey on Caddo Lake with 103 anglers interviewed during the survey period. These fishermen caught an average of 2.8 sunfish per hour and consisted of more local anglers who drove an average of 20 miles to reach Caddo Lake.

Crappie anglers accounted for 95 of the 611 interviews. This group caught an average of 0.73 crappies per hour and drove an average of 40 miles to reach Caddo Lake.

HYDROLOGICAL CHANGES

Construction of Lake O' the Pines upstream of Caddo Lake on Cypress Bayou has significantly altered the water regime in the Cypress Bayou Basin. Peak flows downstream from the reservoir have been altered in intensity and seasonality compared to flood flows prior to the completion of the reservoir. Operational discharges from Lake O' the Pines are restricted to approximately 3,000 cubic feet per second compared to historic flood flows over 57,000 cfs. The altered water regime in the Cypress Bayou Basin has negatively impacted Caddo Lake as the large flood pulses that formerly occurred in the spring now generally occur in the late winter months and at a much lower flow rate. The Caddo Lake Institute initiated an Environmental Flows Project in the Cypress Basin in 2004 to study the impacts of the hydrological changes in the basin and to try to create a water regime that more closely simulates the natural flows in the Cypress Basin and Caddo Lake. More information concerning the Cypress Basin Environmental Flows Project can be found at:

<http://www.caddolakeinstitute.us/flows.html>

WATER USE

Caddo Lake serves as the primary water supply for the municipalities of Vivian, Oil City, Blanchard, Greenwood, and Mooringsport in Louisiana. Fishing, recreational boating, waterskiing, swimming, eco-tourism and waterfowl hunting are also popular uses for Caddo Lake.

Hunting

Waterfowl hunting is locally popular on Caddo Lake.

Skiing

YES

Swimming

YES

Fishing

YES

Boating

YES

APPENDIX I

[\(Return to Authorization\)](#)

Caddo Lake Watershed District - Enabling Legislation

RS 38:3087.71 – 3087.87

PART XIX. CADDO LAKE WATERSHED DISTRICT

§3087.71. Creation; location

There is hereby created a recreation and water conservation district to be known as the "Caddo Lake Watershed District" to be comprised of all of Ward 1 of Caddo Parish.

Acts 1995, No. 345, §1.

§3087.72. District as political subdivision and body corporate; purpose and powers

A. The district so created shall be a political subdivision of the state of Louisiana which shall have for its purpose the preservation, promotion, and development of the wealth and natural resources of the district by the conservation of the soil and water of Caddo Lake for agricultural, recreational, commercial, and sanitary purposes.

B. It shall constitute a body corporate in law with all powers, rights, privileges, and immunities of a corporation. It shall have the power to sue and be sued, to buy and sell, and to execute contracts. It shall have the authority to acquire by purchase, donation, or otherwise every type and specie of property, including servitudes and rights of use necessary to its purpose, and to lease, build, operate, and maintain any works or machinery designed to accomplish the purposes of the district.

C. It shall have complete control over the supply of fresh water from Caddo Lake which shall be administered for the benefit of the persons residing or owning property within the district, and if it should be for the benefit of the district, it shall have the authority to sell such water for irrigation, municipal, and industrial uses both within and outside the district. However, the district shall have no authority to regulate or control any use by any municipality, district, or other person of such water supply which use was being made by such municipality, district, or other person on August 15, 1995, including no authority to charge or collect any fee or charge therefor. The district shall at all times recognize the provisions of the Red River Compact and the rights granted thereunder.

D. The district shall constitute an instrumentality of the state of Louisiana designed to carry out an essential governmental function, and all of the property of the district shall be exempt from state and local sales and use taxation. It shall have the authority to cooperate and contract with the government of the United States or any department or agency thereof and to accept grants and donations of property and money therefrom. It shall have the authority to cooperate with the state of Louisiana or any political subdivision, department, agency, or corporation of the state for the management of the waters of Caddo Lake and the construction, operation, and maintenance of facilities designed to accomplish the purpose for which the district is created on any basis

including the matching of funds and by participating in projects authorized by any federal or state law as it shall see fit.

Acts 1995, No. 345, §1.

§3087.73. Board of commissioners, appointment; tenure; vacancies; compensation

A. The district shall be governed and controlled by the Board of Commissioners of the Caddo Lake Watershed District which is hereby created. The board of commissioners shall be composed of five commissioners, each of whom shall be a qualified elector of the state of Louisiana who resides in Caddo Parish. The commissioners shall be appointed by the governing authority of Caddo Parish and shall serve terms of four years and until their successors have been appointed and have qualified. Any vacancy in the office of commissioner, due to death, resignation, or any other cause, other than the expiration of a term of office, shall be filled by the remaining commissioners for the unexpired term.

B. The members of the board shall receive no compensation for their services.

C. Notwithstanding the provisions of Subsection A of this Section, the terms of the members serving on the Board of Commissioners of the Caddo Lake Watershed District as of June 13, 2001, shall serve terms beginning on June 13, 2001, as follows:

- (1) The board member from Blanchard shall serve a one-year term.
- (2) The board member from Shreveport shall serve a two-year term.
- (3) The board member from Mooringsport shall serve a three-year term.
- (4) The board member from Oil City shall serve a four-year term.
- (5) The board member from Vivian shall serve a five-year term.
- (6) All terms thereafter shall be as provided by Subsection A.

Acts 1995, No. 345, §1; Acts 2001, No. 362, §1, eff. June 13, 2001.

§3087.74. Oaths

Before entering upon his official duties each member of the board of commissioners shall take the oath of office provided by Article X, Section 30 of the Constitution of Louisiana before an officer authorized by law to administer oaths. The oaths of the commissioners shall be recorded in the oath book of the parish.

Acts 1995, No. 345, §1.

§3087.75. Election of officers; record book; public inspection

A. Immediately after the commissioners have been appointed by the Caddo Parish governing authority, or as soon thereafter as practicable, the commissioners shall meet and immediately organize by electing officers as follows: they shall elect from among their number a president who shall preside over the meetings of the board and perform such other duties as are usually required of presidents of corporate bodies, and also a vice president who shall perform the duties of the president in case of his absence or disability, and such other officers as the board finds necessary or convenient.

B. The board shall cause to be kept a well-bound book entitled "Record Book of Caddo Lake Watershed District", in which shall be recorded the minutes of all meetings, all proceedings, certificates, oaths of commissioners, bonds of employees and contractors, and any and all corporate acts. The records shall be in the possession of the

secretary of the board and shall be open to public inspection at all times by any person interested.

Acts 1995, No. 345, §1.

§3087.76. Powers of board

A. In order to accomplish the purposes for which the district is created, the board of commissioners may:

(1) Purchase, acquire by donation, hold, sell, and convey immovable and movable property and execute such contracts as it may deem necessary or convenient to enable it to properly carry out the purposes for which it is created.

(2) Acquire servitudes, rights of use, and flowage rights, by purchase, by donation, by assignment for the district, or otherwise.

(3) Assist in conserving soil and water and in developing the water resources of the district; however, nothing shall be done to interfere with districts or municipalities previously organized under Louisiana law.

(4) Under the supervision of the Department of Transportation and Development, contract for the construction of proposed works and improvements.

(5) Cooperate with the Department of Transportation and Development and other state agencies in the maintenance or improvement and the construction of any works or improvements for the control, retention, diversion, or utilization of water; retard runoff of water and soil erosion, construct any ditch, channel improvement, dike, dam, or levee, and repair, improve, and maintain any of said improvements or structures.

(6) Employ and hire secretarial, clerical, and other such personnel as may be necessary in the operation of the business of the district and fix their compensation; employ engineers, attorneys, and other professional personnel as necessary and fix their compensation. Appoint, hire, designate, and empower wardens, rangers, patrols, and such other personnel as may be deemed necessary by the commission for the enforcement of such regulations as may be promulgated and adopted by said commission.

(7) Cooperate and contract with persons, firms, associations, partnerships and private corporations, and cities of this state, or other public corporations, and with any other local, state, and governmental agencies for the sale or use of any waters impounded by the district.

(8) Select a domicile and home office for the district.

(9) Create, construct, and administer such recreational parks, playgrounds, and public picnic areas as the board may consider necessary; provide all other facilities to accommodate the public; and provide adequate access to any lake or reservoir created by the district for the use of the public.

(10) Grant franchises to telephone, telegraph, cable, and electric power companies and grant franchises for the purposes of laying gas, sewer, electricity, or other utilities to supply the inhabitants or any person or corporation with gas, water, sewerage, and electricity, when such construction is within the district. Nothing contained in this Part shall affect the vested rights of any corporation which, pursuant to R.S. 45:781(A), has constructed, and maintains and operates telegraph, telephone, and other lines for the transmission of intelligence prior to August 15, 1995.

(11) Do and perform any and all things necessary or incident to the fulfillment of the purposes for which this district is created, including all acts necessary to construct, lease, acquire in any manner, maintain, and operate dikes, dams, reservoirs, storage basins, locks, levees, flumes, conduits, spillways, or other structures necessary, suitable, or convenient to the purposes of the district.

B. The Caddo Lake Watershed District shall have, with respect to the improvements and maintenance of the district, the advice of the Department of Transportation and Development, and it shall request from time to time the assistance of the department to make such surveys, inspections, and investigations, render such reports, estimates, and recommendations, and furnish such plans and specifications as the board of commissioners of said district may request.

Acts 1995, No. 345, §1.

§3087.77. Constructions which would impede flow of water in watershed prohibited; pollution defined and prohibited; penalties fixed for violations

A.(1) No person or public corporation shall erect within the drainage area of the district any dam, channel, or reservoir upon any stream or watercourse which will affect Caddo Lake until a copy of the plans thereof has been filed with the board of commissioners for approval.

(2) Whoever violates this Subsection shall be fined not less than five hundred dollars nor more than one thousand dollars or imprisoned for not less than thirty days, nor more than sixty days, or both.

B.(1) No person shall knowingly and willfully empty or drain or permit to be drained from any pump, reservoir, well, or oil field, into any stream or drain constituting the watershed of the lake, or from any stream within said district into said lake any oil, salt water, or other noxious, toxic, hazardous, or poisonous gas, liquid, or substance which would render the water unfit for irrigation purposes or for human consumption through "water districts" or would destroy aquatic and fish life in the lake.

(2) Each and every day that oil, salt water, or other prohibited substances are permitted to flow into natural streams or drains which constitute the watershed of Caddo Lake shall constitute a separate and distinct offense.

(3) Whoever violates this Subsection shall be fined not less than one hundred dollars nor more than two hundred dollars or imprisoned for not less than thirty days nor more than three months.

C.(1) No person shall:

(a) Obstruct drainage channels which compose any drain or stream flowing into Caddo Lake by bridging them except in accordance with plans, specifications, and instructions prescribed by the board of commissioners.

(b) Construct dams, locks, or gates in drainage channels of the Caddo Lake watershed or in the lake itself without permission of the board.

(c) Extend fences of wire or any other material across drainage channels into and forming a part of the watershed of Caddo Lake.

(d) Anchor rafts, crafts, fish traps, fish cars, and other obstacles in the channel of any stream, drain, or natural flow of the feeder streams of the Caddo Lake watershed.

(e) Drain into channels by natural or artificial inlets, except under regulations prescribed by the board of commissioners.

(f) Float timber in the watershed of Caddo Lake.

(g) Use the channels for transportation or navigation, except under authority of and agreement with the board of commissioners.

(h) In any manner obstruct drainage channels, natural flow drains, or natural flowage, or violate any of the rules or regulations adopted and promulgated by the board of commissioners for preserving and maintaining the efficiency of the drainage channels in said district.

(2) Whoever violates this Subsection shall be fined not less than two hundred fifty dollars nor more than five hundred dollars or imprisoned for not less than thirty days nor more than sixty days, or both.

D.(1) No proprietor, owner, lessee, or possessor of land abutting upon the Caddo Lake reservoir or upon any public road paralleling the water line or contiguous to the said Caddo Lake reservoir shall in any manner close or place any obstruction in the drains or ditches, whether on private property or on the public road or levee adjacent to the road which will in any manner interfere with the effective, thorough, and continuous drainage into the said reservoir.

(2) Whoever violates this Subsection shall be fined not less than two hundred fifty dollars nor more than five hundred dollars or be imprisoned for not less than thirty days nor more than sixty days, or both.

E. The sheriff of the parish, in addition to his other duties, is charged with the responsibility of aiding and assisting the board of commissioners in the enforcement of this Section and all rules and regulations of the board.

F. The district attorney of the judicial district within which the said watershed district is situated is hereby designated as the proper official and charged with the responsibility of the prosecution of all violations of the rules and regulations adopted by the board of commissioners.

Acts 1995, No. 345, §1.

§3087.78. Dam maintenance and construction

The Department of Transportation and Development shall maintain any existing dam and shall build and construct such other dams and works as may be necessary or beneficial to carry out the purposes of this Part and shall make such surveys and estimates as may be necessary therefor. The board of commissioners shall aid and assist the department during construction of any such project.

Acts 1995, No. 345, §1.

§3087.79. Regulation of commercial establishments

A. The board of commissioners shall have authority:

(1) To establish and cause to be enforced rules and regulations pertaining to all commercial establishments which may be constructed for the purpose of commercializing and making commercial use of the lake or its facilities.

(2) To license and permit such establishments and to levy and collect a fee, to be fixed by the commission, for the privilege of making commercial use of the facilities of the lake.

B. The rules and regulations established and promulgated by the board of commissioners pursuant to this Section shall provide penalties for any commercial establishment operating without a permit or license.

Acts 1995, No. 345, §1.

§3087.80. Management of improvements

A. The board of commissioners may regulate the construction and use of all piers, docks, bridges, and other improvements built or erected on any part of the district inundated by Caddo Lake and may regulate and control the erection of any improvements of any kind whatever within one mile from the shoreline of Caddo Lake. The board of commissioners shall have the authority and power to regulate such improvements by the issuance of permits for same and to fix a fee for the issuance of same.

B. The board of commissioners is authorized to charge an annual fee for a permit to maintain improvements on or within one mile of the shores of Caddo Lake.

Acts 1995, No. 345, §1.

§3087.81. State departments; authority of corporation

Nothing in this Part shall be construed to impede or interfere with the control and supervision of the wildlife of the state by the Louisiana Wildlife and Fisheries Commission or the regulatory authority of the Department of Environmental Quality and its officers. The Department of Wildlife and Fisheries and the Department of Environmental Quality shall assist the board of commissioners in the conduct of its duties and functions and the board shall advise and consult with the departments in matters relating to their respective powers and responsibilities.

Acts 1995, No. 345, §1.

§3087.82. Individual mineral leases unabridged

The provisions of this Part shall in no way abridge the right of any individual, person, firm, or corporation from whom a servitude or right of use may have been acquired to lease the land subject thereto for the production of oil, gas, or other minerals and to produce or cause to be produced oil, gas, or other minerals from such property so long as said leases are subject to the terms and conditions of the servitude executed in favor of the commission.

Acts 1995, No. 345, §1.

§3087.83. Attorney general as counsel

The attorney general of the state of Louisiana and his assistants shall be and are hereby designated as counsel for the Department of Transportation and Development and the district in the execution of the purposes of this Part and are hereby charged with the responsibility of representing the department and the board of commissioners in any and all matters when called upon to do so.

Acts 1995, No. 345, §1.

§3087.84. Tax exemption

The lands which lie within and form the Caddo Lake proper shall not be subject to any ad valorem taxation or any other tax of any nature whatsoever by either the state of Louisiana or any of its political subdivisions, for so long as the said lands shall form and lie within the lake proper.

Acts 1995, No. 345, §1.

§3087.85. Contracts let by board

A. Any and all contracts of the district shall be let by the board of commissioners under the provisions of the Public Bid Law, R.S. 38:2181 et seq.

B. The board of commissioners, the Department of Transportation and Development, or both may execute any and all work with their own forces and equipment and under department or board supervision, or the work may be executed on behalf of and for the benefit of the district by the state of Louisiana, or any agency, or department thereof.

Acts 1995, No. 345, §1.

§3087.86. Audit

The district shall be audited pursuant to R.S. 24:513.

Acts 1995, No. 345, §1.

§3087.87. Recreational facilities

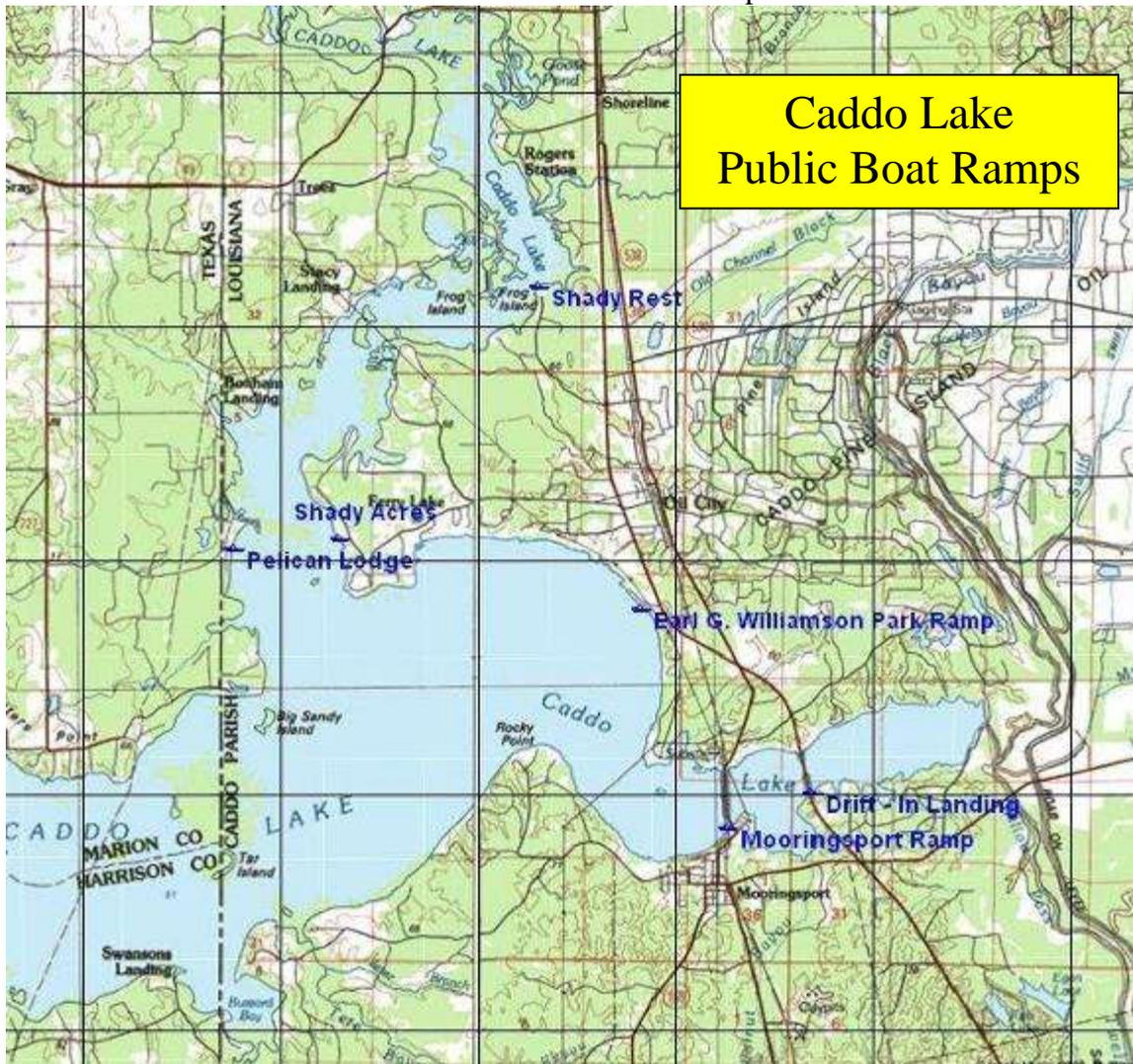
The board of commissioners shall also provide for the construction of public access boat ramps in the district to allow for and maintain public access to Caddo Lake for recreational purposes.

Acts 1995, No. 345, §1.

APPENDIX II

[\(return to Boat Ramps\)](#)

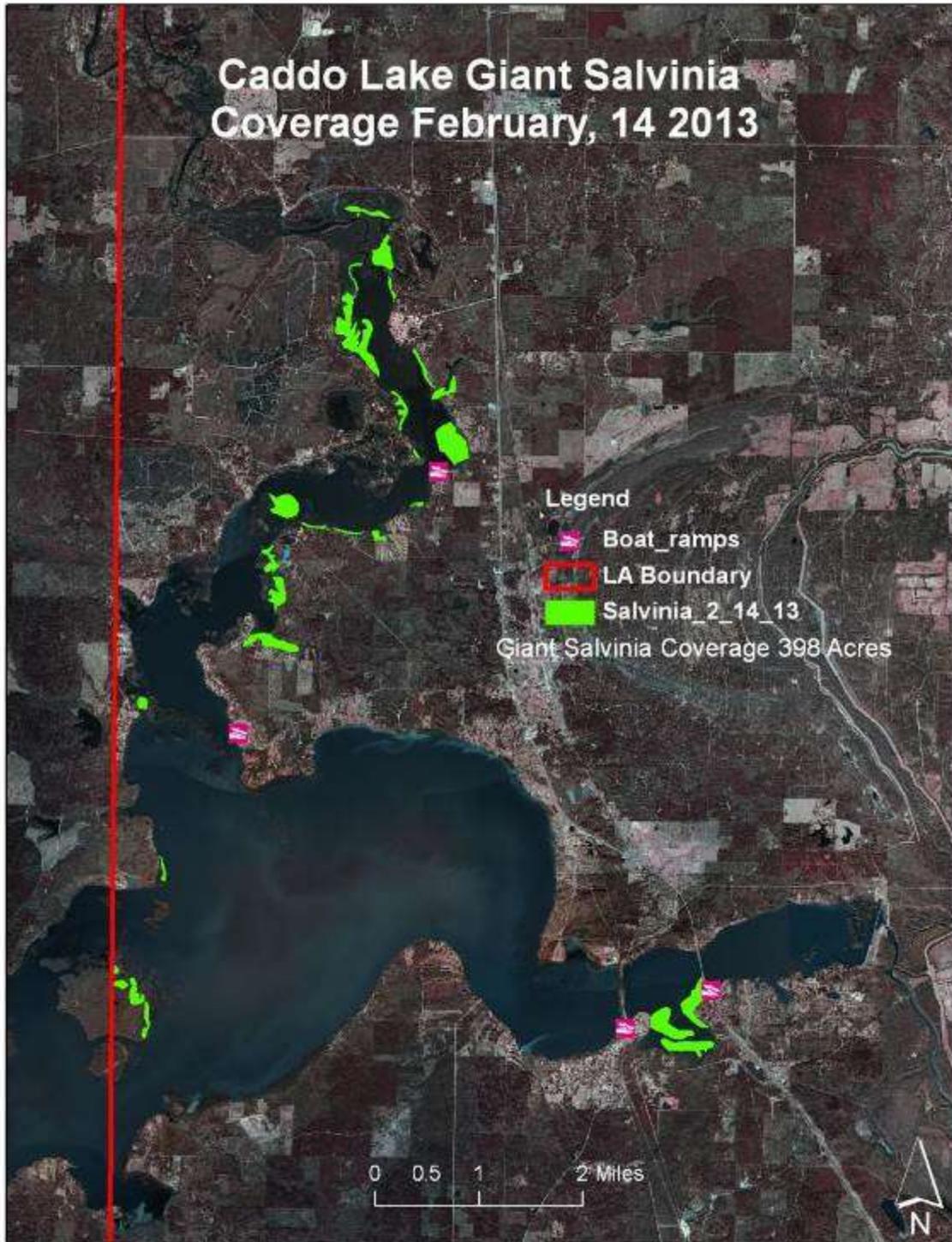
Caddo Lake Public Boat Ramps



APPENDIX III
([Return to Aquatic Vegetation](#))

Aquatic Vegetation Type Maps

2013 Caddo Lake Type Map



APPENDIX IV
[\(return to Border Waters\)](#)

Red River Compact (from the Texas Water Code)

WATER CODE

TITLE 3. RIVER COMPACTS

CHAPTER 46. RED RIVER COMPACT

Sec. 46.001. RATIFICATION. The Red River Compact, the text of which is set out in Section 46.013 of this code, is ratified and confirmed in all respects after having been signed at Denison Dam, on the Texas-Oklahoma border, on May 12, 1978, by John P. Saxton, commissioner for the State of Arkansas, Orville B. Saunders, commissioner for the State of Oklahoma, Arthur R. Theis, commissioner for the State of Louisiana, and Fred Parkey, commissioner for the State of Texas, and approved by R. C. Marshall, representative of the United States.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.002. ORIGINAL COPY. An original copy of the compact is on file in the office of the secretary of state.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.003. COMMISSIONER. The governor, with the advice and consent of the senate, shall appoint a commissioner to represent this state on the commission established by Article IX of the compact.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.004. TERM OF OFFICE. The appointed commissioner holds office for a term of six years and until his or her successor is appointed and qualified.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979. Amended by Acts 1985, 69th Leg., Ch. 608, Sec. 2.

Sec. 46.005. OATH. The appointed commissioner shall take the constitutional oath of office and shall also take an oath to faithfully perform his or her duties as commissioner.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.006. COMPENSATION; EXPENSES. (a) The appointed commissioner is entitled to receive as compensation \$15,600 a year until otherwise provided by legislative appropriation and is entitled to reimbursement for actual and necessary expenses while traveling in the discharge of official duties.

(b) Repealed by Acts 1985, 69th Leg., Ch. 608, Sec. 3, eff. Sept. 1, 1985.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979. Amended by Acts 1985, 69th Leg., Ch. 608, Sec. 3, eff. Sept. 1, 1985.

Sec. 46.007. POWERS AND DUTIES. The appointed commissioner is responsible for administering the provisions of the compact and has all the powers and duties prescribed by the compact.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.0071. NOTICE OF COMPACT MEETINGS. For informational purposes, the commissioner shall file with the secretary of state notice of compact meetings for publication in the Texas Register.

Added by Acts 1985, 69th Leg., Ch. 608, Sec. 1, eff. Sept. 1, 1985.

Sec. 46.008. EXECUTIVE DIRECTOR. (a) The executive director of the Texas Natural Resource Conservation Commission or a designated representative selected from the staff of the Texas Natural Resource Conservation Commission shall also serve as a commissioner and represent this state on the commission established by Article IX of the compact.

(b) The executive director or the designated representative may exercise the powers and shall discharge the duties provided by the compact.

(c) The executive director or the designated representative is not entitled to additional compensation for performing the duties under the compact but is entitled to reimbursement for actual and necessary expenses incurred while traveling in the discharge of official duties.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979. Amended by Acts 1985, 69th Leg., Ch. 795, Sec. 1.136, eff. Sept. 1, 1985; Acts 1995, 74th Leg., Ch. 76, Sec. 11.318, eff. Sept. 1, 1995.

Sec. 46.009. EMPLOYEES; ADMINISTRATIVE EXPENSES. The commissioners, in conjunction with other members of the commission and as authorized by the legislature, may employ engineering and clerical personnel and may incur necessary office expenses for the appointed commissioner and other expenses incident to the proper performance of their duties and the proper administration of the compact. However, the commissioner shall not incur any financial obligation on

behalf of this state until the legislature has authorized and appropriated money for the obligation.

Added by Acts 1979, 66th Leg., p. 551, ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.010. COOPERATION OF TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. The Texas Natural Resource Conservation Commission shall cooperate with the commissioners in the performance of their duties and shall furnish them any factual data and information that are available.

Added by Acts 1979, 66th Leg., p. 551, Ch. 261, Sec. 1, eff. May 24, 1979. Amended by Acts 1985, 69th Leg., Ch. 795, Sec. 1.137, eff. Sept. 1, 1985; Acts 1995, 74th Leg., Ch. 76, Sec. 11.319, eff. Sept. 1, 1995.

Sec. 46.011. NOTIFICATION OF OTHER PARTIES; COPIES. The governor shall notify the Governor of Arkansas, the Governor of Louisiana, the Governor of Oklahoma, and the President of the United States of the ratification of the compact by this state. On request of the governor, the secretary of state shall furnish to each of these other governors and the president a certified copy of the Act adopting this chapter of the code.

Added by Acts 1979, 66th Leg., p. 551, ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.012. TIME WHEN COMPACT BINDING. The compact is binding and obligatory when it is ratified by the legislatures of Arkansas, Louisiana, and Oklahoma and consented to by the United States under Article XIII of the compact.

Added by Acts 1979, 66th Leg., p. 551, ch. 261, Sec. 1, eff. May 24, 1979.

Sec. 46.013. TEXT OF COMPACT. The Red River Compact reads as follows:

"PREAMBLE

"The States of Arkansas, Louisiana, Oklahoma, and Texas, pursuant to the acts of their respective Governors or legislatures, or both, being moved by considerations of interstate comity, have resolved to compact with respect to the water of the Red River and its tributaries. By Act of Congress, Public Law No. 346 (84th Congress, First Session), the consent of the United States has been granted for said states to negotiate and enter into a compact providing for an equitable apportionment of such water; and pursuant to that Act the President has designated the representative of the United States.

"Further, the consent of Congress has been given for two or more states to negotiate and enter into agreements relating to water pollution control by the provisions of the Federal Water Pollution Control Act (P.L. 92-500, 33 U.S.C. Subsection 1251 et seq.).

"The Signatory States acting through their duly authorized Compact Commissioners, after several years of negotiations, have agreed to an equitable apportionment of the water of the Red River and its tributaries and do hereby submit and recommend that this compact be adopted by the respective legislatures and approved by Congress as hereinafter set forth:

"ARTICLE I

"PURPOSES

"Sec. 1.01. The principal purposes of this Compact are:

"(a) To promote interstate comity and remove causes of controversy between each of the affected states by governing the use, control and distribution of the interstate water of the Red River and its tributaries;

"(b) To provide an equitable apportionment among the Signatory States of the water of the Red River and its tributaries;

"(c) To promote an active program for the control and alleviation of natural deterioration and pollution of the water of the Red River Basin and to provide for enforcement of the laws related thereto;

"(d) To provide the means for an active program for the conservation of water, protection of lives and property from floods, improvement of water quality, development of navigation and regulation of flows in the Red River Basin; and

"(e) To provide a basis for state or joint state planning and action by ascertaining and identifying each state's share in the interstate water of the Red River Basin and the apportionment thereof.

"ARTICLE II

"GENERAL PROVISIONS

"Sec. 2.01. Each Signatory State may use the water allocated to it by this Compact in any manner deemed beneficial by that state. Each state may freely administer water rights and uses in accordance with the laws of that state, but such uses shall be subject to the availability of water in accordance with the apportionments made by this Compact.

"Sec. 2.02. The use of water by the United States in connection with any individual Federal project shall be in accordance with the Act of Congress authorizing the project and the water shall be charged to the state or states receiving the benefit therefrom.

"Sec. 2.03. Any Signatory State using the channel of Red River or its tributaries to convey stored water shall be subject to an appropriate reduction in the amount which may be withdrawn at the point of removal to account for transmission losses.

"Sec. 2.04. The failure of any state to use any portion of the water allocated to it shall not constitute relinquishment or forfeiture of the right to such use.

"Sec. 2.05. Each Signatory State shall have the right to:

"(a) Construct conservation storage capacity for the impoundment of water allocated by this Compact;

"(b) Replace within the same area any storage capacity recognized or authorized by this Compact made unusable by any cause, including losses due to sediment storage;

"(c) Construct reservoir storage capacity for the purposes of flood and sediment control as well as storage of water which is either imported or is to be exported if such storage does not adversely affect the delivery of water apportioned to any other Signatory State; and

"(d) Use the bed and banks of the Red River and its tributaries to convey stored water, imported or exported water, and water apportioned according to this Compact.

"Sec. 2.06. Signatory States may cooperate to obtain construction of facilities of joint benefits to such states.

"Sec. 2.07. Nothing in this Compact shall be deemed to impair or affect the powers, rights, or obligations of the United States, or those claiming under its authority, in, over and to water of the Red River Basin.

"Sec. 2.08. Nothing in this Compact shall be construed to include within the water apportioned by this Compact any water consumed in each state by livestock or for domestic purposes; provided, however, the storage of such water is in accordance with the laws of the respective states but any such impoundment shall not exceed 200 acre-feet, or such smaller quantity as may be provided for by the laws of each state.

"Sec. 2.09. In the event any state shall import water into the Red River Basin from any other river basin, the Signatory State making the importation shall have the use of such imported water.

"Sec. 2.10. Nothing in this Compact shall be deemed to:

"(a) Interfere with or impair the right or power of any Signatory State to regulate within its boundaries the appropriation, use, and control of water, or quality of water, not inconsistent with its obligations under this Compact;

"(b) Repeal or prevent the enactment of any legislation or the enforcement of any requirement by any Signatory State imposing any additional conditions or restrictions to further lessen or prevent the pollution or natural deterioration of water within its jurisdiction; provided nothing contained in this paragraph shall alter any provision of this Compact dealing with the apportionment of water or the rights thereto; or

"(c) Waive any state's immunity under the Eleventh Amendment of the Constitution of the United States, or as constituting the consent of any state to be sued by its own citizens.

"Sec. 2.11. Accounting for apportionment purposes on interstate streams shall not be mandatory under the terms of the Compact until one or more affected states deem the accounting necessary.

"Sec. 2.12. For the purposes of apportionment of the water among the Signatory States, the Red River is hereby divided into the following major subdivisions:

"(a) Reach I--the Red River and tributaries from the New Mexico-Texas state boundary to Denison Dam;

"(b) Reach II--the Red River from Denison Dam to the point where it crosses the Arkansas-Louisiana state boundary and all tributaries which contribute to the flow of the River within this reach;

"(c) Reach III--the tributaries west of the Red River which cross the Texas-Louisiana state boundary, the Arkansas-Louisiana state boundary, and those which cross both the Texas-Arkansas state boundary and the Arkansas-Louisiana state boundary.

"(d) Reach IV--the tributaries east of the Red River in Arkansas which cross the Arkansas-Louisiana state boundary; and

"(e) Reach V--that portion of the Red River and tributaries in Louisiana not included in Reach III or in Reach IV.

"Sec. 2.13. If any part or application of this Compact shall be declared invalid by a court of competent jurisdiction, all other severable provisions and applications of this Compact shall remain in full force and effect.

"Sec. 2.14. Subject to the availability of water in accordance with this Compact, nothing in this Compact shall be held or construed to alter, impair, or increase, validate, or prejudice any existing water right or right of water use that is legally recognized on the effective date of this Compact by either statutes or courts of the Signatory State within which it is located.

"ARTICLE III

"DEFINITIONS

"Sec. 3.01. In this Compact:

"(a) The States of Arkansas, Louisiana, Oklahoma, and Texas are referred to as 'Arkansas,' 'Louisiana,' 'Oklahoma,' and 'Texas,' respectively, or individually as 'State' or 'Signatory State,' or collectively as 'States' or 'Signatory States.'

"(b) The term 'Red River' means the stream below the crossing of the Texas-Oklahoma state boundary at longitude 100 degrees west.

"(c) The term 'Red River Basin' means all of the natural drainage area of the Red River and its tributaries east of the New Mexico-Texas state boundary and above its junction with Atchafalaya and Old Rivers.

"(d) The term 'water of the Red River Basin' means the water originating in any part of the Red River Basin and flowing to or in the Red River or any of its tributaries.

"(e) The term 'tributary' means any stream which contributes to the flow of the Red River.

"(f) The term 'interstate tributary' means a tributary of the Red River, the drainage area of which includes portions of two or more Signatory States.

"(g) The term 'intrastate tributary' means a tributary of the Red River, the drainage area of which is entirely within a single Signatory State.

"(h) The term 'Commission' means the agency created by Article IX of this Compact for the administration thereof.

"(i) The term 'pollution' means the alteration of the physical, chemical, or biological characteristics of water by the acts or instrumentalities of man which create or are likely to result in a material and adverse effect upon human beings, domestic or wild animals, fish and other aquatic life, or adversely affect any other lawful use of such water; provided, that for the purposes of this Compact, 'pollution' shall not mean or include 'natural deterioration.'

"(j) The term 'natural deterioration' means the material reduction in the quality of water resulting from the leaching of solubles from the soils and rocks through or over which the water flows naturally.

"(k) The term 'designated water' means water released from storage, paid for by non-Federal interests, for delivery to a specific point of use or diversion.

"(l) The term 'undesignated water' means all water released from storage other than 'designated water.'

"(m) The term 'conservation storage capacity' means that portion of the active capacity of reservoirs available for the storage of water for subsequent beneficial use, and it excludes any portion of the capacity of reservoirs allocated solely to flood control and sediment control, or either of them.

"(n) The term 'runoff' means both the portion of precipitation which runs off the surface of a drainage area

and that portion of the precipitation that enters the streams after passing through the portions of the earth.

"Subdivision of Reach I and apportionment of water therein. Reach I of the Red River is divided into topographical sub-basins, with the water therein allocated as follows:

"ARTICLE IV

"APPORTIONMENT OF WATER--REACH I

"OKLAHOMA--TEXAS

"Sec. 4.01. Subbasin 1--Interstate streams--Texas.

"(a) This includes the Texas portion of Buck Creek, Sand (Lebos) Creek, Salt Fork Red River, Elm Creek, North Fork Red River, Sweetwater Creek, and Washita River, together with all their tributaries in Texas which lie west of the 100th Meridian.

"(b) The annual flow within this subbasin is hereby apportioned sixty (60) percent to Texas and forty (40) percent to Oklahoma.

"Sec. 4.02. Subbasin 2--Intrastate and Interstate streams--Oklahoma.

"(a) This subbasin is composed of all tributaries of the Red River in Oklahoma and portions thereof upstream to the Texas-Oklahoma state boundary at longitude 100 degrees west, beginning from Denison Dam and upstream to and including Buck Creek.

"(b) The State of Oklahoma shall have free and unrestricted use of the water of this subbasin.

"Sec. 4.03. Subbasin 3--Intrastate streams--Texas.

"(a) This includes the tributaries of the Red River in Texas, beginning from Denison Dam and upstream to and including Prairie Dog Town Fork Red River.

"(b) The State of Texas shall have free and unrestricted use of the water in this subbasin.

"Sec. 4.04. Subbasin 4--Mainstem of the Red River and Lake Texoma.

"(a) This subbasin includes all of Lake Texoma and the Red River beginning at Denison Dam and continuing upstream to the Texas-Oklahoma state boundary at longitude 100 degrees west.

"(b) The storage of Lake Texoma and flow from the mainstem of the Red River into Lake Texoma is apportioned as follows:

"(1) Oklahoma 200,000 acre-feet and Texas 200,000 acre-feet, which quantities shall include existing allocations and uses; and

"(2) Additional quantities in a ratio of fifty (50) percent to Oklahoma and fifty (50) percent to Texas.

"Sec. 4.05. Special Provisions.

"(a) Texas and Oklahoma may construct, jointly or in cooperation with the United States, storage or other facilities for the conservation and use of water; provided that any facilities constructed on the Red River boundary between the two states shall not be inconsistent with the Federal legislation authorizing Denison Dam and Reservoir project.

"(b) Texas shall not accept for filing, or grant a permit, for the construction of a dam to impound water solely for irrigation, flood control, soil conservation, mining and recovery of minerals, hydroelectric power, navigation, recreation and pleasure, or for any other purpose other than for domestic, municipal, and industrial water supply, on the mainstem of the North Fork Red River or any of its tributaries within Texas above Lugert-Altus Reservoir until the date that imported water, sufficient to meet the municipal and irrigation needs of Western Oklahoma is provided, or until January 1, 2000, which ever occurs first.

"Subdivision of Reach II and allocation of water therein. Reach II of the Red River is divided into topographic subbasins, and the water therein is allocated as follows:

"ARTICLE V

"APPORTIONMENT OF WATER--REACH II

"ARKANSAS, OKLAHOMA, TEXAS AND LOUISIANA

"Sec. 5.01. Subbasin 1--Intrastate streams--Oklahoma.

"(a) This subbasin includes those streams and their tributaries above existing, authorized or proposed last downstream major dam sites, wholly in Oklahoma and flowing into Red River below Denison Dam and above the Oklahoma-Arkansas state boundary. These streams and their tributaries with existing, authorized or proposed last downstream major dam sites are as follows:

| <u>Stream</u> | <u>Site</u> | <u>Ac-ft</u> | <u>Latitude</u> | <u>Longitude</u> |
|----------------|-------------|--------------|-----------------|------------------|
| Island-Bayou | Albany | 85,200 | 33°51.5'N | 96°11.4'W |
| Blue River | Durant | 147,000 | 33°55.5'N | 96°04.2'W |
| Boggy River | Boswell | 1,243,800 | 34°01.6'N | 95°45.0'W |
| Kiamichi River | Hugo | 240,700 | 34°01.0'N | 95°22.6'W |

"(b) Oklahoma is apportioned the water of this subbasin and shall have unrestricted use thereof.

"Sec. 5.02. Subbasin 2--Intrastate streams--Texas.

"(a) This subbasin includes those streams and their tributaries above existing authorized or proposed last downstream major dam sites, wholly in Texas and flowing into Red River below Denison Dam and above the Texas-Arkansas state boundary. These streams and their tributaries with existing, authorized or proposed last downstream major dam sites are as follows:

| <u>Stream</u> | <u>Site</u> | <u>Ac-ft</u> | <u>Latitude</u> | <u>Longitude</u> |
|-------------------|----------------------|--------------|-----------------|------------------|
| Shawnee Creek | Randall Lake | 5,400 | 33°48.1'N | 96°34.8'W |
| Brushy Creek | Valley Lake | 15,000 | 33°38.7'N | 96°21.5'W |
| Bois d'Arc Creek | New Bonham Reservoir | 130,600 | 33°42.9'N | 95°58.2'W |
| Coffee Mill Creek | Coffee Mill Lake | 8,000 | 33°44.1'N | 95°58.0'W |
| Sandy Creek | Lake Crockett | 3,900 | 33°44.5'N | 95°55.5'W |
| Sanders Creek | Pat Mayse | 124,500 | 33°51.2'N | 95°32.9'W |
| Pine Creek | Lake Crook | 11,011 | 33°43.7'N | 95°34.0'W |

| | | | | |
|----------------|---------------|---------|-----------|-----------|
| Big Pine Creek | Big Pine Lake | 138,600 | 33°52.0'N | 95°11.7'W |
| Pecan Bayou | Pecan Bayou | 625,000 | 33°41.1'N | 94°58.7'W |
| Mud Creek | Liberty Hill | 97,700 | 33°33.0'N | 94°29.3'W |
| | KVW Ranch | | | |
| Mud Creek | Lakes(3) | 3,440 | 33°34.8'N | 94°27.3'W |

"(b) Texas is apportioned the water of this subbasin and shall have unrestricted use thereof.

"Sec. 5.03. Subbasin 3--Interstate streams--Oklahoma and Arkansas.

"(a) This subbasin includes Little River and its tributaries above Millwood Dam.

"(b) The States of Oklahoma and Arkansas shall have free and unrestricted use of the water of this subbasin within their respective states, subject, however, to the limitation that Oklahoma shall allow a quantity of water equal to 40 percent of the total runoff originating below the following existing, authorized or proposed last downstream major dam sites in Oklahoma to flow into Arkansas:

| <u>Stream</u> | <u>Site</u> | <u>Ac-ft</u> | <u>Latitude</u> | <u>Longitude</u> |
|---------------------|-------------|--------------|-----------------|------------------|
| Little River | Pine Creek | 70,500 | 34°06.8'N | 95°04.9'W |
| Glover Creek | Lukfata | 258,600 | 34°08.5'N | 94°55.4'W |
| Mountain Fork River | Broken Bow | 470,100 | 34°08.9'N | 94°41.2'W |

"(c) Accounting will be on an annual basis unless otherwise deemed necessary by the States of Arkansas and Oklahoma.

"Sec. 5.04. Subbasin 4--Interstate streams--Texas and Arkansas.

"(a) This subbasin shall consist of those streams and their tributaries above existing, authorized or proposed last downstream major dam sites, originating in Texas and crossing the Texas-Arkansas state boundary before flowing into the Red River in Arkansas. These streams and their tributaries with existing, authorized or proposed last downstream major dam sites are as follows:

| <u>Stream</u> | <u>Site</u> | <u>Ac-ft</u> | <u>Location</u> | |
|-------------------------|----------------------|--------------|-----------------|------------------|
| | | | <u>Latitude</u> | <u>Longitude</u> |
| McKinney Bayou Trib. | Bringle Lake | 3,052 | 33°30.6'N | 94°06.2'W |
| Barkman Creek | Barkman Reservoir | 15,900 | 33°29.7'N | 94°10.3'W |
| Sulphur River | Texarkana | 386,900 | 33°18.3'N | 94°09.6'W |

"(b) The State of Texas shall have the free and unrestricted use of the water of this subbasin.

"Sec. 5.05. Subbasin 5--Mainstem of the Red River and tributaries.

"(a) This subbasin includes that portion of the Red River, together with its tributaries, from Denison Dam down to the Arkansas-Louisiana state boundary, excluding all tributaries included in the other four subbasins of Reach II.

"(b) Water within this subbasin is allocated as follows:

"(1) The Signatory States shall have equal rights to the use of runoff originating in subbasin 5 and undesignated water flowing into subbasin 5, so long as the flow of the Red River at the Arkansas-Louisiana state boundary is 3,000 cubic feet per second or more, provided no state is entitled to more than 25 percent of the water in excess of 3,000 cubic feet per second.

"(2) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary is less than 3,000 cubic feet per second, but more than 1,000 cubic feet per second, the States of Arkansas, Oklahoma, and Texas shall allow to flow into the Red River for delivery to the State of Louisiana a quantity of water equal to 40 percent of the total weekly runoff originating in subbasin 5 and 40 percent of undesignated water flowing into subbasin 5; provided, however, that this requirement shall not be interpreted to require any state to release stored water.

"(3) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary falls below 1,000 cubic feet per second, the States of Arkansas, Oklahoma, and

Texas shall allow a quantity of water equal to all the weekly runoff originating in subbasin 5 and all undesignated water flowing into subbasin 5 within their respective states to flow into the Red River as required to maintain a 1,000 cubic foot per second flow at the Arkansas-Louisiana state boundary.

"(c) Whenever the flow at Index, Arkansas, is less than 526 cfs, the states of Oklahoma and Texas shall each allow a quantity of water equal to 40 percent of the total weekly runoff originating in subbasin 5 within their respective states to flow into the Red River; provided however, this provision shall be invoked only at the request of Arkansas, only after Arkansas has ceased all diversions from the Red River itself in Arkansas above Index, and only if the provisions of Sub-sections 5.05(b) (2) and (3) have not caused a limitation of diversions in subbasin 5.

"(d) No state guarantees to maintain a minimum low flow to a downstream state.

"Sec. 5.06. Special Provisions.

"(a) Reservoirs within the limits of Reach II, subbasin 5, with a conservation storage capacity of 1,000 acre feet or less in existence or authorized on the date of the Compact pursuant to the rights and privileges granted by a Signatory State authorizing such reservoirs, shall be exempt from the provisions of Section 5.05; provided, if any right to store water in, or use water from, an existing exempt reservoir expires or is cancelled after the effective date of the Compact the exemption for such rights provided by this section shall be lost.

"(b) A Signatory State may authorize a change in the purpose or place of use of water from a reservoir exempted by subparagraph (a) of this section without losing that exemption, if the quantity of authorized use and storage is not increased.

"(c) Additionally, exemptions from the provisions of Section 5.05 shall not apply to direct diversions from Red River to off-channel reservoirs or lands.

"Subdivision of Reach III and allocation of water therein. Reach III of the Red River is divided into topographic subbasins, and the water therein allocated, as follows:

"ARTICLE VI

"APPORTIONMENT OF WATER--REACH III

"ARKANSAS, LOUISIANA, AND TEXAS

"Sec. 6.01. Subbasin 1--Interstate streams--Arkansas and Texas.

"(a) This subbasin includes the Texas portion of those streams crossing the Arkansas-Texas state boundary one or more times and flowing through Arkansas into Cypress Creek-Twelve Mile Bayou watershed in Louisiana.

"(b) Texas is apportioned sixty (60) percent of the runoff of this subbasin and shall have unrestricted use thereof; Arkansas is entitled to forty (40) percent of the runoff of this subbasin.

"Sec. 6.02. Subbasin 2--Interstate streams--Arkansas and Louisiana.

"(a) This subbasin includes the Arkansas portion of those streams flowing from Subbasin 1 into Arkansas, as well as other streams in Arkansas which cross the Arkansas-Louisiana state boundary one or more times and flow into Cypress Creek-Twelve Mile Bayou watershed in Louisiana.

"(b) Arkansas is apportioned sixty (60) percent of the runoff of this subbasin and shall have unrestricted use thereof; Louisiana is entitled to forty (40) percent of the runoff of this subbasin.

"Sec. 6.03. Subbasin 3--Interstate streams--Texas and Louisiana.

"(a) This subbasin includes the Texas portion of all tributaries crossing the Texas-Louisiana state boundary one

or more times and flowing into Caddo Lake, Cypress Creek-Twelve Mile Bayou or Cross Lake, as well as the Louisiana portion of such tributaries.

"(b) Texas and Louisiana within their respective boundaries shall each have the unrestricted use of the water of this subbasin subject to the following allocation:

"(1) Texas shall have the unrestricted right to all water above Marshall, Lake O' the Pines, and Black Cypress dam sites; however, Texas shall not cause runoff to be depleted to a quantity less than that which would have occurred with the full operation of Franklin County, Titus County, Ellison Creek, Johnson Creek, Lake O' the Pines, Marshall, and Black Cypress Reservoirs constructed, and those other impoundments and diversions existing on the effective date of this Compact. Any depletions of runoff in excess of the depletions described above shall be charged against Texas' apportionment of the water in Caddo Reservoir.

"(2) Texas and Louisiana shall each have the unrestricted right to use fifty (50) percent of the conservation storage capacity in the present Caddo Lake for the impoundment of water for state use, subject to the provision that supplies for existing uses of water from Caddo Lake, on date of Compact, are not reduced.

"(3) Texas and Louisiana shall each have the unrestricted right to fifty (50) percent of the conservation storage capacity of any future enlargement of Caddo Lake, provided, the two states may negotiate for the release of each state's share of the storage space on terms mutually agreed upon by the two states after the effective date of this Compact.

"(4) Inflow to Caddo Lake from its drainage area downstream from Marshall, Lake O' the Pines, and Black Cypress dam sites and downstream from other last downstream dams in existence on the date of the signing of the Compact document by the Compact Commissioners, will be allowed to continue flowing into Caddo Lake except that any manmade

depletions to this inflow by Texas will be subtracted from the Texas share of the water in Caddo Lake.

"(c) In regard to the water of interstate streams which do not contribute to the inflow to Cross Lake or Caddo Lake, Texas shall have the unrestricted right to divert and use this water on the basis of a division of runoff above the state boundary of sixty (60) percent to Texas and forty (40) percent to Louisiana.

"(d) Texas and Louisiana will not construct improvements on the Cross Lake watershed in either state that will affect the yield of Cross Lake; provided, however, this subsection shall be subject to the provisions of Section 2.08.

"Sec. 6.04. Subbasin 4--Intrastate streams--Louisiana.

"(a) This subbasin includes that area of Louisiana in Reach III not included within any other subbasin.

"(b) Louisiana shall have free and unrestricted use of the water of this subbasin.

"Subdivision of Reach IV and allocation of water therein. Reach IV of the Red River is divided into topographic subbasins, and the water therein allocated as follows:

"ARTICLE VII

"APPORTIONMENT OF WATER--REACH IV

"ARKANSAS AND LOUISIANA

"Sec. 7.01. Subbasin 1--Intrastate streams--Arkansas.

"(a) This subbasin includes those streams and their tributaries above last downstream major dam sites originating in Arkansas and crossing the Arkansas-Louisiana state boundary before flowing into the Red River in Louisiana. Those major last downstream dam sites are as follows:

| <u>Stream</u> | <u>Site</u> | <u>Ac-ft</u> | <u>Latitude</u> | <u>Longitude</u> |
|---------------|-------------|--------------|-----------------|------------------|
| Ouachita | Lake | | | |

| | | | | |
|----------------------------|--------------|-----------|-----------|-----------|
| River | Catherine | 19,000 | 34°26.6'N | 93°01.6'W |
| Caddo River | DeGray Lake | 1,377,000 | 34°13.2'N | 93°06.6'W |
| Little Missouri River | Lake Greeson | 600,000 | 34°08.9'N | 93°42.9'W |
| Alum Fork, Saline River | Lake Winona | 63,264 | 32°47.8'N | 92°51.0'W |

"(b) Arkansas is apportioned the waters of this subbasin and shall have unrestricted use thereof.

"Sec. 7.02. Subbasin 2--Interstate Streams--Arkansas and Louisiana.

"(a) This subbasin shall consist of Reach IV less subbasin 1 as defined in Section 7.01(a) above.

"(b) The State of Arkansas shall have free and unrestricted use of the water of this reach subject to the limitation that Arkansas shall allow a quantity of water equal to forty (40) percent of the weekly runoff originating below or flowing from the last downstream major dam site to flow into Louisiana. Where there are no designated last downstream dam sites, Arkansas shall allow a quantity of water equal to forty (40) percent of the total weekly runoff originating above the state boundary to flow into Louisiana. Use of water in this subbasin is subject to low flow provisions of subparagraph 7.02(b).

"Sec. 7.03. Special Provisions.

"(a) Arkansas may use the beds and banks of segments of Reach IV for the purpose of conveying its share of water to designated downstream diversions.

"(b) The State of Arkansas does not guarantee to maintain a minimum low flow for Louisiana in Reach IV. However, on the following streams when the use of water in Arkansas reduces the flow at the Arkansas-Louisiana state boundary to the following amounts:

- "(1) Ouachita--780 cfs
- "(2) Bayou Bartholomew--80 cfs
- "(3) Boeuf River--40 cfs
- "(4) Bayou Macon--40 cfs

the State of Arkansas pledges to take affirmative steps to regulate the diversions of runoff originating or flowing into Reach IV in such a manner as to permit an equitable

apportionment of the runoff as set out herein to flow into the State of Louisiana. In its control and regulation of the water of Reach IV any adjudication or order rendered by the State of Arkansas or any of its instrumentalities or agencies affecting the terms of this Compact shall not be effective against the State of Louisiana nor any of its citizens or inhabitants until approved by the Commission.

"ARTICLE VIII

"APPORTIONMENT OF WATER--REACH V

"Sec. 8.01. Reach V of the Red River consists of the mainstem Red River and all of its tributaries lying wholly within the State of Louisiana. The State of Louisiana shall have free and unrestricted use of the water of this subbasin.

"ARTICLE IX

"ADMINISTRATION OF THE COMPACT

"Sec. 9.01. There is hereby created an interstate administrative agency to be known as the 'Red River Compact Commission,' hereinafter called the 'Commission.' The Commission shall be composed of two representatives from each Signatory State who shall be designated or appointed in accordance with the laws of each state, and one Commissioner representing the United States, who shall be appointed by the President. The Federal Commissioner shall be the Chairman of the Commission but shall not have the right to vote. The failure of the President to appoint a Federal Commissioner will not prevent the operation or effect of this Compact, and the eight representatives from the Signatory States will elect a Chairman for the Commission.

"Sec. 9.02. The Commission shall meet and organize within 60 days after the effective date of this Compact. Thereafter, meetings shall be held at such times and places as the Commission shall decide.

"Sec. 9.03. Each of the two Commissioners from each state shall have one vote; provided, however, that if only one representative from a state attends he is authorized to vote on behalf of the absent Commissioner from that state. Representatives from three states shall constitute a quorum. Any action concerned with administration of this Compact or any action requiring compliance with specific terms of this Compact shall require six concurring votes. If a proposed action of the Commission affects existing water rights in a state, and that action is not expressly provided for in this Compact, eight concurring votes shall be required.

"Sec. 9.04.

"(a) The salaries and personal expenses of each state's representative shall be paid by the government that it represents, and the salaries and personal expenses of the Federal Commissioner will be paid for by the United States.

"(b) The Commission's expenses for any additional stream flow gaging stations shall be equitably apportioned among the states involved in the reach in which the stream flow gaging stations are located.

"(c) All other expenses incurred by the Commission shall be borne equally by the Signatory States and shall be paid by the Commission out of the 'Red River Compact Commission Fund.' Such Fund shall be initiated and maintained by equal payments of each state into the fund. Disbursement shall be made from the fund in such manner as may be authorized by the Commission. Such fund shall not be subject to audit and accounting procedures of the state; however, all receipts and disbursements of the fund by the Commission shall be audited by a qualified independent public accountant at regular intervals, and the report of such audits shall be included in and become a part of the annual report of the Commission. Each state shall have the right to make its own audit of the accounts of the Commission at any reasonable time.

"ARTICLE X

"POWERS AND DUTIES OF THE COMMISSION

"Sec. 10.01. The Commission shall have the power to:

"(a) Adopt rules and regulations governing its operation and enforcement of the terms of the Compact;

"(b) Establish and maintain an office for the conduct of its affairs and, if desirable, from time to time, change its location;

"(c) Employ or contract with such engineering, legal, clerical and other personnel as it may determine necessary for the exercise of its functions under this Compact without regard to the Civil Service Laws of any Signatory State; provided that such employees shall be paid by and be responsible to the Commission and shall not be considered employees of any Signatory State.

"(d) Acquire, use and dispose of such real and personal property as it may consider necessary;

"(e) Enter into contracts with appropriate State or Federal agencies for the collection, correlation and presentation of factual data, for the maintenance of records and for the preparation of reports;

"(f) Secure from the head of any department or agency of the Federal or State government such information as it may need or deem to be useful for carrying out its functions and as may be available to or procurable by the department or agency to which the request is addressed; provided such information is not privileged and the department or agency is not precluded by law from releasing same;

"(g) Make findings, recommendations or reports in connection with carrying out the purposes of this Compact, including, but not limited to, a finding that a Signatory State is or is not in violation of any of the provisions of this Compact. The Commission is authorized to make such investigations and studies, and to hold such hearings as it may deem necessary for said purposes. It is authorized to

make and file official certified copies of any of its findings, recommendations or reports with such officers or agencies of any Signatory State, or the United States, as may have any interest in or jurisdiction over the subject matter. The making of findings, recommendations, or reports by the Commission shall not be a condition precedent to the instituting or maintaining of any action or proceeding of any kind by a Signatory State in any court or tribunal, or before any agency or officer, for the protection of any right under this Compact or for the enforcement of any of its provisions; and

"(h) Print or otherwise reproduce and distribute its proceedings and reports.

"Sec. 10.02. The Commission shall:

"(a) Cause to be established, maintained, and operated such stream, reservoir and other gaging stations as are necessary for the proper administration of the Compact;

"(b) Cause to be collected, analyzed and reported such information on stream flows, water quality, water storage and such other data as are necessary for the proper administration of the Compact;

"(c) Perform all other functions required of it by the Compact and do all things necessary, proper and convenient in the performance of its duties thereunder;

"(d) Prepare and submit to the governor of each of the Signatory States a budget covering the anticipated expenses of the Commission for the following fiscal biennium;

"(e) Prepare and submit an annual report to the governor of each Signatory State and to the President of the United States covering the activities of the Commission for the preceding fiscal year, together with an accounting of all funds received and expended by it in the conduct of its work;

"(f) Make available to the governor or to any official agency of a Signatory State or to any authorized representative of the United States, upon request, any information within its possession;

"(g) Not incur any obligation in excess of the unencumbered balance of its funds, nor pledge the credit of any of the Signatory States; and

"(h) Make available to a Signatory State or the United States in any action arising under this Compact, without subpoena, the testimony of any officer or employee of the Commission having knowledge of any relevant facts.

"ARTICLE XI

"POLLUTION

"Sec. 11.01. The Signatory States recognize that the increase in population and the growth of industrial, agricultural, mining and other activities combined with natural pollution sources may lead to a diminution of the quality of water in the Red River Basin which may render the water harmful or injurious to the health and welfare of the people and impair the usefulness or public enjoyment of the water for beneficial purposes, thereby resulting in adverse social, economic, and environmental impacts.

"Sec. 11.02. Although affirming the primary duty and responsibility of each Signatory State to take appropriate action under its own laws to prevent, diminish, and regulate all pollution sources within its boundaries which adversely affect the water of the Red River Basin, the states recognize that the control and abatement of the naturally-occurring salinity sources as well as, under certain circumstances, the maintenance and enhancement of the quality of water in the Red River Basin may require the cooperative action of all states.

"Sec. 11.03. The Signatory States agree to cooperate with agencies of the United States to devise and effectuate means of alleviating the natural deterioration of the water of the Red River Basin.

"Sec. 11.04. The Commission shall have the power to cooperate with the United States, the Signatory States and other entities in programs for abating and controlling pollution and natural deterioration of the water of the Red

River Basin, and to recommend reasonable water quality objectives to the states.

"Sec. 11.05. Each Signatory State agrees to maintain current records of waste discharges into the Red River Basin and the type and quality of such discharges, which records shall be furnished to the Commission upon request.

"Sec. 11.06. Upon receipt of a complaint from the governor of a Signatory State that the interstate water of the Red River Basin in which it has an interest are being materially and adversely affected by pollution and that the state in which the pollution originates has failed after reasonable notice to take appropriate abatement measures, the Commission shall make such findings as are appropriate and thereafter provide such findings to the governor of the state in which such pollution originates and request appropriate corrective action. The Commission, however, shall not take any action with respect to pollution which adversely affects only the state in which such pollution originates.

"Sec. 11.07. In addition to its other powers set forth under this Article, the Commission shall have the authority, upon receipt of six concurring votes, to utilize applicable Federal statutes to institute legal action in its own name against the person or entity responsible for interstate pollution problems; provided, however, sixty (60) days before initiating legal action the Commission shall notify the Governor of the state in which the pollution source is located to allow that state an opportunity to initiate action in its own name.

"Sec. 11.08. Without prejudice to any other remedy available to the Commission, or any Signatory State, any state which is materially and adversely affected by the pollution of the water of the Red River Basin by pollution originating in another Signatory State may institute a suit against any individual, corporation, partnership, or association, or against any Signatory State or political or governmental subdivision thereof, or against any officer,

agency, department, bureau, district or instrumentality of or in any Signatory State contributing to such pollution in accordance with applicable Federal statutes. Nothing herein shall be construed as depriving any persons of any rights of action relating to pollution which such person would have if this Compact had not been made.

"ARTICLE XII

"TERMINATION AND AMENDMENT OF COMPACT

"Sec. 12.01. This Compact may be terminated at any time by appropriate action of the legislatures of all of the four Signatory States. In the event of such termination, all rights established under it shall continue unimpaired.

"Sec. 12.02. This Compact may be amended at any time by appropriate action of the legislatures of all Signatory States that are affected by such amendment. The consent of the United States Congress must be obtained before any such amendment is effective.

"ARTICLE XIII

"RATIFICATION AND EFFECTIVE DATE OF COMPACT

"Sec. 13.01. Notice of ratification of this Compact by the legislature of each Signatory State shall be given by the governor thereof to the governors of each of the other Signatory States and to the President of the United States. The President is hereby requested to give notice to the governors of each of the Signatory States of the consent to this Compact by the Congress of the United States.

"Sec. 13.02. This Compact shall become effective, binding and obligatory when and only when:

"(a) It has been duly ratified by each of the Signatory States; and

"(b) It has been consented to by an Act of the Congress of the United States, which Act provides that: "Any other statute of the United States to the contrary notwithstanding, in any case or controversy:

"which involves the construction or application of this Compact;
"in which one or more of the Signatory States to this Compact is a plaintiff or plaintiffs; and
"which is within the judicial power of the United States as set forth in the Constitution of the United States;
"and without any requirement, limitation or regard as to the sum or value of the matter in controversy, or of the place of residence or citizenship of, or of the nature, character or legal status of, any of the other proper parties plaintiff or defendant in such case or controversy:
"The consent of Congress is given to name and join the United States as a party defendant or otherwise in any such case or controversy in the Supreme Court of the United States if the United States is an indispensable party thereto.

"Sec. 13.03. The United States District Courts shall have original jurisdiction (concurrent with that of the Supreme Court of the United States, and concurrent with that of any other Federal or state court, in matters in which the Supreme Court, or other court has original jurisdiction) of any case or controversy involving the application or construction of this Compact; that said jurisdiction shall include, but not be limited to, suits between Signatory States; and that the venue of such case or controversy may be brought in any judicial district in which the acts complained of (or any portion thereof) occur.

SIGNED AND APPROVED on the 12th day of May 1978 at Denison Dam.

John P. Saxton
John P. Saxton, Commissioner
State of Arkansas

Arthur R. Theis
Arthur R. Theis, Commissioner
State of Louisiana

Orville B. Saunders
Orville B. Saunders,
Commissioner
State of Oklahoma

Fred Parkey
Fred Parkey,
Commissioner
State of Texas

R.C. Marshall
R.C. MARSHALL, Major General
Representative
United States of America"

Added by Acts 1979, 66th Leg., p. 551, ch. 261, Sec. 1,
eff. May 24, 1979.

APPENDIX V

[\(return to Border Waters\)](#)

Caddo Lake Compact (from the Texas Water Code)

CHAPTER 47. CADDO LAKE COMPACT

◆ 47.001. Ratification

The Caddo Lake Compact, the text of which is set out in Section 47.011 of this code, is ratified and confirmed in all respects after having been signed at Marshall, Texas, on January 26, 1979, by Arthur R. Theis, Red River Compact Commissioner for the State of Louisiana, Fred Parkey, Red River Compact Commissioner for the State of Texas, William M. Huffman, Marshall, Texas, Senator Ed Howard, Texarkana, Texas, Senator Don Williamson, Shreveport, Louisiana, and Calhoun Allen, Shreveport, Louisiana.

Added by Acts 1979, 66th Leg., p. 750, ch. 330, ◆ 1, eff. June 6, 1979.

◆ 47.002. Original Copy

An original copy of the compact is on file in the office of the secretary of state.

Added by Acts 1979, 66th Leg., p. 750, ch. 330, ◆ 1, eff. June 6, 1979.

◆ 47.003. Commissioner

(a) The appointed Red River Compact Commissioner shall serve as a commissioner to represent this state on the commission established by Section 6 of the compact. Additionally, the governor with the advice and consent of the senate shall appoint a local commissioner from the Caddo Lake area in Texas to serve as another commissioner to represent the state on the commission established by Section 6 of the compact.

(b) The appointed Red River Compact Commissioner shall receive no additional compensation for serving as a Caddo Lake Compact Commissioner.

(c) The appointed local commissioner shall receive no compensation for serving as Caddo Lake Compact Commissioner but shall be entitled to reimbursement for actual and necessary expenses incurred in the discharge of official duties.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, ◆ 1, eff. June 6, 1979.

◆ 47.004. Oath

The appointed Red River Compact Commissioner and local commissioner shall each take the constitutional oath of office and shall each also take an oath to faithfully perform his or her duties as commissioner.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, **◆** 1, eff. June 6, 1979.

◆ 47.005. Powers and Duties

The appointed Red River Compact Commissioner and local commissioner are responsible for administering the provisions of the compact and have all the powers and duties prescribed by the compact.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, **◆** 1, eff. June 6, 1979.

◆ 47.006. Executive Director

(a) The executive director of the Texas Natural Resource Conservation Commission or a designated representative selected from the staff of the Texas Natural Resource Conservation Commission shall also serve as a commissioner and represent this state on the commission established by Section 6 of the compact.

(b) The executive director or the designated representative may exercise the powers and shall discharge the duties provided by the compact.

(c) The executive director or the designated representative is not entitled to additional compensation for performing the duties under the compact but is entitled to reimbursement for actual and necessary expenses incurred while traveling in the discharge of official duties.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, **◆** 1, eff. June 6, 1979. Amended by Acts 1985, 69th Leg., Ch. 795, **◆** 1.137, eff. Sept. 1, 1985; Acts 1995, 74th Leg., Ch. 76, **◆** 11.320, eff. Sept. 1, 1995.

◆ 47.007. Employees; Administrative Expenses

The commissioners, in conjunction with other members of the commission and as authorized by the legislature, may employ engineering and clerical personnel and may incur necessary office expenses for the appointed Red River Compact Commissioner and other expenses incident to the proper performance of their duties and the proper administration of the compact. However, the commissioners shall not incur any financial obligation on behalf of this state until the legislature has authorized and appropriated money for the obligation.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, **◆** 1, eff. June 6, 1979.

◆ 47.008. Cooperation of Texas Natural Resource Conservation Commission

The Texas Natural Resource Conservation Commission shall cooperate with the commissioners in the performance of their duties and shall furnish them any factual data and information that is available.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, ◆ 1, eff. June 6, 1979. Amended by Acts 1985, 69th Leg., Ch. 795, ◆ 1.137, eff. Sept. 1, 1985; Acts 1995, 74th Leg., Ch. 76, ◆ 11.321, eff. Sept. 1, 1995.

◆ 47.009. Notification of Other Parties; Copies

The governor shall notify the Governor of Louisiana and the President of the United States of the ratification of the compact by this state. On request of the governor, the secretary of state shall furnish to the Governor of Louisiana and the President of the United States a certified copy of the Act adopting this chapter of the code.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, ◆ 1, eff. June 6, 1979.

◆ 47.010. Time When Compact Binding

This compact is binding and obligatory when the Red River Compact has been ratified by the State of Texas and this compact is ratified by the Legislature of Louisiana and consented to by the United States.

Added by Acts 1979, 66th Leg., p. 750, Ch. 330, ◆ 1, eff. June 6, 1979.

◆ 47.011. Text of Compact

The Caddo Lake Compact reads as follows:

"CADDO LAKE COMPACT

Preamble

The States of Louisiana and Texas, by acts of their respective governors, and based upon previous acts of their legislatures, have appointed representatives, including their respective Red River Compact Commissioners, to negotiate, in the interest of interstate comity and equitable apportionment and use of water, a Compact on Caddo Lake to augment and amplify the provisions of the Red River Compact dealing with Caddo Lake.

The Act of Congress, Public Law No. 346 (84th Congress, First Session), grants consent of federal government to the negotiation of this Compact; pursuant to that act, the President has designated the representative of the United States.

Because the water and water rights of the States of Oklahoma and Arkansas under the Red River Compact are completely unaffected by this Compact, Oklahoma and Arkansas have no objection to this Compact and did not participate in the negotiation of this Compact.

In order to resolve current controversies regarding the use of Caddo Lake water, controversies not adequately dealt with in the Red River Compact, the States of Texas and Louisiana, acting through their authorized representatives, have agreed to an equitable apportionment and use of the water of Caddo Lake and do hereby submit this Compact to amplify the Red River Compact and recommend that it be adopted by their respective legislatures and approved by Congress as hereinafter set forth:

Sec. 1 Purposes

In addition to the purposes specified in the Red River Compact, this compact is intended to preserve and protect Caddo Lake as a valuable environmental, cultural and natural resource and enhance water resource and recreational potentials, while allowing its utilization for water needs of adjacent portions of Louisiana and Texas. A primary means of accomplishing these purposes is to raise the spillway elevation of Caddo Lake to an elevation of 170.5 feet above mean sea level.

Nothing in this Compact shall be deemed to impair or affect the powers, rights, or obligations of the United States or those claiming under its authority in, over, and to water of Caddo Lake; nor shall this Compact be construed as interfering with the application of the National Environmental Policy Act of 1969.

Sec. 2 Relation to the Red River Compact

(a) This compact augments and amplifies the Red River Compact. It shall be construed harmoniously with the Red River Compact; it is not intended to amend, replace, or supersede any provisions of the Red River Compact, nor are any of the provisions of the Red River Compact intended to prevent the effective implementation of this Compact.

(b) In the event the Red River Compact is not enacted by all concerned states and ratified by Congress, or in the event that such action occurs after the effective date of this Compact, this Compact shall be fully effective pursuant to the provisions of Section 9.

Sec. 3 Dedication

The States of Louisiana and Texas hereby dedicate the water of Caddo Lake below 167.5 feet above mean sea level to serve as a recreation and navigation pool. Neither Louisiana nor Texas shall allow the diversion or consumptive use of the water of Caddo Lake below that level except as authorized in this Compact.

Sec. 4 Diversion of Dedicated Water

(a) In order to divert water when the level of Caddo Lake is below 167.5 feet above mean sea level, any water user diverting more than 1,000 gallons per day from Caddo

Lake must submit water use plans to the Caddo Lake Commission providing for conservation and efficient use of water.

(b) The Caddo Lake Commission shall authorize users with approved water use plans to divert water from Caddo Lake when the lake level is below 167.5 feet above mean sea level, at times and under conditions authorized by the Caddo Lake Commission. The Caddo Lake Commission shall give priority to domestic users, municipalities or municipal use by political subdivisions and industries, in that order.

(c) In the event any user of water from Caddo Lake shall purchase water which is delivered into Caddo Lake from another source, that user making the purchase shall have the use of such purchased water, minus transportation or storage losses if any, as determined by the Commission, free from the regulation of the Caddo Lake Commission.

Sec. 5 Operating Rules

As provided in Section 7, the Caddo Lake Commission shall have the power to establish operating criteria to govern the diversion and use of water from Caddo Lake. Unless modified, supplemented or changed by the Caddo Lake Commission, the following rules shall govern the diversion and use of water from Caddo Lake.

(a) The following operating rules shall be in effect until Caddo Lake is enlarged by raising the spillway level as provided in Section 8.

(1) Whenever water is spilling over the existing spillway at 168.5 feet above mean sea level, each state may withdraw or divert water from Caddo Lake without restriction.

(2) Whenever Caddo Lake is not spilling over the existing spillway at 168.5 feet above mean sea level, the total consumptive use by each state shall not exceed 8,400 acre-feet during the drawdown period; provided that neither state shall divert more than 3,600 acre-feet during any one month or 4,800 acre-feet during any two consecutive months.

(3) In addition to the requirements of Section 5(a)(2), when the lake level of Caddo Lake is at or below 167.5 feet above mean sea level,

(a) Any diversion by either state must be approved by the Caddo Lake Commission, as provided in Section 4; and,

(b) The total consumptive use by each state shall not exceed an average of 1,000 acre-feet per month, or more than 3,000 acre-feet during any two consecutive months; however,

(c) The limitations above shall not apply to a municipality or political subdivision during an emergency caused by the destruction or contamination of the municipality's or political subdivision's other water source.

(b) The following operating rules shall be in effect after Caddo Lake is enlarged by raising the spillway level as provided in Section 8.

(1) Whenever water is spilling over the raised spillway level, each state may withdraw or divert water from Caddo Lake without restriction.

(2) Whenever Caddo Lake is not spilling over the raised spillway, and the lake surface elevation is above 167.5 feet above mean sea level,

(a) If each state obtains 50% of the water above 168.5 feet above mean sea level, as authorized in Section 8, each state shall be entitled to divert 16,800 acre-feet during a drawdown period.

(b) If each state does not obtain 50% of the water above 168.5 feet above mean sea level, as authorized in Section 8, the total consumptive use by that state shall not be reduced below the amount of water to which it was entitled under Section 5(a).

(3) Whenever Caddo Lake is at or below 167.5 feet above mean sea level, no diversions from Caddo Lake may be made except in the case of a catastrophic event (such as destruction of a municipality or political subdivision's other water supply source or a drawdown which is more severe than the critical drawdown of record). Any emergency withdrawal or diversion must be specifically authorized by the Caddo Lake Commission, as provided in Section 4.

(c) The term 'drawdown' as used herein means that period commencing on the first day water ceases spilling over the existing spillway (or the raised spillway, if Caddo Lake is enlarged as authorized in Section 8) and continuing so long as the Caddo Lake surface elevation continues to fall, until the day when appreciable inflow reaches Caddo Lake, causing the Caddo Lake surface elevation to rise leading to a spill from Caddo Lake.

Sec. 6 Administration

(a) There is hereby created an interstate administrative agency to be known as the 'Caddo Lake Commission,' also referred to herein as the 'Commission.' It shall be composed of the Commissioners of Louisiana and Texas who serve as Red River Compact Commissioners and an appointed commissioner from each state who resides within one of the parishes or counties in which Caddo Lake is located. The Commissioners shall choose one member of the Commission to serve as a voting chairman. In the event this Compact becomes effective prior to, or without, the Red River Compact, the Governors of Texas and Louisiana shall each appoint three Commissioners to serve as Caddo Lake Commissioners. These Commissioners, or their successors, shall serve until the Red River Compact becomes effective and the offices of the nonlocal commissioners are assumed by the states' Red River Compact Commissioners.

(b) The Commission shall meet and organize within sixty (60) days after the effective date of this Compact. Thereafter, meetings shall be held at such times and places as the Commission shall decide.

(c) Each Commissioner shall have one vote; however, if one or more commissioners from a state is absent, the Commissioner(s) in attendance from that state is authorized to vote on behalf of the absent Commissioner(s) from that state. Any action concerning the administration of this Compact shall require four votes.

(d) The salaries and personal expenses of each state's Commissioners shall be paid by that state.

(e) All expenses incurred by the Commission shall be borne equally by the States of Louisiana and Texas and shall be paid by the Commission out of the 'Caddo Lake Commission Fund'. Such fund shall be initiated and maintained by equal payments of each state into the fund. Disbursements shall be made from the fund in such a manner as may be authorized by the Commission. Such fund shall not be subject to audit and accounting procedures of either state; however, all receipts and disbursements of the fund by the Commission shall be audited by a qualified independent public accountant at regular intervals, and the report of such audits shall be included in and become part of the annual report of the Commission. Each state shall have the right to make its own audit of the accounts of the Commission at any reasonable time.

Sec. 7 Duties and Powers

(a) The Commission shall have the power to:

(1) Adopt rules and regulations governing its operation and enforcement of the terms of the Compact;

(2) Establish and maintain an office for the conduct of its affairs and, if desirable, from time to time, change its location;

(3) Employ or contract with such engineering, legal, clerical and other personnel as it may determine necessary for the exercise of its functions under this Compact without regard to the Civil Service Laws of Louisiana or Texas; provided that such employees shall be paid by and be responsible to the Commission and shall not be considered employees of any state;

(4) Acquire, use and dispose of such real and personal property as it may consider necessary;

(5) Enter into contracts with appropriate state or federal agencies for the collection, correlation and presentation of factual data, for the maintenance of records and for the preparation of reports;

(6) Secure from the head of any department or agency of the federal or state government such information as it may need or deem to be useful for carrying out its functions and as may be available to or procurable by the department or agency to which the request is addressed; provided such information is not privileged and the department or agency is not precluded by law from releasing same;

(7) Make findings, recommendations or reports in connection with carrying out the purposes of this Compact, including, but not limited to, a finding that Louisiana or Texas is or is not in violation of any of the provisions of this Compact. The Commission is authorized to make such investigations and studies, and to hold such hearings as it may deem necessary for said purposes. It is authorized to make and file official certified copies of any of its findings, recommendations or reports with such officers or agencies

of Louisiana or Texas or the United States, as may have any interest in or jurisdiction over the subject matter. The making of findings, recommendations, or reports by the Commission shall not be a condition precedent to the instituting or maintaining of any action or proceeding of any kind by Louisiana or Texas, in any court or tribunal, or before any agency or officer, for the protection of any right under this Compact or for the enforcement of any of its provisions; and

(8) Print or otherwise reproduce and distribute its proceedings and reports.

(b) The Commission shall:

(1) Cause to be established, maintained, and operated such stream, reservoir and other gaging stations as are necessary for the proper administration of the Compact;

(2) Cause to be collected, analyzed and reported such information on stream flows, water quality, water storage and such other data as are necessary for the proper administration of the Compact;

(3) Adopt reasonable standards and criteria for the approval of water use plans required by Section 4, and procedures for the submission thereof;

(4) Establish operating criteria to govern the diversion and use of water from Caddo Lake;

(5) Perform all other functions required of it by the Compact and do all things necessary, proper and convenient in the performance of its duties thereunder;

(6) Prepare and submit to the Governors of Louisiana and Texas a budget covering the anticipated expenses of the Commission for the following fiscal year or biennium;

(7) Prepare and submit an annual report to the Governors of Louisiana and Texas and to the President of the United States covering the activities of the Commission for the preceding fiscal year, together with an accounting of all funds received and expended by it in the conduct of its work;

(8) Make available to the governor or to any official agency of Louisiana or Texas or to any authorized representative of the United States, upon request, any information within its possession;

(9) Not incur any obligation in excess of the unencumbered balance of its funds, nor pledge the credit of Louisiana or Texas; and

(10) Make available to Louisiana or Texas or the United States in any action arising under this Compact, without subpoena, the testimony of any officer or employee of the Commission having knowledge of any relevant facts.

Sec. 8 Enlargement of Caddo Lake

(a) It is the intention of Louisiana and Texas to enlarge Caddo Lake by raising the spillway level two feet. Each state has the guaranteed right to obtain 50% of the water above 168.5 feet above mean sea level made available from such an enlargement, subject to paying one-half of the total costs. Total costs of enlargement are equal to the sum of the cost of spillway construction, the cost of land and flowage easements in Texas, the current market value of land and flowage easements in Louisiana, as well as the administrative expenses incurred for each of the above listed items.

(b) Each state may obtain a proportionately larger share of the water resulting from the enlargement by paying the portion of the cost which would otherwise be paid by the other state under Section 8(a).

(c) Should Louisiana, or one of its political subdivisions, unilaterally raise the Caddo Lake spillway level without obtaining flowage easements in Texas, Louisiana would have the right to all water made available by the enlargement; provided, however, this provision constitutes an express waiver of any sovereign immunity or Eleventh Amendment defenses which might otherwise be available to the State of Louisiana in an action for damages by a Caddo Lake property owner in Texas for damage resulting from such action.

(d) This section does not prevent the enlargement of Caddo Lake by raising the spillway level some amount less than two feet, nor does it prevent a subsequent enlargement of Caddo Lake which might ultimately raise the level of Caddo Lake's spillway more than two feet.

Sec. 9 Ratification and Effective Date of Compact

(a) Notice of ratification of this Compact by the Legislatures of Louisiana and Texas shall be given by the Governor thereof to the Governor of the other state and to the President of the United States. The President is hereby requested to give notice to the Governors of Texas and Louisiana of the consent to this Compact by the Congress of the United States.

(b) This Compact shall become effective, binding and obligatory when, and only when:

(1) It has been duly ratified by Louisiana and Texas;

(2) The Red River Compact has been duly ratified by the State of Texas; and

(3) It has been consented to by an Act of the Congress of the United States, which Act provides that:

Any other statute of the United States to the contrary notwithstanding, in any case or controversy:

which involves the construction or application of this Compact; in which Louisiana or Texas is a plaintiff; and

which is within the judicial power of the United States as set forth in the Constitution of the United States;

and without any requirement, limitation or regard as to the sum or value of the matter in controversy, or of the place of residence or citizenship of, or of the nature, character or legal status of, any of the other proper parties plaintiff or defendant in such case or controversy:

The consent of Congress is given to name and join the United States as a party defendant or otherwise in any such case or controversy in the Supreme Court of the United States if the United States is an indispensable party thereto.

(c) The United States District Courts shall have original jurisdiction (concurrent with that of the Supreme Court of the United States, and concurrent with that of any other federal or state court, in matters in which the Supreme Court, or other court has original jurisdiction) of any case or controversy involving the application or construction of this Compact; that said jurisdiction shall include, but not be limited to, suits between Louisiana and Texas; and that the venue of such case or controversy may be brought in any judicial district in which the acts complained of (or any portion thereof) occur.

SIGNED AND APPROVED THIS 26th DAY OF JANUARY, 1979.

William M. Huffman

WILLIAM M. HUFFMAN

Marshall, Texas

Ed Howard

SENATOR ED HOWARD

Texarkana, Texas

Fred Parkey

FRED PARKEY

Red River Compact Commissioner for Texas

Don Williamson

SENATOR DON WILLIAMSON

Shreveport, Louisiana

Calhoun Allen

CALHOUN ALLEN

Shreveport, Louisiana

Arthur R. Theis

ARTHUR R. THEIS,

Red River Compact Commissioner for Louisiana"

Added by Acts 1979, 66th Leg., p. 750, ch. 330, ♦ 1, eff. June 6, 1979.

APPENDIX VI

[\(return to Contaminants / Pollution\)](#)

Fish Consumption Advisories



Alan Levine
Secretary
Department of
Health & Hospitals
P. O. Box 629
Baton Rouge, LA
70821-0629

Harold Leggett, PhD
Secretary
Department of
Environmental Quality
P. O. Box 4301
Baton Rouge, LA
70821-4301

Robert Barham, MS
Secretary
Department of
Wildlife & Fisheries
P. O. Box 98000
Baton Rouge, LA
70898-9000

The following fish consumption advisory was issued on 2/11/2009 by the Department of Health & Hospitals, the Department of Environmental Quality, and the Department of Wildlife & Fisheries. For more information, please contact:

DHH
Adrienne Katner
(888) 293-7020

DEQ
Chris Piehler
(225) 219-3615

DWF
Mike Wood
(318) 343-4045

FISH CONSUMPTION ADVISORY FOR CADDO LAKE

In response to recent sampling and analysis of fish tissue data, the Louisiana Department of Health & Hospitals (DHH), Department of Environmental Quality (DEQ), and Department of Wildlife & Fisheries (DWF) are issuing the following advisory for Caddo Lake in Caddo Parish where unacceptable levels of mercury have been detected in bowfin (choupique, grinnel).

DHH, DEQ and DWF advise that the following precautions be taken when eating fish taken from Caddo Lake:

- **Women of childbearing age and children less than seven years of age should consume no more than SIX MEALS PER YEAR of bowfin (choupique, grinnel) from the advisory area. (A meal considered to be half a pound of fish for adults and children.)**
- **Other adults and children seven years of age and older should consume no more than TWO MEALS PER MONTH of bowfin from the advisory area. (A meal is considered to be half a pound of fish for adults and children.)**

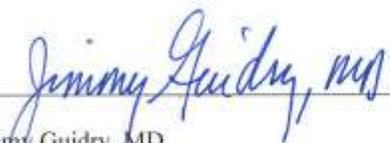
Louisiana fish consumption advisories are based on the estimate that the average Louisiana resident eats four fish meals per month (1 meal = ½ pound). Adults that eat more than four meals of fish a month, and women of child-bearing age and children that eat more than one meal of fish a month from local waterbodies, might increase their health risks. You can contact the Office of Public Health toll free at 1-888-293-7020 for more information about eating fish that contain chemicals.

The Texas Department of State Health Services also has an advisory for Caddo Lake. They advise that people should not consume more than TWO MEALS PER MONTH (8 ounce portion for adults, 4 ounces for children) of largemouth bass and freshwater drum combined from Caddo Lake. For more information see: http://www.dshs.state.tx.us/seafood/PDF2/Active/ADV-12_signed_TBR_SRR_BAS_CDL_BCC.pdf.

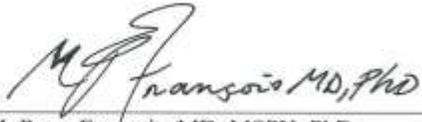
Mercury is an element that occurs naturally in the environment. It is released into the environment through natural processes and human activities. Consequently, there are small amounts of mercury in lakes, rivers, and oceans. Here, the mercury is turned into methylmercury, a form that is particularly harmful to an unborn baby or young child. Fish absorb methylmercury as they feed on aquatic organisms. Nearly all fish contain trace amounts of methylmercury. Larger fish, especially those that feed on other fish, contain more methylmercury than smaller fish. Therefore, in general, it is recommended that smaller fish be consumed instead of larger ones.

People are exposed throughout their lives to low levels of mercury. One way they can be exposed to mercury is from eating contaminated fish. Pregnant women can pass mercury from the fish they eat to their unborn babies, and nursing mothers can pass the mercury to their infants through their breast milk. Health effects from harmful levels of mercury can include nervous system and kidney damage. Developing fetuses are more sensitive to the toxic effects of mercury, especially in the first trimester of pregnancy. In addition to developing fetuses, infants and children are more sensitive to the effects of mercury; therefore, consumption advisories are issued at lower fish tissue concentration levels for these groups.

This advisory is issued as a precaution. Further sampling will be carried out by DEQ to determine the need for modifications to this advisory, including an adjustment of the boundaries if necessary. If you have consumed species under advisory from these waters, it is not likely that there is an immediate need to be concerned about the effects of mercury. However, you should consult your personal doctor if you are concerned.



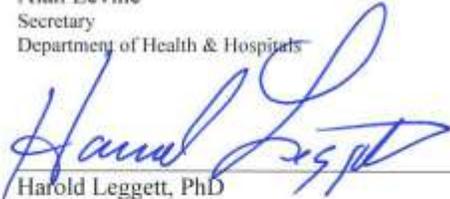
Jimmy Guidry, MD
State Health Officer and Medical Director
Department of Health & Hospitals



M. Rony Francois, MD, MSPH, PhD
Assistant Secretary, Office of Public Health
Department of Health & Hospitals



Alan Levine
Secretary
Department of Health & Hospitals



Harold Leggett, PhD
Secretary
Department of Environmental Quality



Robert Bachant, MS
Secretary
Department of Wildlife & Fisheries