Kenneth Lynn Ward Project Manager Parish of Caddo, Louisiana

Testimony on "Giant Salvinia" June 27, 2011

Giant salvinia has been in Caddo Lake for several years. Its fast growth rate causes many problems to the lake and the people who use it. Giant salvinia can double in size in a few days and can become up to three feet deep. This causes Caddo Lake not to be the water resource that it should be.

One million seven hundred thousand gallons of water each day is used to provide drinking water for Caddo Parish residents. Giant salvinia reduces the oxygen in the water, which increases treatment requirements. The thickness of the salvinia also slows down currents causing suspended solids to settle to the bottom resulting in increased siltation. Who knows what problems are associated with the decaying salvinia at the bottom of the lake?

More than thirty thousand people visit Caddo Lake each year for recreation. Giant salvinia causes large "dead zones" where floating islands of salvinia harm wildlife as well as recreation. The floating islands create problems for boaters, blocking off large areas of the lake. Reduced sunlight and oxygen cause problems for fish and other wildlife in those areas.

Currently, the Louisiana Department of Wildlife and Fisheries is the lead agency fighting giant salvinia in Caddo Parish. As the local government agency involved, Caddo Parish works with the Louisiana Department of Wildlife and Fisheries to address visitors and residents' concerns effectively. LSU AgCenter and Louisiana Tech University are conducting research to find the best way to battle giant salvinia. They are researching herbicides, weevils, and microorganisms.

Today, no known problem areas exist on Caddo Lake in Caddo Parish. But, now that summer is here, the high temperatures and lack of rain creates the perfect growing conditions for giant salvinia. In a few short weeks, Caddo Lake could be out of control as experienced in 2008 (see pictures A and B). The colder winters of the past two years and the "flushing", due to heavy rains last year, forced giant salvinia over the dam and into the currents of the Red River which has helped to clear Caddo Lake.

The Parish of Caddo has worked closely with the Louisiana Department of Wildlife and Fisheries to identify herbicide spray locations. Wildlife and Fisheries has a spray crew assigned to Caddo Lake. Herbicide spraying works, but has many limitations. The cost of the herbicide is the greatest. In fact in past years Louisiana ran out of funds for herbicide and the Parish of Caddo purchased the chemicals for continued spraying. Manpower for spraying is also very limited. Spray can not be applied in rain or high winds. See pictures C and D of areas before and after spraying.

Boat launch barriers have been installed at the Parish of Caddo's Earl Williamson Park in Oil City to assist in keeping giant salvinia from entering the boat launch area, see picture E. This also, helps in keeping the plant from attaching to boat trailers during launch and pick up. But during high winds, giant salvinia can be blown over the barriers and back into the launching area.

Caddo Parish has passed and posted ordinances on the prohibition of transportation and spreading of giant salvinia. Enforcement of such ordinances are hard and time consuming. Proper enforcement is very expensive. Signs have been posted at all boat launches to assist in proper notifications, hoping that most users would be concerned that they are not causing the invasive plant to spread.

Louisiana State University in Shreveport through a grant with funds from Caddo Parish is working on finding possible solutions to the giant salvinia battle. Also, Caddo Parish is providing land to the Louisiana Wildlife and Fisheries for a regional facility to store equipment and supplies to fight giant salvinia in Northwest Louisiana.

Other possible solutions are the introduction of weevils to the infested areas. The ability of the weevils to survive our winters and the inability to spray areas where weevils have been added are the largest limitations. Harvesting is an option in open lake areas. Areas with heavy trees and shallows make harvesting impossible. Both of these require funding and large amounts of manpower.

In conjunction with the Louisiana Department of Wildlife and Fisheries, the Parish of Caddo is working to save one of the most valuable water resources in Northwest Louisiana. The loss of historic Caddo Lake due to giant salvinia would be the loss of a way of life to our Parish. Jobs that derive from the lake would be lost. Families would have to move away from Caddo Lake to find work. Recreational opportunities would be lost, and high quality drinking water would be lost. The Parish of Caddo has spent more than \$40,000, not to mention the State funds that have been spent, to save this valuable resource. With research, and committed dedication this invasive plant can be managed in Caddo Lake.



Picture A



Picture B



Picture C



Picture D



Picture E