



Testimony of Richard Lowerre  
President, Caddo Lake Institute

Before the Subcommittee on Fisheries, Wildlife, Oceans & Insular Affairs  
House Committee on Natural Resources

June 27, 2011

## REGIONAL SOLUTIONS FOR GIANT SALVINIA

### INTRODUCTION

Mr. Chairman, thank you for permitting me to address your committee today on the important issue of control of Giant Salvinia. I also want to thank Congressman Gohmert for his support for the work of the Caddo Lake Institute and the many others who have worked hard together on the problem. I also appreciate the subcommittee members taking the time to help address the invasive species issues facing this region and much of the country.

Giant Salvinia is clearly having a very negative impact on this region. You have heard and will hear from many about the problems created by its presence. It is reducing the recreational value of the natural resources in the area. It is depressing the economics of tourism, sport fishing, hunting, and other water-based enterprises. It is depressing property values.

Giant Salvinia is clearly a regional problem. We need to address it together, as a regional problem.

Caddo Lake makes a good example, since it is half in Texas and half in Louisiana. Effective management of Giant Salvinia on only one side of the state line is clearly not a viable approach. Likewise, effective management at one lake in the region is also not sufficient. Because this plant can easily be transferred from lake to lake on boats and trailers, we need to address the problem at all the lakes. If we do not, those lakes that are not treated will simply become the source for infestations and re-infestations of other lakes.

Mr. Chairman, you have assembled a very good set of people with expertise and experience to help this committee address the problems. Moreover, by holding the hearing here, you are helping with the needed public outreach effort. Thank you.

It is that public outreach effort that will be the focus of my testimony today.

The Caddo Lake Institute (CLI) is a non-profit scientific and educational organization with the mission of protecting the ecological, cultural and economic integrity of Caddo Lake, its associated wetlands and surrounding plant and wildlife habitats.

DON HENLEY, *FOUNDER* | DWIGHT SHELLMAN JR., *PRESIDENT 1992 – 2006*

**BOARD OF DIRECTORS** DON HENLEY, *CHAIRMAN*; SANDRA HAVERLAH, *SECRETARY/TREASURER*; DR. CARROLL L. CORDES; MYRON J. HESS; J. MARSHALL JONES, JR.; WILLIAM F. MICHAELS

MAIL: 707 RIO GRANDE, SUITE 200, AUSTIN TEXAS 78701 | TELEPHONE: (512) 482-9345 | FAX: 512.482.9346 | WWW.CADDOLAKEINSTITUTE.US

CLI was founded by Don Henley in 1993 and has had the honor of working with the local governments, non-governmental organizations and individuals around Caddo for 18 years. We have worked together to take advantage of opportunities to improve local economic development and to address threats to such development in the region. Giant Salvinia is one of the biggest threats to date.

The public-private partnerships that have developed to work on opportunities and threats can claim significant victories. In the 1990s for example, we obtained a designation for much of Caddo Lake as a Wetland of International Importance under the Ramsar Convention, now signed by over 160 countries. Likewise, the partnership has successfully addressed threats to the lake and wetlands including assuring adequate flows to Caddo Lake.

The successes have been the result of coordination and cooperation among partners once there was consensus on a goal. There is a very strong consensus now that Giant Salvinia is a serious threat and has to be properly managed.

### **BACKGROUND ON THE WORK ON INVASIVE SPECIES AT CADDO LAKE**

Many individuals and organizations have played important roles in the work on invasive species at Caddo Lake. Some of the key individuals are here today.

For example, Texas State Representative Hughes (who is testifying today) has been a strong ally, helping to obtain funding from the State of Texas for the efforts by the Cypress Valley Navigation District to control Giant Salvinia.

Likewise USGS, and especially Dr. Randy Westbrooks, has played a critical role in providing information on control of Giant Salvinia that we could not get from private sources. Dr. Westbrooks continues to be a critical advisor.

Dr. Damon Waitt has also been an important advisor and ally. His website, [www.texasinvasives.org](http://www.texasinvasives.org) serves as an important central location for information on how we can address problems of invasive species.

The National Fish and Wildlife Foundation has helped fund the work of the Caddo Lake Institute - work that CLI hopes to continue. The Foundation has been an important source for funds for other control efforts around the country as well.

There are many others who have helped, but are not represented here today. Alcoa is one of the private companies that has helped fund work at Caddo. Alcoa helped pay for the field guide to aquatic plants of Caddo Lake that helps people identify native and invasive aquatic plant species.

The Northeast Texas Municipal Water District (NETMWD) led a watershed protection planning process that helped coordinate some of the earliest work to manage Giant Salvinia.

The Cypress Valley Navigation District (CVND) has used its limited resources effectively in the application of herbicides.

Last year, the Texas Parks and Wildlife Department (TPWD) initiated a major public education campaign on invasive species focusing initially on the problems in Northeast Texas with Giant Salvinia. Some of their materials are shown in the attachments to my testimony.

It is, however, non-governmental groups and volunteers who have done some of the most amazing work to fight Giant Salvinia. For example, in 2006 and 2007, the Greater Caddo Lake Association of Texas raised money and convinced many volunteers to spend hundreds of hours to build a 2-mile-long net across Caddo Lake and to collect the Giant Salvinia daily as it was captured in the net. A picture and map of that net is attached.

A local landowner, John Sanders, purchased an expensive floating mechanical harvester to allow CLI and others to experiment with such equipment on Caddo Lake and determine if and when such harvesting can play a role in the overall effort, and it can.

Since there are too many partners who have helped to name them all here, I have attached a poster to this testimony which identifies them. The full size poster is located at the Caddo Lake National Wildlife Refuge and is one effort to recognize the many participants in the effort to control invasive species.

It is my belief that only with such an extensive public-private partnership can we solve the problem of Giant Salvinia. There is no single solution; no one entity that can provide all the answers. There are important roles for the people who live, work and play at the affected lakes and rivers. We need to have them involved in a significant way, and we can.

## **SOLUTIONS**

This hearing is an important step in solving the regional problem with appropriate regional solutions.

We need a comprehensive public-private partnership made up of all the potential participants, including

- 1) the two state agencies with legal responsibilities for management of invasive species,
- 2) federal agencies with expertise and resources to bring to this two state problem,
- 3) local governments that can often move more quickly to respond to local problems,
- 4) universities that bring expertise to the problem, and
- 5) local non-governmental organizations and individuals who can assume important roles in the effort.

While we are going to have to rely on chemical, biological and mechanical controls, mostly used by governmental entities, it is almost as important to have the owners of property at the lakes, boats used on the lakes and marinas with operations on the lake to serve as inspectors for the effort. They can help identify infestations so the Giant Salvinia can be eradicated before it gets out of hand.

In fact, in the long run, it has to be the local stakeholders who are engaged and want to take responsibility if the management of invasive species is going to be successful.

We had a great start to public education and participation at Caddo Lake. The two-mile net is just one example. We have lost some of our momentum, however. We lost the funding for the volunteer coordination that is needed. And while the hard freeze of 2010 knocked back the Giant Salvinia, it also knocked back public involvement. That is understandable. The hard freezes did what all our other efforts had not done. In fact, some thought that periodic freezes would solve our problems.

After that 2010 freeze, however, Giant Salvinia roared back. If not for the freeze this past winter, Caddo Lake could have been on its way to very significant coverage by Giant Salvinia this year. We now know that we cannot rely on freezes. We know that Giant Salvinia can take over a lake in just a couple of years, damaging the economic and other values of the lake.

The two freezes in the winter of 2010 and 2011 have given us a new opportunity to reinvigorate people to help. Lakefront landowners and boaters and others can help identify small infestations so rapid response teams can spray or remove the Giant Salvinia.

We had this type of effort at Caddo in the past. We called it a Shoreline Watch. Residents and others were trained and provided field guides and other tools and information to help with search and destroy efforts. They helped identify infestations and some even took actions to remove the Giant Salvinia.

CLI is starting this effort again. We believe we can be more effective this time, having learned from past experience. We also believe we can and should take this approach to other lakes, if invited to do so by the local communities.

CLI and other non-governmental organizations can also build on other work done over the past 5 years. We can, for example, use the materials developed by TPWD and in others states for a broad public campaign. This work will likely be needed just to keep the current effort up, given budget cuts for TPWD. We can also use the videos, PSAs and other ideas that have already been developed. TPWD has agreed to assist.

## **RESEARCH**

I do want to highlight one more critical part of the effort. We need to know what is working now and what can work best under different conditions. Toward that end, the Texas A&M Water Resource Institute has been able to establish an experimental Giant Salvinia weevil rearing facility at the Caddo Lake National Wildlife Refuge. It did so with federal funds, thanks to Senator Hutchison. It has also set up research projects that will help us evaluate the proper role of weevils and other control techniques.

Until last year, we lacked these aspects of the effort. Weevils seemed like a possible solution, but there were different opinions about if and when they should be used. We are learning first hand now that they can be raised in this region and that they can be used to control Giant Salvinia. They will not, however, be a silver bullet. They certainly can be used to help control Giant Salvinia, but here, where we have freezes that kill the weevils faster than the plant, they are not going to be the only tool we need to use.

The weevil facility has another benefit. It provides a great public education opportunity since it is located at the visitor area at the Caddo Lake National Wildlife Refuge.

Mr. Chairman and members of the subcommittee, when you consider options to address Giant Salvinia, I hope you will be looking to expand these facilities to other parts of our region if, as I expect, you learn that these types of facilities are cost effective tools in the fight against Giant Salvinia. Texas A&M, LSU and other universities are the logical grantees for these types of research and experimental efforts.

## **CONCLUSION**

I have a set of recommendations on the opportunity to engage the public in the management of Giant Salvinia. I urge this subcommittee to encourage a strong public role. That is, I believe we need not only the chemical,

biological and mechanical systems that our government agencies can bring to the problem, but also the grass roots solutions.

With your help we can find solutions that fit the two-state or regional problem. One of those solutions should be early detection and response assisted by local residents and other stakeholders. Those efforts can be important to:

1. Eradicate Minor Infestations: We can develop better programs to encourage and assist property owners, boaters, local governments and local lake associations to help identify small infestations in public water bodies and report them to others for rapid responses through chemical treatments.
2. Remove Many of the Small Infestations: We can develop better programs to encourage and assist property owners, boaters and others to remove infestations around their boat docks, boat ramps, marinas and other locations to prevent establishment or spread of the invasive species.

To make this happen, I believe we need to raise public awareness throughout the region. We have good models, such as the signs, bumper stickers and other materials developed by the Texas Parks and Wildlife Department.

We also need to reduce the transportation of Giant Salvinia in the region. We can develop better programs to use volunteers and signage at local gas stations and at other locations to encourage boaters to clean their boats and trailers before leaving boat ramps at Giant Salvinia infested waters to help stop the spread of the problem.

And in raising public awareness of the need to reduce the movement of Giant Salvinia, we will have prepared ourselves to address similar problems for the next invasive species to arrive.

Thank you for holding this hearing and the opportunity to provide this testimony.

**Attachments -**

Pages 1-4: CLI brochure

Page 5: Signage at the weevil-rearing facility on the Caddo Lake National Wildlife Refuge

Page 6-9: TPWD public awareness campaign materials

Page 10: Map and photo of giant salvinia net across Caddo Lake