

# CYPRESS VALLEY NAVIGATION DISTRICT

Robert Speight  
Chairman

# CVND

- ▶ CVND was formed as a navigation, conservation, and reclamation district
- ▶ Encompasses all of the Cypress Basin in Harrison and Marion Counties
- ▶ Board members appointed by Commissioners Courts of each County
- ▶ Funded by the Counties as well as by Texas Parks and Wildlife Department

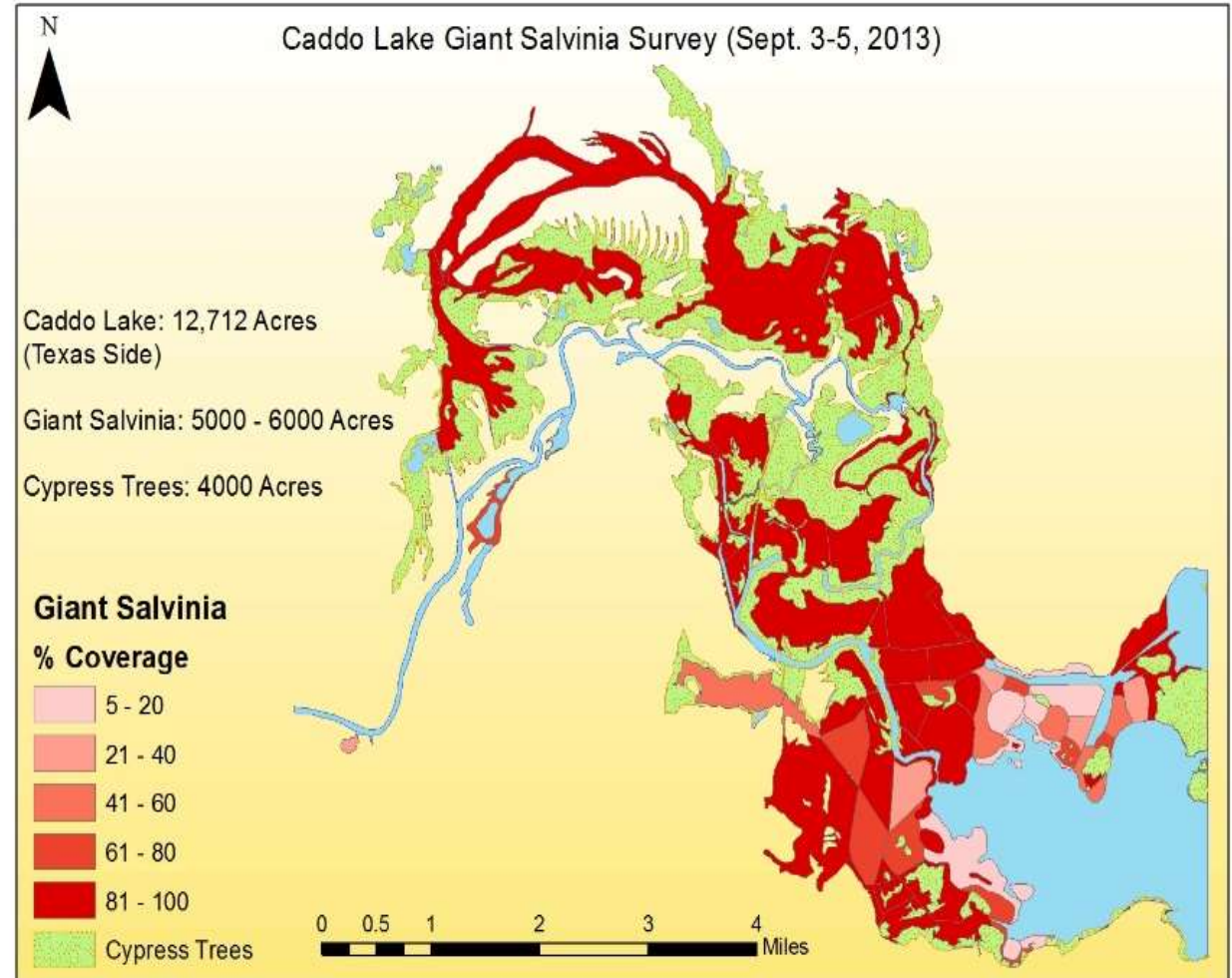
Mission is to :

Maintain, operate, and encourage the operation of navigable canals or waterways, using the natural bed and banks of the Cypress River and its tributaries and of Caddo Lake as necessary.

- ▶ Since the late 1960s CVND has utilized its own equipment and contractors to carry out its mission by:
  - ▶ Dredging,
  - ▶ Log and tree removal
  - ▶ Maintenance and repair of the extensive channel marker system in Caddo Lake
  - ▶ *Aquatic Vegetation Suppression*

# GIANT SALVINIA (GS)

- ▶ Discovered on Caddo Lake (La.) in early 2006
- ▶ Reported on Tx side in September 2006
- ▶ One plant can cover 40 sq. mi. in 3 months.
- ▶ Has been know to exceed 1 meter thick.
- ▶ Estimated to cover 100 acres on Tx side by Fall of 2007
- ▶ Increased to over 3200 acres in 2009
- ▶ Exploded to almost 6000 acres by 2013

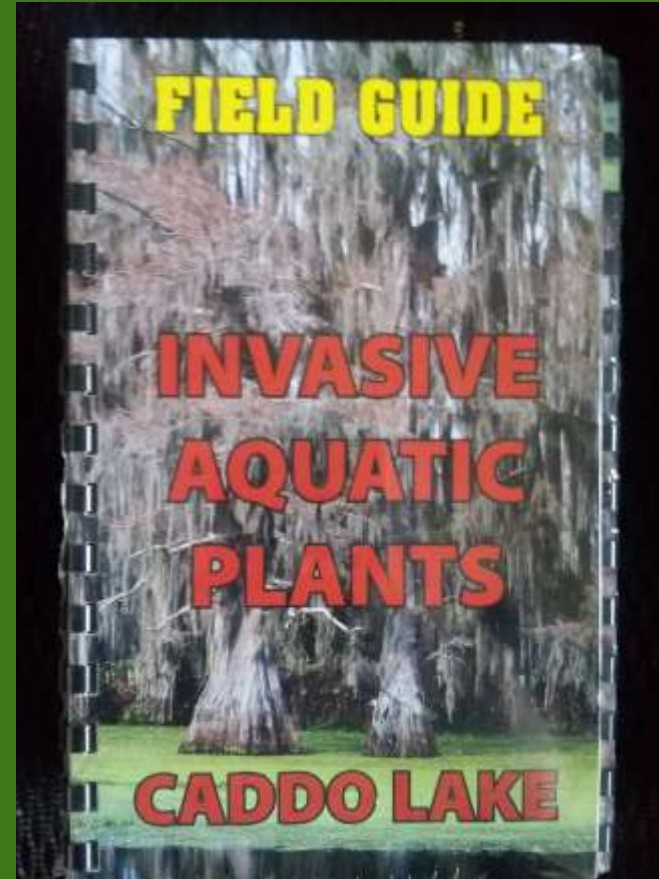


# Texas side control efforts

- ▶ Rapid Response Budget Committee formed in early 2007 made up of:
  - CITY OF MARSHALL
  - HARRISON COUNTY
  - NORTHEAST TEXAS MUNICIPAL WATER DISTRICT
  - CADDO LAKE INSTITUTE
  - CYPRESS VALLEY NAVIGATION DISTRICT
  - AEP/SWEPCO
  - USFWS

# Budget Committee actions

- ▶ Raised \$65,000 to fight the spread into Texas
- ▶ Authorized CVND to construct a 2 mile fence across the lake near the State line in an attempt to slow the invasive plant down. This was completed in August 2017 at a cost of \$30,000
- ▶ Built and deployed warning signs
- ▶ Developed a handbook for public education on how to identify invasive aquatic plants.





# CVND begins herbicide applications

- ▶ CVND received increased funding from the State Legislature to combat GS in 2007, 2009 and again in 2011. (CVND also received funding from USFWS)
- ▶ TPWD donated a surplus airboat to CVND which was refurbished and put into action in early 2008, a second boat was purchased in 2009
- ▶ TPWD/CVND partnered to make herbicide applications on Caddo from 2008-12
- ▶ CVND spent over \$750,000.00 during this period battling GS
- ▶ As GS spread to more lakes in Texas, CVND's funding was reduced and TPWD hired a stand alone contractor to treat aquatic invasives on all the lakes.



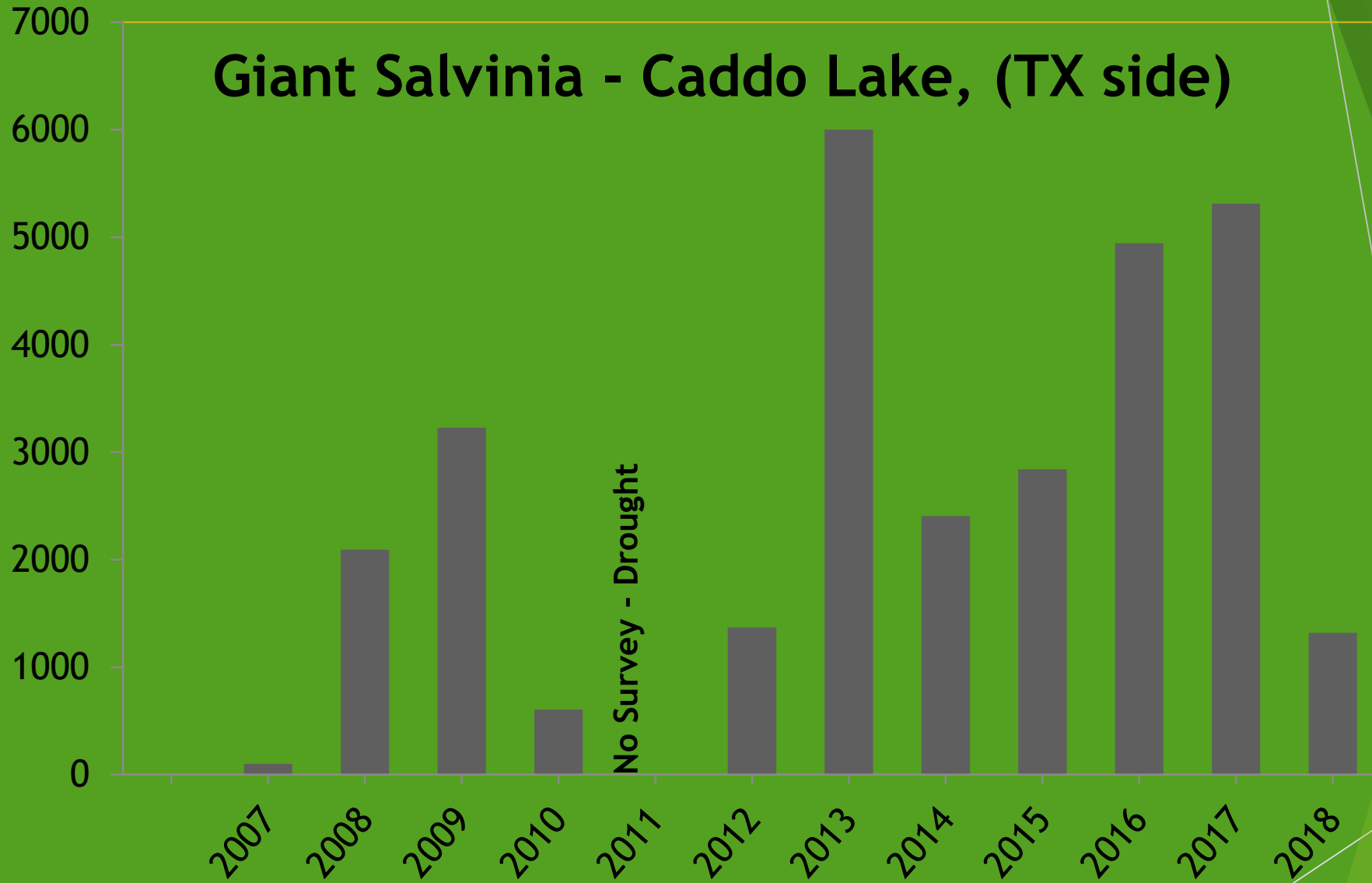


September 2013



# Giant Salvinia - Caddo Lake, (TX side)

Acres

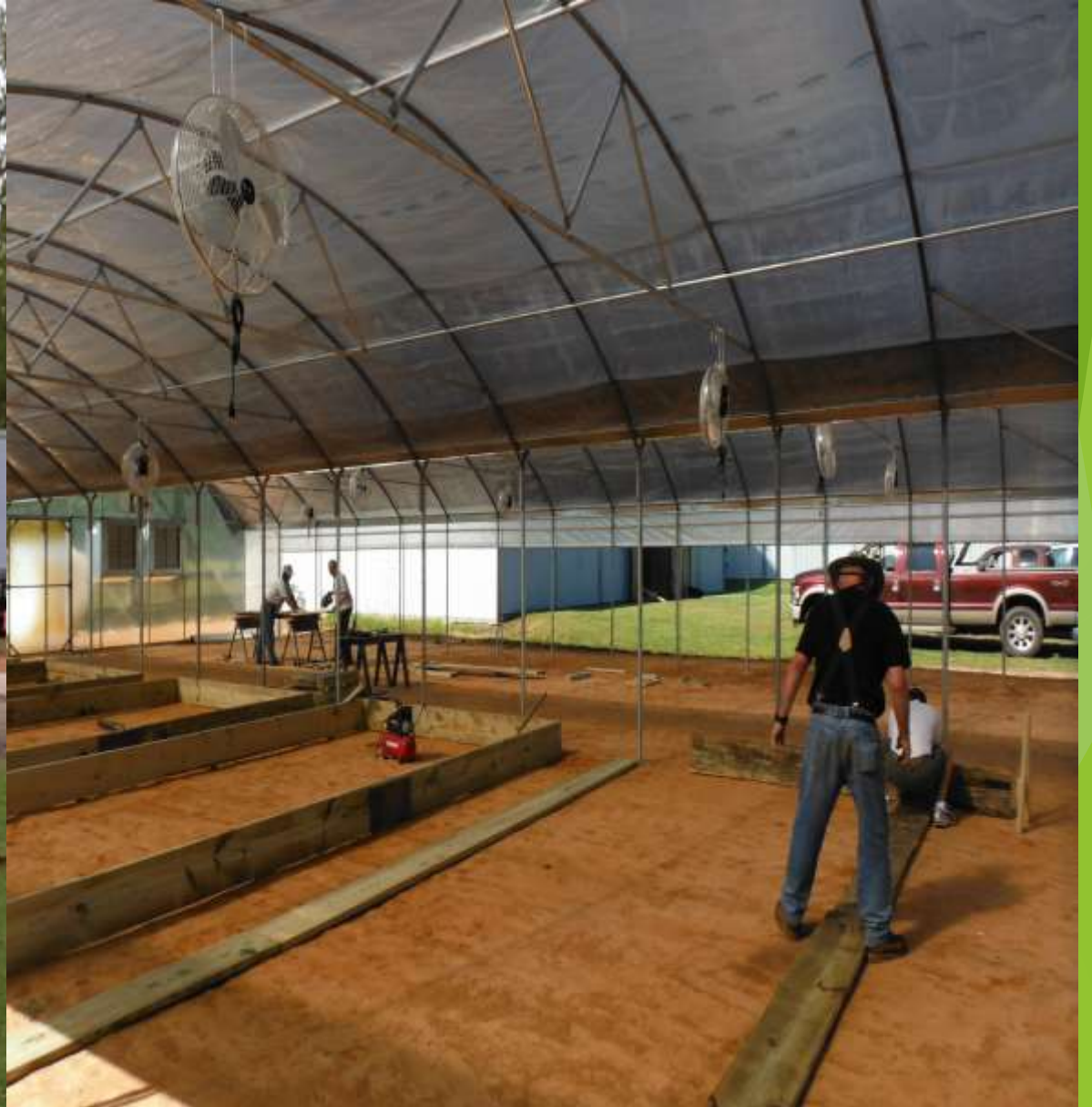


# Biological control

- ▶ The Giant Salvinia Weevil, *Cyrtobagous Salviniae* was first used in Texas on Toledo Bend to combat GS
- ▶ TPWD stocked weevils from Toledo Bend into Caddo in 2009
- ▶ Texas A&M and TPWD built a greenhouse at Caddo in 2010
- ▶ Caddo Bio Control Alliance was formed in 2013 and built a 2<sup>nd</sup> greenhouse at Caddo in 2014



# GREENHOUSE CONSTRUCTION 2014



# CVND biocontrol support



- ▶ 2014-2017 supplied funding of \$10,000.00 to build and operate the CBA greenhouse
- ▶ 2015 donated surplus mud boat to CBA
- ▶ 2018 agreed to fund an additional \$20,000.00 to help build a 2<sup>nd</sup> CBA greenhouse to increase production of weevils

# SUMMARY

- ▶ CVND continues to support efforts to suppress Giant Salvinia on Caddo Lake.
- ▶ TPWD and CBA are taking an intergrated approach to combating GS utilizing all the “Tools” in the toolbox. Combining herbicide applications with Biological Control agents and public outreach
- ▶ CBA has grown and released over 600,000 weevils on Caddo since 2014. This allows TPWD to utilize the weevils from their greenhouses in other affected lakes.
- ▶ TPWD has spent in excess of \$2,000,000 on herbicide applications in during that period on Caddo Lake.
- ▶

# Questions?

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TEAM LEADER, WATER QUALITY

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