



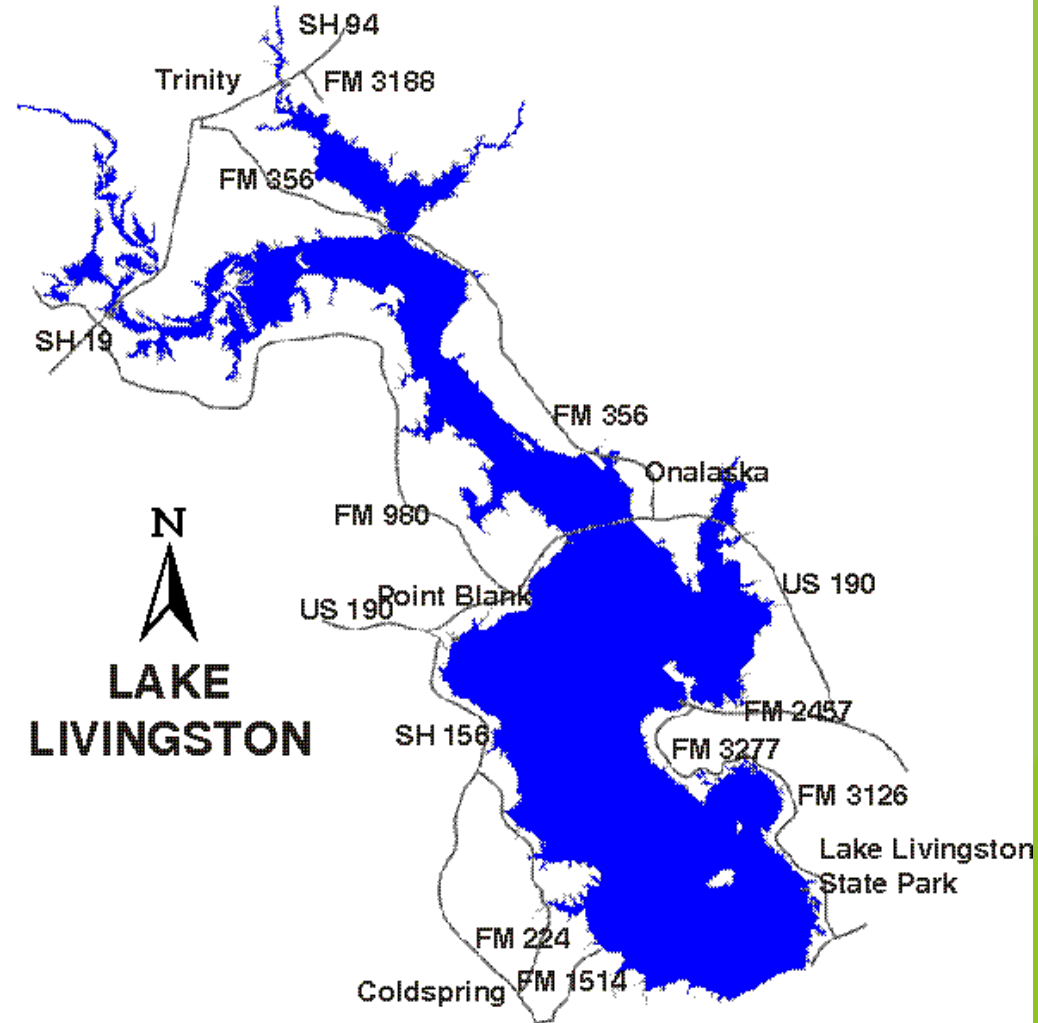
Friends of Lake Livingston

Encouraging Nature. Engaging Community.

Revitalizing Lake Livingston

The Problem Today at Lake Livingston?

- ▶ 85,000-acre lake nearly devoid of native aquatic plant life
- ▶ Bulkheads line much of 450 mile shoreline
- ▶ Native habitat loss
- ▶ Flooded river-lake bordered by pasture and timberland not suited to water and flooding
- ▶ Siltation and Water Turbidity
- ▶ Poor Fish Habitat – yields poor fishing!



01

Restore habitat with American Water-willow on shorelines, islands, and shallow water flats

02

Reduce erosion, improve water filtration and quality, and provide habitat for juvenile fish, reptiles and birds

03

Reestablish Lake Livingston as a prime destination for anglers and outdoor recreationists

04

Enlist and engage local high schools and community members in growing, planting, and managing project areas

The Solution!

Why American Water-Willow?



Non-invasive

Rhizome

Fast Growing

Grass Carp Hate It

Hearty

Easy Colonization



- 18 Sites
- Protected Creek Plantings Thrive
- Plants Prefer Shallow Water
- North End Offers Greatest Opportunity

2017 Survey Showed

4100/8900 = 46%



Site Selection Is Critical!
(Wolf Creek Plantings)

Science Strategy

- ▶ **Establish Founder Colonies**
- ▶ **New Plant Species Diversification and Propagation**
- ▶ **Focus on Specific Sites to Plant and Nurture**
- ▶ **Shoreline Enhancement Through Riparian Restoration**



Founder Colony Concepts



Experimenting with Varieties of Aquatic Plants

- Water Willow
- Bulrush (Three Square)
- Water Lily
- Inland Sea Oat grasses
- Indian Grass



Softstem
Bulrush



Sea Oat



Water Lily

How Do We Measure Success?

- **Monitor Plant Population Growth**
- **Water Quality Assessment**
- **Measure Invertebrate Population**
- **Riparian Area Assessment**



BearKat Camp – May 2018

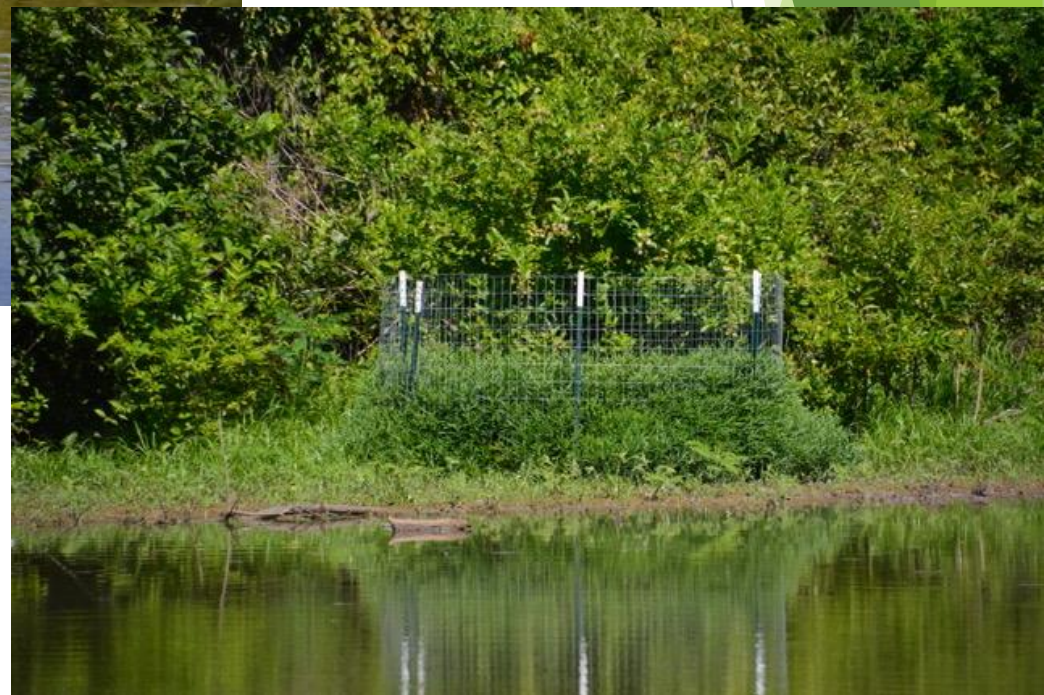


Bearkat Camp (Aug – 2018)



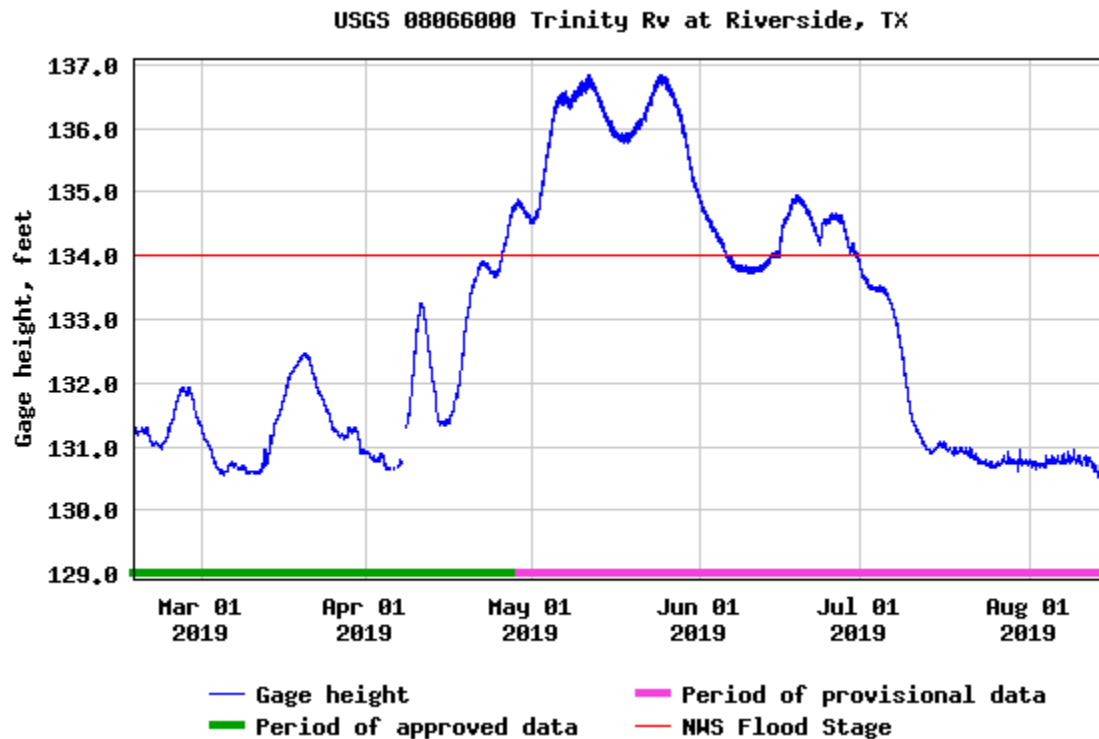
Bearkat Camp (Aug - 2018)

Founder Colonies



El Nino Summer 2019

3 months under 2' to 6' of turbid water



Signs of Life

July 2019 – SHSU Site



Signs of Life

July 2019 – SHSU Site



Carolina Creek – Aug 2019

Before



Making A Difference

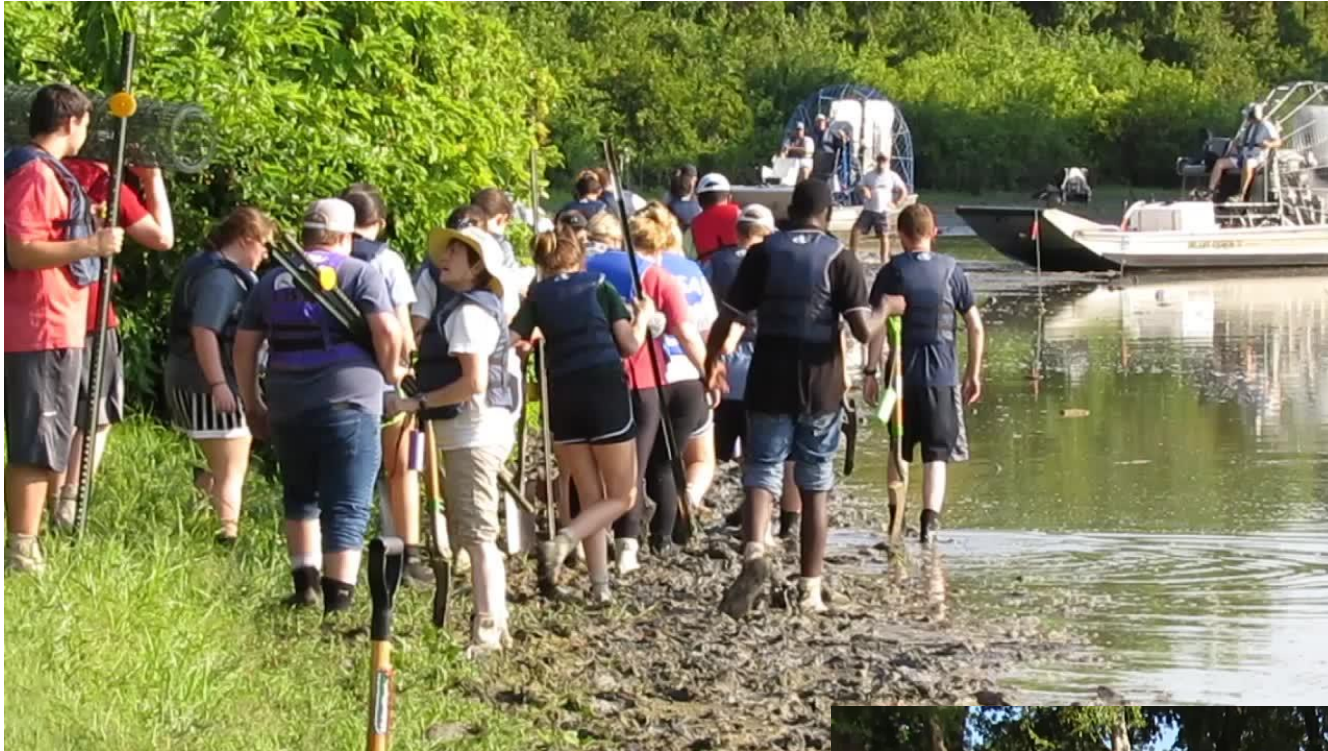


- ▶ Big Sandy, Coldspring-Oakhurst, Corrigan-Camden, Goodrich, Livingston, Onalaska, Leggett, Shephard ISDs, Livingston Montessori
- ▶ Propagating, growing, planting
- ▶ Ecology Improvement
- ▶ Site Monitoring
- ▶ 23 Propagation tanks

SAM HOUSTON STATE
UNIVERSITY CAMP



September 2019











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