



**Lake Conroe Division**

**[www.sjra.net](http://www.sjra.net)**

# SJRA's Mission & Vision

## Mission

**Plan** for develop reliable long-term water supplies

**Treat and Distribute** safe drinking water

**Provide** regional wastewater treatment

**Deliver** raw water

**Monitor and Protect** source water quality

**Ensure** safe, dependable reservoir operations

**Educate** the public about water conservation and water resources.

## Vision

**Be** a trusted leader in the management of the water resources of the San Jacinto River Basin



# SJRA's Organizational Structure

## **General & Administrative**

General and administrative support services to operating divisions

## **Flood Management Division**

**Four Operational Divisions**



**Four Operational Divisions**  
**Highlands- Highlands, TX**  
**Woodlands - The Woodlands, TX**  
**Groundwater Reduction Plan - Conroe, TX**  
**Lake Conroe - Conroe, TX**



# Lake Conroe Division's Mission

## The What

- To operate and maintain the Lake Conroe dam and reservoir in strict compliance with dam safety rules, regulations, and best management practices.

## The Why

- To ensure that Lake Conroe continues to serve its intended
- purpose – Water Supply.



# Lake History

An aerial photograph of a large dam with multiple spillways. Water is flowing through the spillways, creating white rapids. The dam is surrounded by green grass and a large body of water in the background.

## **Impetus**

Planned and constructed shortly after the record 7-year drought of the 1950s

## **Construction**

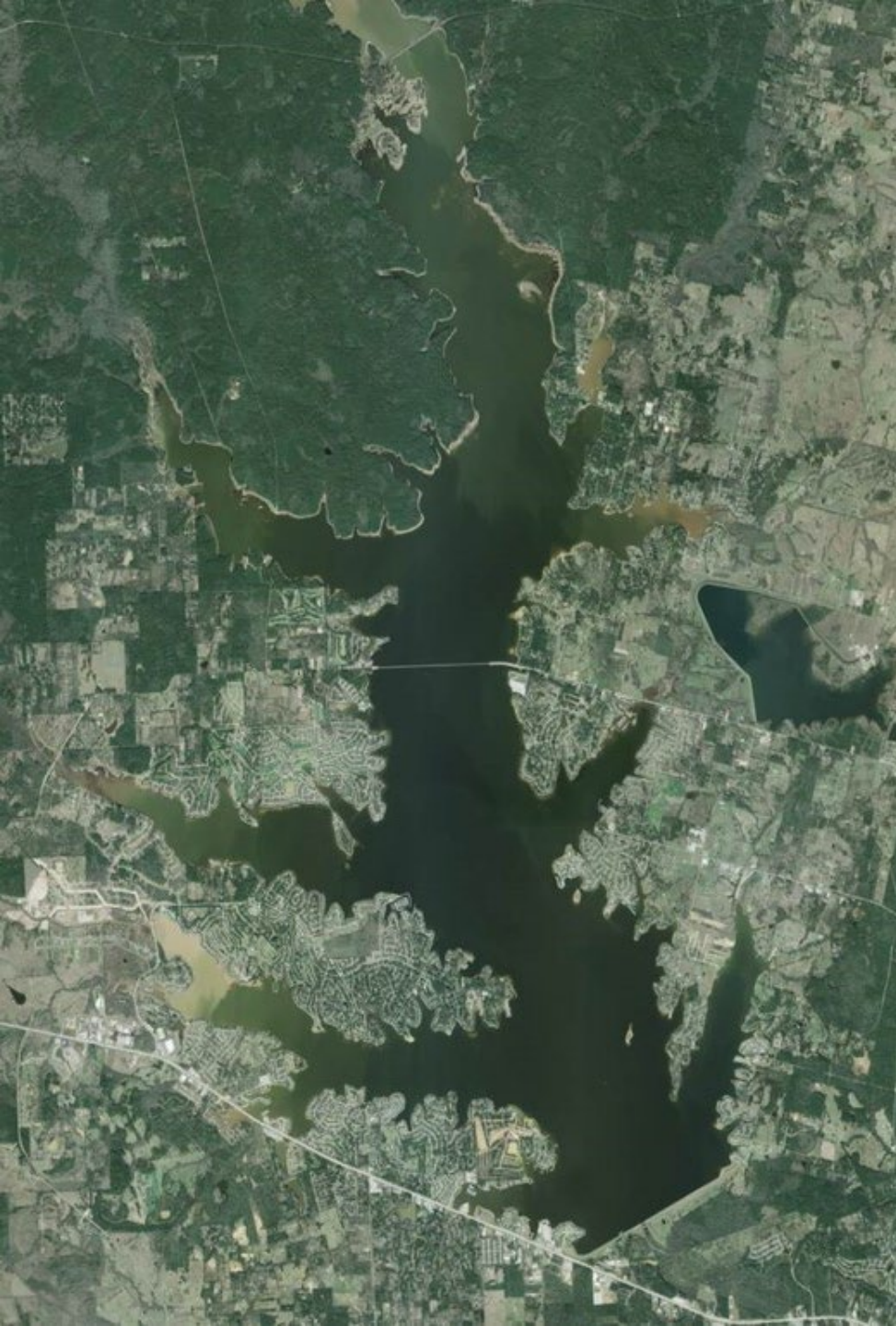
1968 – 1973 (filled)

## **Joint venture**

City of Houston/SJRA

## **Purpose**

Water supply



# Relevant Details

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444 square mile watershed

20,000 surface acres

430,000 ac-ft

160 miles of shoreline



# Water Rights and Ownership

Property Ownership - SJRA

Water Ownership - State of Texas

Water Rights

- Permitted Yield (100,000 ac-ft/year)
  - 2/3 COH (66,666 ac-ft/year)
  - 1/3 SJRA (33,333 ac-ft/year)





# Division Responsibilities

Maintenance

Licensing and Permitting

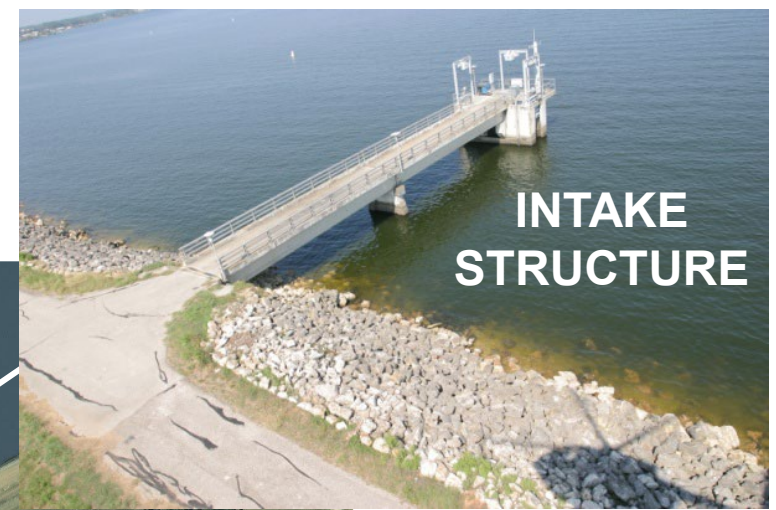
Operations

Invasive Species Management

Source Water Protection

Habitat Restoration

Bear Branch Reservoir System Operations and Maintenance



# Key Structures



# Water Quality Initiatives

## Watershed Protection Plan



Clean Rivers Program  
On Site Sewage Facility Program

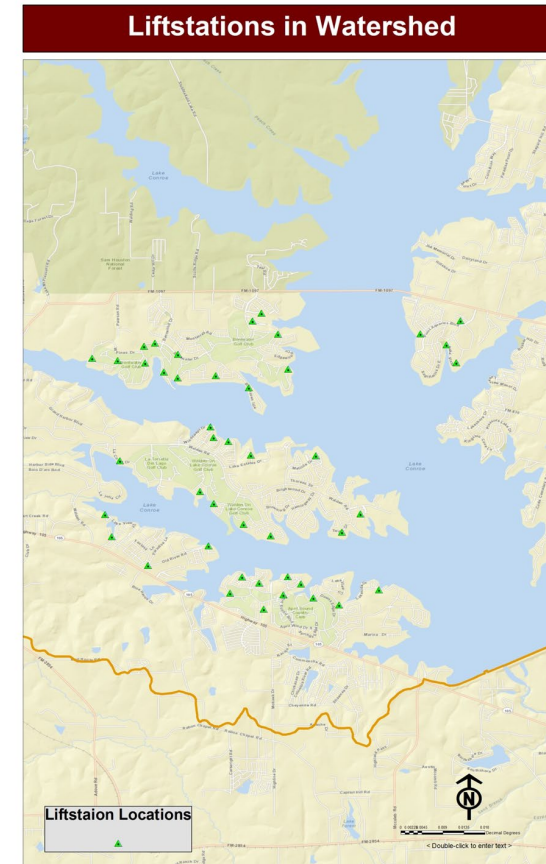


Stormwater Inlet Marking (SwIM)



# Watershed Protection Plan

- Created for the new GRP water plant on Lake Conroe
- Worked with stakeholders
- Characterized the watershed
- Identified pollution sources
- Set a path forward
- HGAC is helping get EPA approved



# Clean Rivers Program Partnership

- Monthly Sampling
  - 20 Sites
  - 3 reservoirs
  - 3 creeks
- Locations on Lake Conroe and The Woodlands
- Partners with HGAC and City of Houston



# Nutrient Monitoring

- Better understanding of nutrient trends
- Testing for:
  - Total Phosphorus
  - Total Nitrogen
  - Chlorophyll – a
- Will help guide policy changes going forward





# On Site Sewage Facilities

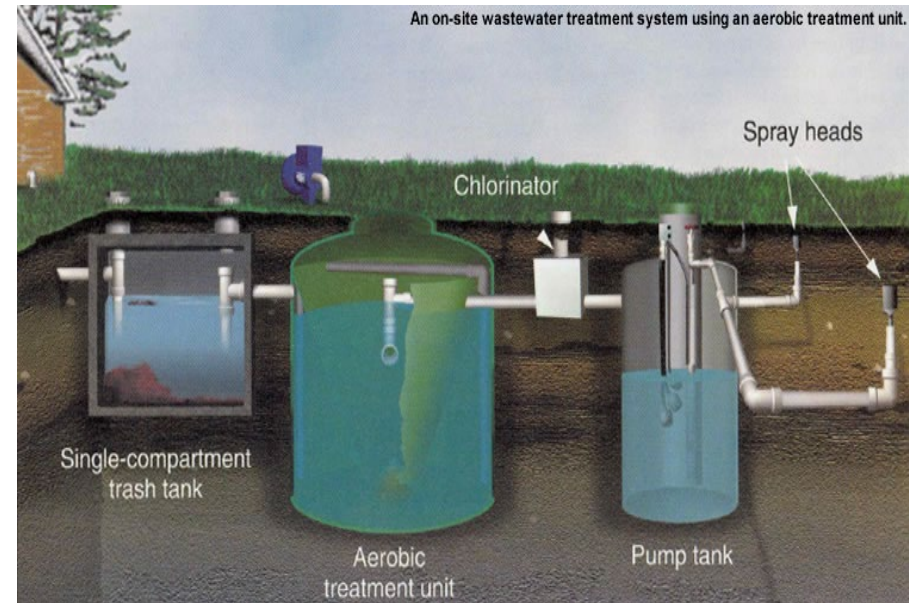
## On Site Sewage Facility (OSSF)

- Waste collected, treated, disposed on same property
- < 5,000 gal/day

## SJRA - TCEQ Authorized Agent

### Program Elements:

- Permitting
- Inspecting
- Complaint investigation
- Enforcement



# WWTF permit tracking

- Over 45 WWTFs in Lake Conroe Watershed
- Reviewing permit renewals and new construction
- Possible Lake Conroe Watershed Rule





# Stormwater Approval

- Letter of No Objection
- Lake Conroe as detention
- Best Management Practices
- SwPPP measures
- Possible future Lake Conroe Ordinances





# SwIM

- Stormwater Inlet Marking
- Work with volunteer groups
- Made Kits and training information
- Over 1000 inlet markers installed



# Texas Stream Team

- Currently growing
- Two locations at this time
- Future plans for bi-annual trainings
- Working with lake residence and possible local colleges

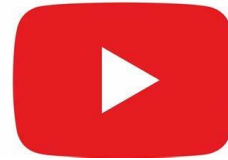


# Public Education and Outreach

- SwIM
- Dock Line
- Social Media
- Tours
- Environmental Fairs
- YouTube

**DOCK LINE**  
MAGAZINE

**YouTube**



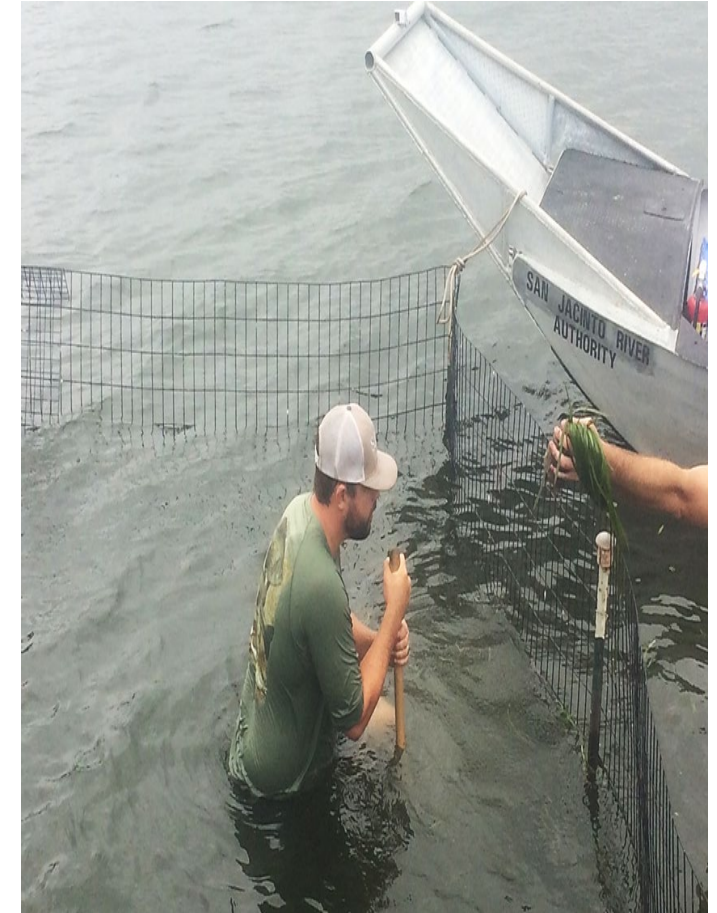
**facebook**





# Native Planting

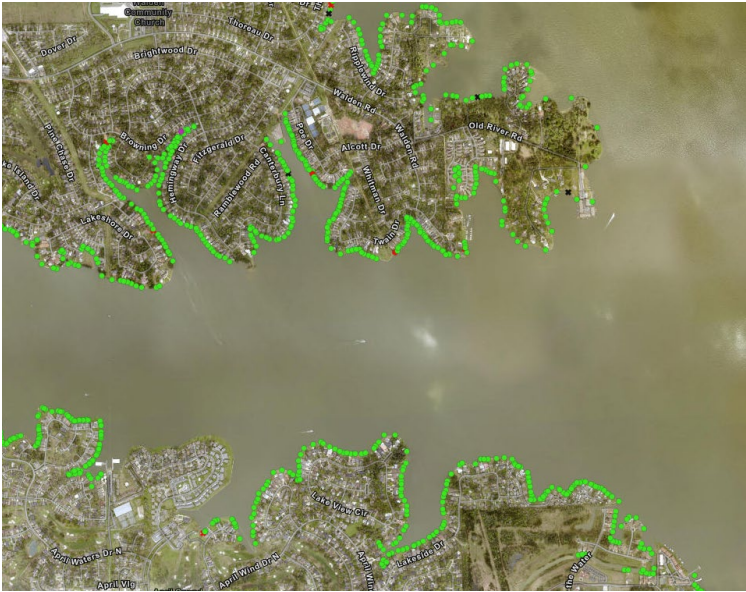
- Native plant nursery
  - 8 water coffins
  - Propagation
  - Grow out
- Planting along shorelines
- GIS mapping





# Residential / Commercial Licensing

- Docks
- Marinas and Businesses
- Land Leases
- Residential Irrigation
- Commercial Irrigation



# Zebra Mussel Monitoring

- 9 settlement samplers
- Veliger sampling
- TPWD/Texas State
  - DNA sampling
  - Veliger sampling
- Boat Inspections
- Public Education and Outreach
  - Stencils
  - Articles
  - Handouts





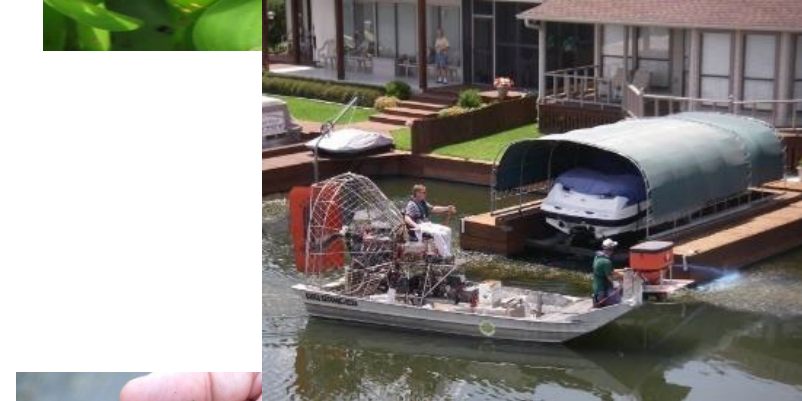
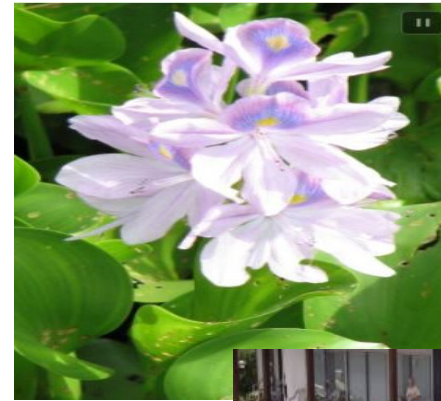
# Invasive Species Management

## SJRA Treatment

- Biological
  - White Amur
  - Cyrtobagous Weevils
- Aquatic Herbicides

## External Partners

- Lake Conroe Association
- Montgomery County
- Texas Parks and Wildlife
- US Fish and Wildlife
- Sports Groups



# Habitat Restoration



# Questions or Comments



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