



# Sam Rayburn Reservoir

## Upper Neches Basin Clean Rivers Program

### July 11, 2017

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Fort Worth District



# Sam Rayburn Reservoir

- Completed Construction and Started Impoundment in 1965
- Purpose: Flood Control, Hydroelectric Power, Water Supply, Recreation, and Environmental Stewardship
- Size: 112,590 Surface Acres (At Conservation Pool 164.4 MSL), 750 Miles of Shoreline, Largest Lake Within the State of Texas





# Recreation Program

- 1.5 Million Visitors Annually
- \$47 Million Economic Impact from Fishing
- Top Rated Fishery in the Nation
  - ▶ Currently Rated Bassmaster's 4<sup>th</sup> Ranked Lake In the Central Division for 2016
- Worked Hard to Sustain Recreational Access and Operations During 2015 and 2016 Flood Events.
- Challenged By Reduced Budgets



# Flood Risk Management

- Flood Control
  - ▶ Flood Storage Capacity at Elevation 176' MSL 4,420,949 acre feet
  - ▶ Controlled Releases
- Labyrinth Weir Spillway
  - ▶ Spillway Elevation 176' MSL
- Flood Control Value
  - ▶ 2015 Flood Event Offered an Estimated value of \$232 Million In Downstream Protection.  
Maximum Pool Level 173.95' MSL
  - ▶ 2016 Flood Event Offered an Estimated value of \$249 Million In Downstream Protection.  
Maximum Pool Level 170.79' MSL
  - ▶ Pool of Record March 10, 1992 at 175.13' MSL



# Water Supply

- Conservation of Water for Municipal, Industrial, and Agricultural Use
- Lower Neches Valley Authority (LNVA)
  - ▶ Holds Rights to 820,000 Acre Feet
  - ▶ Up to 2,000 Cubic Feet Per Section (CFS) from Town Bluff Dam
- City of Lufkin
  - ▶ Holds Rights to 25 Million Gallons Per Day
  - ▶ Currently Sold to LNVA
- Conservation Storage
  - ▶ 1.4 Million Acre Feet for Hydroelectric Power Development and Stream Flow Regulation
  - ▶ 1.4 Million Acre Feet for Power Head and Sediment Storage
  - ▶ 2.8 Million Acre Feet Total Water Supply Storage



# Hydropower

- Plant Commissioned in 1965
- Peaking Plant
  - ▶ Supports Power Demand During Peak Use
- Two Generators
  - ▶ 26 Megawatts Each
- Annual Average Revenue \$3.6 Million
  - ▶ Southwestern Power Administration



# Stewardship

- Shoreline Management
  - ▶ Permits
  - ▶ Flowage Easement
  - ▶ Encroachments
- Cultural Resources Management
- Invasive Species Management
  - ▶ Giant Salvinia
  - ▶ Aquatic Invasive Species
- Endangered Species Habitat
  - ▶ Red-cockaded Woodpecker
- Forestry Management
  - ▶ Prescribed Burn Program
  - ▶ Longleaf Pine Restoration
- Hunting Program
  - ▶ Wounded Warrior and Veteran Hunts
  - ▶ Youth Hunts





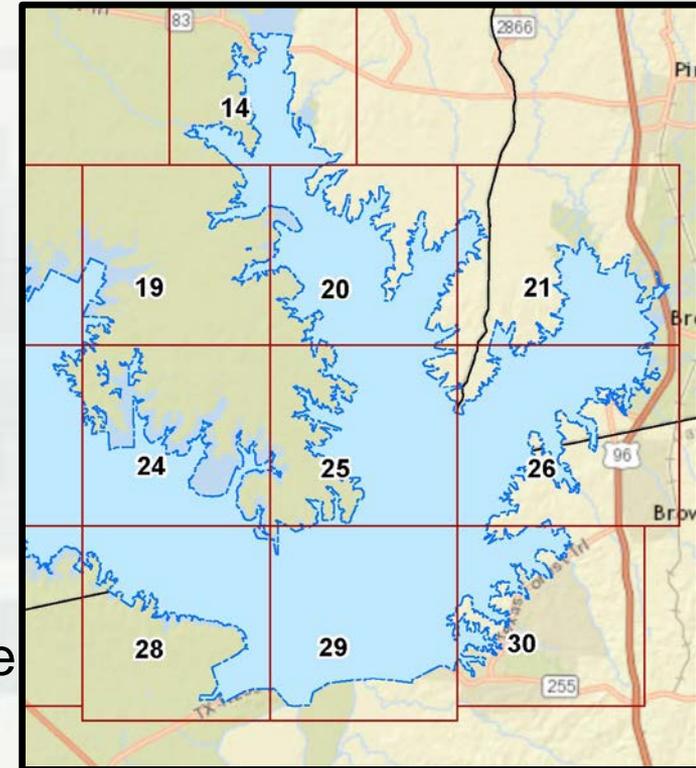
# Sam Rayburn Master Plan Revision

- A Master Plan is defined by USACE as the strategic land use management document that guides the comprehensive management and development of all recreational, natural, and cultural resources throughout the life of the water resource development project.
- The Master Plan defines “how” the resources will be managed for public use and resource conservation.
- Revision of the Master Plan will not address in detail the technical operational aspects of the reservoir related to the water supply, flood risk management, or hydroelectric power generation missions.
- The Master Plan study area will include Sam Rayburn Reservoir proper and all adjacent recreational and natural resources properties under USACE administration.
- Key topics addressed in the revised Master Plan include revised land classifications, new natural and recreational resource management objectives, recreation facility needs and special topics such as invasive species management.

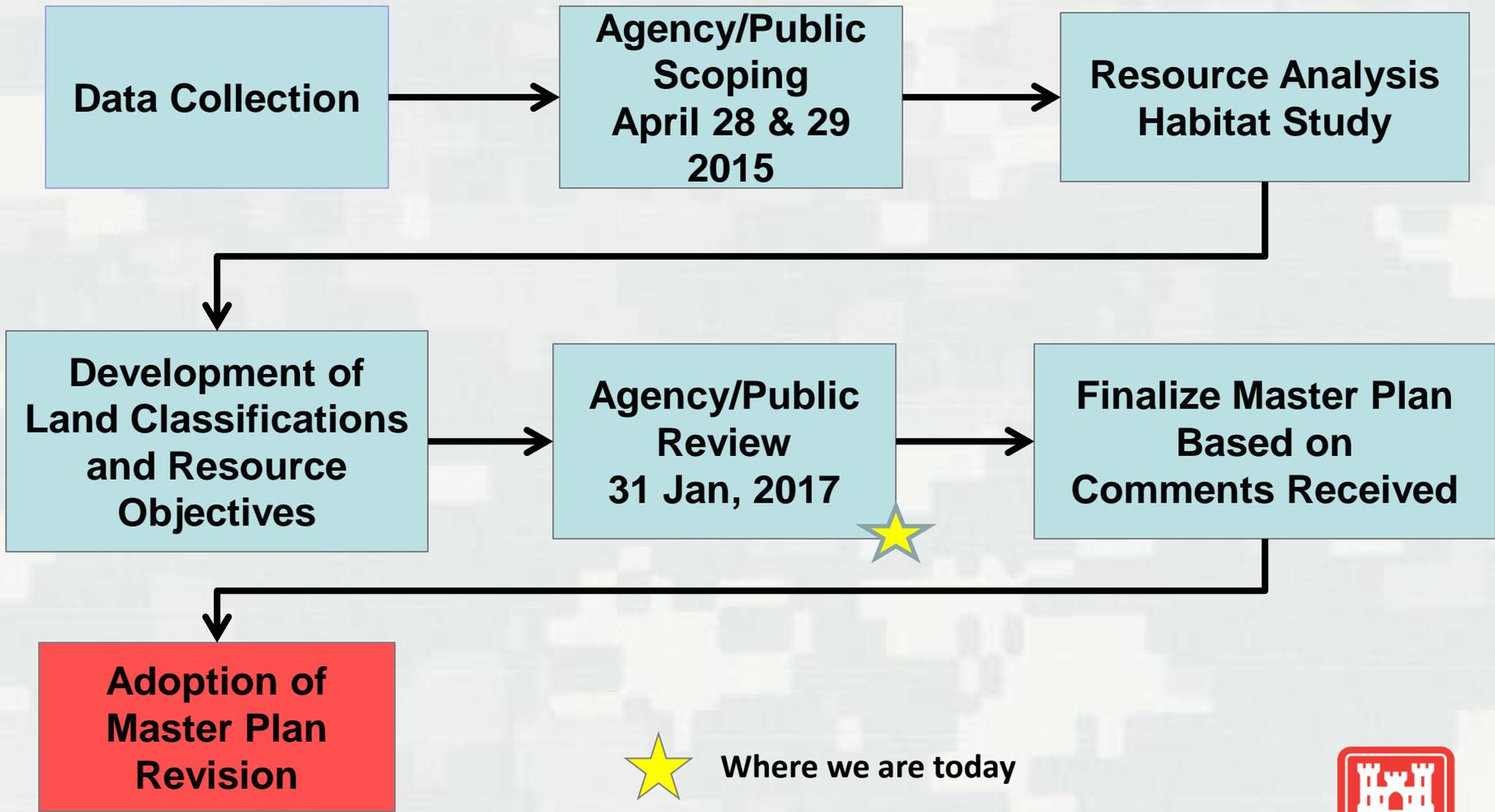


# Sam Rayburn Master Plan

- Announce the final draft revision of the Sam Rayburn Reservoir Master Plan and accompanying Environmental Assessment.
- Highlight changes proposed in the revised Master Plan compared to the previous 1970 version.
- Summary of the public and stakeholder Comments from the initial public meetings and follow up public meetings presenting the Proposed draft revision.
- The draft Master Plan with Environmental Assessment is pending approval by the District Engineer and anticipated for completion in July 2017.



# The Master Planning Process



 Where we are today





# Process Followed to Date

- Initial public meetings were held April 28 & 29, 2015 to announce preparation of a Master Plan Revision
- Public and Agency comments were received during a 30-day comment period from 30 April thru 30 May 2015
- All public and agency comments received were reviewed and considered in the preparation of the draft Master Plan Revision and Draft Environmental Assessment
- Public meetings presenting the proposed Draft Master Plan Revision were held January 31 & February 2, 2017
- Public and Agency comment on the Draft Plan were received during a 30-day comment period ending 3 March 2017
- Final Draft and Adoption of New Master Plan set for July 2017

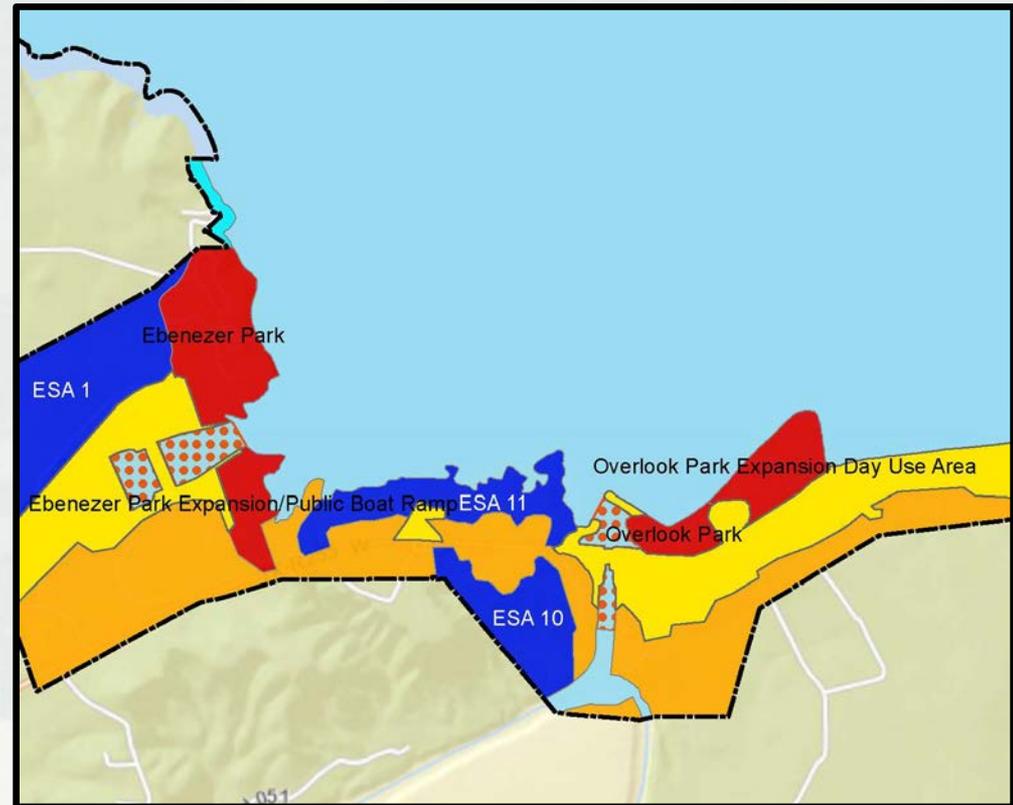


# Public/Agency Comments Summary

TOPIC	COMMENTS
Shoreline Management Mowing, etc.	<ul style="list-style-type: none"><li>• Allow adjacent landowners to mow and remove other vegetation on public land. Want a view of the lake, and a manicured appearance.</li><li>• Allow docks, including rolling docks.</li><li>• Keep shorelines natural in appearance</li><li>• Do not allow permanent private docks</li></ul>
Land Classifications	<ul style="list-style-type: none"><li>• Don't allow land classifications that chase people away for the sake of eagles, woodpeckers, or reduced erosion.</li><li>• Want to know the future of Tiger Creek Park.</li><li>• Fear that the High Density Recreation Classification will open the door to oil and gas exploration.</li><li>• Favor land classification that will allow economic development.</li></ul>
Recreation Facilities	<ul style="list-style-type: none"><li>• Extend boat ramps in northern sector for low water conditions.</li><li>• More small boat ramps in Rayburn Country and Jasper County.</li><li>• Rayburn Country/Forest Hills need beaches, playgrounds.</li><li>• Improve natural recreation opportunities (kayaks, nature study)</li><li>• Fishing tournaments detrimental to family/public use of lake.</li><li>• Need gas docks at marinas. Need gas in northern end.</li></ul>
Natural Resources and Aesthetics	<ul style="list-style-type: none"><li>• Keep the lake natural.</li><li>• Reduce noise, prohibit 2-stroke boat engines</li><li>• Continue invasive species management</li><li>• Improve water quality and enforce Clean Water Act violations</li><li>• Implement a dark skies initiative...reduce light pollution.</li><li>• Protect important islands from erosion.</li></ul>

# Principal Changes from Current Master Plan to Revised Plan

- Significant changes to Land Classifications
  - ▶ Reduced footprint of High Density Recreation.
  - ▶ Shift from Low Density Recreation to Vegetation Management
  - ▶ New Environmentally Sensitive Areas
- Comprehensive New Management Objectives



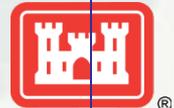
Example of Land Classification Map





# Land Classification Definitions

Land Classification	Definition
Project Operations	Those lands required for the dam, operations center, office, maintenance compound and other areas that are used solely for project operations
High Density Recreation	Land developed for intensive recreational activities by the visiting public, including developed recreation areas and areas for marinas and related concessions, and resorts
Multiple Resource Management	<b>Low Density Recreation:</b> Activities such as hiking, primitive camping, wildlife observation, and hunting
	<b>Wildlife Management General:</b> Fish and wildlife management activities
	<b>Vegetative Management:</b> Management activities for the protection and development of a specific vegetative cover
Environmentally Sensitive Areas	Areas where scientific, ecological, cultural or aesthetic features have been identified. These areas must be considered by management to ensure they are not adversely impacted



# Change in Land Classifications and Acreage

1970 Land Classifications	Acreage	New Classifications	Acreage	Net Difference
Project Operations	1,000	Project Operations	370	(630)
Recreation – Intensive Use	3,861	High Density Recreation	1,598	(2,263)
		Environmentally Sensitive Area	1,809	1,809
Recreation – Low Density Use	8,862	Low Density Recreation	2,249	(6,613)
Wildlife Management	8,379	Wildlife Management	896	(7,483)
		Vegetative Management	10,296	10,296
		Future/Inactive Recreation Areas	718	718



# Management Goals & Resource Objectives

- Chapter 3 of the Master Plan
- Consists of 5 Goals (broad generalized statements)
- Consists of 5 Resource Objective Categories
  - ▶ Recreational Objectives
  - ▶ Natural Resource Management Objectives
  - ▶ Visitor Information, Education, and Outreach Objectives
  - ▶ General Management Objectives
  - ▶ Cultural Resource Management Objectives



# Public/Agency Comments Summary On Draft Master Plan and EA

TOPIC	COMMENTS
Shoreline Management Mowing, etc.	<ul style="list-style-type: none"><li>• Gratitude for the continued restriction of permanent docks.</li><li>• Suggestion to permit use of non-permanent docks by adjacent property owners; requiring docks be removed when not in use.</li><li>• The undeveloped shoreline of Sam Rayburn Reservoir is its best feature.</li><li>• Adjacent landowners should be able to maintain their property boundaries to the shoreline for recreational use, safety and esthetics.</li></ul>
Land Classifications	<ul style="list-style-type: none"><li>• Reclassify certain areas along the shoreline for commercial and recreational development to improve and foster a stronger economy in Jasper County.</li><li>• Classify areas for recreational development such as hiking or biking trails and beaches.</li><li>• Rayburn Country Municipal Utility District (RCMUD) and other public comment expressed concern about the potential for oil and gas exploration activities and the reclassification of USACE lands being a subtle attempt to make it easier for USACE to place its mineral rights up for auction by the Bureau of Land Management (BLM); increasing the potential for pollution of the reservoir and aquifer impacting their ability to provide safe drinking water.</li><li>• Strong objection to any changes in the Master Plan which would allow drilling on Federal land at Sam Rayburn Reservoir. Specifically objection to the change in designation of lands which would allow surface occupancy of Federal lands for the extraction of Federally-owned minerals.</li></ul>

# Public/Agency Comments Summary

TOPIC	COMMENTS
Recreation Facilities	<ul style="list-style-type: none"><li>• Texas Parks and Wildlife Department (TPWD) supports the actions and revisions to the Master Plan as it creates a balance between recreational opportunity and stewardship of natural resources at Sam Rayburn.</li><li>• Identify hunting as an appropriate passive recreation activity in ESA and MRML areas as USACE deems appropriate for public safety.</li><li>• Provide more boat trailer parking.</li><li>• No-wake zone needed for Rayburn Country Yacht Club.</li><li>• Develop more small boat launching areas so canoes, kayaks and smaller fishing boats can utilize protected coves instead of the big ramps that are exposed to the open water of the main lake and high traffic from larger boats.</li><li>• Consider improved recreation facilities in Twin Dikes Park. Replace the swimming beach that was removed to accommodate the water intake for the TPWD fish hatchery.</li></ul>
Natural Resources and Aesthetics	<ul style="list-style-type: none"><li>• TPWD supports the actions and revisions to the Master Plan as it creates a balance between recreational opportunity and stewardship of natural resources at Sam Rayburn.</li><li>• Include potential for the occurrence of the Louisiana Pine Snake.</li><li>• No! To any kind of drilling, fracking, or similar activity in and around Sam Rayburn Lake!!</li><li>• Commend the Corps for the professional way they treat the public and for the way the lake is maintained.</li></ul>

# Public/Agency Comments Summary

TOPIC	COMMENTS
Water Supply	<ul style="list-style-type: none"><li>• Clarify water storage rights held by Southwestern Power Administration and City of Lufkin, utilization by Lower Neches Valley Authority, water dedicated to support power head and power production, and reallocation of 0.4 feet of flood storage to water supply for City of Lufkin.</li><li>• Maintain wording and language consistent with earliest authorization documents as it relates to the water supply purpose of the reservoir.</li><li>• Include statement noting the Lower Neches Valley Authority's donation of 10,000 acre feet per year in support of the Texas Parks and Wildlife Departments John D. Parker East Texas State Fish Hatchery.</li></ul>
General Comment	<ul style="list-style-type: none"><li>• Recommendation to maintain open communication with agencies, stakeholders, and the public.</li><li>• Establish a Community-Oriented Communication Committee to improve communication and relationships between USACE and local, county, state, and Congressional representatives. Suggest property owners be afforded this same information. Such open communication might help to provide better lines of communication for all parties.</li><li>• Need better community oriented communications between USACE and local residents, stakeholders and elected officials.</li><li>• Establish a non-profit organization to assist in taking care of the lake. Something like "Friends of Sam Rayburn Lake" or a similar name.</li><li>• Other than the change in land classifications and acreage, I find it extremely difficult to discern the differences between the Master Plan of 1970 and the new Draft Master Plan. I feel that the USACE should provide us with a clear list of the differences of the two plans with an explanation of each difference.</li></ul>

# Final Steps

Public and agency comments due on draft	March 3, 2017
Comments considered and incorporated	March/April 2017
Internal Review of Final Master Plan and EA	May/June 2017
Final Approved by District Engineer	July 2017
Notice to Public of Final Master Plan	July 2017



This concludes the presentation. We look forward to having a completed Master Plan at Sam Rayburn and thank those who were involved and contributed to the plan.



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