

An aerial photograph of a large-scale environmental renovation project. The landscape is a mix of vibrant green grass and patches of brown, muddy water. A prominent dam structure is visible on the right side of the frame. The background is dominated by a dense, dark green forest. The sky is clear and bright. The text 'AGFC Lake Poinsett Renovation' is overlaid in the center of the image in a white, serif font.

# AGFC Lake Poinsett Renovation

# Erosion



# Erosion onto property owner

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# Public Meetings in May/June 2017

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Lake Drained July 10, 2017

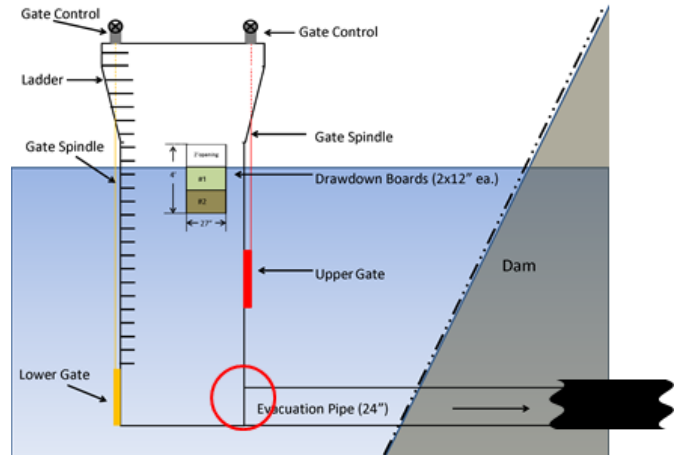
- ❑ 5 year plan
- ❑ 3 year plan to repair lake; WCS, shoreline, fish habitat
  
- ❑ Year 4 Stock prey species
- ❑ Year 5 Stock predator species



# Project Background 2006 - Present

## Major Problems with Lake Poinsett

- ❑ Severe shoreline erosion
- ❑ High Risk Dam
- ❑ Outflow structure and apron compromised
- ❑ Water Control Structure was inoperable
  - ❑ Upper gate stem completely broken
  - ❑ Lower gate questionable
- ❑ Evacuation pipe compromised
- ❑ Emergency Spillway needed regrading, widening and repair



# Scope and Reminders

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- ❑ Estimated \$80 Million in needed repair to dams and Green Tree Reservoirs
- ❑ Currently, 15 other dams need serious work
- ❑ Lake Poinsett Project was a priority to the Commission.





# Construction Progress

Kevin Mullen - Chief of Operations



# Analysis of Dam and Design of Repairs

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- ▣ **Silver Jackets coordination**
  - ▣ Arkansas Natural Resources Commission – Hydrologic and Hydraulic Analyses
  - ▣ USGS – Frequency-Domain Electromagnetic Induction
  - ▣ USACOE – Watershed/Flood data
  
- ▣ **Pickering Firm**



# Phase I Construction - Water Control Tower and Spillway Renovations

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## Problems with Lake Poinsett

- Water Control Structure Needs
- Outlet pipe deterioration
- Outlet Structure Damage
- Spillway Modifications
- Shoreline Erosion



# Spillway expansion

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# Pipe Sleeve



# Rain delays



# Tower Foundation



# Work moving up



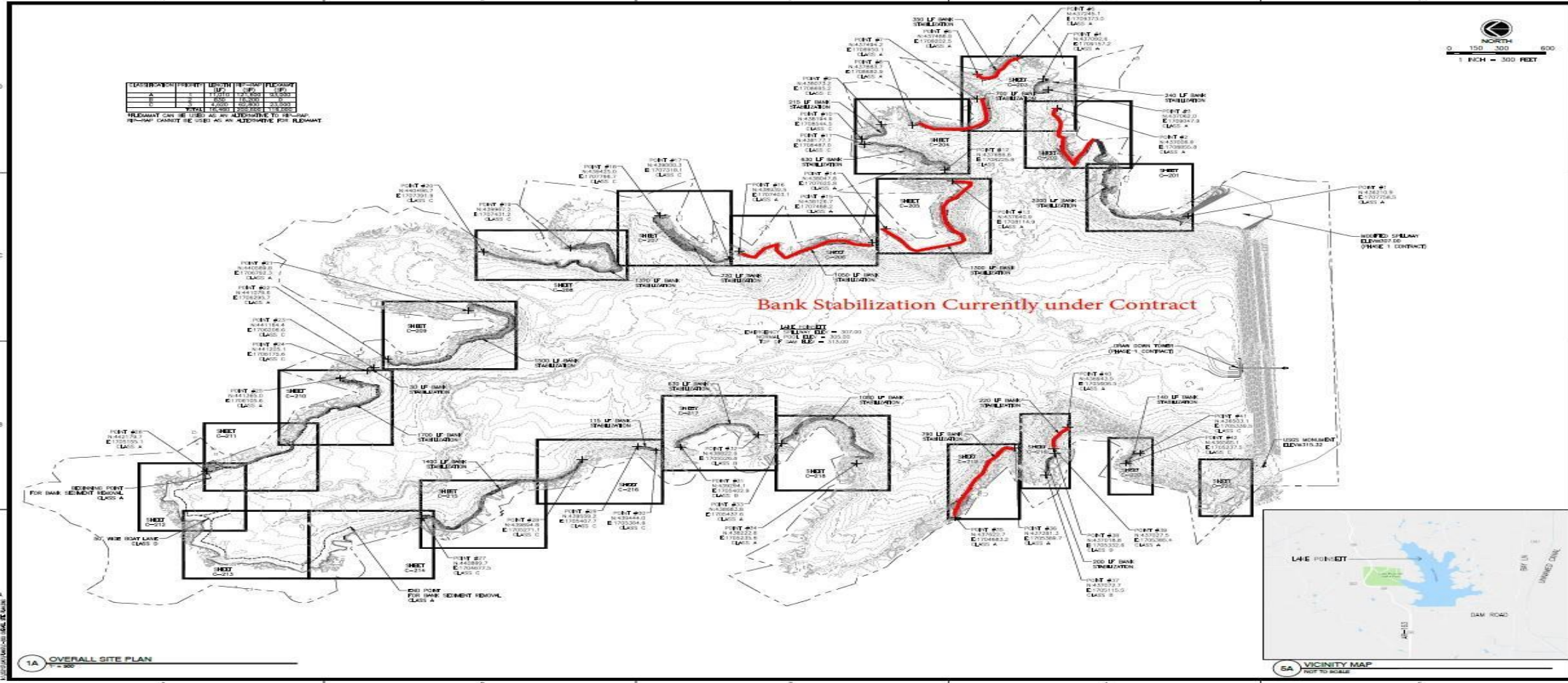



# New Control Tower and Spillway are Complete

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# Phase 2 - Bank Stabilization



 Pickering, Inc. 1000 West College Parkway Harrisburg, AR 72428 Phone: 501-681-1000 Fax: 501-681-1001	
<b>LAKE POINSETT</b> <b>MODIFICATIONS - PHASE 2</b> <b>HARRISBURG, AR</b>	
	
SHEET NUMBER <b>C-200</b>	
DESCRIPTION OVERALL SITE PLAN	
BID SET 10/23/2018	



# Site Preparation



# Rip Rap



# Flexamat



# Point 21-22 Before



# Point 21-22 After

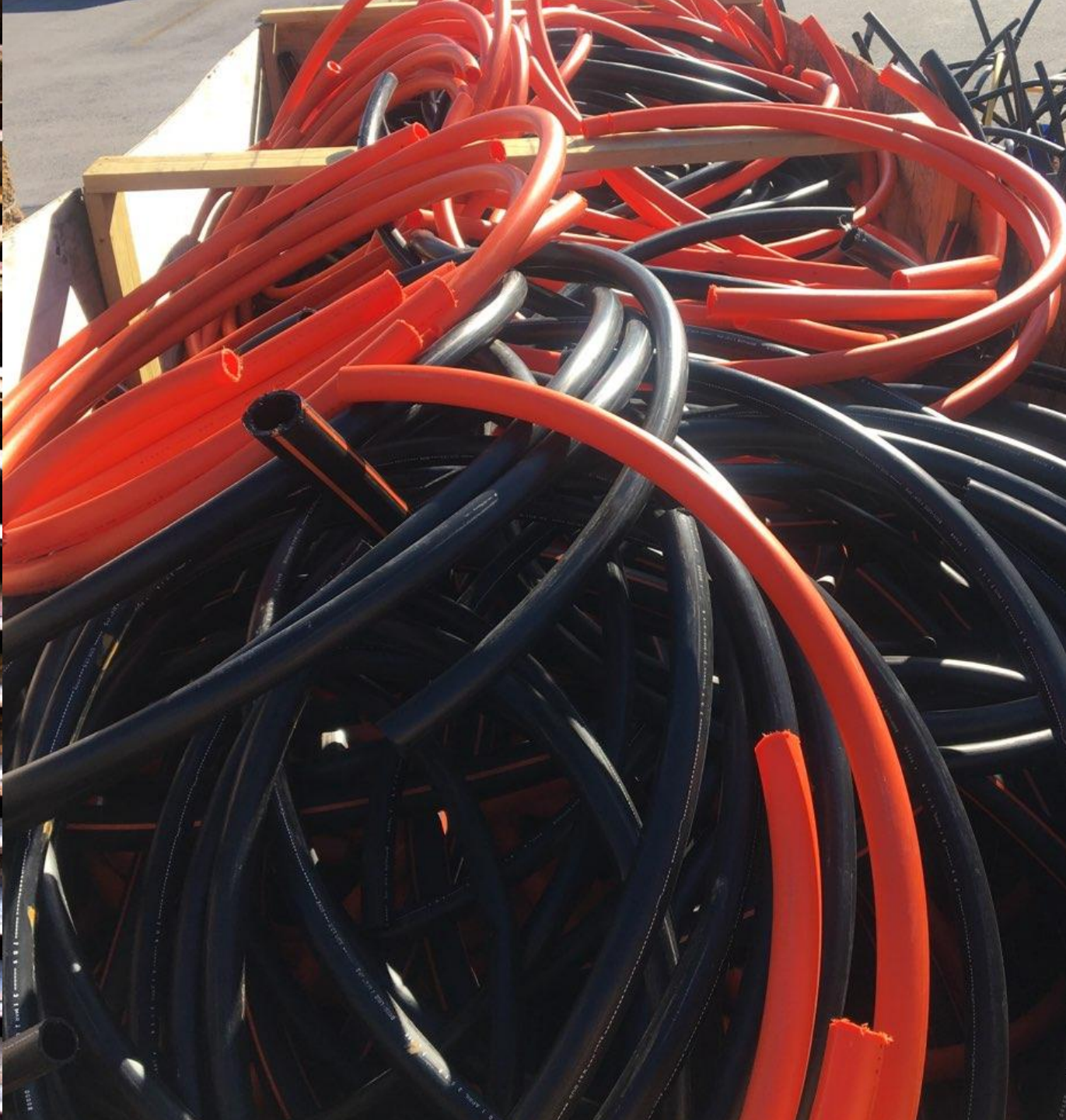


# Fish Habitat Restoration

Brett Timmons - District Fisheries Supervisor







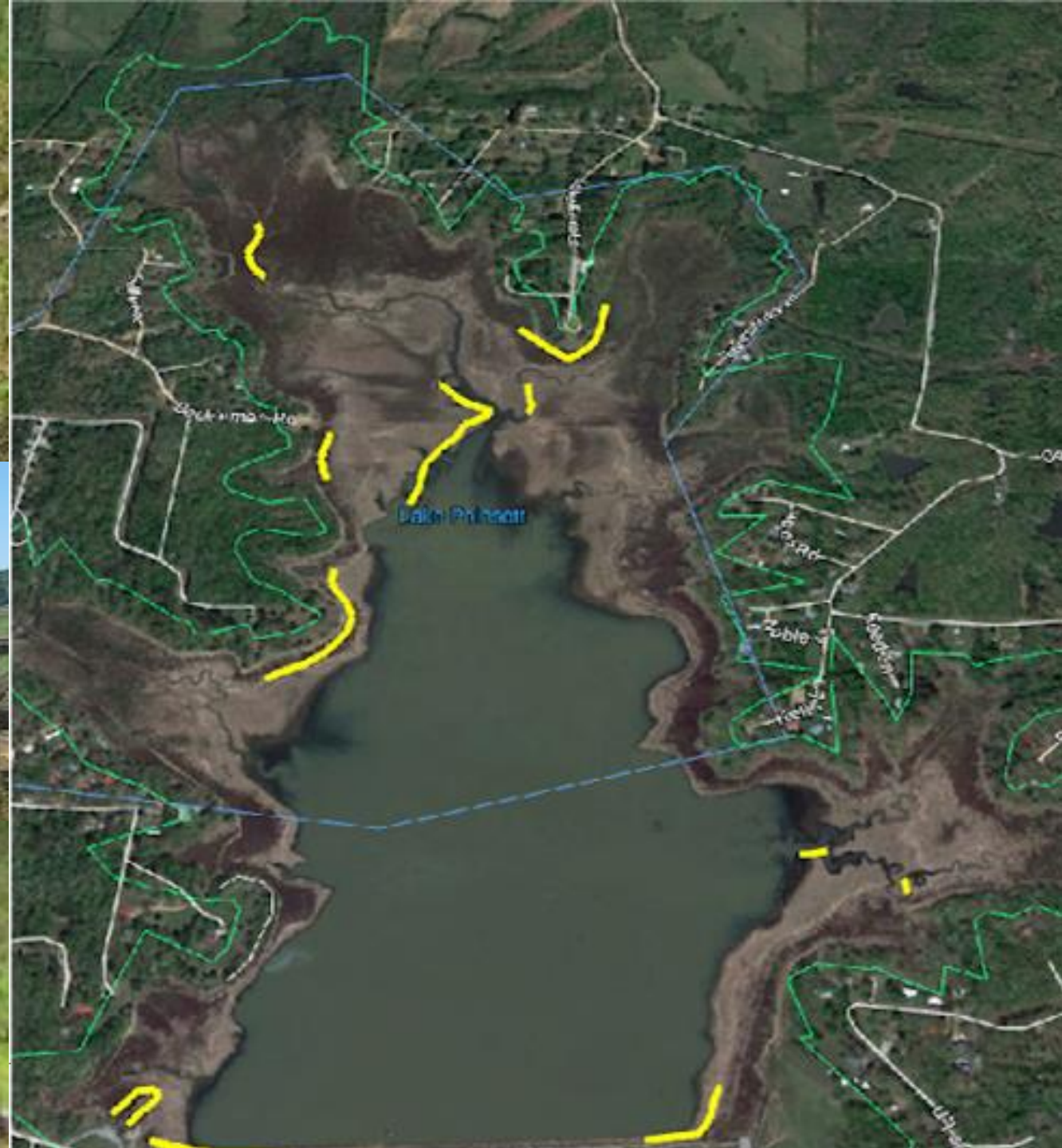














# Stocking

Brett Timmons - District Fisheries Supervisor







# Stocking Prey Species

Spring/Summer 2021

Bluegill

Redear Sunfish

Golden Shiners

Threadfin Shad

Fathead Minnows

Catchable Channel Catfish

Yearling Channel Catfish



# Stocking Predators

Spring/Fall 2022

Largemouth bass

Crappie



# Thank you

- ❑ Currently, Poinsett is the most expensive lake repair to date totaling \$3,180,020 to date.
- ❑ Analysis and Design - \$385,200
- ❑ Phase I Construction -\$1,241,880
- ❑ Phase 2 Construction – \$1,481,655
- ❑ Habitat and access to date - \$71,285
- ❑ What is your experience with Flexamat long term?
- ❑ Grant opportunity for dam and lake restoration?

