



**Lower Fish River and Magnolia  
River Watersheds: Phase II  
Baldwin County, AL**

# Project Overview

Goal: Restore degraded streambanks and reduce sediment/nutrient loading into Weeks Bay

Funding: NFWF Gulf Environmental Benefit Fund

Partners: Mobile Bay National Estuary Program, Volkert, Inc., Goodwyn Mills Cawood, Streamline Environmental, Spreadrite, LLC.

# Project Background

Baldwin County has seen rapid development that has led to the increase of impervious surfaces and stormwater runoff.

The result has erosion that has impacted water quality and habitats in the Lower Fish River Watershed.

The project was modeled after the D'Olive Watershed Program that utilizes natural channel design to emulate a natural system.

# Phase II Scope

## Stream Restoration:

- 3,131 linear feet of stream on the Schoolhouse Branch
  - 900 linear feet of bluffs on the Magnolia River

## Construction Timeline:

- Began November 2024
- Ending November 2025
- 2 Years of Monitoring will follow

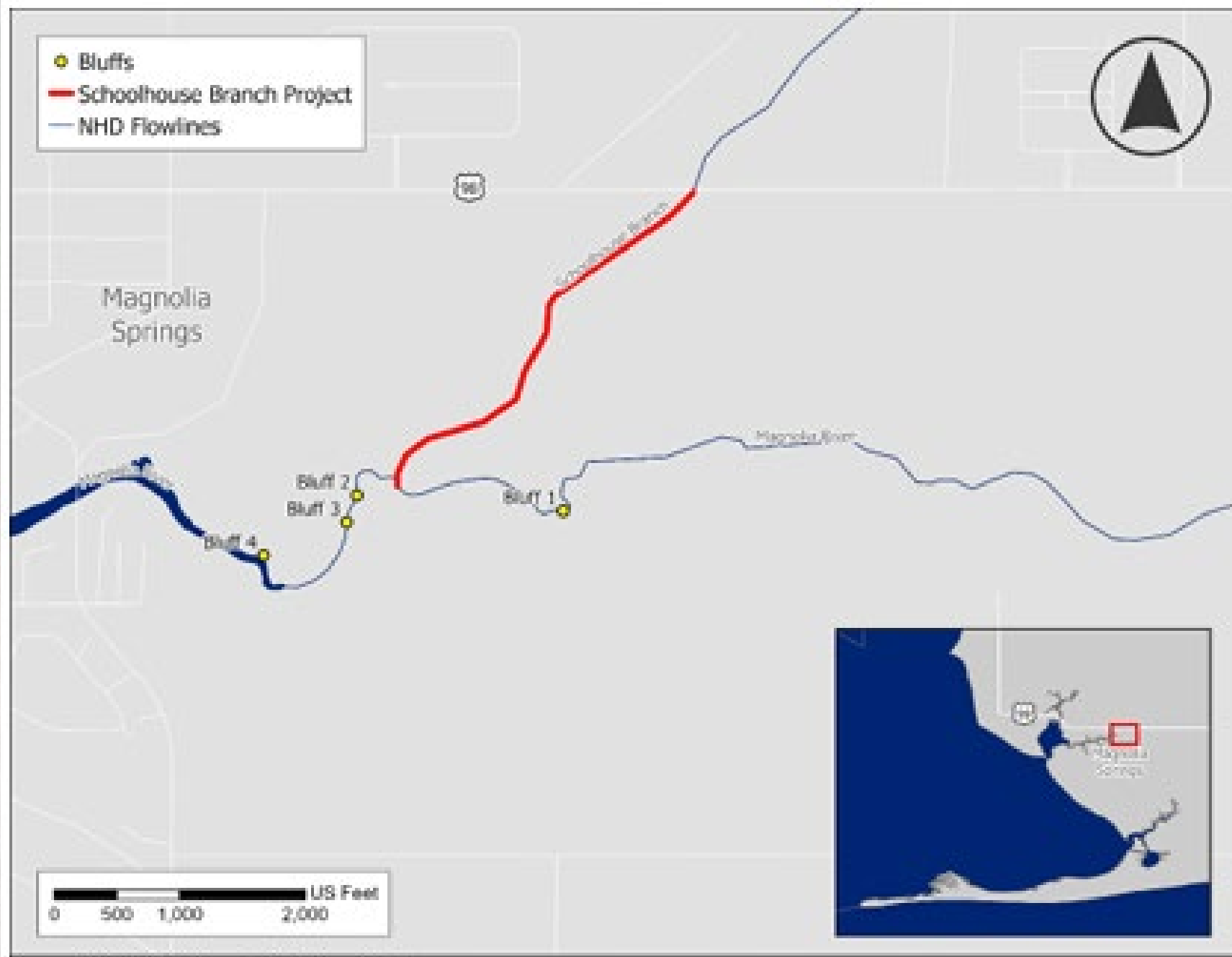


Figure 1: LFRW Phase II Project Map

# Environmental Impact

Project	Stream Length (ft)	Erosion Reduction (tons/year)	Watershed Total Sediment Loading Reduction (%)	Nitrogen Reduction (tons/year)	Phosphorus Reduction (tons/year)
Schoolhouse Branch	3131	4940	18	13.2	11.9
Magnolia River	900	1893	7	9.1	1.3
<b>Total</b>	<b>4031</b>	<b>6833</b>	<b>25</b>	<b>22.3</b>	<b>13.2</b>

*Table 1: Phase II LFRW Load Reduction Estimates*

# Restoration Techniques

An aerial photograph of a river restoration project. The river flows through a landscape with some trees and open fields. The channel is winding and appears to be newly constructed or recently modified. Several workers in orange safety vests are visible on the banks, and some construction equipment is parked in the distance. The water is a light brown color, possibly due to sediment or the way the light reflects off the surface.

Natural Channel design to mimic natural systems

Use of:

- Toe Wood Revetments
- Root Wads
- Log J-Hooks
- Rip rap and Boulder Riffles
- Natural Erosion Control Blankets and Logs

Reestablishment of native vegetation buffers

















