PROJECT CASE STUDY

Oakes Landing

NATRX ADAPTIVE INFRASTRUCTURE

The Oakes Landing Living Shoreline project began with a Natrx Assess analysis that quickly identified erosion risks and informed a permit-ready solution. Building on that foundation, we deployed modular Wave Slope and Wave Brush ExoForms™ to deliver shoreline protection, slope stabilization, and marsh restoration. This project is a clear example of how Natrx turns advanced analysis into fast, high-performance, habitat-positive results.

Saluda, Virginia   Winter 2024

PROJECT OVERVIEW

Partners: Middle Penninsula Planning District, Biogenic Solutions Consulting, LLC

Project: Shoreline Stabilization, Habitat Protection

Application: Natrx ExoForm™-based living shoreline

PROJECT GOALS

- Stabilize 200 linear feet of eroding shoreline along Urbanna Creek
- Reduce wave-driven erosion caused by wind and nearby boat traffic
- Establish native marsh habitat in a steep, shaded slope environment
- Protect existing marsh near the property's pier
- Deliver a permit-friendly, fast-track solution to meet a year-end deadline

PROJECT OUTCOMES

- Completed a Natrx Assess report to evaluate erosion drivers and inform project design
- Coordinated field assessment, design, and permitting under Living Shoreline Group II General Permit
- Installed 30 Wave Slope and 31 Wave Brush ExoForms
- Stabilized the toe of a north-facing bluff using clean sand backfill (47 cu yd)
- Planted 1,275 Spartina Alterniflora marsh grass plugs with protective netting
- Employed low-crested structure design to capture sediment and promote vegetation growth
- Achieved a nature-positive solution with minimal disturbance and aesthetic integration
- Constructed full project within one week of mobilization

BEFORE: Rapidly Eroding Shoreline

AFTER: Stable Shoreline and Thriving Habitat