

CUSTOMER CASE STUDY

# DESIGNING A LIVING SHORELINE SOLUTION WITH THE JAMES RIVER ASSOCIATION

Suffolk, Virginia



## PROJECT OVERVIEW

**PROJECT / CUSTOMER:**  
James River Association

**LOCATION:**  
Suffolk, Virginia

**PRODUCT / SOLUTIONS:**  
NatrX ExoForms™

## CHALLENGE:

Design a stable living shoreline solution capable of handling high wave energy in addition to maintaining a natural appearance.

## SOLUTION:

Install 90 Natrx WaveSlope-33 ExoForm structures to create a living shoreline capable of handling the high wave energy environment. The low-impact installation made it possible to construct the living shoreline in one day, despite the restricted access and minimal space for large equipment.

## PRODUCT ADVANTAGES:

- Fast installation with minimal equipment
- Natural appearance
- Supports marine habitat
- Small footprint handles high wave energy applications
- More cost-effective than comparable solutions

## PROJECT OVERVIEW:

Natrx worked with the James River Association to design a living shoreline solution for a property at the mouth of Hoffler Creek, which faced severe erosion and storm damage. The wave energy at this site was higher than most living shoreline solutions could withstand. Not to mention, site access was limited, making it difficult to use the large machinery required for traditional rock-based construction.

## CHALLENGE:

Design a stable living shoreline solution capable of handling high wave energy in addition to maintaining a natural appearance.

## SOLUTION:

Stabilized 270 feet of shoreline using Natrx WaveSlope-33 ExoForms. The modular units offer a smaller physical footprint than a traditional rock breakwater, minimizing bottom disturbance while protecting the property from the high wave energy environment. Furthermore, low-impact installation made it possible to construct the living shoreline in one day, despite the restricted access and minimal space for large equipment.

## WHAT ARE THE BENEFITS OF NATRX EXOFORMS?

- Natrx ExoForms often install faster and without the heavy machinery required for rock construction.
- Mimicking structures found in the marine environment, they support thriving ecosystems.
- Their small footprints minimize benthic disturbance and add net habitat value while still being applicable in high wave energy locations.
- Natrx living shorelines are often less expensive than comparable rock-based erosion control methods.

## THE SOLUTION: FERGUSON WATERWORKS

Our local experts are ready to meet your project specifications with innovative solutions and fast turnarounds. From design to product delivery, we bring experience, proactive thinking and boots-on-the-ground support to every shoreline protection project.

