



## SPECIALIZING IN

- Nature-Based Solutions
- Living Shorelines
- Oyster Restoration





# About Us

- Reef Arch is a coastal protection system for both inshore & offshore applications.
- Our goal is providing **shoreline preservation, habitat creation, and value-add amenities**

- marine enhancement
- education
- aquaculture
- mangrove restoration
- workforce training
- citizen engagement

- living shoreline
- asset protection
- oyster restoration
- coral restoration
- wave attenuation
- gray/green infrastructure



- 200+ employees
- 45 years old
- Seasoned Contractor

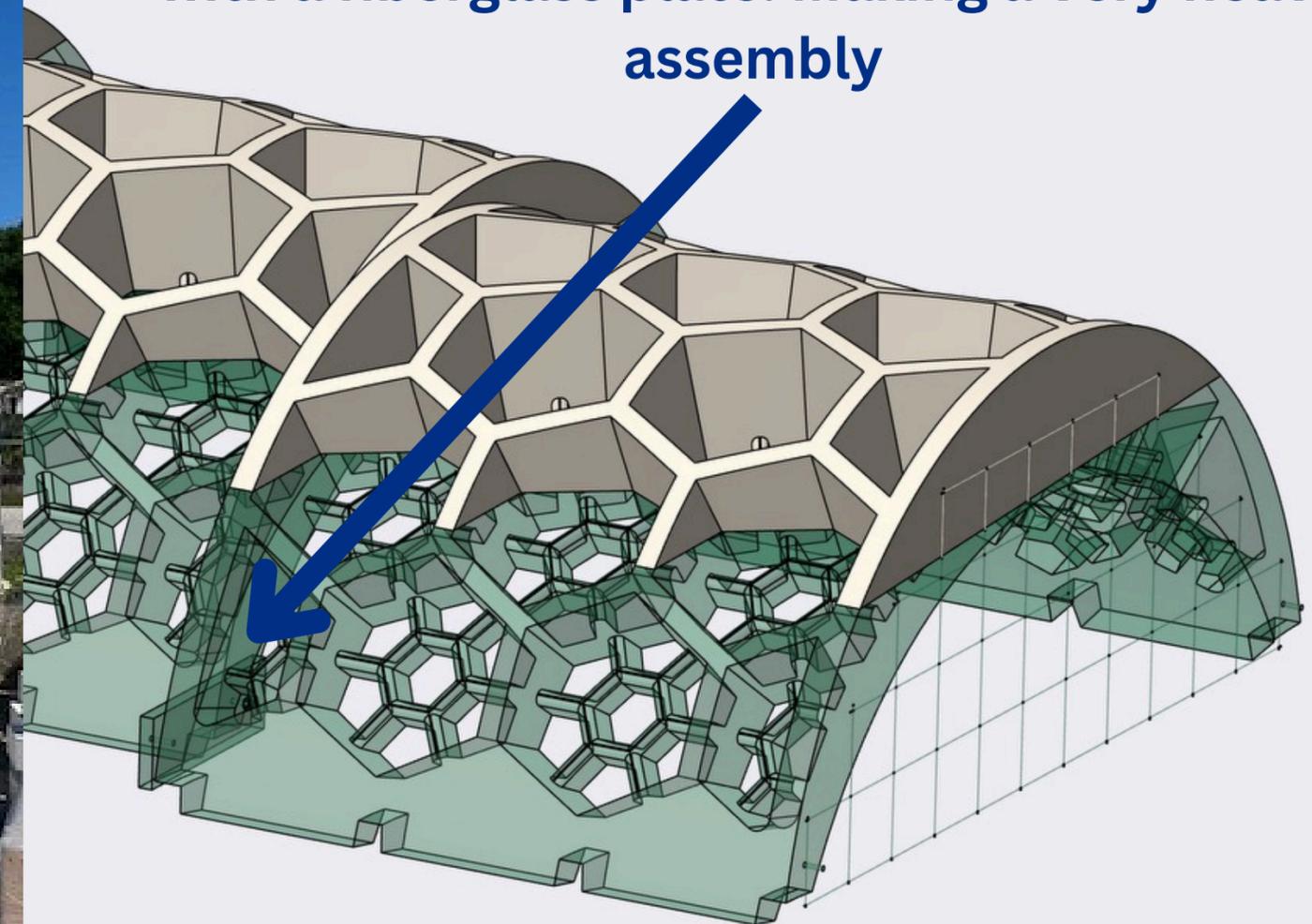


# Simple, Scalable, Innovative Product

**Production Site:  
Made in Fort Pierce, Florida**



**Each 1200 pound arch connected together  
with a fiberglass plate. Making a very heavy  
assembly**





# Strategic Partners



## Exclusive National Distributor

- + provide Engineer Services to Municipalities
- + \$33 Billion/Year Revenue
- + Already engaged in 2 projects with them  
(\$3 million in this relationship since Sept 2024)

## Strategic Mining Partner

- + Contracted with a majority of State Parks
- + Their materials are already approved for state use
- + Both our supplier & large customer

# Tailoring a solution for each environment

*except marshes & swamps*



# Use Reef Arch As A..

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## Living Shoreline

Mangroves grow *through* the Reef Arch a resilient, soft-option for the nature-based solution.

Shoreline protection is a growing need and usually complemented with mangrove restoration. Reef Arches can provide a turnkey restoration solution across Florida



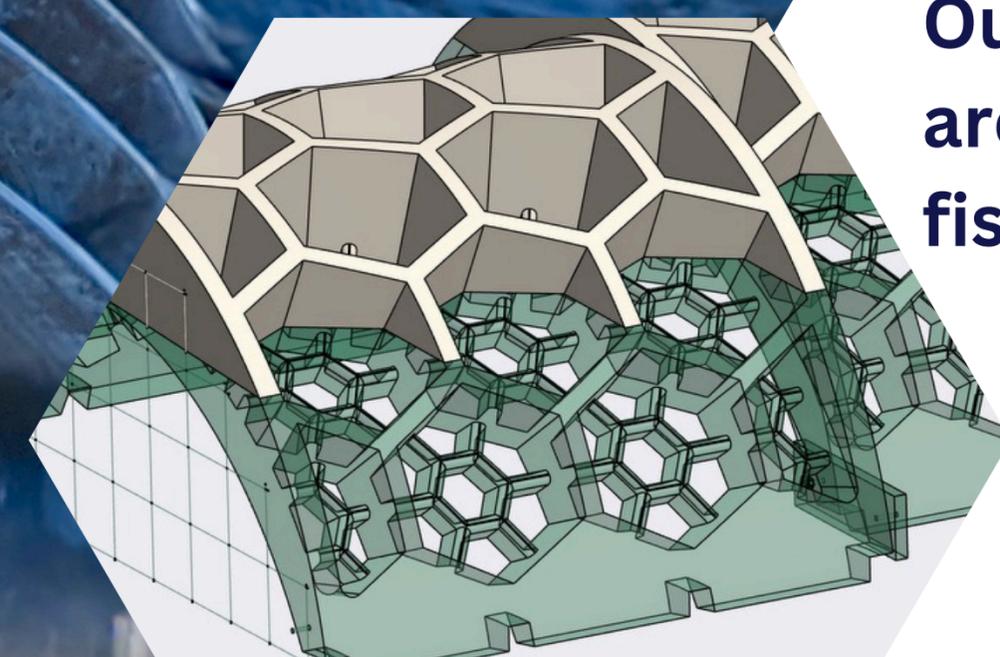
# Use Reef Arch As A..

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## Breakwater

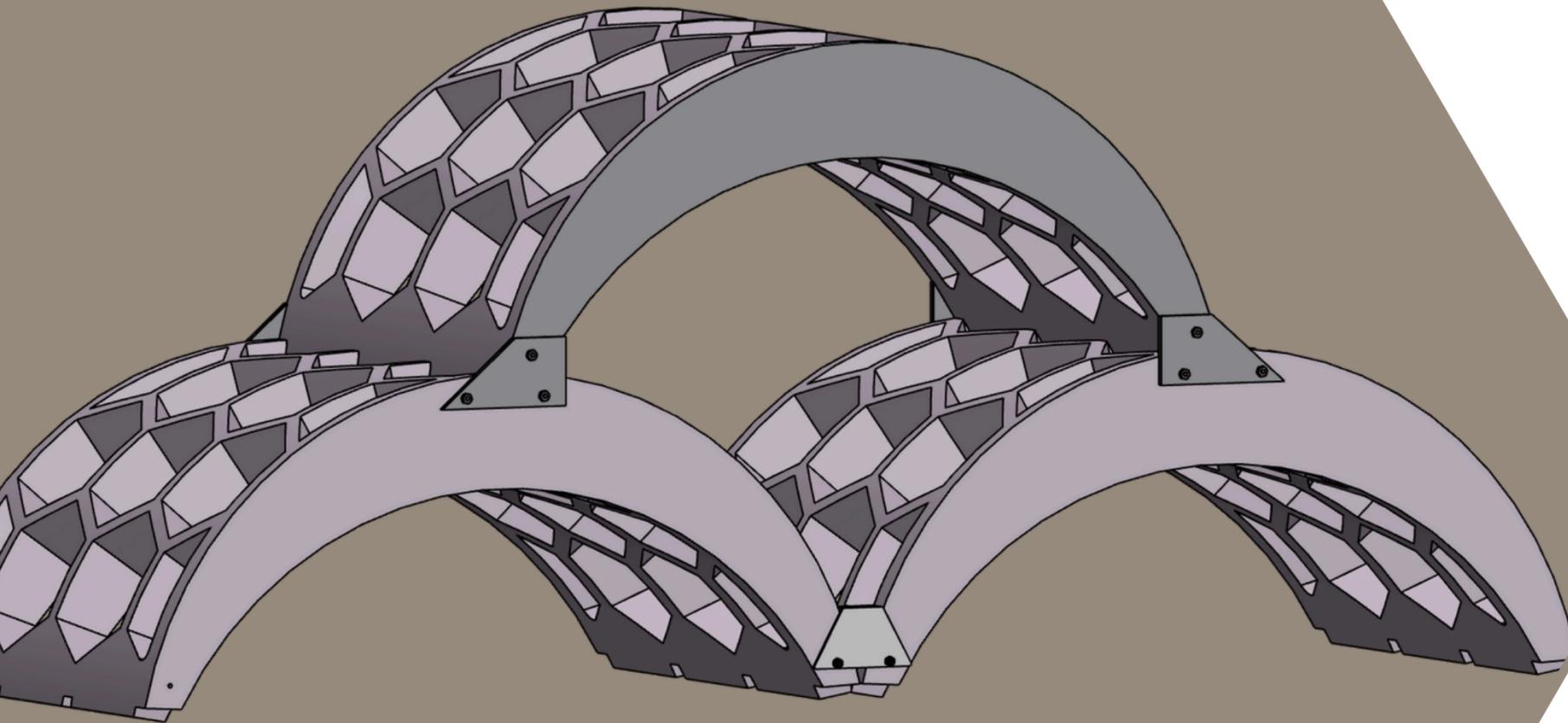
Breakwaters are an excellent approach for wave attenuation. Our system is connected to each other thus making it one large assembly.

Our system has significant surface area for marine enhancement for fisheries.



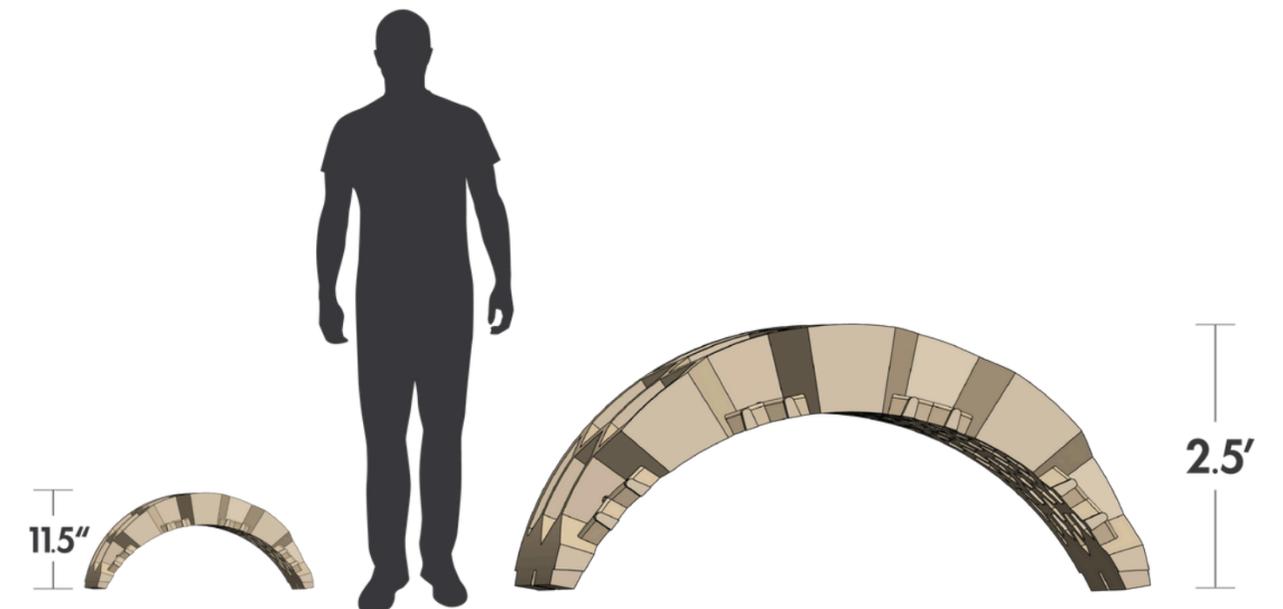
# Stack The Arches

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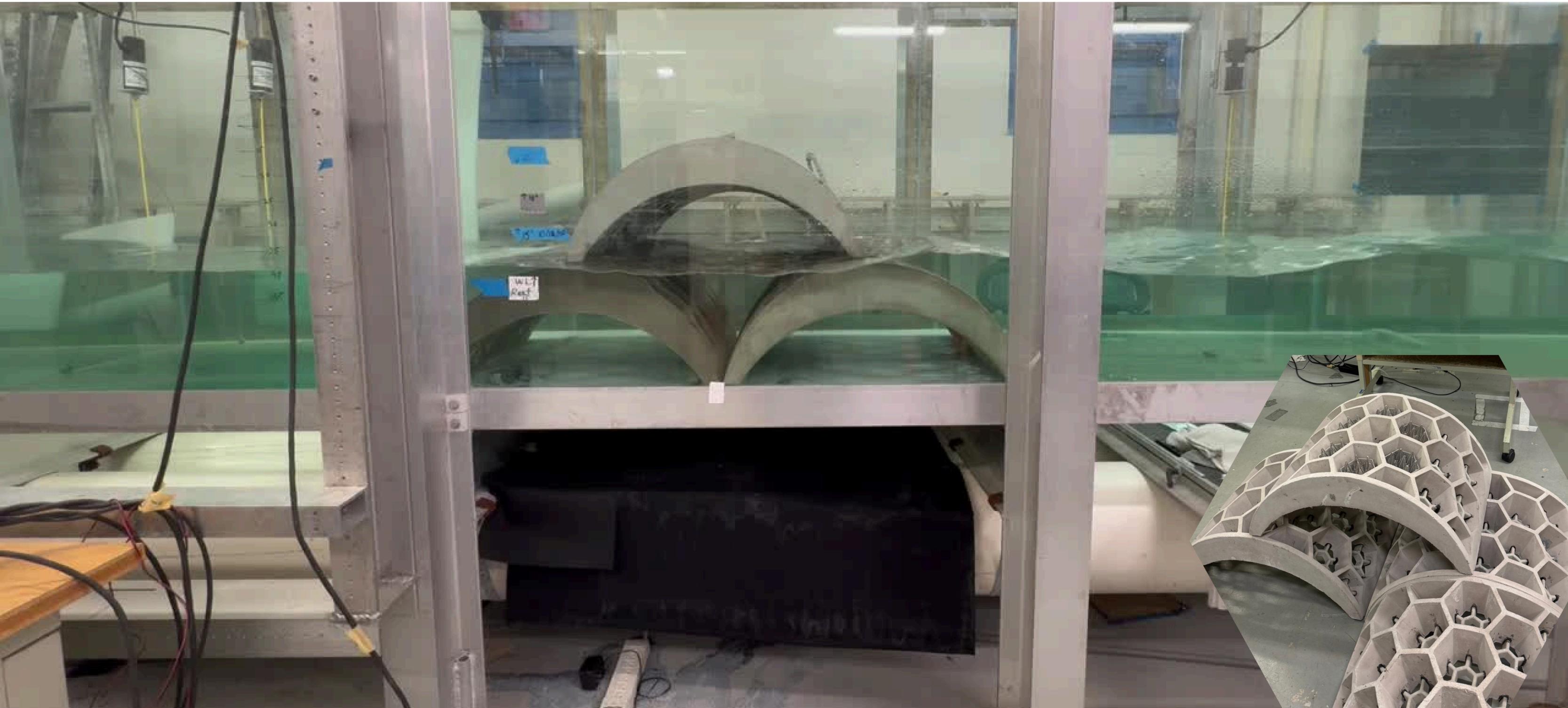


Reef Arches can be stacked vertically as well for a variety of heights allowing for dynamic water depths, over topping, and wave heights.

Pictured is a 3600 pound structure



# Continuous Testing





**START**

microtidal zone 4" & light wind





# Project Case Study





## POST 3-DAYS

visible sediment accretion straight easterly wind observed





# SHORELINE CLOSEUP





**WE ARE BUILDING A BEACH!**





## POST 18-DAYS

contact made with sediment, habitat forming





## POST 45-DAYS

16" thick of sediment, 10' out, ~90' wide | continued monitoring



NO Scouring



July 26th





## GOALS, RESULTS, & OBSERVATIONS

nearshore breakwaters, living shorelines, & “flow-through” design



- You can plant any plant even along side a lake, pond, canal, or shoreline depending on the shoreline angle.
- Shoreline stabilization can occur quickly with proper deployment & native plant choices for absorption



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# How We Deployed

## Barge, Flatbed, or Go-Kart

# DEPLOYMENT





# AN EASY LIFT



# “ROLL WITH IT”





# "BON VOYAGE"





# HOME AT LAST





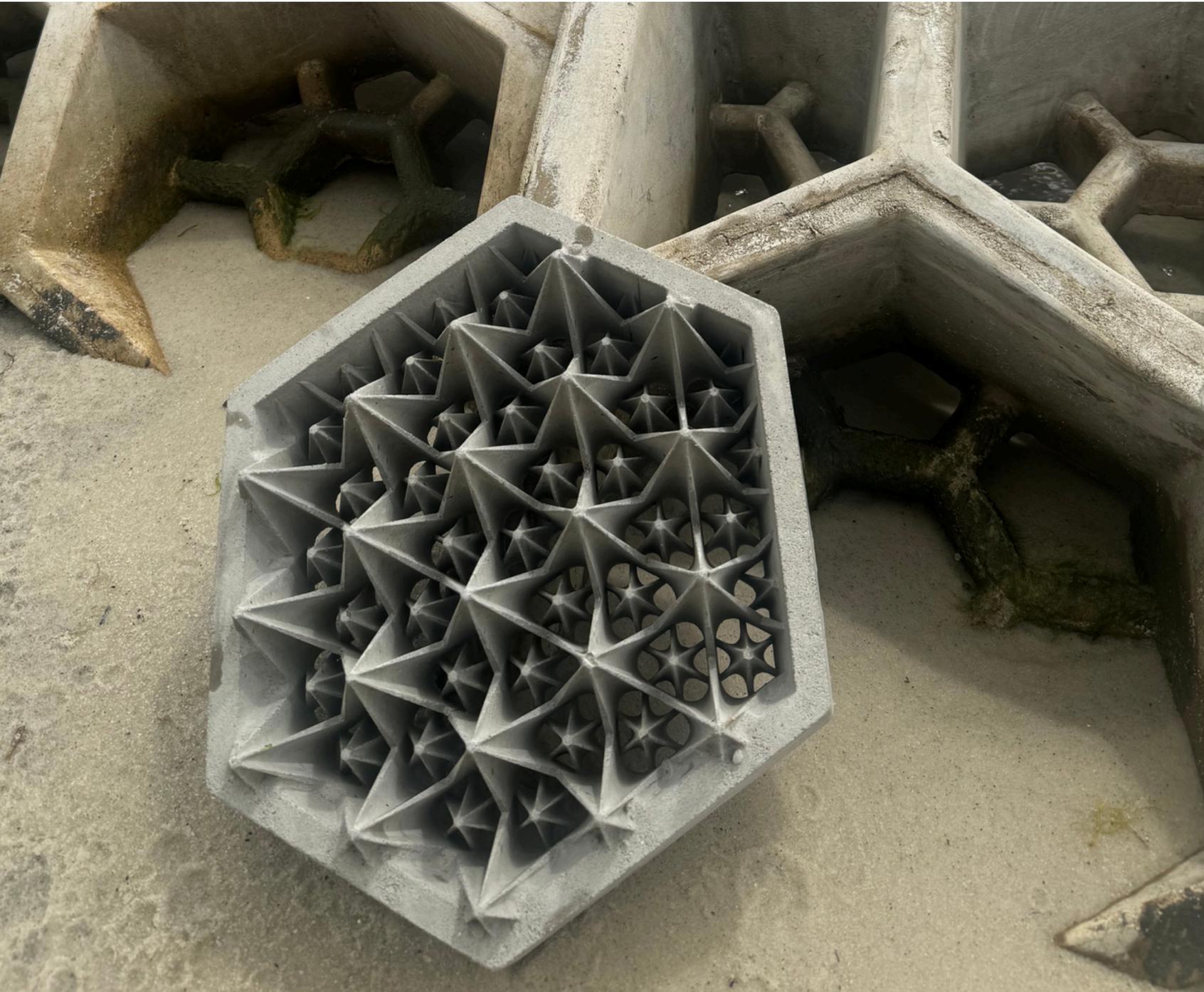


# Oyster Restoration





# Inserts for Oysters





# Oyster Recruitments Post 4 months







# THANK YOU



## EMAIL ADDRESS

[nick@reefarches.com](mailto:nick@reefarches.com)

[keith@reefarches.com](mailto:keith@reefarches.com)

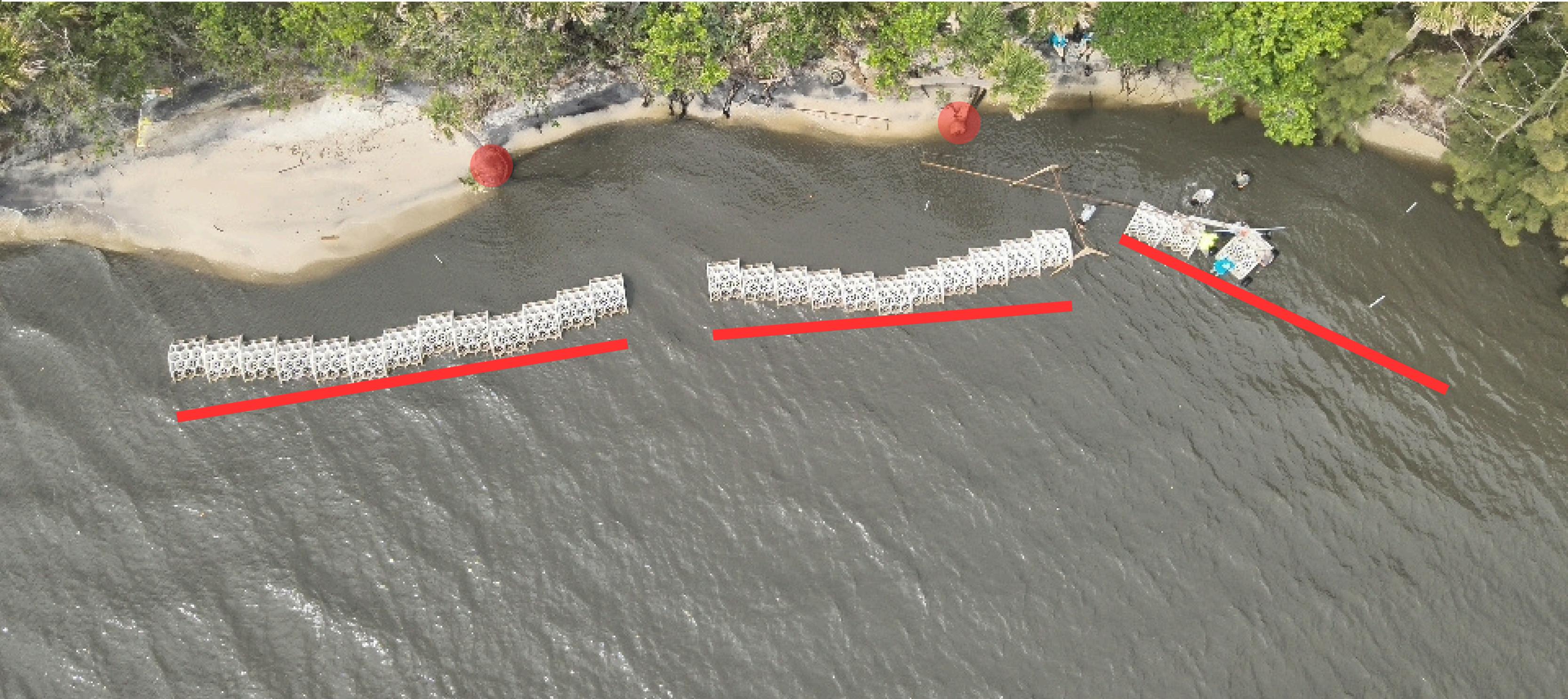
[parker@reefarches.com](mailto:parker@reefarches.com)

## WEBSITE

[www.reefarches.com](http://www.reefarches.com)



# March 2024 Deployment





**MANG**  <sup>®</sup>  
BUY ONE. PLANT ONE. <sup>®</sup>

