



Engaging communities using a demonstration living shoreline

FOR THE

#GATORGOOD

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Summary

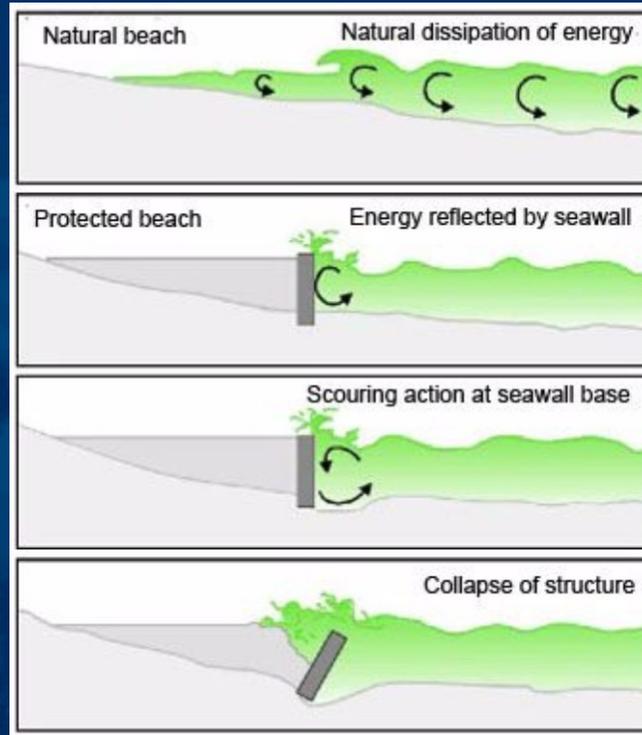
- What are living shorelines
- The Goffinsville demonstration living shoreline
- Methods
- Community science and social impacts
- Lessons learned



Humans have hardened our shorelines

- Florida has >1300 miles of shoreline
- Seawalls are failing
- Living shorelines are a natural alternative
- NOAA living shoreline definition:

A protected and stabilized shoreline that is made of natural materials such as plants, sand, or rock.



Source: UF/IFAS Extension Nature Coast Biological Station



'Hard' infrastructure like retaining walls abruptly severs the ecological connection between the coast and water.



Not only do Living Shorelines defend land against destructive waves, but they also provide crucial habitat for fish and wildlife.

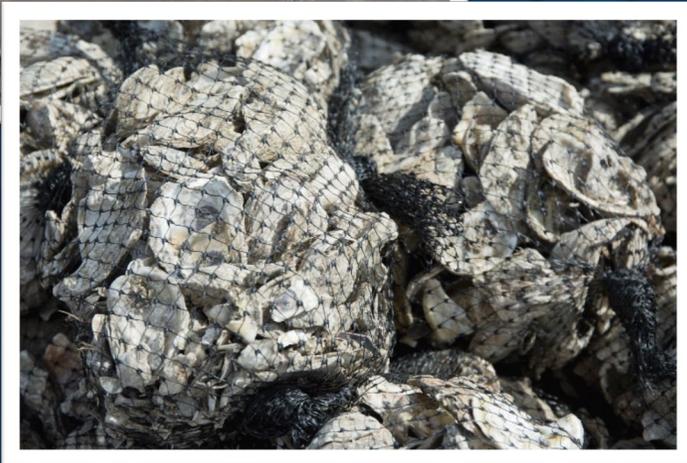
Source: www.delawarelivingshorelines.org

Goffinsville Park: A living shoreline inspiration



A Demonstration Living Shoreline

Plastic mesh bags filled with oyster cultch



Source: UF/IFAS photo database

Community Oyster Reef Enhancement (CORE) modules



Source: Jose Nunez

Created by Dr.
Todd Osborne &
Jose Nunez at UF
Whitney
Laboratory



A Demonstration Living Shoreline

Oyster Reef Balls



Source: Savanna Barry

Reef Turtles



Source: Mark Clark

Reef Prisms



Source: Mark Clark

- Deployment March 6
- Weigh 50 pounds
- Order from companies

- JR-CSA – Jute-reinforced calcium sulfoluminate
- Multiple configurations
- Materials obtained at big box stores

Community Science and Changes in Attitude

- Collected monitoring data 6 months after deployment
- Oyster recruitment
- Oyster shell growth
- Rugosity
- Post-surveys evaluated participants knowledge gained and behavior changes (n=324, 46% response)
- 70-98% knowledge gain in water quality, oyster ecology, restoration, sea level rise, climate change
- Behavior change:
 - 82% service septic tank, 76% reduce fertilizer
 - 53% less boat wake around oyster reefs



Lessons Learned

Community buy in is of utmost importance – education is key

Your project will evolve

Partnerships make life much easier

Understand your system – tides!

Thank You!

Questions?



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