# Marine Extension and Georgia Sea Grant Update

**GCRC Coastal Georgia Colloquium** 

October,, 2024

Mark Risse, Director













# MISSION

To improve the environmental, social and economic health of the Georgia coast through **research**, **education** and **extension**.







#### Some of our Proirities

- Rapid Growth and Resilience
  - 100,000 new jobs will lead to 250,000 new residents
  - Managing Water Resources
  - BIL and IRA Opportunities
- Growing Aquaculture in Georgia
  - Georgia Aquaculture Conference (April, 25, 2025)
  - Growth in Oyster Aquaculture
- South Atlantic Salt Marsh Initiative
- Sea Grant Program Site Review





# **Environmental Literacy and Workforce Development**

- Expanding classroom outreach focused on underserved audiences and engaging new schools in pre-K-12 programs at the aquarium.
- Increasing volunteer and community science efforts (Phytoplankton monitoring, Trawl to Trash marine debris cleanups)
- Reviving Public Programs by hiring Shannon Matzke as Public Programs Coordinator
- Hiring a Curator and Educator and Marine Fellow Coordinator soon.



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Shannon Matzke

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# **Environmental Literacy and Workforce Development**

#### **Student Programs Continue to Grow**

- Improved onboarding process for student interns, fellows and scholars.
- Increased professional development opportunities and networking.
- Mona will cover more



**LEARN MORE** 









# Sustainable Fisheries and Aquaculture

- Supporting sustainable aquaculture through research and workforce development is priority
- Aquaculture White Paper and Conference
- Renewing efforts to promote shell recycling and study reef restoration and living shorelines
- Continuing to engage commercial shrimpers and fisherpeople through oral history projects, survey of working waterfronts and by providing workforce development



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# **Healthy Coastal Ecosystems**

- Increasing applied ecological research capacity through the Coastal Ecology Lab
- Creating new green infrastructure tools and resources for coastal municipalities
- Keren Giovengo retired but still have interest in Spartina Nurseries.
- Blue Carbon/ Marsh Restoration



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# Stormwater Management using Green Infrastructure







Rain garden

Green roof

Permeable pavement



Infiltration trench



Landscape water body



Grassed swale

- Working with Georgia DNR to update Coastal Stormwater Supplement
- Coastal Georgia Rain Garden
  Program
- Rethinking Runoff Plans for Hinesville and Brunswick
- Coastal Georgia LID Inventory
- Can we get communities to implement these at scale?



### **Resilient Communities and Economies**

- Assessing economic impact of coastal industries
- Engaging military installations and surrounding communities in resilience through Coastal Resilience DoD Liaison Program
- Coastal Tourism programs
- Sydney Williams hired as Nature based Solutions Specialis.



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### **Resilient Communities and Economies**

- Sea Grant Legal and Policy Program now led by Katie Hill
- Working closely with IRIS/Network for Engineering with Nature
  - Beneficial Use of Dredge materials
- Community-based Adaption Planning
  - Ex: Tybee Island Natural Infrastructure Plan





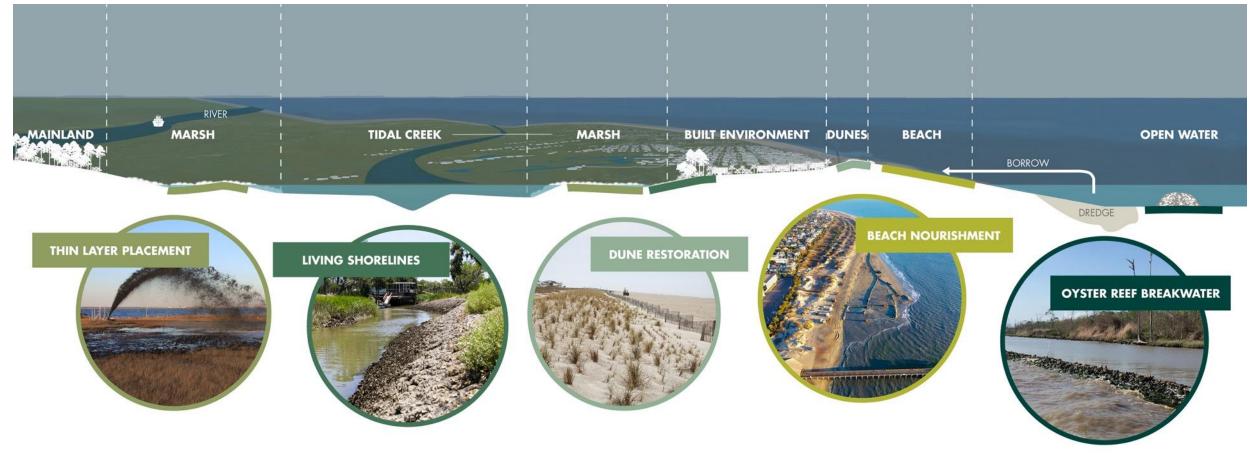








# Examples of natural infrastructure practices that increase the resilience of coastal communities to sea level rise and storms



Graphic developed by Rhett Jackson and Kelsey Broich, Network for Engineering with Nature, University of Georgia. Thin layer placement image by Tim Welp, USACE. Living shoreline and dune restoration images by USA Marine Extension and Georgia Sea Grant. Beach nourishment image by Alan Robertson, City of Tybee. Oyster Reef Breakwater, Bon Secour National Wildlife Refuge in Alabama photo used with permission and provided to the University of Georgia by USACE, Engineering With Nature.





