GEORGIA
DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION

Coastal Advisory Council Green Growth Updates 2025

Kelly Hill, Green Growth Specialist

GA Coastal Management Program

GA DNR Coastal Resources Division

Green Growth Program

Goal: Allowing for economic growth while protecting natural and cultural resources. Our coastal economy thrives with healthy ecosystems to support tourism, fisheries, storm protection, water and air quality and overall quality of life.

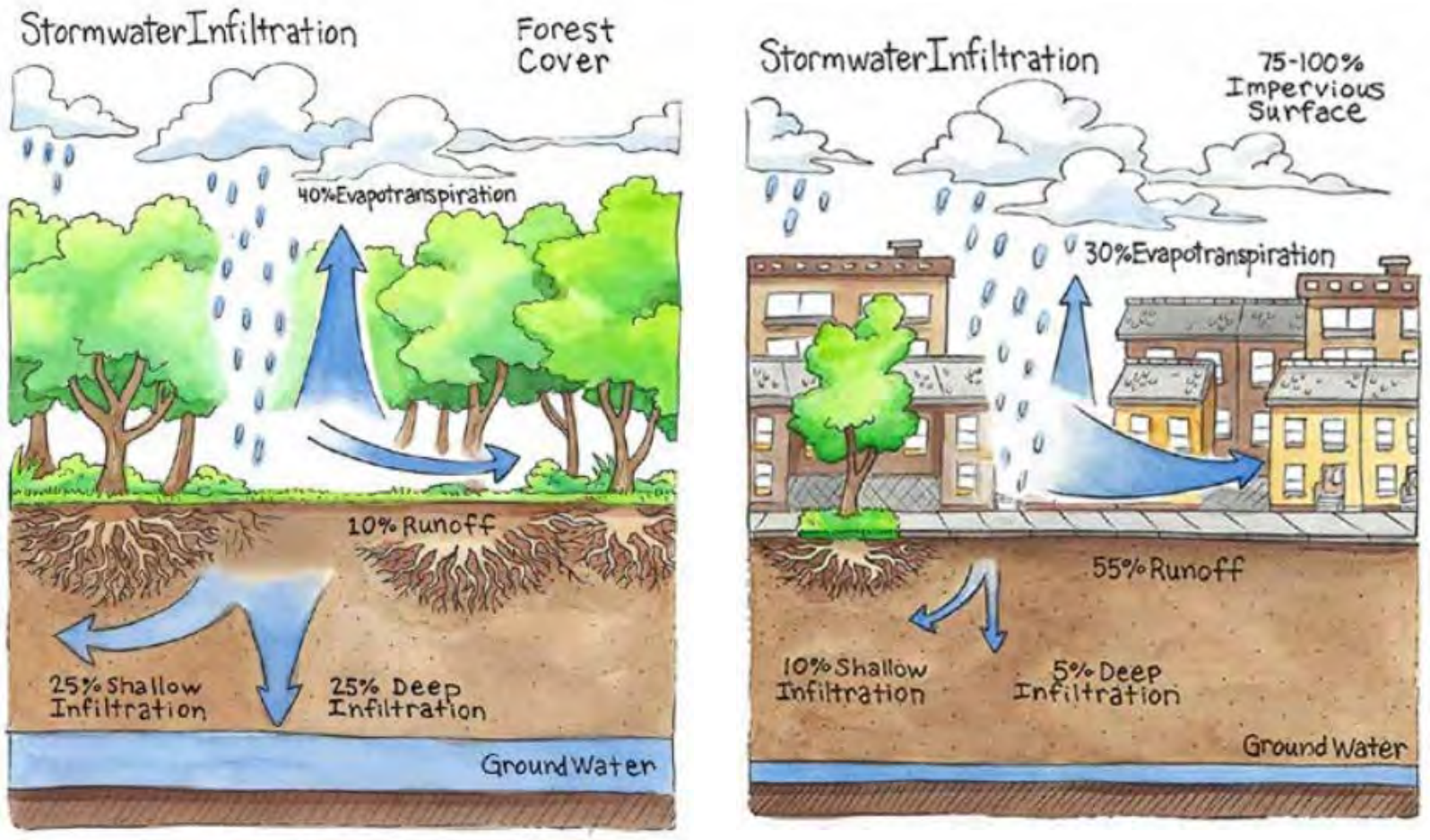
How? Comprehensive and future land use plans implemented in concert with codes and ordinances. Include variety of solutions; land conservation, habitat restoration, green building practices, low impact development stormwater management.

Challenges: Political will to prioritize and enforce; public perception.

Green Growth Program

- ❑Technical Assistance
- ❑Training, Education & Outreach
- ❑Directed Projects

Stormwater Runoff



Green Infrastructure Center Inc.

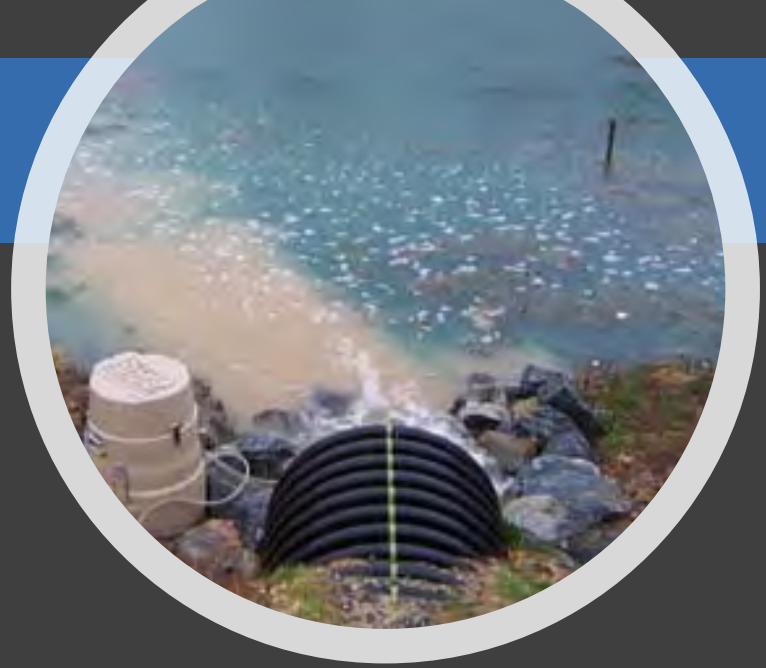
Traditional Approach to Stormwater Management

Drainage Ditches

Curb and Gutters/ Storm Drains

Stormwater Ponds

Discharge Directly Into Stream



Where does it all go?

Coastal Georgia Challenges

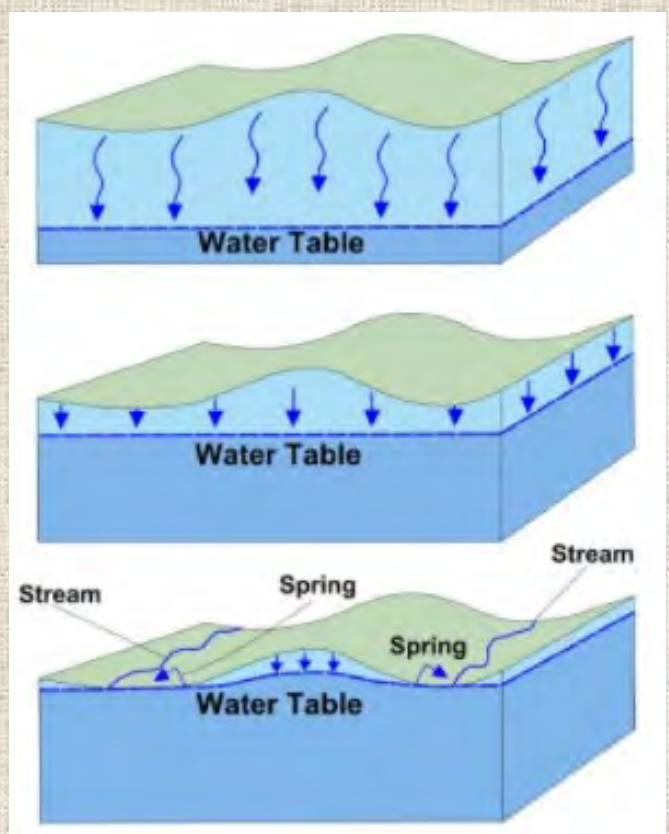


Image Credit:
gov.uk/government/publications/groundwater

Coastal Georgia Challenges

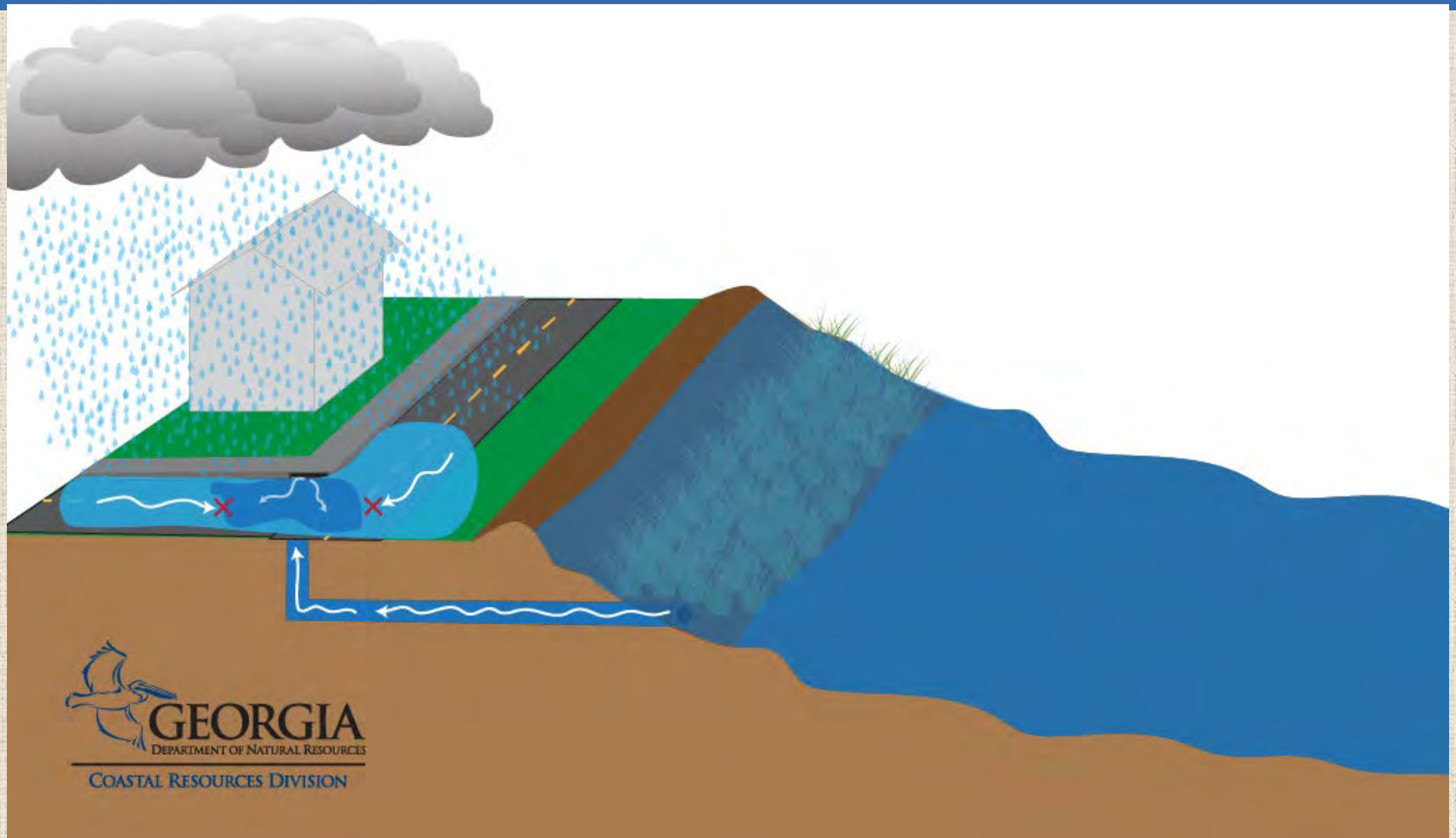


Photo: City of Brunswick


Visiting Angels
America's Choice in Homecare
912.342.8901
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MERRY & BRIGHT
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jekyllisland.com/holiday
BOOK ONLINE
ROCK THE DOCK OYSTER ROAST
THE WHARF NOV 29 11AM-4PM
BOOK AT JEKYLLCLUB.COM
BESEENOUTDOOR.COM
SOUTHERN HARDWARE
912-267-7992

NFWF National Coastal Resilience Fund Award

GLYNN COUNTY SCHOOLS

CITY OF BRUNSWICK INCORPORATED FEBRUARY 22, 1856 GEORGIA

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Opportunities

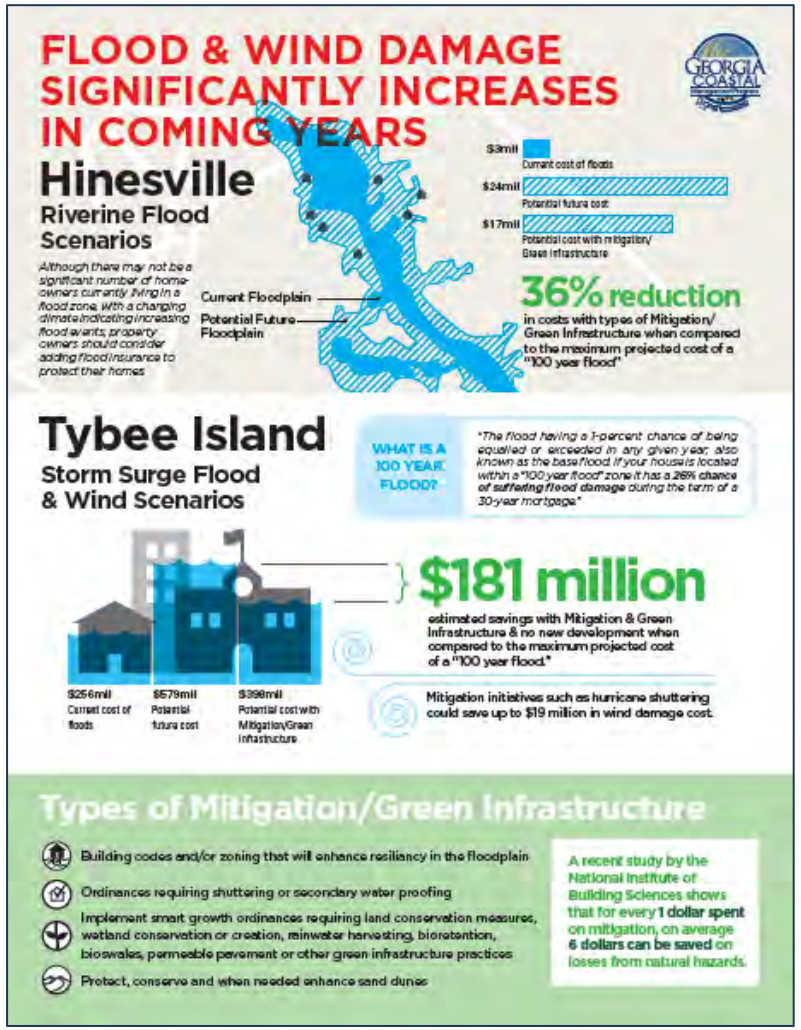
Permeable Pavement

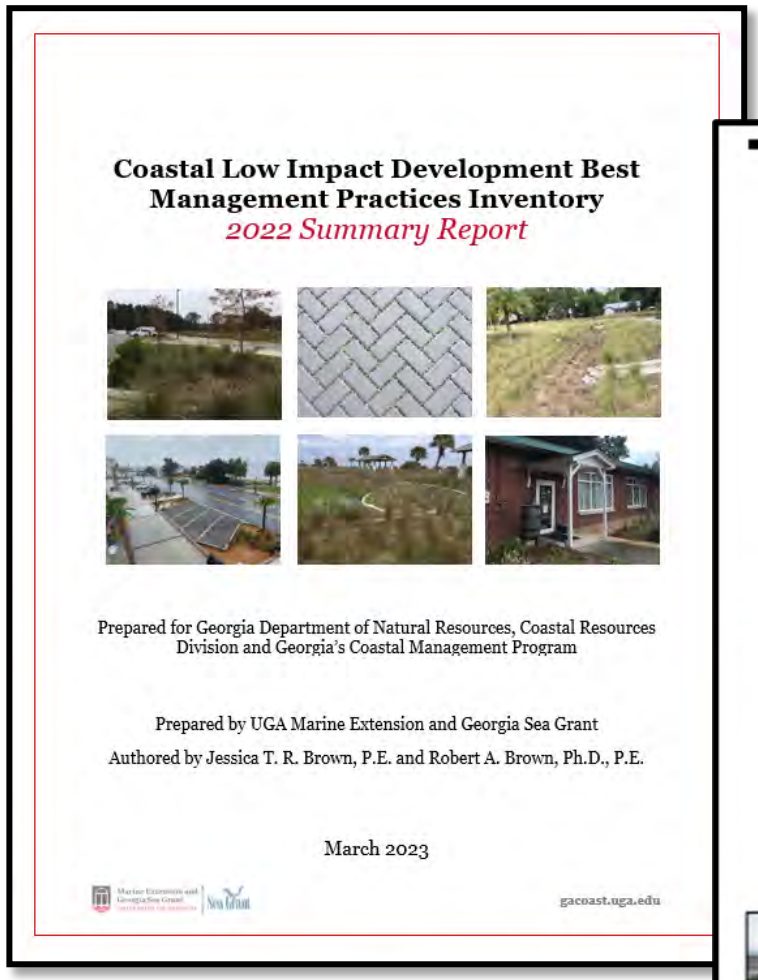
Bioswales and Bioretention

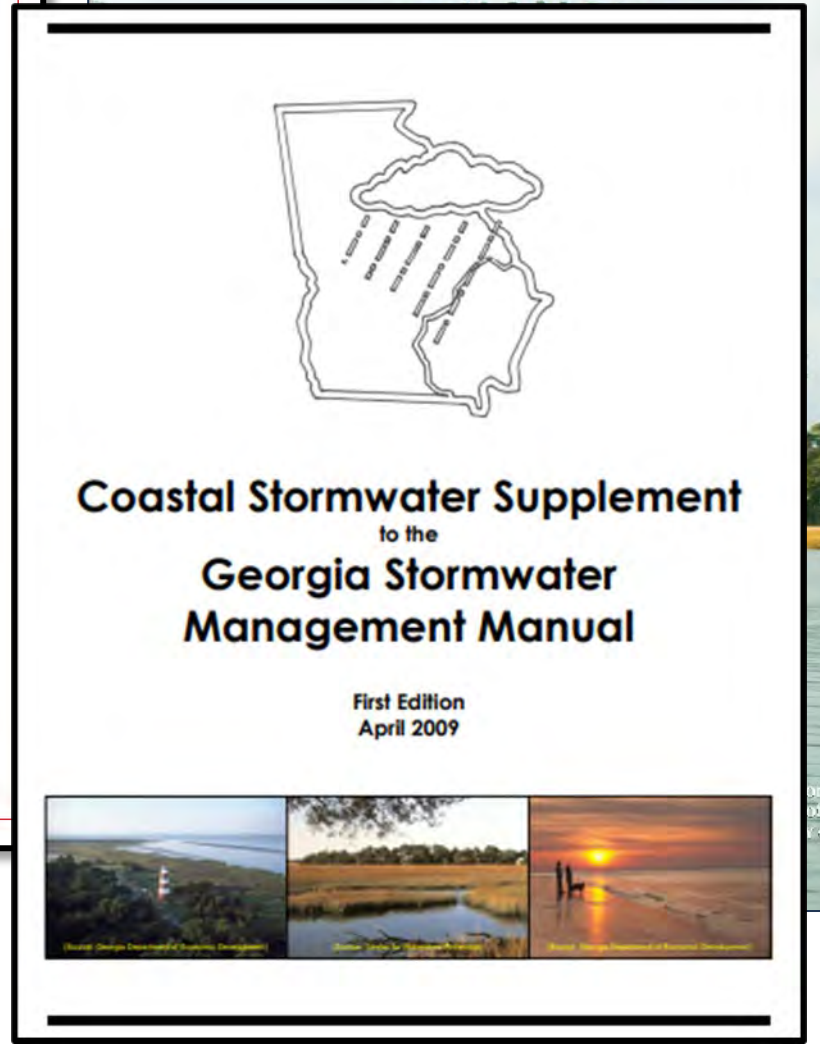
Rain Gardens

Rainwater Harvesting

Developing Tools & Resources







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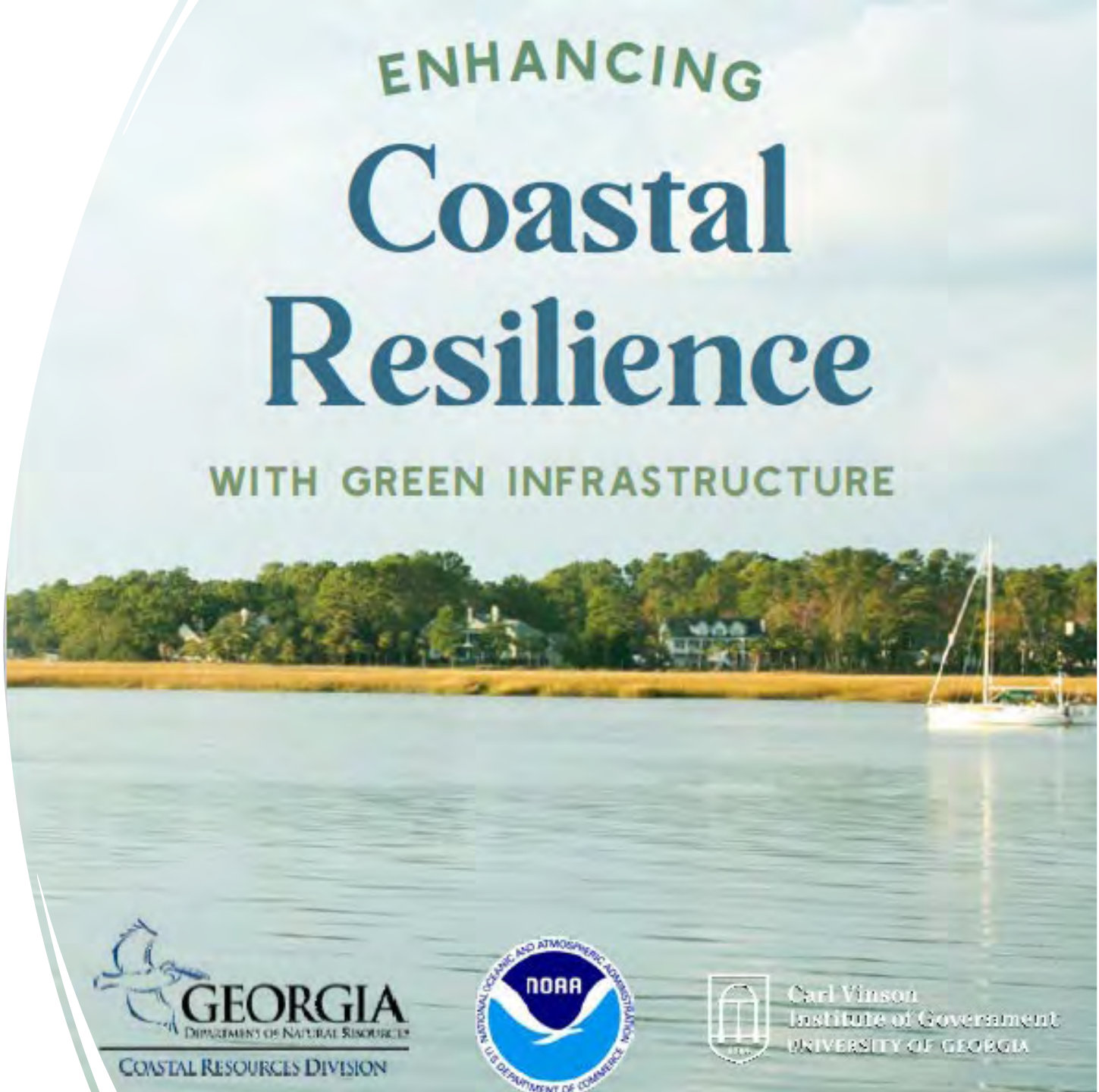
Guidance Document

- **Community Resilience**
- **Policy & Practice Cards**
- **Community Rating System (CRS) Connections**
- **Model Ordinances**



BMP CARD 4

Promote Infiltration/ Evapotranspiration Practices

DESCRIPTION: Infiltration and evapotranspiration practices reduce stormwater volumes by capturing runoff and infiltrating it into the ground or promoting its evaporation or transpiration back into the atmosphere. Such practices can also reduce pollutant loads that are carried to nearby surface waters. Infiltration and evapotranspiration can be bolstered by incorporating additional trees and other vegetation into the built environment, using engineered bioretention and infiltration structures, and preserving existing natural vegetated areas.

PREFERRED AREA: Promoting infiltration and evapotranspiration through the use of landscaping and vegetation is appropriate in all development settings, whether urban, suburban, or rural. However, the use of bioretention areas and the preservation of natural areas are more appropriate in suburban areas, and preservation of natural areas should be the primary means of promoting this practice in rural areas.

PLANNING SCALE: Infiltration and evapotranspiration practices decrease flooding by reducing peak downstream flows within their watershed. Therefore, these practices would optimally be considered as an integrated network of practices designed and implemented at the watershed scale.

IMPLEMENTATION EXAMPLES

- Mandate or promote Green Streets practices.
- Mandate or promote practices resulting in less area covered by impervious surfaces.
- Include pre-application meetings in the community design review process.
- Require green infrastructure practices to offset impervious cover that exceeds that maximum.

Rain Garden (left) Credit: Coastal GA LID Inventory | Urban Trees (right) Credit: Georgia Forestry Commission

RELEVANT MODEL ORDINANCE PROVISIONS

The **Model Enhanced Stormwater Resilience Ordinance in Appendix A** includes the following provisions:

- Section 5 limits the amount of impervious cover that can be used onsite based on the existing zoning districts.

BMP CARD 4

- Section 6 requires that building downspouts be disconnected from impervious areas and be directed into infiltrative stormwater infrastructure.

The **Model Model Tidal Flooding Resilience Ordinance in Appendix A** includes the following provision:

- Section 6 prohibits new development in areas subject to recurrent tidal flooding.
- Section 6 prohibits privately developed infrastructure built in areas vulnerable to tidal flooding from being accepted into public ownership.
- Section 9 requires the development of a plan to acquire land in the area of coastal tidal vulnerability.

To view technical resources, click on each title to visit the site online.

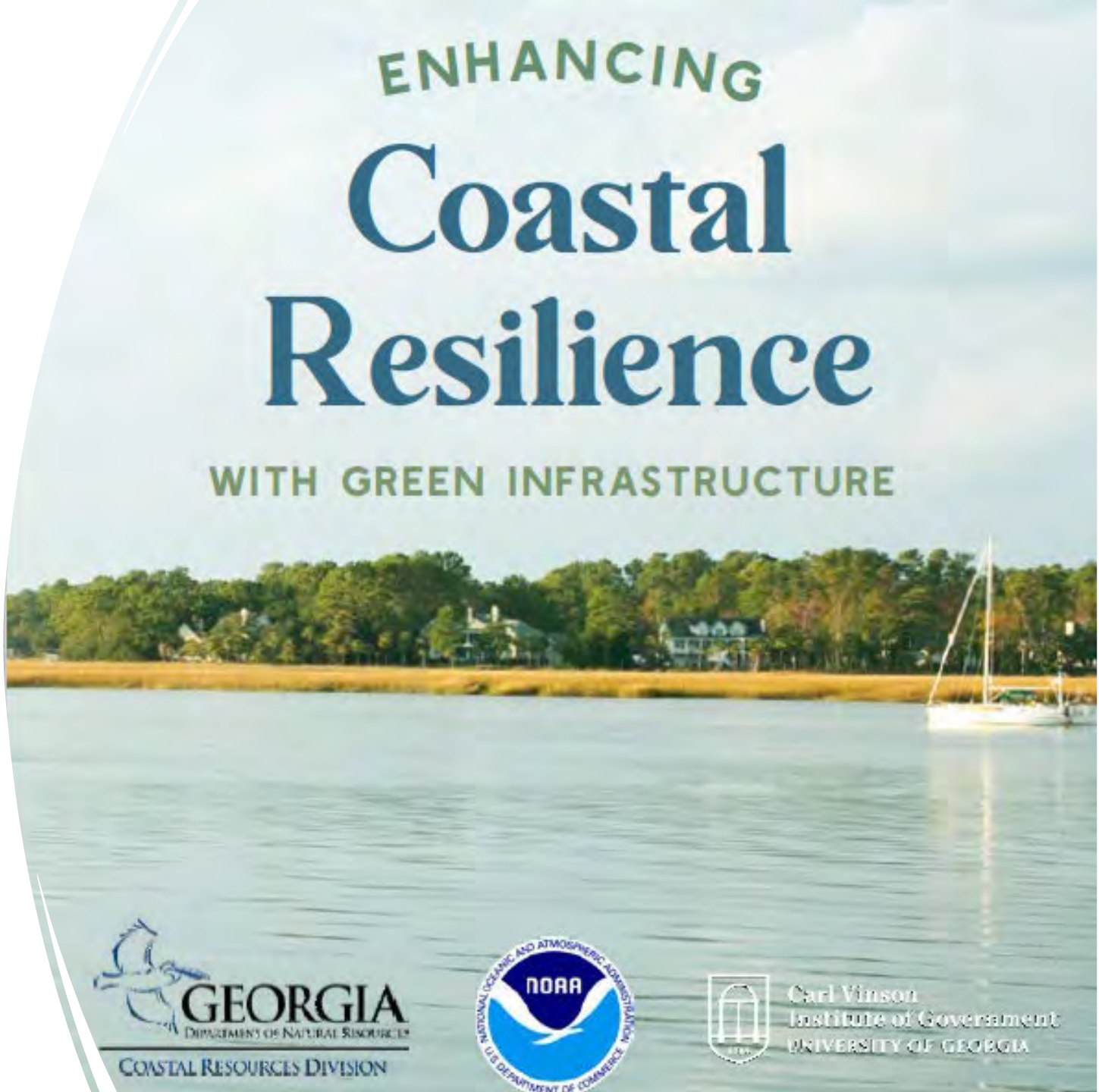
EXAMPLES OF PRACTICES	TECHNICAL RESOURCES
GREEN STREETS	• US EPA Green Streets • National Association of City Transportation Officials, Urban Street Stormwater Guide
URBAN TREE CANOPY	• Georgia Forestry Commission, Community Forests Program • US Forest Service, Urban Forestry Resources • Center for Watershed Protection, Urban Tree Canopy
BIORETENTION AND LANDSCAPING WITH NATIVE PLANTS	• Coastal Supplement to the Georgia Stormwater Management Manual • Coastal Resources Division of the Georgia Department of Natural Resources, Green Growth Guidelines
LOW-IMPACT DEVELOPMENT PRACTICES	• Coastal Supplement to the Georgia Stormwater Management Manual • Coastal Resources Division of the Georgia Department of Natural Resources, Green Growth Guidelines
TREE PLANTING/ FORESTRY MANAGEMENT	• Georgia Forestry Commission, Community Forests Program • Georgia Forestry Commission, Tree Ordinance Development Guidebook • US Forest Service, Urban Forestry Resources
RAINWATER HARVESTING	University of Georgia Extension, Rainwater Harvesting for System Designers and Contractors Georgia Department of Community Affairs, Georgia Rainwater Harvesting Guidelines

CRS CREDIT CONNECTIONS

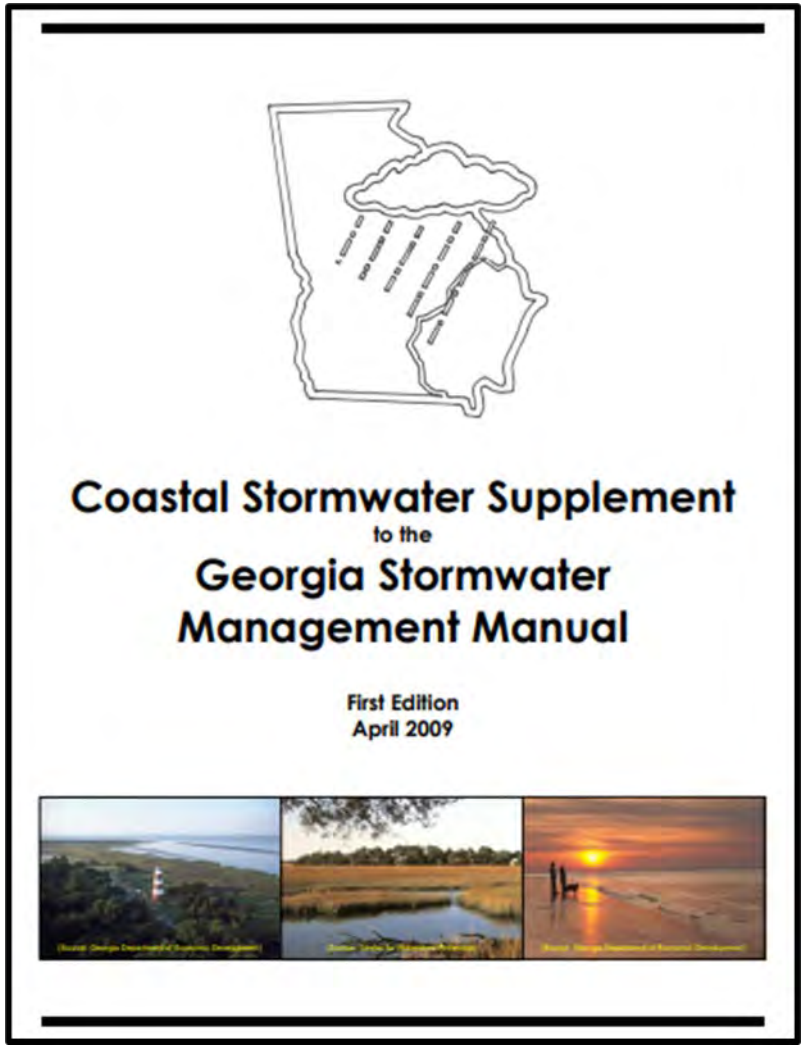
- CRS 420: Open Space Preservation
- CRS 422e: Coastal Erosion Open Space
- CRS 422f: Open Space Incentives
- CRS 422g: Low Density Zoning

Model Ordinances

- **Model Flood Resilient Development and Building Ordinance**
- **Model Enhanced Stormwater Resilience Ordinance**
- **Model Sea Level Rise Ordinance**
- **Model Tidal Flooding Resilience Ordinance**
- **Model Coastal Resilience Ordinance**



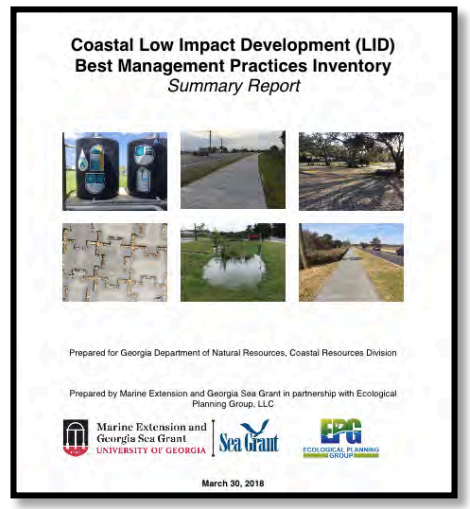
Updates to the Coastal Stormwater Supplement

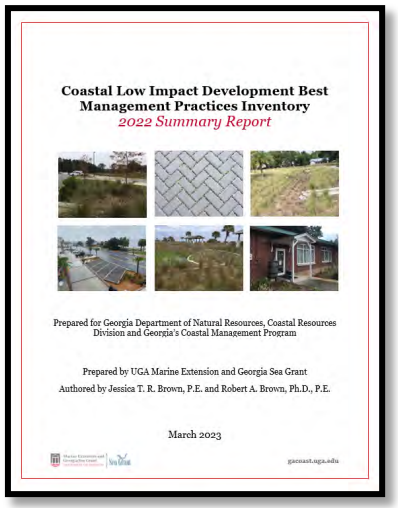


Funding for this contract is provided by the Georgia Department of Natural Resources, Environmental Protection Division through a grant from the U.S. Environmental Protection Agency under the Provisions of Section 319(h) of the Federal Water Pollution Control Act, as amended.

Coastal Low Impact Development (LID) Inventory

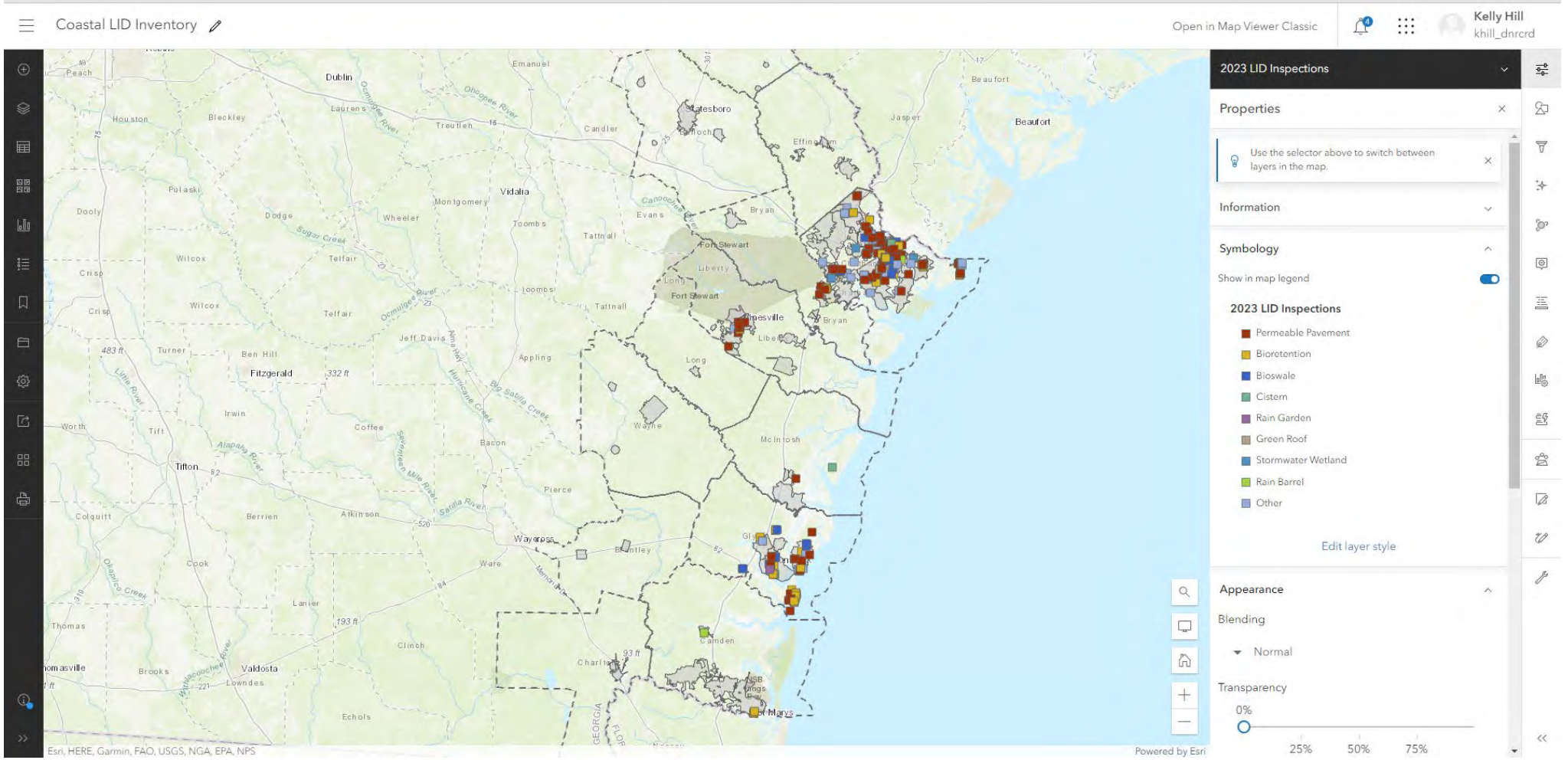
- **Developed by:** UGA Marine Extension and Georgia Sea Grant, Georgia DNR's Coastal Management Program, Ecological Planning Group, LLC (2016), Center for Watershed Protection (2016), Goodwyn Mills Cawood, LLC (2022)
- **What it Does:** Inventory of stormwater green infrastructure practices located on civic, public, commercial and mixed-use properties. Conducted using a combination of data collection and field verification. Includes narrative summary and photographs.
- **Access:** https://coastalgadnr.org/DemoSites
- **Date Published/Update:** **2017; 2023**





Financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration and passed through the Coastal Management Program of the Department of Natural Resources.

https://coastalgadnr.org/DemoSites



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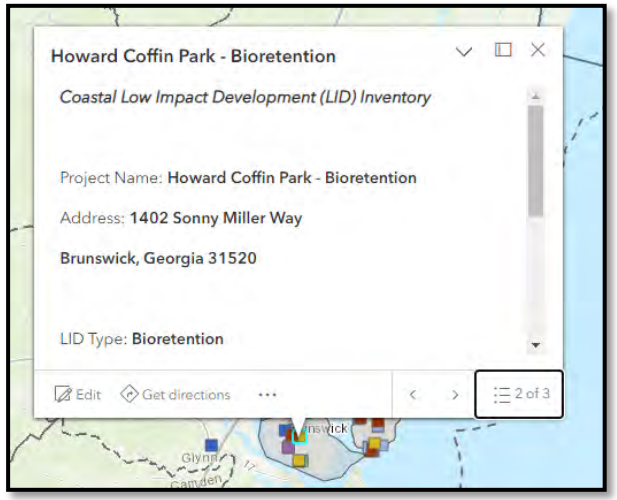

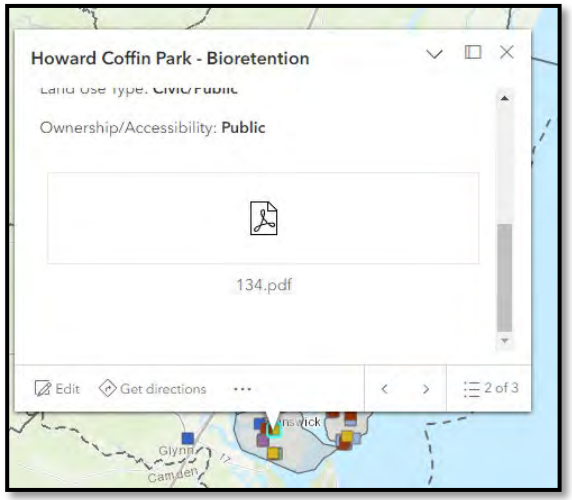

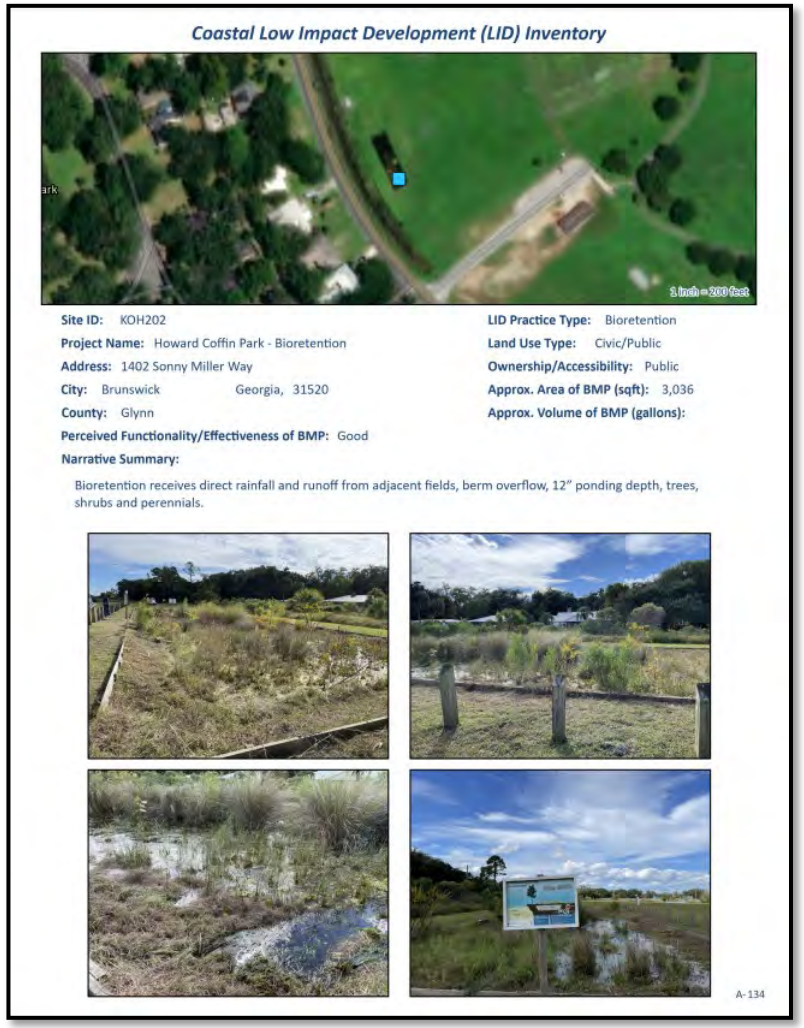

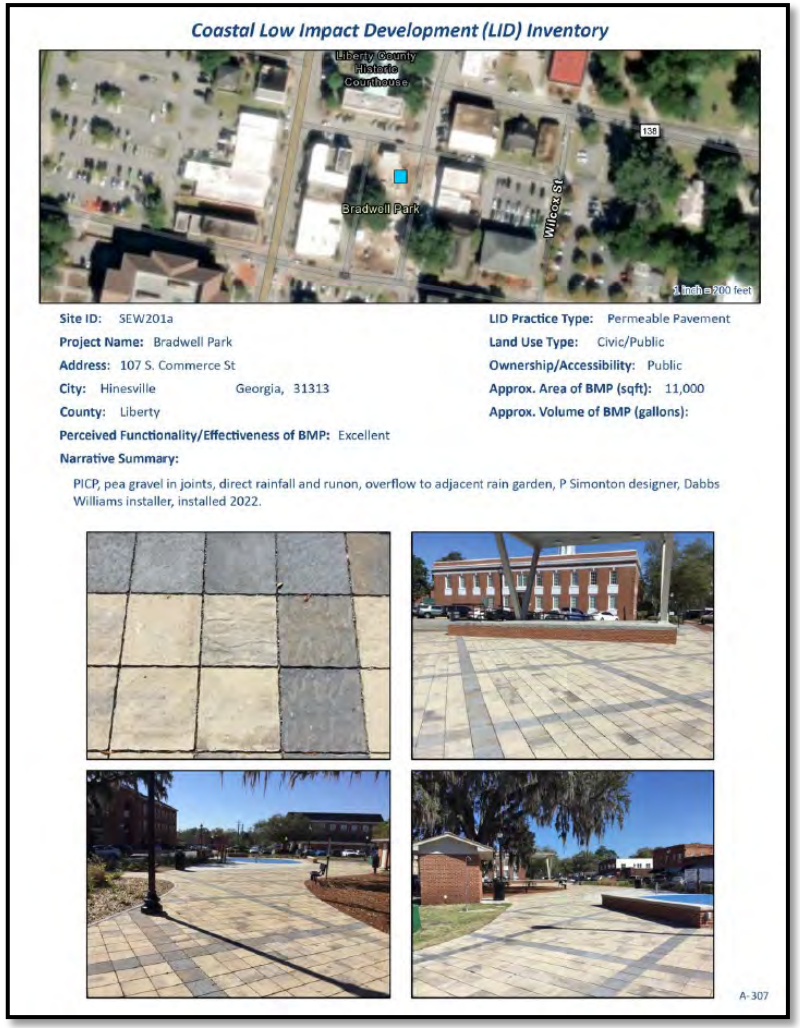

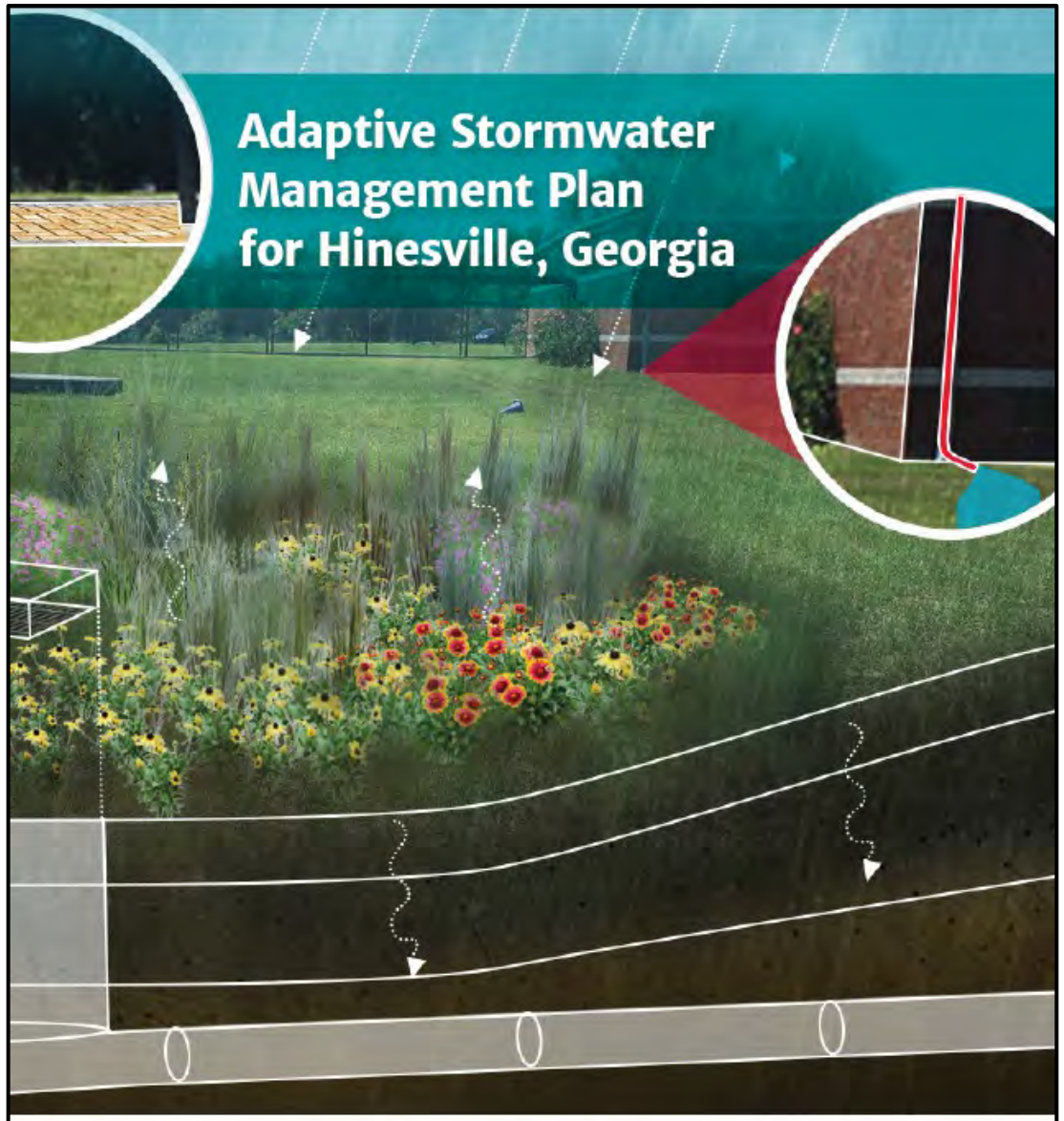

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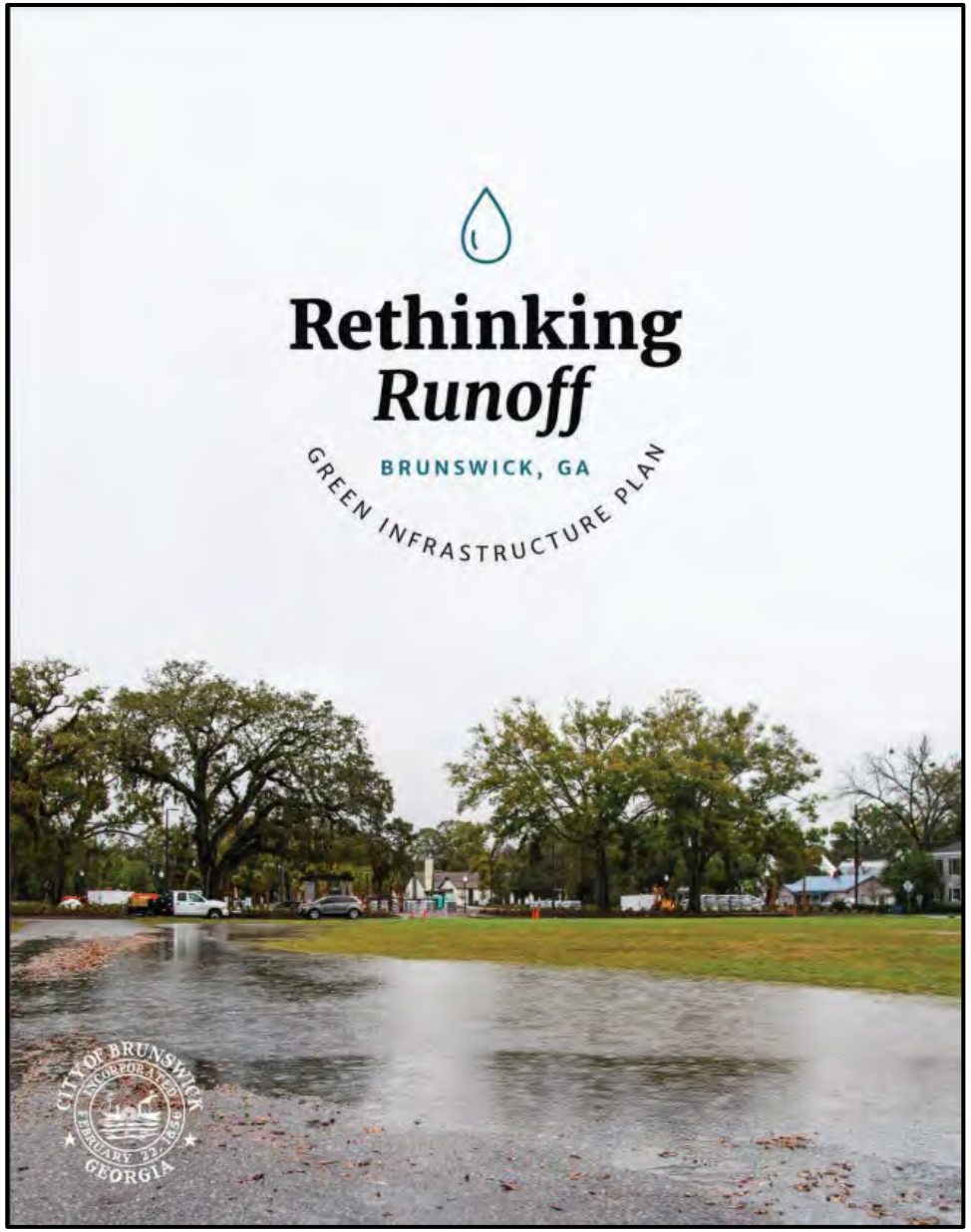

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FEMA BRIC Award

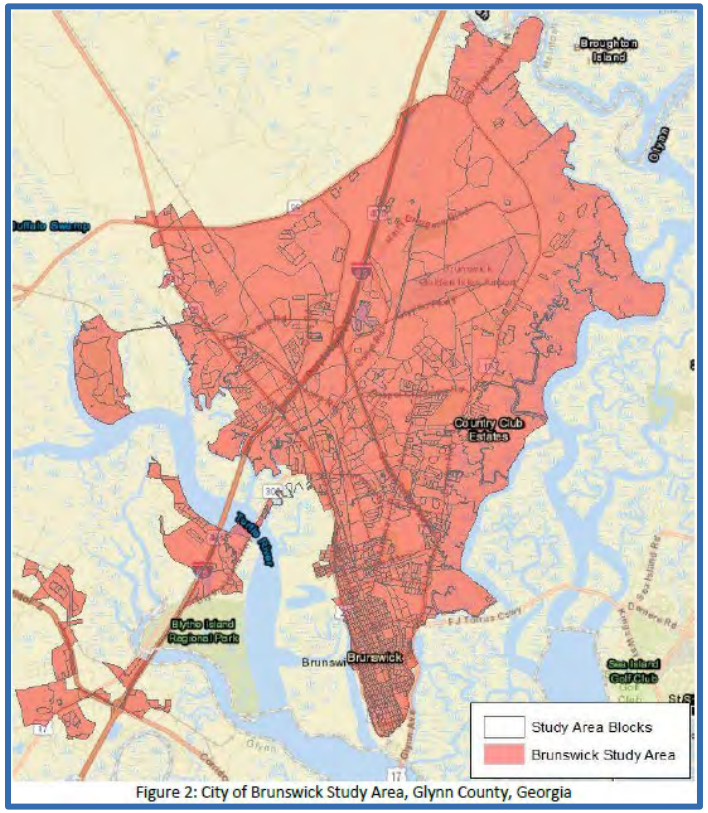


Figure 2: City of Brunswick Study Area, Glynn County, Georgia

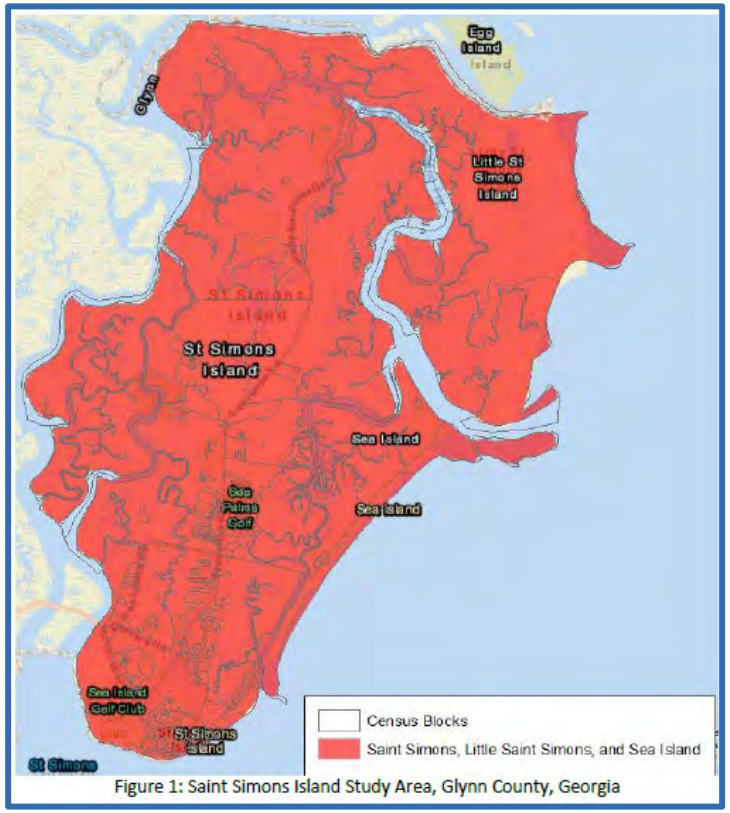
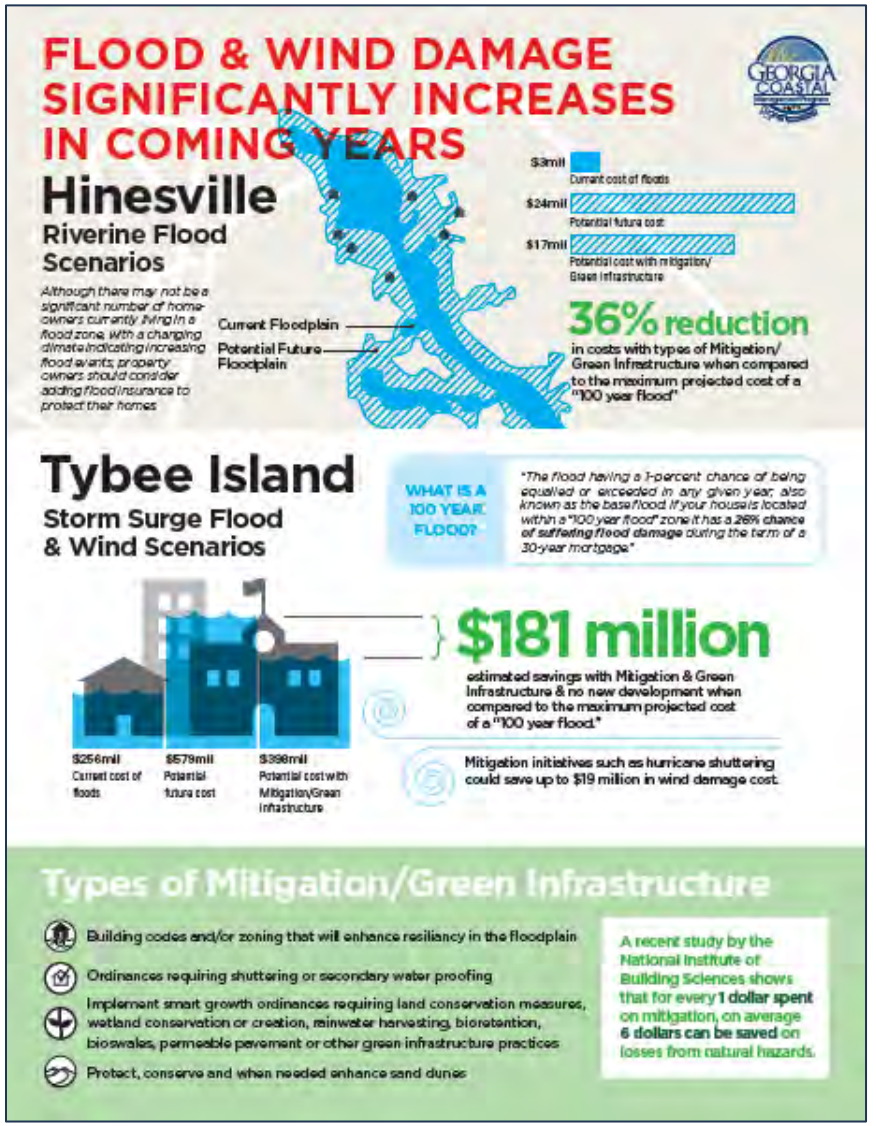
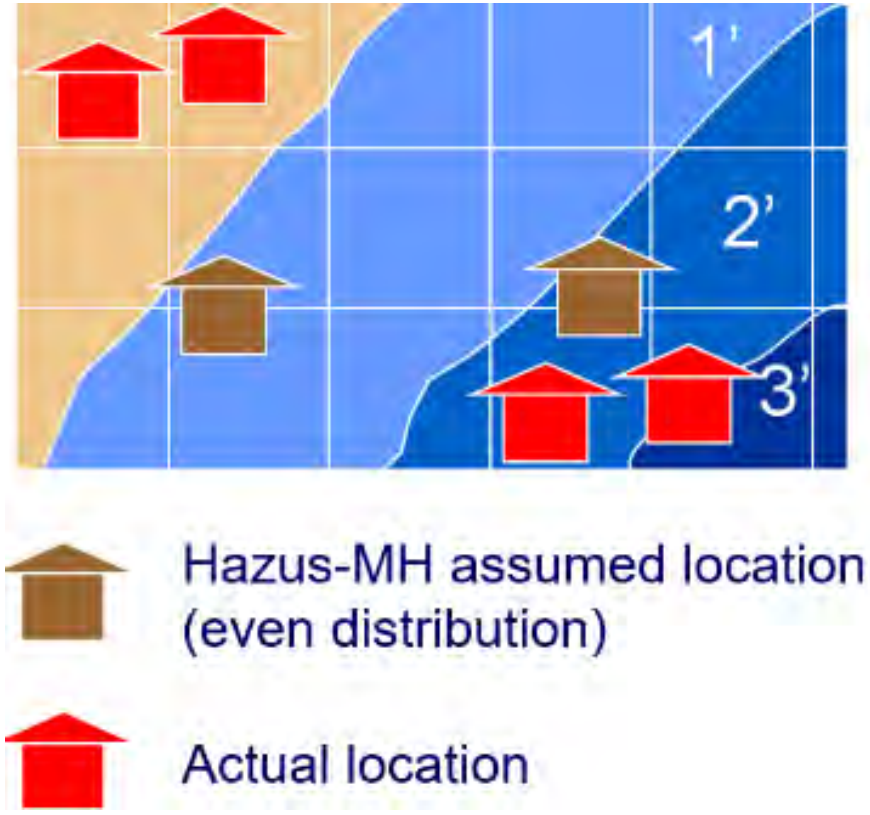


Figure 1: Saint Simons Island Study Area, Glynn County, Georgia



coastalgadnr.org/ResiliencewithGreenInfrastructure



SSEC

The Polis Center

Full Risk Assessment

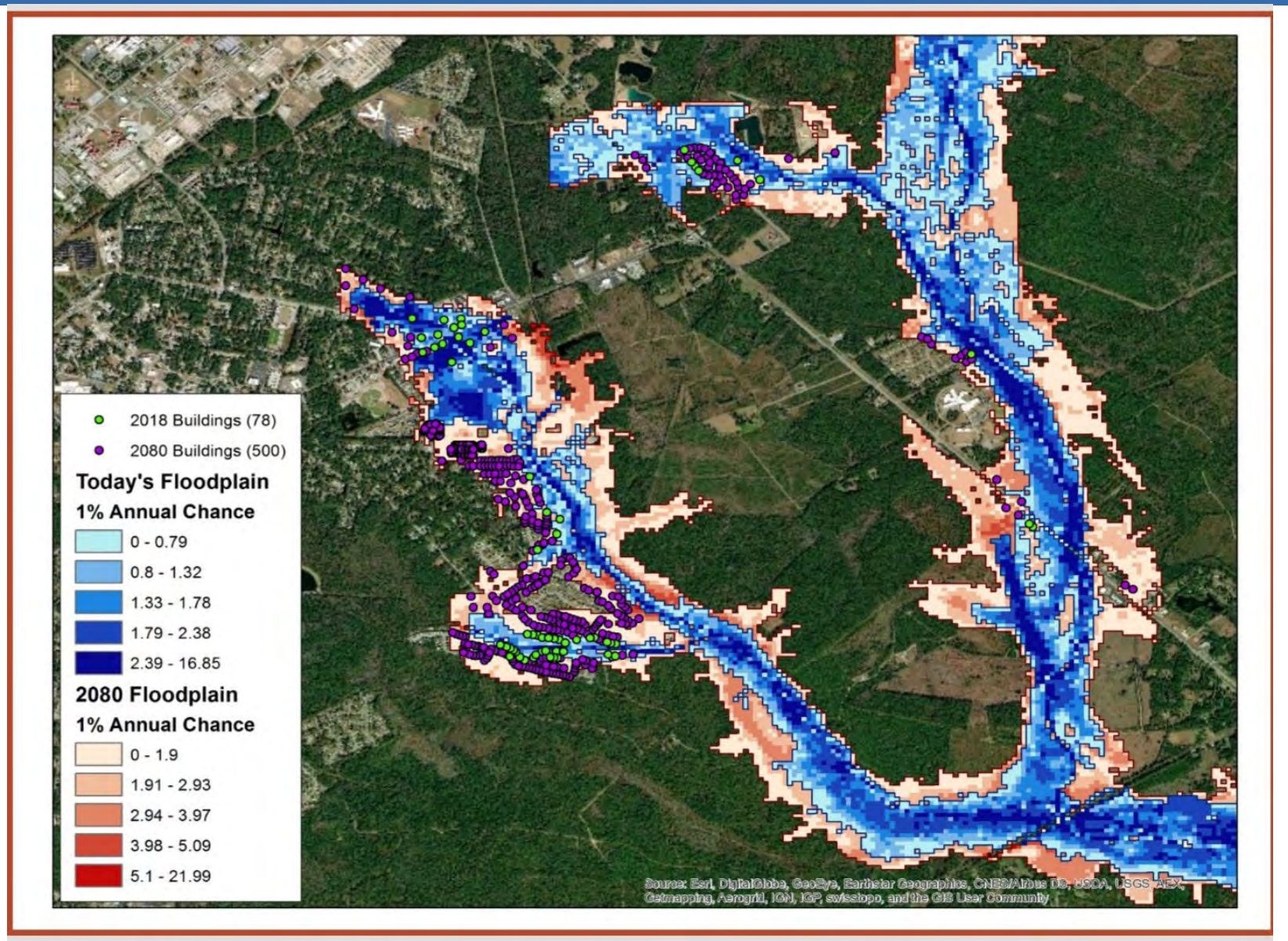
FLOOD & WIND DAMAGE SIGNIFICANTLY INCREASES IN COMING YEARS

GEORGIA COASTAL Management Program

Future Flooding Risks

Although there may not be a significant number of home-owners currently living in a flood zone, with a changing climate indicating increasing flood events, property owners should consider adding flood insurance to protect their homes.

Future Floodplains



Georgia Clean Marina Program

Certified Marinas

- Delegal Creek Marina
- Barbour River Yacht Club
- Savannah Boathouse
- Hinckley Yacht Services
- Savannah Yacht Club
- Safe Harbor Bahia Bleu
- Belle Bluff Island Marina

Pledged Marinas

- Safe Harbor Savannah Yacht Center
- Sun Life Marina Wilmington Is.
- Ford Field and River Club Marina

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GAMBA
Georgia Marine Business Association

www.GeorgiaCleanMarina.org

CAC Engagement Requests

- ❑ Ask questions!
- ❑ Explore our website, learn about CIGs and other funded work
- ❑ Provide contact information, facilitate introductions
- ❑ Provide recommendations for stakeholder engagement opportunities
- ❑ Project collaboration
- ❑ Pass along information to your contacts on what the GCMP does!

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Thank You

Kelly Hill, Green Growth Specialist

Kelly.Hill@dnr.ga.gov

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