

Transportation Resilience: Ensuring Access to Southeastern Georgia's Savannah Coastal Refuge Complex (SCRC)

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What is the Public Lands Transportation Fellows (PLTF) Program?
The PLTF program provides fellowships to recent graduates in a transportation-related field. The fellows are provided with a unique opportunity for career development and public service working directly with staff of Federal Land Management Agencies (FLMAs) on key visitor transportation issues. The assigned projects help the land units develop transportation solutions that preserve valuable resources and enhance the visitor experience. See footer for a list of sponsors.

Savannah Coastal Refuge Complex

The Savannah Coastal Refuge Complex (SCRC) consists of seven National Wildlife Refuges (NWRs) spanning 100 miles of South Carolina and Georgia coastline

WILDLIFE REFUGES:

South Carolina

- Pinckney Island NWR
- Savannah NWR

Georgia

- Tybee NWR
- Wassaw NWR
- Harris Neck NWR
- Blackbeard Island NWR
- Wolf Island NWR

COMPLEX CHARACTERISTICS

- In total, the Complex is made up of 53,000 acres of salt and freshwater marshes, mixed pine and hardwood forests and is host to a variety of wildlife, as well as 5,000 acres of wilderness
- More than 500,000 visitors annually engage with the Complex, with nearly half (215,000) at both the Savannah and Wassaw NWRs

URBAN WILDLIFE REFUGES

- Urban NWR's are within 25 miles of a population center with 250,000 or more people
- Two refuges within the Complex are designated as Urban Wildlife Refuges:
 - Savannah NWR
 - Wassaw NWR



Water Impoundment on the Savannah NWR



Map of the Savannah Coastal Refuges Complex



North Beach Wassaw NWR



Wassaw National Wildlife Refuge: Wingwall Replacement and Bulkhead Maintenance

OVERVIEW:

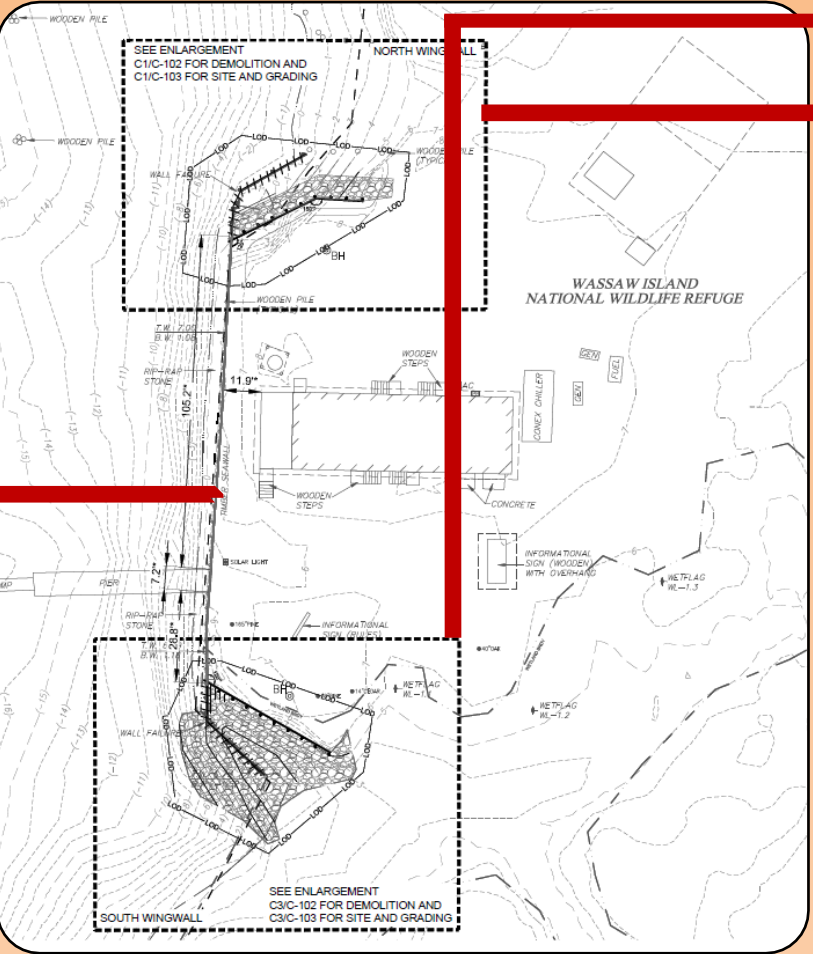
- Structures were heavily impacted by Hurricanes Matthew (2016) and Irma (2017)
- Serves as an anchor point for the only public dock on the island
- Provides protection for several structures from erosion

STRUCTURAL RESILIENCY:

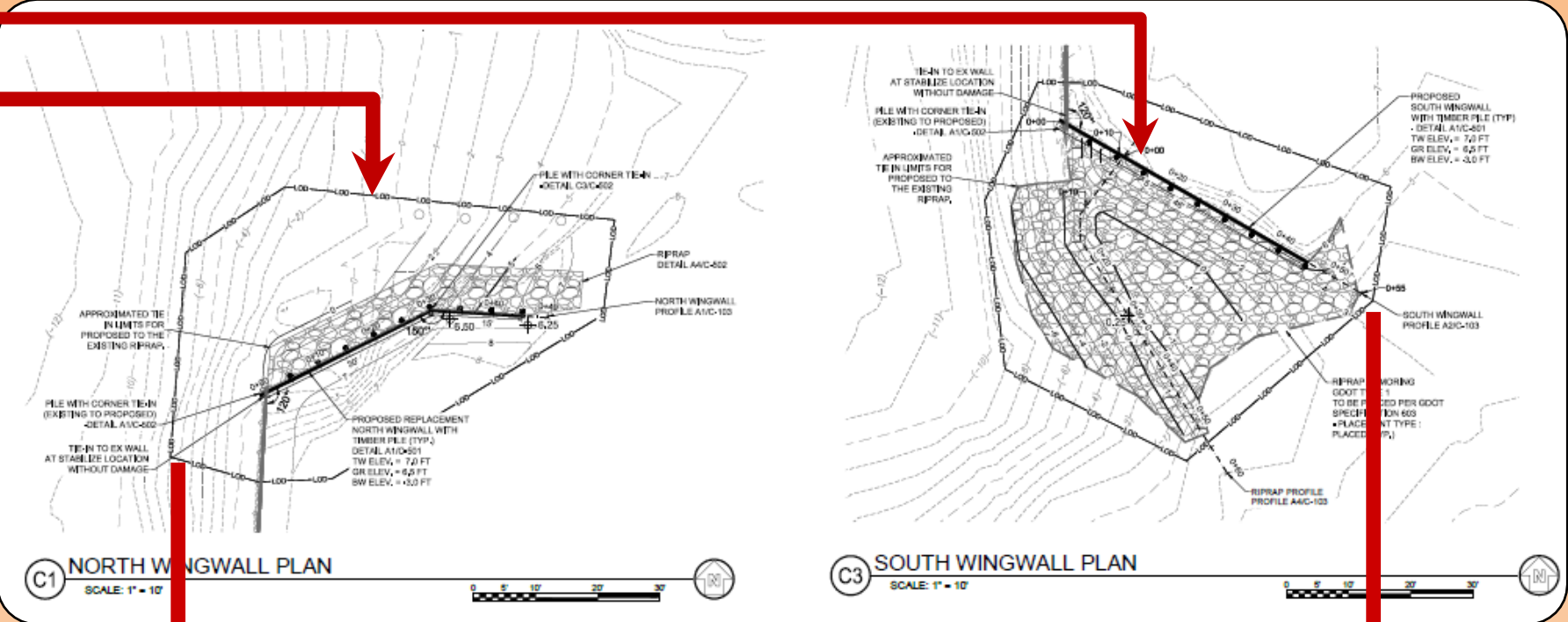
- Replace existing and failing wingwalls
- Repair failing sections of the bulkhead allowing erosion behind the wall
- Build new, longer lasting wingwalls to help provide protection for future weather events

ROLES & RESPONSIBILITIES:

- Will serve as Field Inspector
- Assisted POND A/E with permit acquisition
- Provided input on selection of contracting firm
- Liaison between contractor and FWS engineers



Current and future wingwall designs



Design of future wingwalls with planned riprap included



Erosion behind bulkhead due to failing sheet pile



North wingwall nearing max high tide



South wingwall nearing max high tide

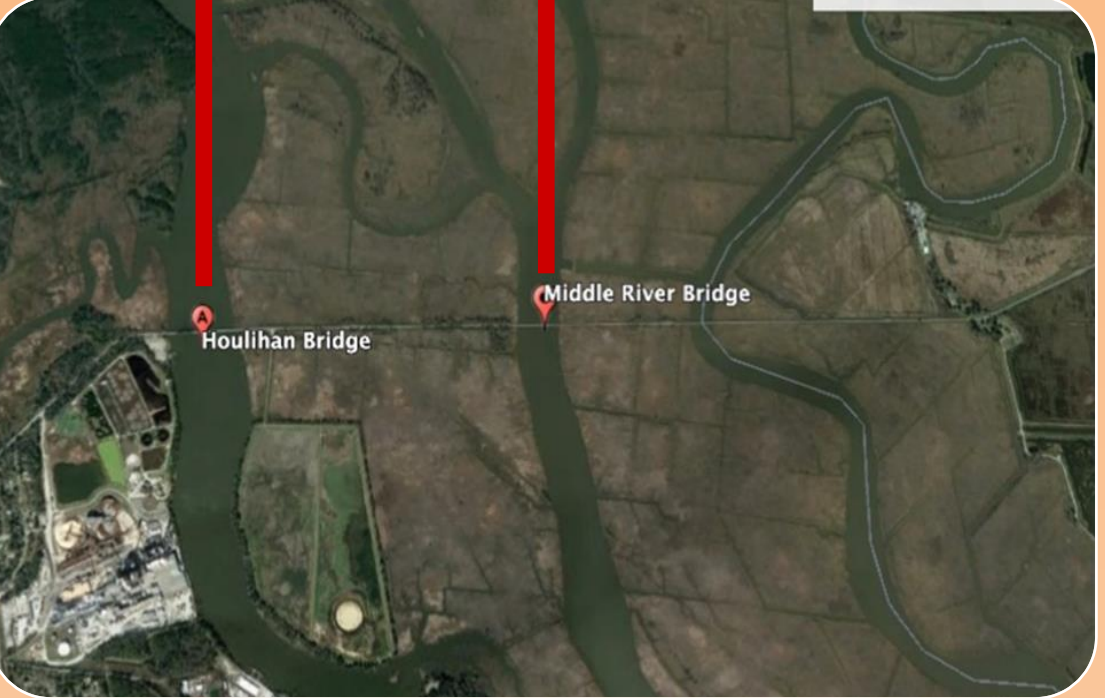
Savannah National Wildlife Refuge: Houlihan and Middle River Bridge Replacement



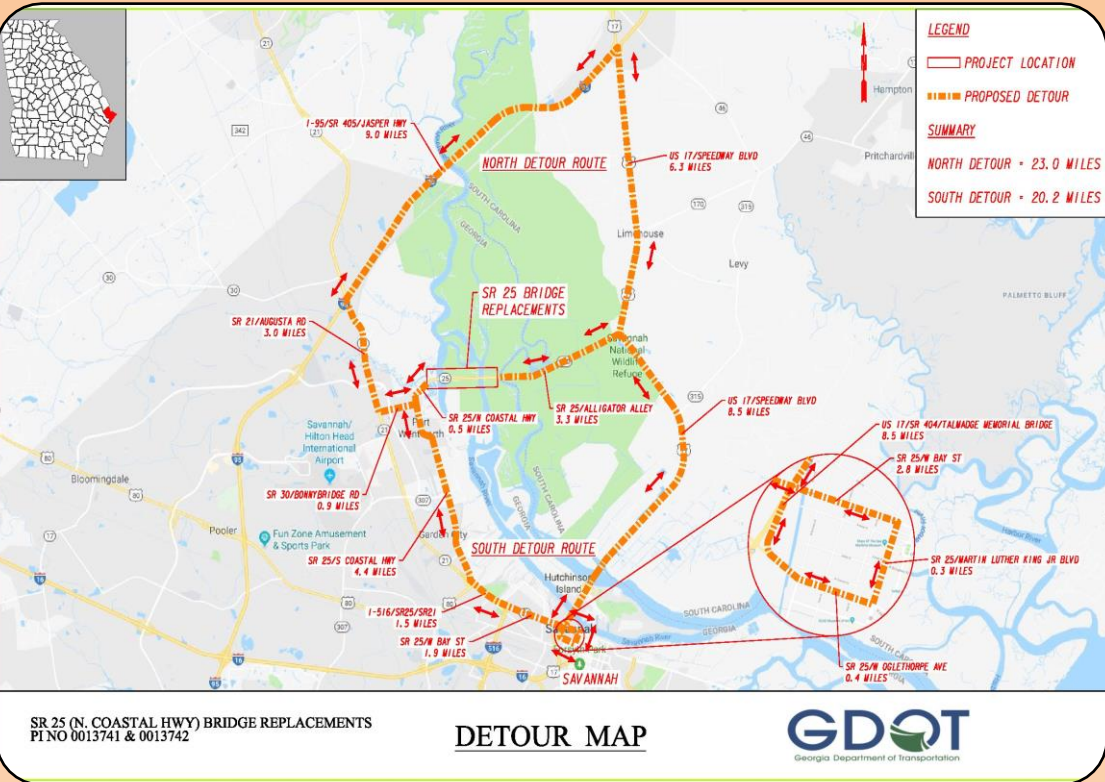
Houlihan Bridge over the Savannah River



Middle River Bridge over the Middle River



Regional overview highlighting bridge locations



Travel impacts from bridge closures

	Savannah Crossing Bridge	Middle River Bridge	Per Site Easement Expansion Totals (Acres)
Permanent ROW (Acres)	0.144	0.340	0.484
Temporary ROW (Acres)	0.413	0.686	1.099
Combined ROW total	0.557	1.026	1.583

OVERVIEW:

- Both the Houlihan and Middle River bridges were built in 1922
- No significant renovations since 1953 & 1954
- Houlihan bridge is the last swing bridge in Georgia
- Rural Minor Arterial roadway
- Primary point of access to Laurel Hill Wildlife Drive
- Irregular maintenance shutdowns disrupt refuge visitation and transportation of goods from local port

IMPACTS:

- When closed travel time increases by approximately 30 minutes
- Right-of-Way adjustment will result in small changes to Refuge size via temporary and permanent easements for construction and future maintenance

ROLES & RESPONSIBILITIES:

- Frequent coordination with GDOT to determine project stipulations and guidelines
- Wrote a Compatibility Determination outlining stipulations and impacts the refuge may incur

Timeline:

Compatibility Determination: **4/26/2021**
Expected construction begin: **January 2022**
Expected completion: **2024**