



Town of Hilton Head Island

Town Council Workshop Meeting

Wednesday, October 30, 2024, 9:00 AM
1 Town Center Court, Hilton Head Island, SC
Benjamin M. Racusin Council Chambers

The meeting can be viewed on the [Town's YouTube Channel](#), the [Beaufort County Channel](#), and Spectrum Channel 1304.

- 1. Call to Order**
- 2. Adoption of the Agenda**
- 3. Workshop Discussion**
 - a. Beach Renourishment Update - Shawn Colin, Assistant Town Manager
 - b. Resilience Plan Status Update - Shawn Colin, Assistant Town Manager
 - c. Stormwater Utility Update - Jeff Netzinger, Engineering and Projects Director
- 4. Public Comment**
- 5. Adjournment**

Town Council Workshops consist of discussion items only - no action will be taken.

FOIA Compliance: Public notification of this workshop has been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act and the requirements of the Town of Hilton Head Island.

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Hilton Head Island will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. Auditory accommodations are available. Any person requiring further accommodation should contact the Town of Hilton Head Island ADA Coordinator as soon as possible but no later than 48 hours before the scheduled event.

Municipal Association of South Carolina (MASC) Civility Pledge:

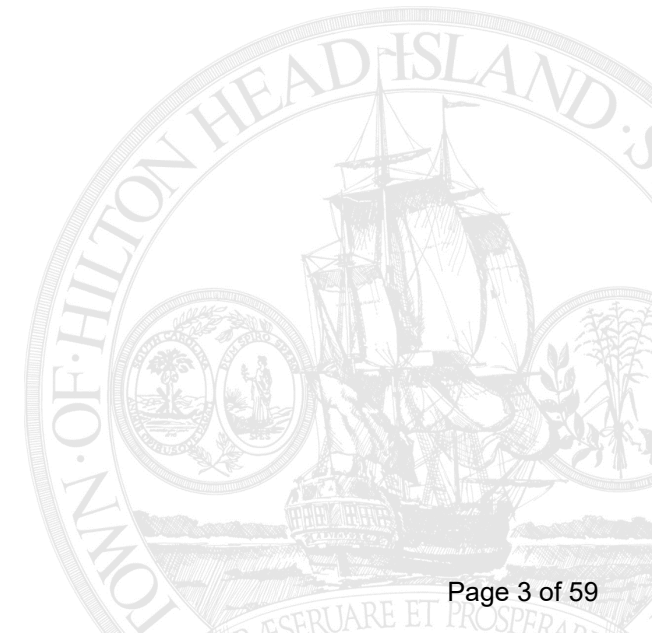
“I pledge to build a stronger and more prosperous community by advocating for civil engagement, respecting others and their viewpoints, and finding solutions for the betterment of my city or town.”

Town of Hilton Head Island

2025 Beach Renourishment Project

*Town Council Workshop
October 30, 2024*

Shawn Colin
Assistant Town Manager



Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PRESENTATION OVERVIEW

Presentation Overview

- Project Overview
- Program Background
- Project Status and Schedule
- 2025 Project Description
 - South Beach
 - Central Island
 - The Heel / Port Royal
 - Fish Haul Creek
 - Pine Island
- Project Funding
- Communication Plan



Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT OVERVIEW

Project Overview

- Hilton Head Island's Beach has been renourished several times, beginning in the 1990's. Major renourishment projects were completed in 1990, 1997, 2006, and 2016
- The proposed project will include:
 - Placement of approximately 2.2 million cubic yards of sand, and
 - Installation of six rip-rap breakwaters on the Port Royal Sound shoreline at Pine Island
- The sand will be sourced from up to four offshore borrow areas located roughly 8 miles offshore
- The project is being implemented per the Town's Beach Management Plan with scheduled renourishment every 8 to 10 years
- The estimated project cost is \$42 million
- Disruptions at individual properties generally last one week or less as the moving operation progresses
- Once the operation is up and running, the project will advance along the beach at a rate of 200 to 300 feet/day
- The project schedule was developed to avoid significant impacts to nesting turtles and migratory shore birds, including piping plovers and red knots
- Construction windows are set by US Fish and Wildlife Service

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROGRAM BACKGROUND

Project / Activity History

- 1990:** Initial Restoration of Atlantic Shorefront
- 1997:** First Renourishment of Atlantic Shorefront
- Channel Relocation (Port Royal Plantation)
 - Restoration of Port Royal Shoreline (south of Fish Haul Creek)
 - Terminal Groin at The Folly
- 1999:** South Beach Emergency Beach Fill Project
- 2006/07:** Second Renourishment of Atlantic Shorefront
- Renourishment of Port Royal Plantation
 - Renourishment of South Beach
 - Restoration of Fish Haul/Spa
 - Six Detached Breakwaters at the Folly
- 2008:** Lands End Groin Rehabilitation
- 2012:** “The Heel” Restoration and Terminal Groin
- 2014:** Ocean Point Interim Truck Haul Beach Fill
- 2016:** Third Renourishment of Atlantic Shorefront and Other Restored Areas (Central Island Post-Matthew)
- 2017:** South Island Post-Matthew / Post-Irma



Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROGRAM BACKGROUND



North Forest Beach (1990) Prior to First Renourishment

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROGRAM BACKGROUND



The Folly/Singleton Beach (1990) Prior to First Renourishment

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROGRAM BACKGROUND



Port Royal (1990) Prior to First Renourishment

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT STATUS

Project Status & Schedule

- US Fish & Wildlife Service (USFWS) Biological Opinion (BO)
 - Issued on August 8, 2024
 - Included in State Permit Terms and Conditions
- Permit is currently being reviewed by the State and USACE
- Project Schedule
 - Preconstruction
 - Anticipated permit issue date: Dec 31, 2024
 - Bid Phase: Jan – Mar 2025
 - Contract Awards: April 1, 2025
 - Construction (3 Phases)
 - Phase 1 (Renourishment): June 2025 to Oct 2025
 - Sand placement on the Island's north end
 - Phase 2 (Renourishment): Sept 2025 to May 2026
 - Sand placement on south beach and central island
 - Phase 3 (Breakwater Structures): To Be Determined
 - Rock breakwater structures at Pine Island



Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT DESCRIPTION

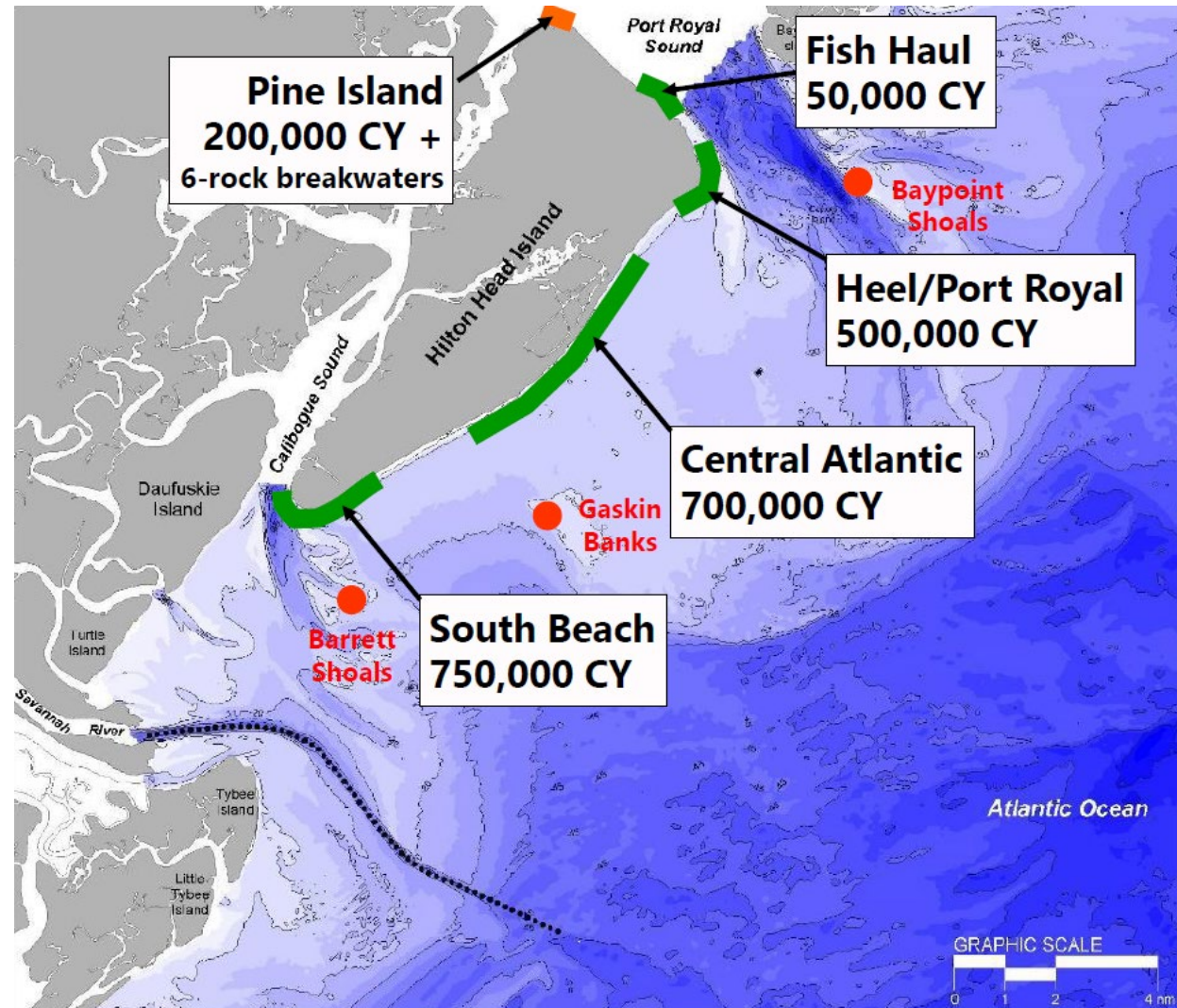
Project Scope

Permit 1

- South Beach: place 750,000 cubic yards of sand
- Central Atlantic: place 700,000 cubic yards of sand
- The Heel/Port Royal: place 500,000 cubic yards of sand
- Fish Haul: place 50,000 cubic yards of sand

Permit 2

- Pine Island: place 200,000 cubic yards of sand and install six rock breakwaters to mitigate against sand accretion



2025 Project Scope

Town of Hilton Head Island

2025 BEACH RENOURISHMENT - PROJECT DESCRIPTION

South Beach

- Beach Restoration

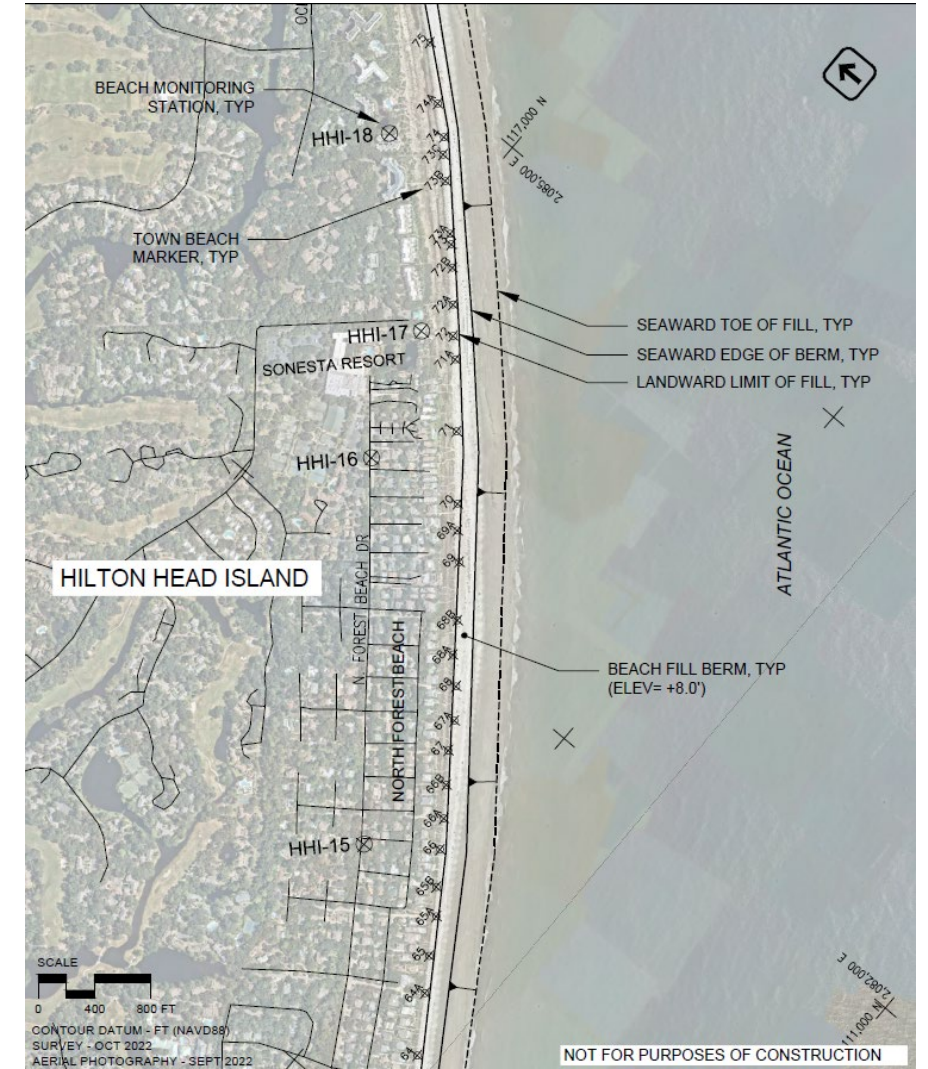


Town of Hilton Head Island

2025 BEACH RENOURISHMENT - PROJECT DESCRIPTION

Central Island

- Beach Restoration

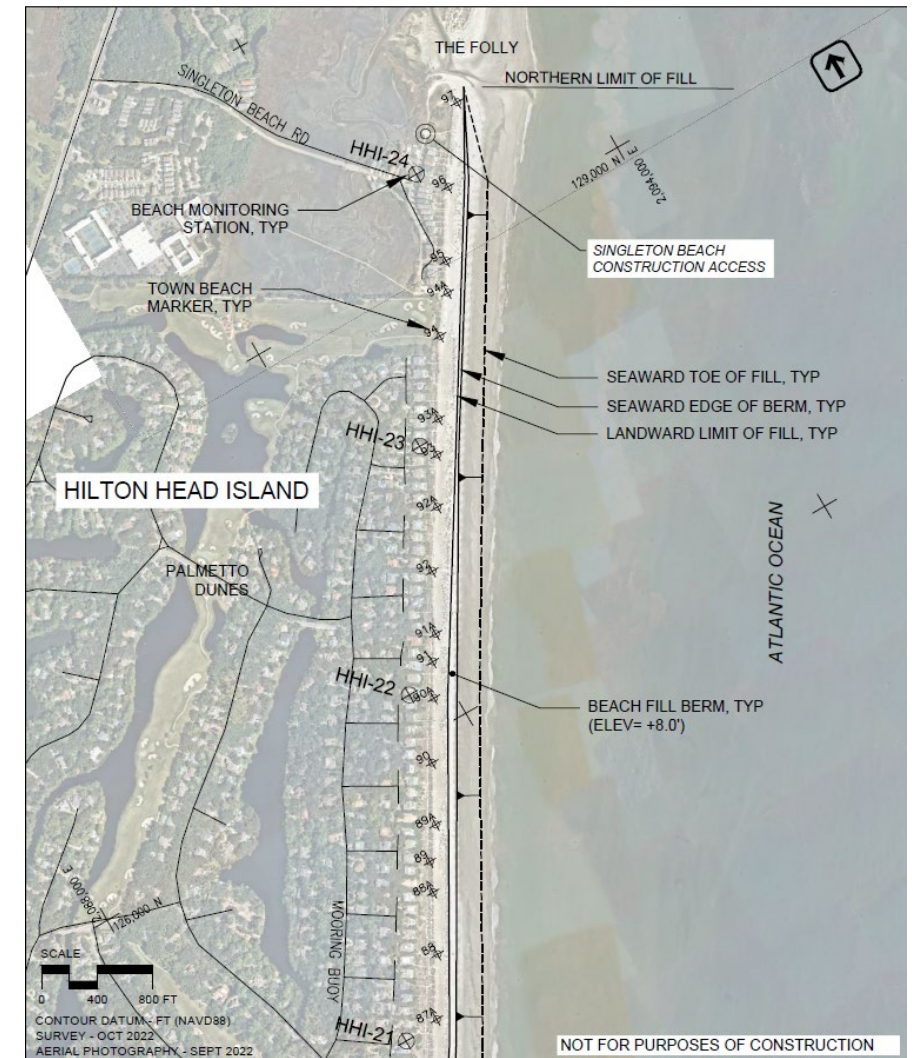


Town of Hilton Head Island

2025 BEACH RENOURISHMENT - PROJECT DESCRIPTION

Central Island

- Beach Restoration



Town of Hilton Head Island

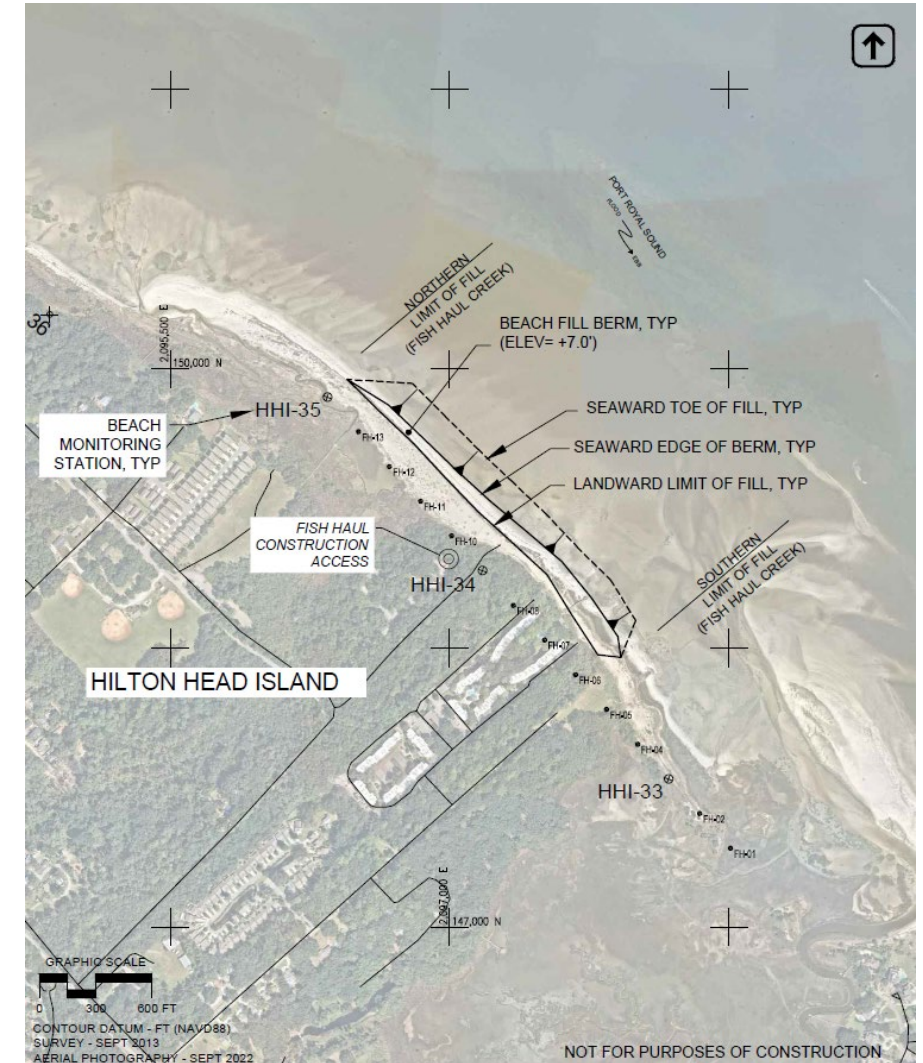
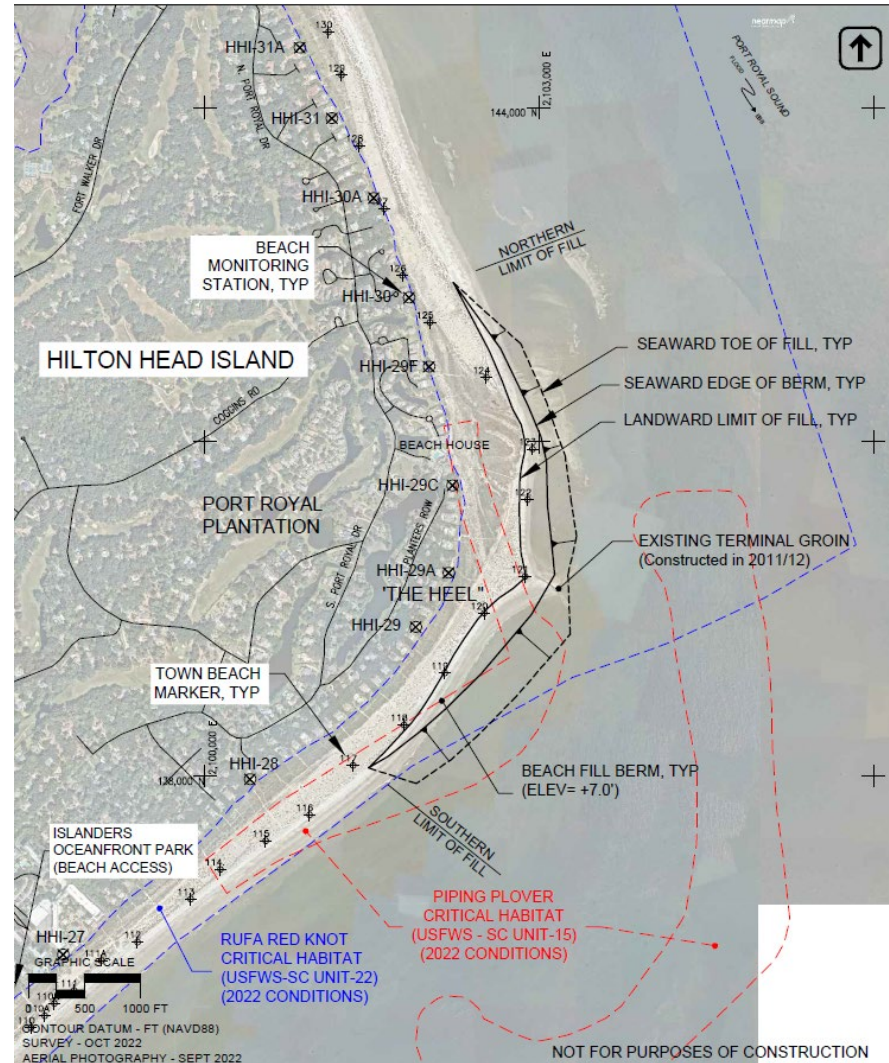
2025 BEACH RENOURISHMENT - PROJECT DESCRIPTION

"The Heel"

- Beach Restoration

Fish Haul

- Beach Restoration

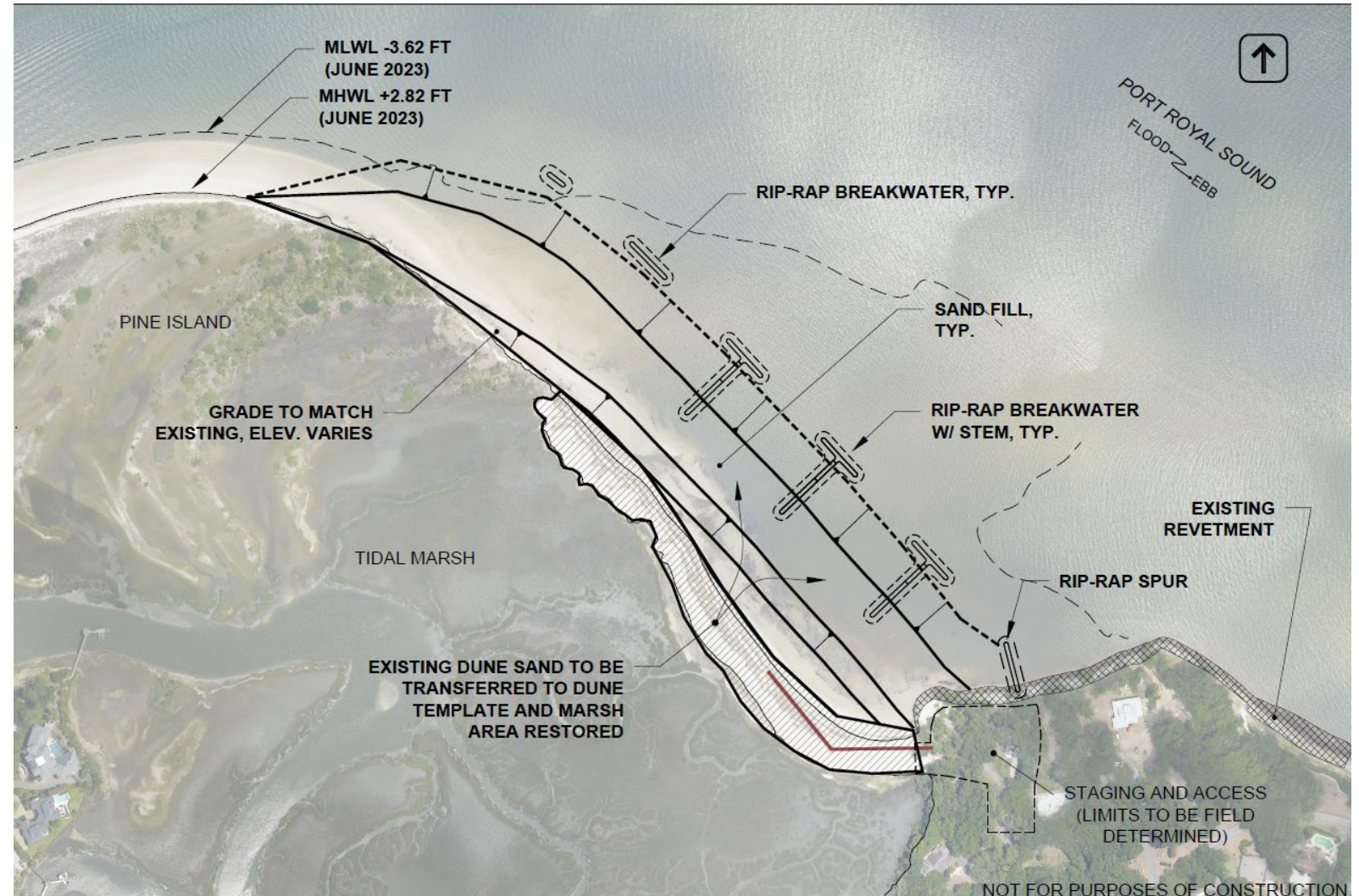


Town of Hilton Head Island

2025 BEACH RENOURISHMENT - PROJECT DESCRIPTION

Pine Island

- Beach Restoration
- Rip-rap Breakwater Installation (6 structures)



Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT FUNDING

Project Funding

- Estimated Project Cost \$42.0 million
- FY 2025 (CIP) Budget \$16.5 million (Source of Funding: Beach Preservation Fee)
- FY 2026 Funding \$25.5 million (Source of Funding: To Be Determined)

FUNDING OPTIONS

- Beach Preservation Fund Balance, reducing fund balance to \$13 million +/-
- Issue Debt for ± \$42.5 million; paid for with future Beach Preservation Fees
- Beach Preservation Fund Balance + Debt Issuance.

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PREVIOUS PROJECT FUNDING

Remaining 2017 Beach Preservation Fee Bonds – Original \$30.1 Million

Fiscal Year	Payment Date	Principal		Interest		Total	Call Status	
2025	02/01/2025		\$	274,375	\$	274,375		
2026	08/01/2025	\$	3,480,000	\$	274,375	\$	3,754,375	Non-Callable
2026	02/01/2026		\$	187,375	\$	187,375		
2027	08/01/2026	\$	3,655,000	\$	187,375	\$	3,842,375	Callable on 08/01/2025
2027	02/01/2027		\$	96,000	\$	96,000		
2028	08/01/2027	\$	3,840,000	\$	96,000	\$	3,936,000	Callable on 08/01/2025
		\$	10,975,000	\$	1,115,500	\$	12,090,500	

Pays 2017 Bond Issue in Full, with Zero Balance

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT FUNDING

Projected FY2025 & FY2026 Cash Flows

	<u>Scenario 1</u>		<u>Scenario 2</u>		<u>Scenario 3</u>	
	<u>All Cash</u>		<u>Cash/Debt Mix</u>		<u>All Debt</u>	
<u>FY2025</u>						
Approximate Cash Balance as of June 30, 2024	\$	39,000,000	\$	39,000,000	\$	39,000,000
Expected Revenues FY25	\$	13,800,000	\$	13,800,000	\$	13,800,000
Budgeted Non-Beach Renourishment CIP & Operating Expense FY25	\$	(6,483,000)	\$	(6,483,000)	\$	(6,483,000)
Budgeted Beach Renourishment CIP FY25	\$	(16,500,000)	\$	(16,500,000)	\$	(16,500,000)
Remaining FY25 Series 2017 Debt Service Payment (Interest only, payable 2/1/25)	\$	(274,375)	\$	(274,375)	\$	(274,375)
Proceeds from potential August, 2025 Bond Issue to pay for Capital Projects*	\$	-	\$	26,000,000	\$	42,500,000
Projected Balance as of June 30, 2025	\$	29,542,625	\$	55,542,625	\$	72,042,625
<u>FY2026</u>						
Expected Revenues FY26	\$	13,800,000	\$	13,800,000	\$	13,800,000
FEMA Anticipated Past Storms Reimbursements (80% of Expected)	\$	7,000,000	\$	7,000,000	\$	7,000,000
Budgeted Non-Beach Renourishment CIP & Operating Expense FY26	\$	(6,483,000)	\$	(6,483,000)	\$	(6,483,000)
Remaining FY26 Series 2017 Debt Service Payments (payable 8/1/25 & 2/1/26)	\$	(3,941,750)	\$	(3,941,750)	\$	(3,941,750)
Budgeted Beach Renourishment CIP FY26	\$	(26,000,000)	\$	(26,000,000)	\$	(26,000,000)
Projected Balance as of June 30, 2026	\$	13,917,875	\$	39,917,875	\$	56,417,875

*New Bond Debt Service Payments begin approximately Aug, 2026 (FY 2027). Scenario 2: \$3,900,000; Scenario 3: \$5,800,000.

Town of Hilton Head Island

2025 BEACH RENOURISHMENT – PROJECT STATUS

Communications Plan

- Plan Goals
 - Create widespread awareness and engagement related to the project
 - Share timely information about the projects prior to and throughout each phase
- Target audiences include
 - Island residents and visitors
 - The Chamber of Commerce and business owners
 - HOAs and property management firms
 - Partner groups (Shore Beach Services, Island Rec, and others)
 - School Groups
 - Environmental Groups
 - Media
- Outreach will be managed by the Communications Team
 - Social Media, Web postings, News releases
 - Interactive, real-time mapping during implementation

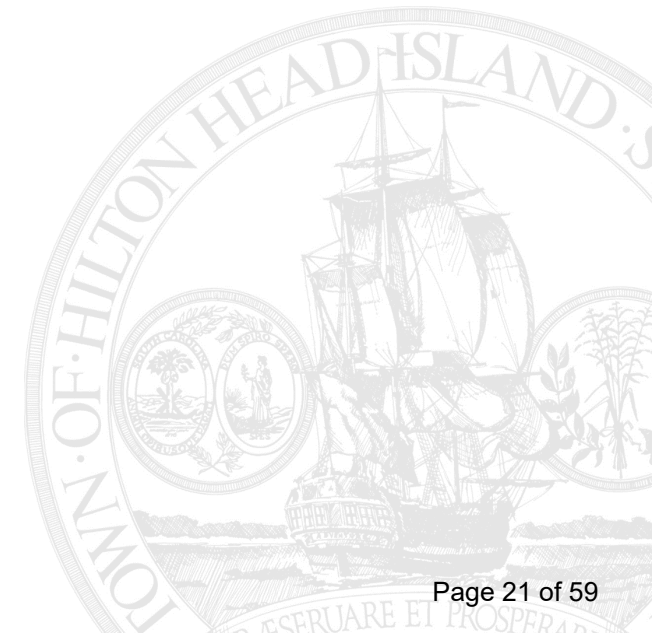


Town of Hilton Head Island

2025 Beach Renourishment Project

*Town Council Workshop
October 30, 2024*

Questions?

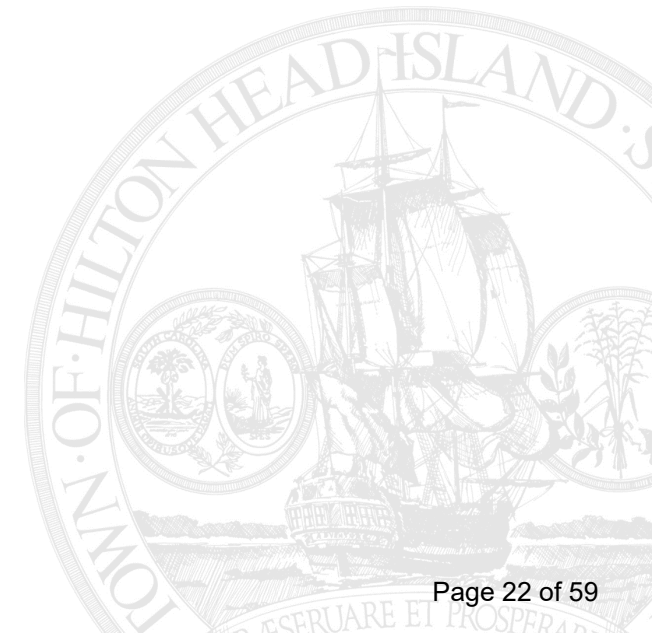


Town of Hilton Head Island

Resilience Plan Update

*Town Council Workshop
October 30, 2024*

Shawn Colin
Assistant Town Manager



Overview of Presentation

- **Background**
- **Town Council Approved Scope of Work**
- **Resilience Planning Project Overview**
 - **Project Approach and Timeline**
 - **Public Engagement**
 - **Next Steps**
- **Resilience Plan Contents**

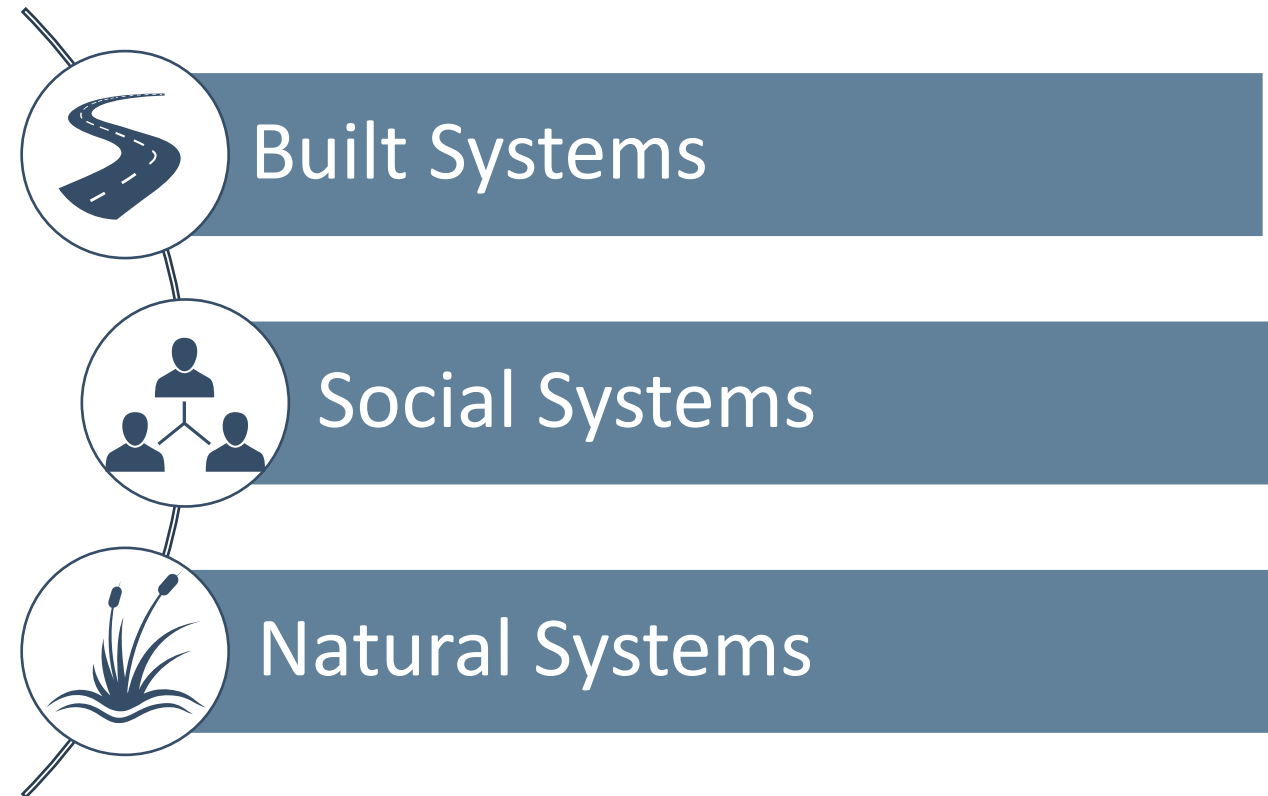
Background

- **Priority initiative in the Town of Hilton Head Island 2023-25 Strategic Action Plan to identify Strengths, Weaknesses, Opportunities & Threats (SWOT) of Hilton Head Island Resiliency and Establish an Island Resiliency Plan**
- **Town Council approved a Resolution June 6, 2023, supporting the proposed approach and scope of services outline to complete the SWOT assessment**
- **Staff procured Dewberry, an expert consultant firm in the field of resiliency planning, to conduct this assessment**

Background

“ Resilience – *The ability of communities, economies, and ecosystems within South Carolina to anticipate, absorb, recover, and thrive when presented with environmental change and natural hazards.*”

South Carolina Office of Resilience
Strategic Statewide Resilience Risk and Reduction Plan



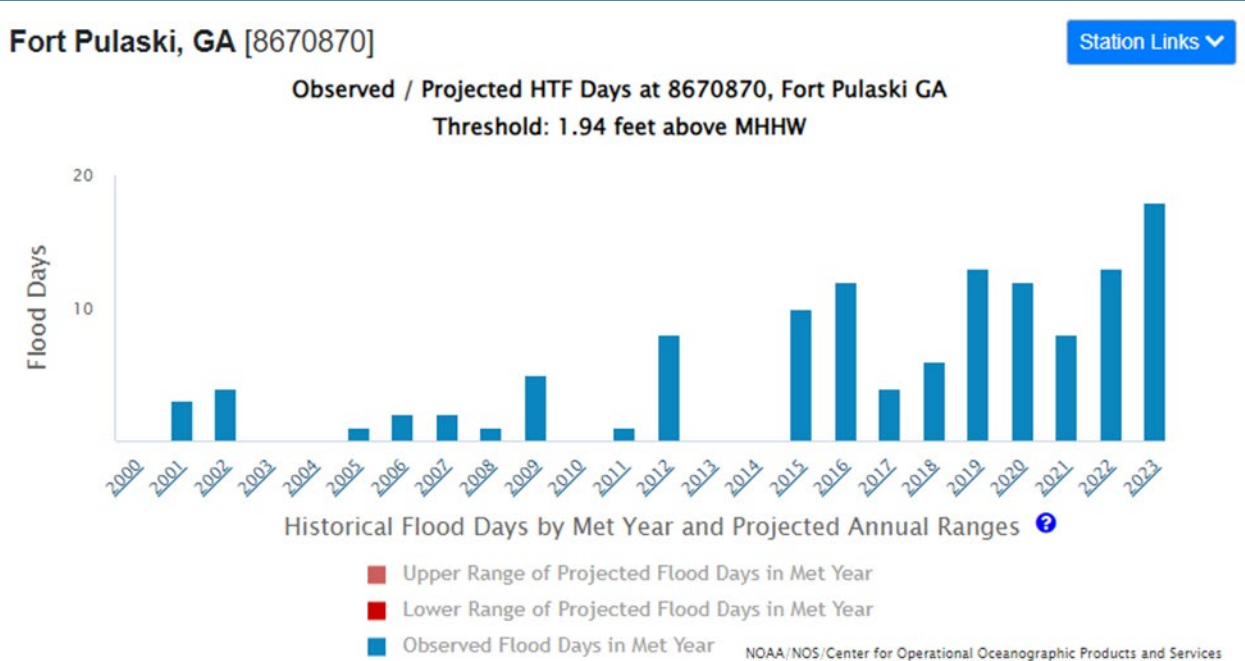
Background

Historic Data



*Ft. Pulaski, GA (Savannah)
water level station*

Historical Flood events:



Historical Rates of Sea Level:

**Last 10 Years:
0.38 ft/decade**

**Last 20 Years:
0.36 ft/decade**

**Last 30 Years:
0.21 ft/decade**

**Last 40 Years:
0.18 ft/decade**

USACE Sea Level Analysis Tool

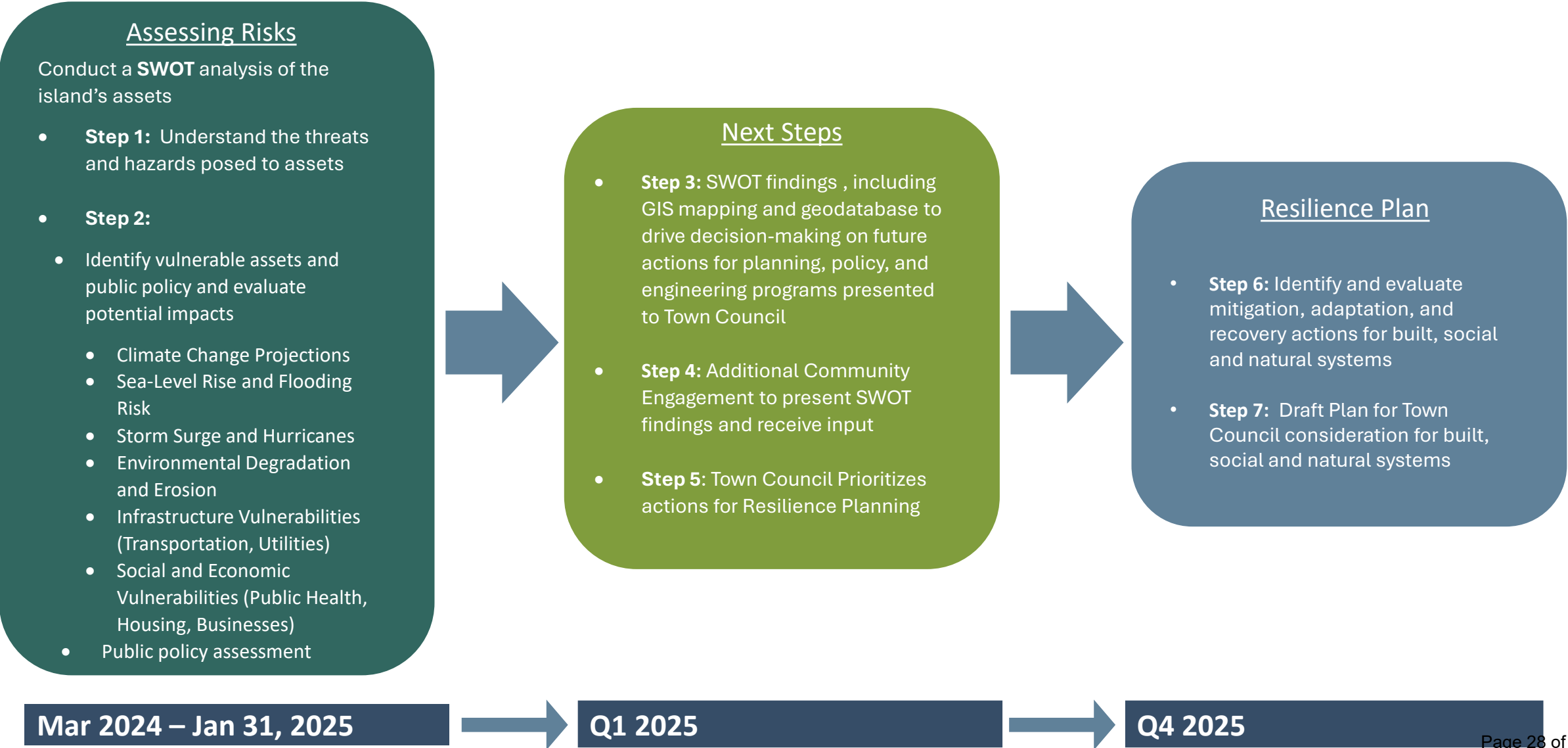
Scope of Work Approved By Town Council

Collect and compile information and conduct an analysis of the strengths, weaknesses, opportunities, and threats (SWOT) that the Town possesses and faces with respect to changing conditions

- Compilation and assessment of existing relative data and programs
- Sea Level Rise forecast analysis and selection of design forecast
- Public outreach and solicitation of stakeholder input
- Public policy and regulation assessment and identify those for change
- Recommendations related to floodplain management and future development
- Storm Drainage System assessment (tidal backflow prevention at tidal culverts and outfalls, pump stations, hydraulic capacity, design standards)
- Beach Renourishment program (including sustainability analysis)
- Flood Inundation Mapping
- SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis

Resilience Planning Project Overview

Project Approach and Timeline



Resilience Planning Project Overview

Public Engagement



First Public Open House

Two meetings were held on June 11th and included three stations to gather feedback:

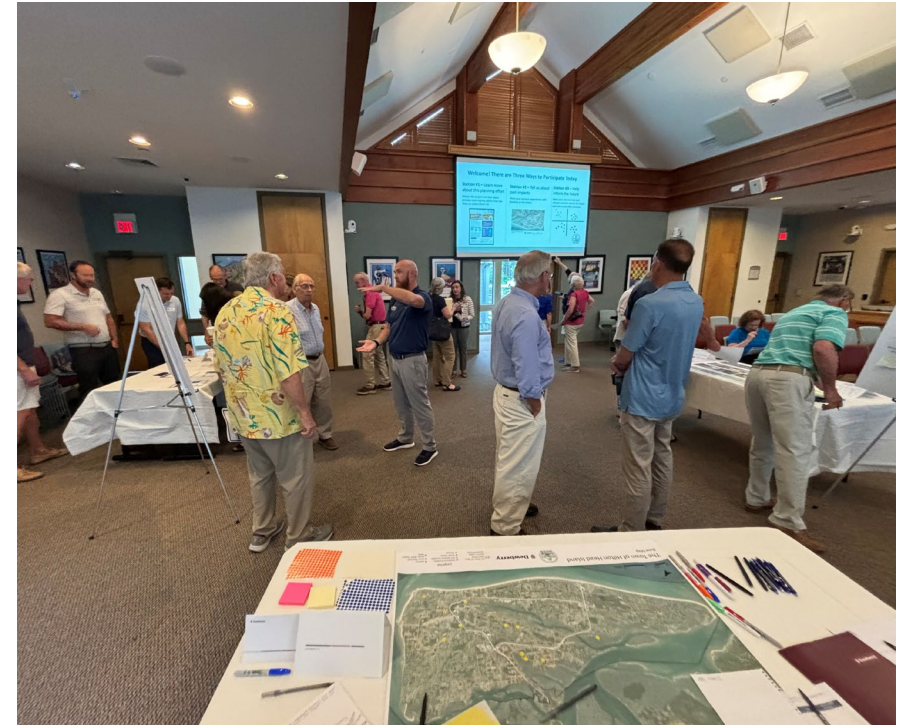
Station 1 – Shared information about the project and related Town efforts

Station 2 – Interacted with the public to gain information on observed flood impacts

Station 3 – Collected preferences of potential strategy types

Results:

- Recorded ~50 locations of previous flood impacts or areas of concern across the island
- Nature Based and Infrastructure Solutions supported the most from the public



Resilience Planning Project Overview

Public Engagement



Community Survey:

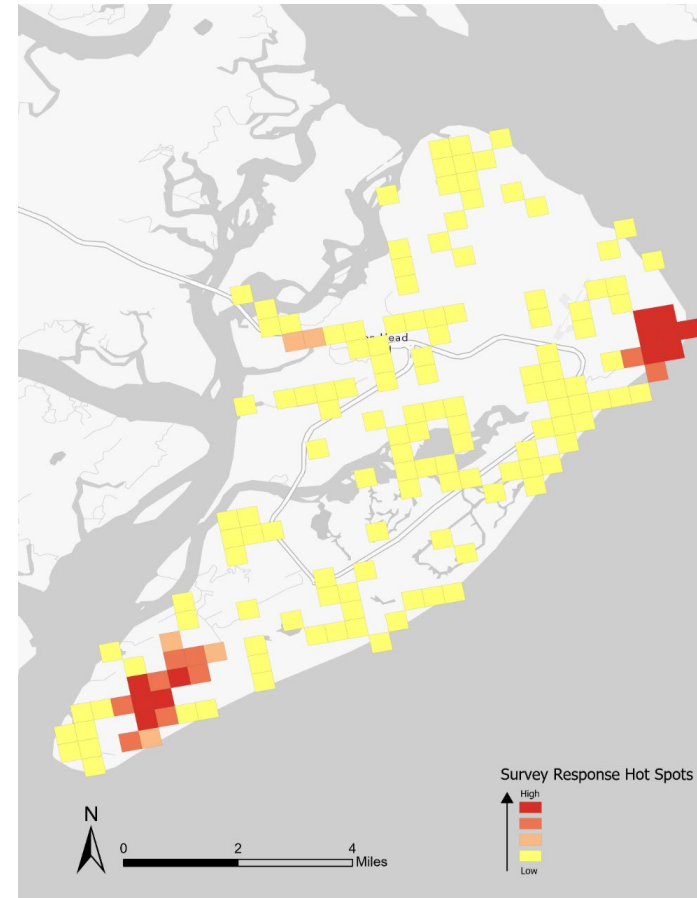
- **459 survey responses** received across the Island

Stakeholder Interviews:

- **12 virtual interviews** completed on flooding challenges and strategies for improvement

Project Story Map:

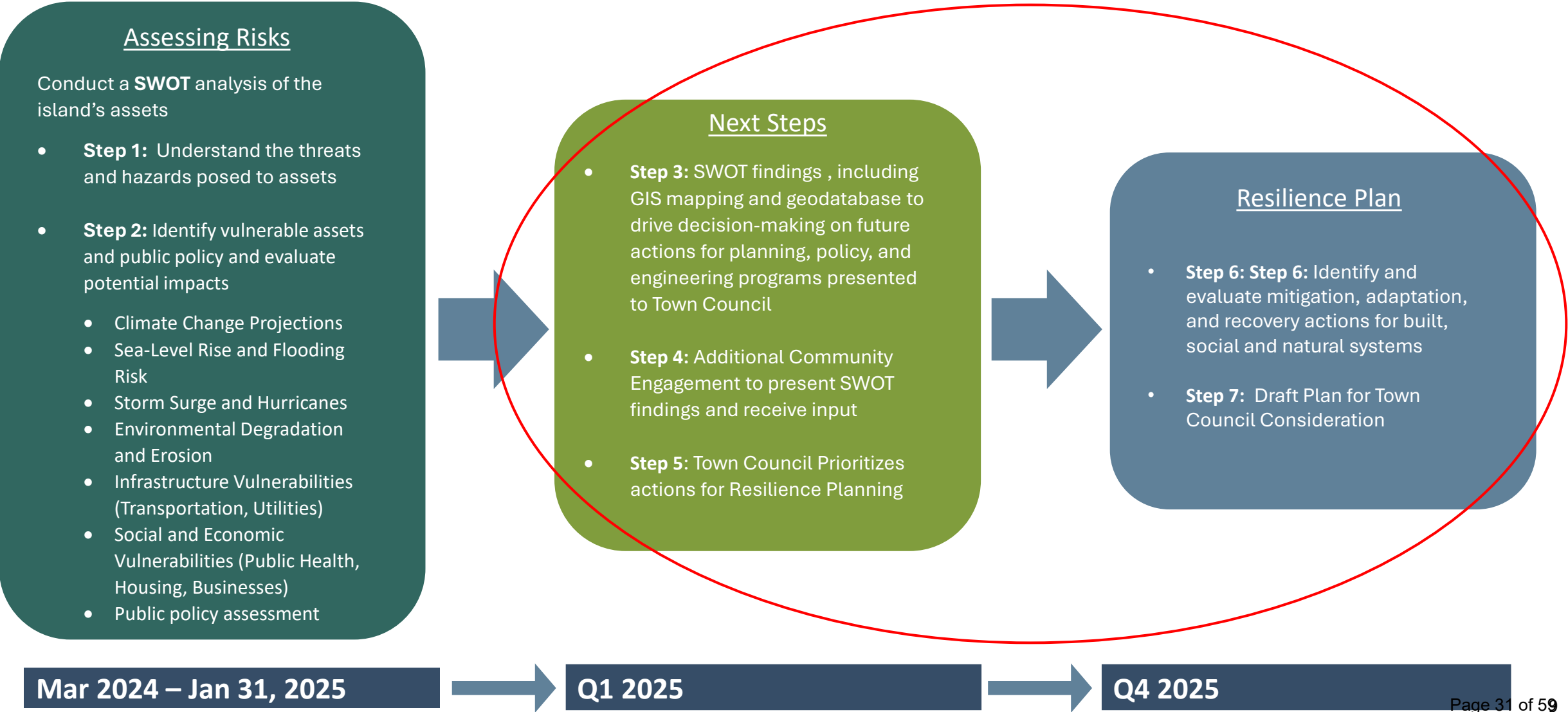
- Upcoming, will provide information to public on project and findings



Distribution of survey responses to “What area of the Island are you most concerned about flooding?”

Resilience Planning Project Overview

Next Steps



Resilience Plan Contents



1. Executive Summary
 - a. Overview of the Resilience Plan
 - b. Key Goals and Objectives
 - c. Summary of Challenges and Opportunities
 - d. Action Plan Highlights
2. Introduction
 - a. Purpose of the Plan
 - b. Background on Hilton Head Island's Resilience Efforts
 - c. Stakeholder Involvement
 - d. Guiding Principles and Vision
3. Risk and Vulnerability Assessment
 - a. Climate Change Projections
 - b. Sea-Level Rise and Flooding Risk
 - c. Storm Surge and Hurricanes
 - d. Environmental Degradation and Erosion
 - e. Infrastructure Vulnerabilities (Transportation, Utilities)
 - f. Social and Economic Vulnerabilities (Public Health, Housing, Businesses)
4. Resilience Goals and Priorities
 - a. Environmental Protection and Sustainability
 - b. Infrastructure Strengthening and Adaptation
 - c. Public Safety and Emergency Preparedness
 - d. Community Well-being and Social Resilience
 - e. Economic Resilience

Focus on near-term issues and actions, awareness and plan for long-term challenges

Resilience Plan Contents



5. Climate and Environmental Strategies
 - a. Flood Mitigation Measures
 - b. Shoreline Protection and Beach Renourishment
 - c. Wetland Restoration and Conservation
 - d. Water Resource Management
 - e. Tree Canopy and Greenspace Protection
 - f. Integrated Pest Management (IPM) Policy
6. Infrastructure and Community Planning
 - a. Transportation Resilience (Roadways, Public Transport)
 - b. Utility Resilience (Stormwater, Water/Sewer, Energy, Solid Waste and Recycling)
 - c. Growth Management and Zoning
 - d. Public Facilities and Critical Infrastructure Adaptation
 - e. Future-Proofing New Development
7. Public Safety and Emergency Preparedness
 - a. Hurricane Preparedness and Response
 - b. Evacuation Routes and Sheltering Plans
 - c. Community Warning Systems and Communications Strategy
 - d. Lifeguard and Public Safety Programs on Beaches
 - e. Medical and Health Services for Disaster Scenarios
8. Community and Economic Resilience
 - a. Housing Resilience
 - b. Small Business and Tourism Support Strategies
 - c. Workforce Retention Programs
 - d. Social Services Support

Focus on near-term issues and actions, awareness and plan for long-term challenges

Resilience Plan Contents



9. Governance and Partnerships
 - a. Coordination with County, State, and Federal Agencies
 - b. Public-Private Partnerships
 - c. Community Engagement and Public Education Programs
 - d. Intergovernmental Collaboration and Policy Alignment
10. Infrastructure and Community Planning
 - a. Transportation Resilience (Roadways, Public Transport)
 - b. Utility Resilience (Stormwater, Water/Sewer, Energy, Solid Waste and Recycling)
 - c. Growth Management and Zoning
 - d. Public Facilities and Critical Infrastructure Adaptation
 - e. Future-Proofing New Development
11. Public Safety and Emergency Preparedness
 - a. Hurricane Preparedness and Response
 - b. Evacuation Routes and Sheltering Plans
 - c. Community Warning Systems and Communications Strategy
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 - b. Small Business and Tourism Support Strategies
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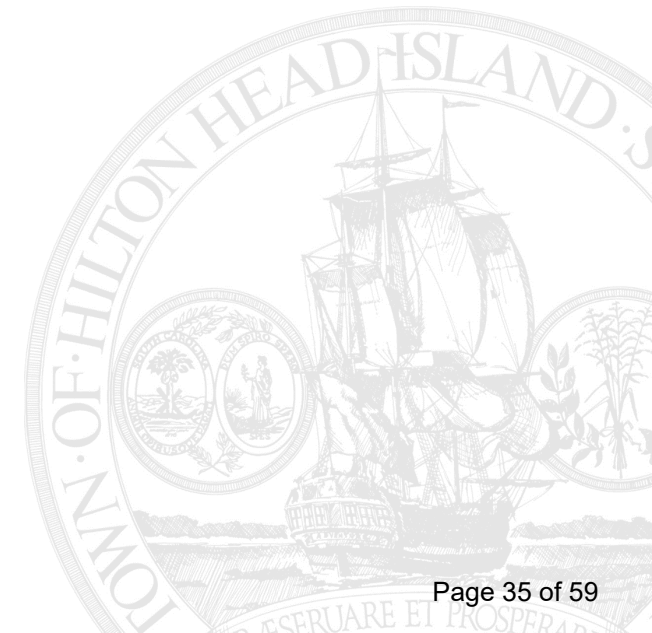
Focus on near-term issues and actions, awareness and plan for long-term challenges

Town of Hilton Head Island

Resilience Plan Update

*Town Council Workshop
October 30, 2024*

Questions?

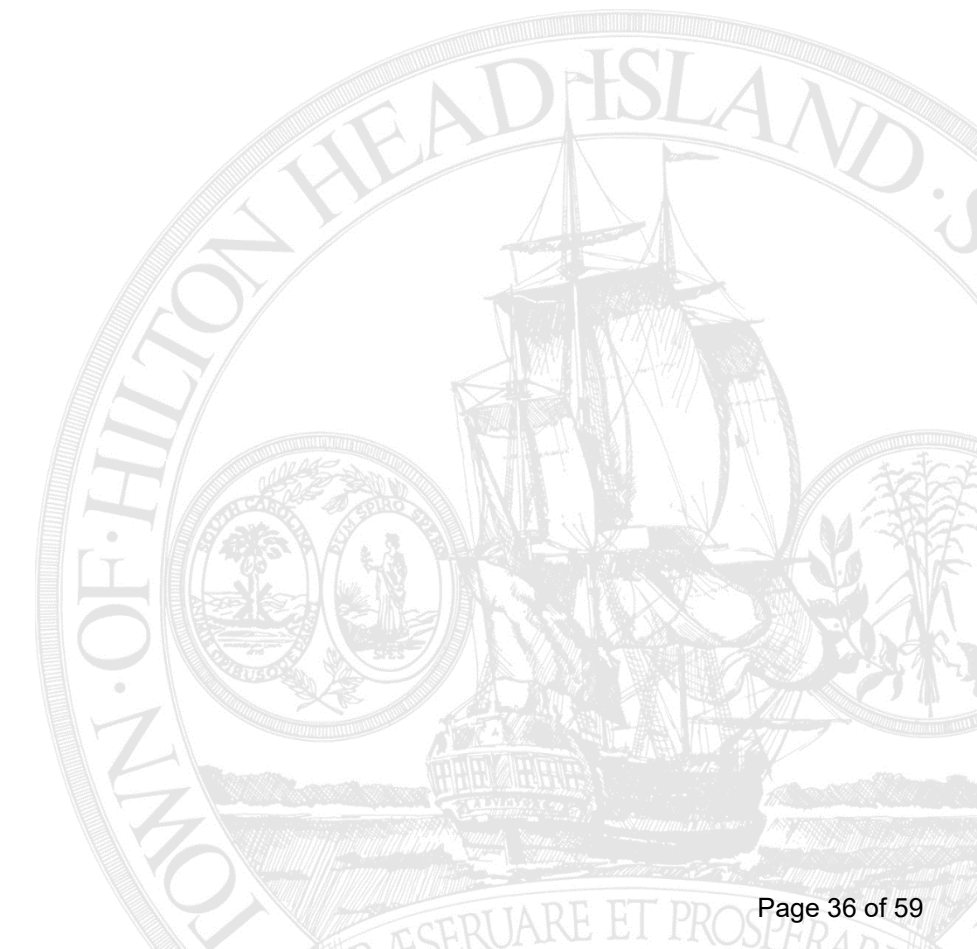


Town of Hilton Head Island

Stormwater Utility Program Overview

*Town Council Workshop
October 30, 2024*

Jeff Netzinger
Director of Engineering and Projects



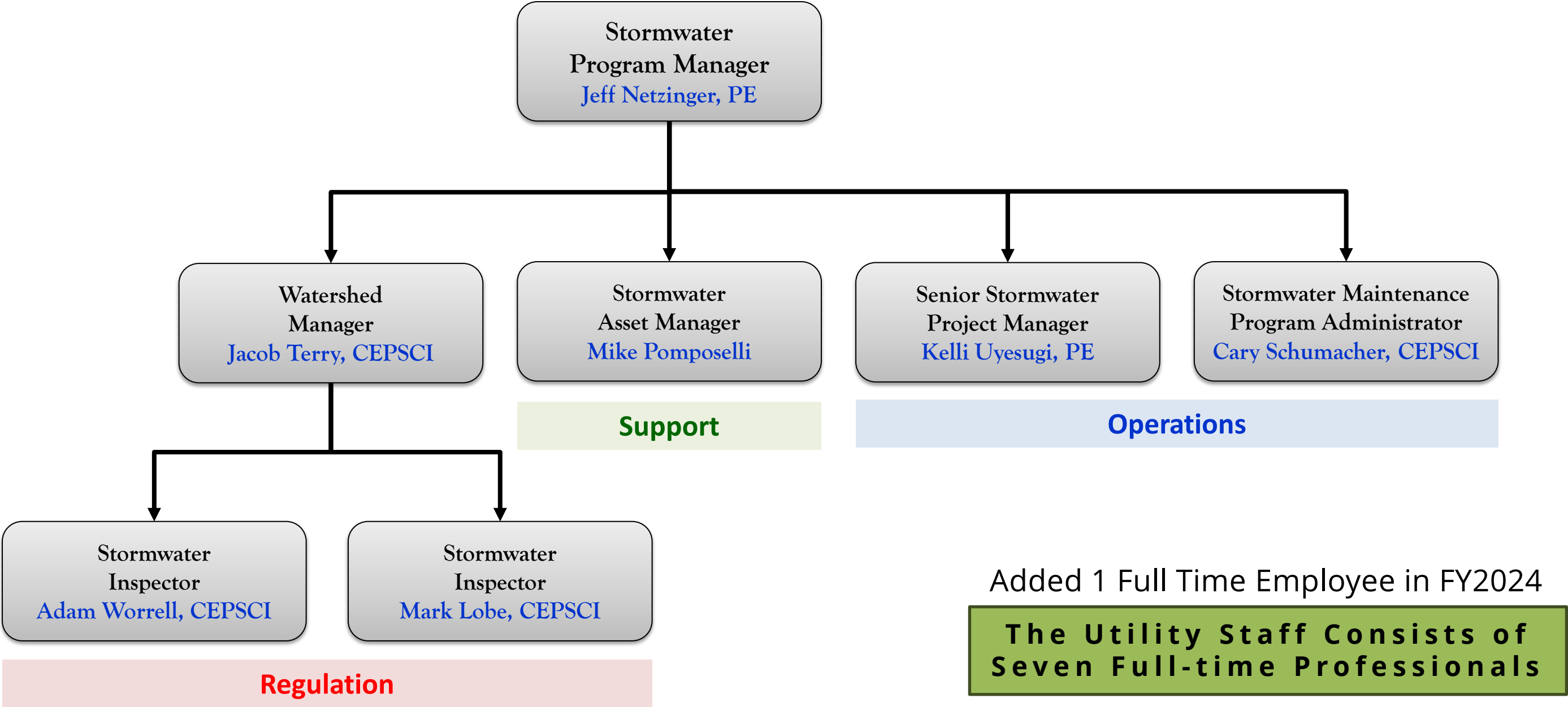
Town of Hilton Head Island

STORMWATER UTILITY – PRESENTATION OVERVIEW

- **Stormwater Utility Overview**
 - **Staffing**
 - **Revenue**
 - **Expenses**
 - **Fund Balance**
- **Targeted Discussion**
 - **Capital Improvement Program SWU**
 - **Routine Maintenance Program**
 - **Channels**
 - **Street Sweeping**
 - **Ponds**
 - **Pump Stations**
 - **Corrective Maintenance Program**
 - **Extent of Service**
 - **Drainage Agreements**
 - **Ranking & Project Prioritization**
 - **Service Request Evaluation**
 - **Annual SWU and CIP Budget Development**
- **Stormwater Utility Program Challenges/Opportunity**

Town of Hilton Head Island

STORMWATER UTILITY OVERVIEW – STAFFING

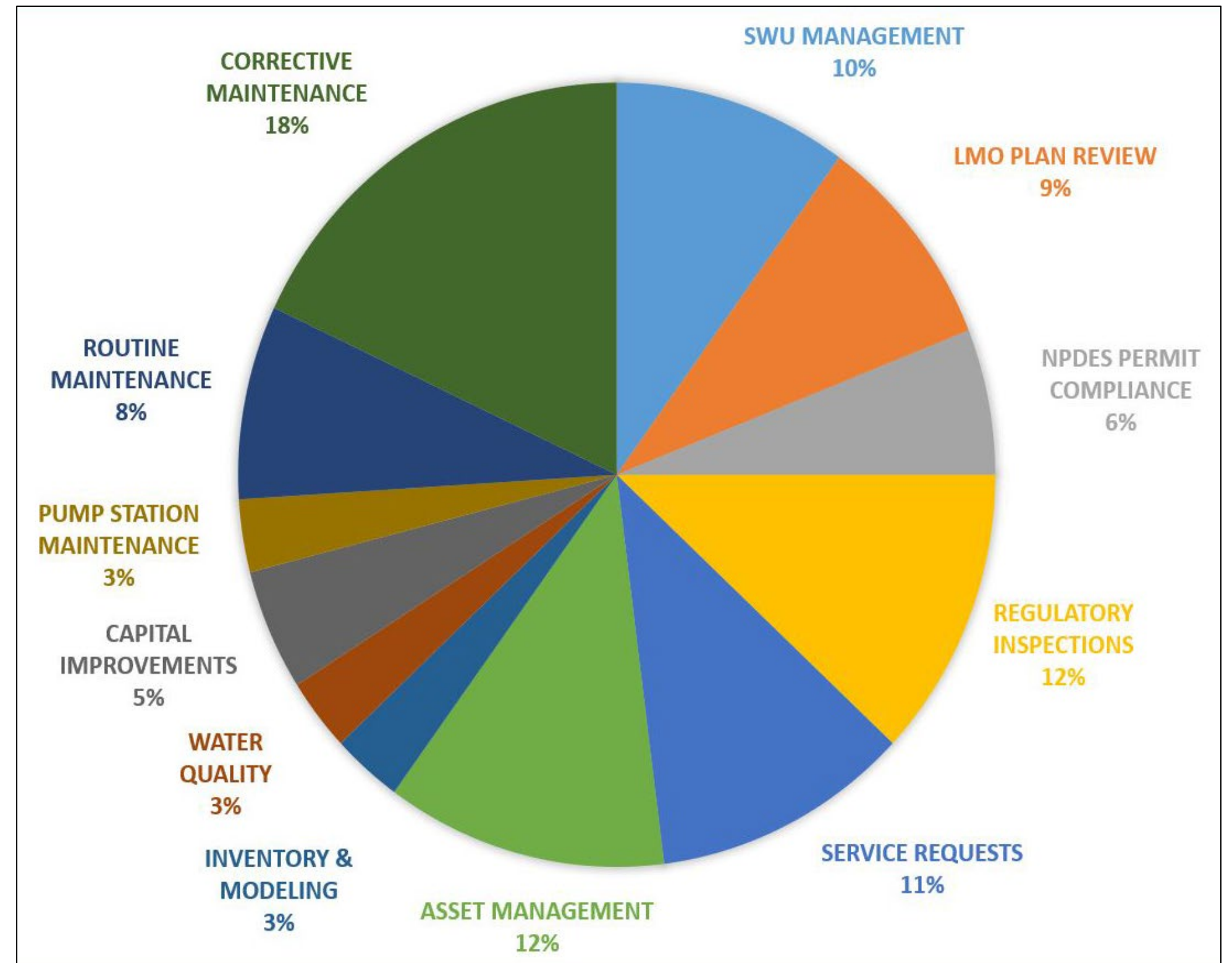


Town of Hilton Head Island

STORMWATER UTILITY OVERVIEW – ALLOCATION OF STAFF RESOURCES

Staff time allocation distributed over 12 significant activity categories:

- Utility Management
- LMO Plan Review
- NPDES Permit Compliance
- Regulatory Inspections
- Service Request Data Management
- Infrastructure Asset Management
- Inventory & Modeling Program
- Water Quality Programs
- Capital Improvement Program
- Pump Station Maintenance Program
- Routine Maintenance Programs
- Corrective Maintenance Program



Annual SWU Staff Effort by Activity Category (Manhours)

Town of Hilton Head Island

STORMWATER UTILITY OVERVIEW – REVENUE

Stormwater Utility Revenue

- The Utility was established in 2001 per an IGA with Beaufort County.
- A stormwater fee is included on annual property tax bills.
- Fees are calculated based on three components:
 - Administrative Fee (flat rate per account)
 - Impervious Area (based on total measured in square feet)
 - Gross Area (measured in acres)
- Fees are based on a 4,906 ft² Single-family Unit (SFU).
- Town Council elected to increased the base SFU fee rate from \$108.70 to \$150.00 for a Single-family unit in 2017.
- Beaufort County collects the fees and transfers all funds to the Town, less an administrative fee.
 - The FY 2025 administrative fee is \$3.90 per account based on 35,865 accounts, totaling \$139,873.
- **Total Stormwater Fee revenue was \$5,275,035 in FY 2024**

	Town of Hilton Head Island	Beaufort County	Town of Bluffton	City of Beaufort	Town of Port Royal
Administrative Fee (flat rate/account)	\$24.00	\$19.00	\$5.00	\$5.00	\$5.07
Impervious Area Unit (unit: square feet)	\$105.00	\$71.00	\$85.00	\$95.00	\$43.50
Gross Area Unit (unit: acres)	\$21.00	\$10.00	\$25.00	\$35.00	\$11.43
Total	\$150.00	\$100.00	\$115.00	\$135.00	\$60.00

FY 2024 Stormwater Fee Structure Comparison (based on One Single Family Unit)

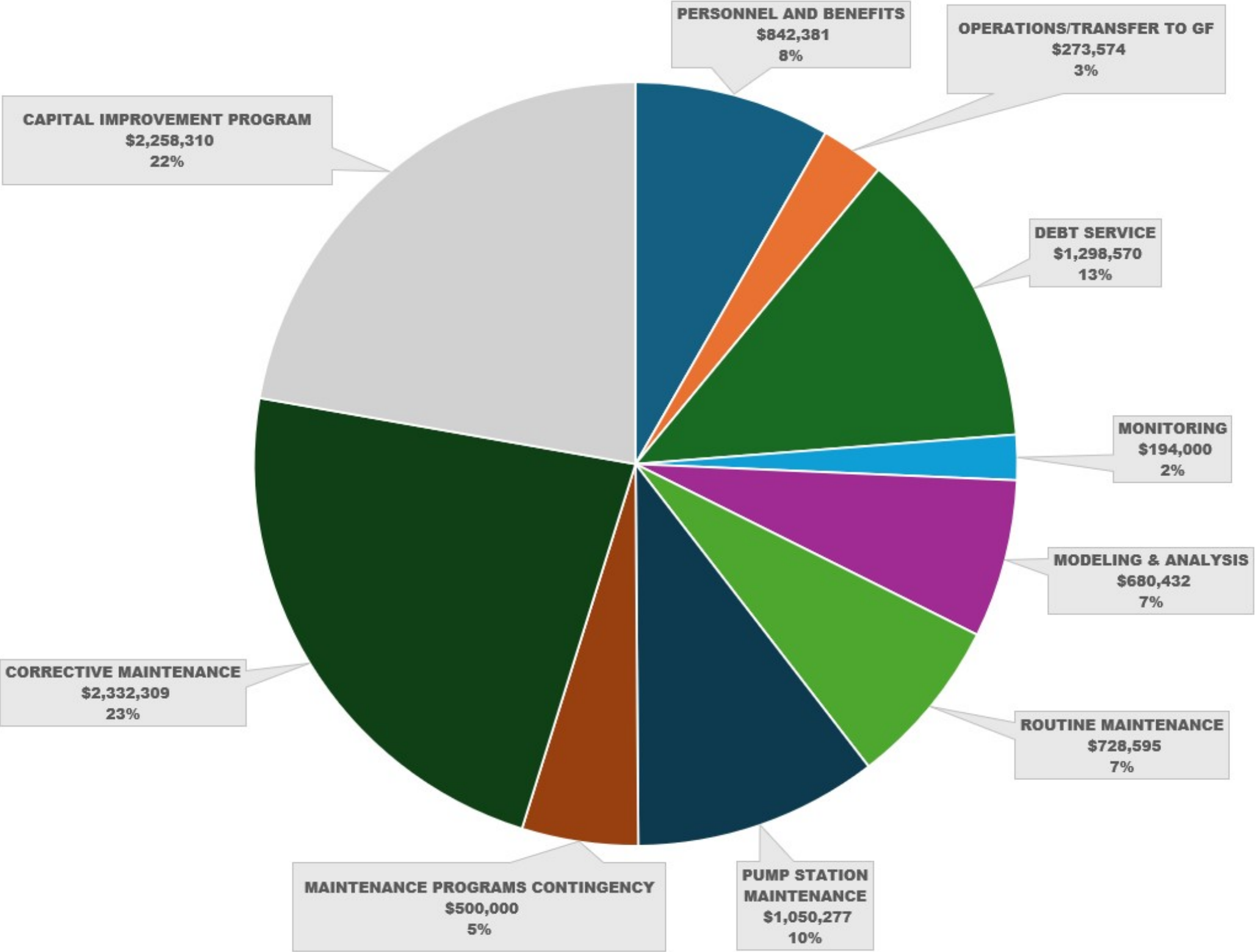
Town of Hilton Head Island

STORMWATER UTILITY OVERVIEW – EXPENSES (FY2025 BUDGET ALLOCATION)

○ Personnel & Benefits	\$ 842,381
○ Operations/Transfer to General Fund	\$ 273,574
○ Debt Service (P&I)	\$1,298,570
○ Monitoring Programs	
○ Water Quality Monitoring	\$ 140,000
○ Tide Monitoring	\$ 4,000
○ Weather Monitoring	\$ 50,000
○ Modeling and Analysis Programs	
○ Inventory & Modeling	\$ 375,271
○ Resiliency Planning	\$ 305,161
○ Routine Maintenance Programs	
○ Channel Maintenance	\$ 360,000
○ Street Sweeping	\$ 340,000
○ Pond Maintenance	\$ 28,595
○ Pump Station Maintenance	\$1,050,277
○ Maintenance Programs Contingency	\$ 500,000
○ Corrective Maintenance Program	\$2,332,309
○ Transfer to CIP Program	\$2,258,310

Programs Total

\$10,158,448



FY 2025 Budget Allocation, Including the 10/15 Budget Amendment

Town of Hilton Head Island

STORMWATER UTILITY OVERVIEW – FUND BALANCE

Stormwater Fund Balance

- The fund balance increased by 46.3% between 2019 and 2024
- The fund balance will decrease in FY2025 per Town Council approval of both:
 - the FY2025 Budget (supported in part with prior year unspent fund balance), and
 - the October 2025 Budget Amendment to address recent tropical storm impacts

	FY2019		FY2020		FY2021		FY2022		FY2023		FY2024 PRELIMINARY		FY2025 PROJECTED	
STORMWATER COLLECTIONS REVENUE	\$	4,895,801	\$	4,928,623	\$	5,043,167	\$	5,081,075	\$	5,066,598	\$	5,275,035	\$	5,475,100
STORMWATER EXPENSES	\$	3,809,206	\$	4,449,281	\$	4,883,899	\$	4,579,158	\$	2,428,728	\$	4,698,935	\$	10,158,448
FUND BALANCE INCREASE	\$	1,086,595	\$	479,343	\$	159,268	\$	501,917	\$	2,637,870	\$	576,100	\$	(4,683,348)
FUND BALANCE	\$	9,400,212	\$	9,879,555	\$	10,038,823	\$	10,540,740	\$	13,178,610	\$	13,754,710	\$	9,071,362

Town of Hilton Head Island

CAPITAL IMPROVEMENT PROGRAM -SWU

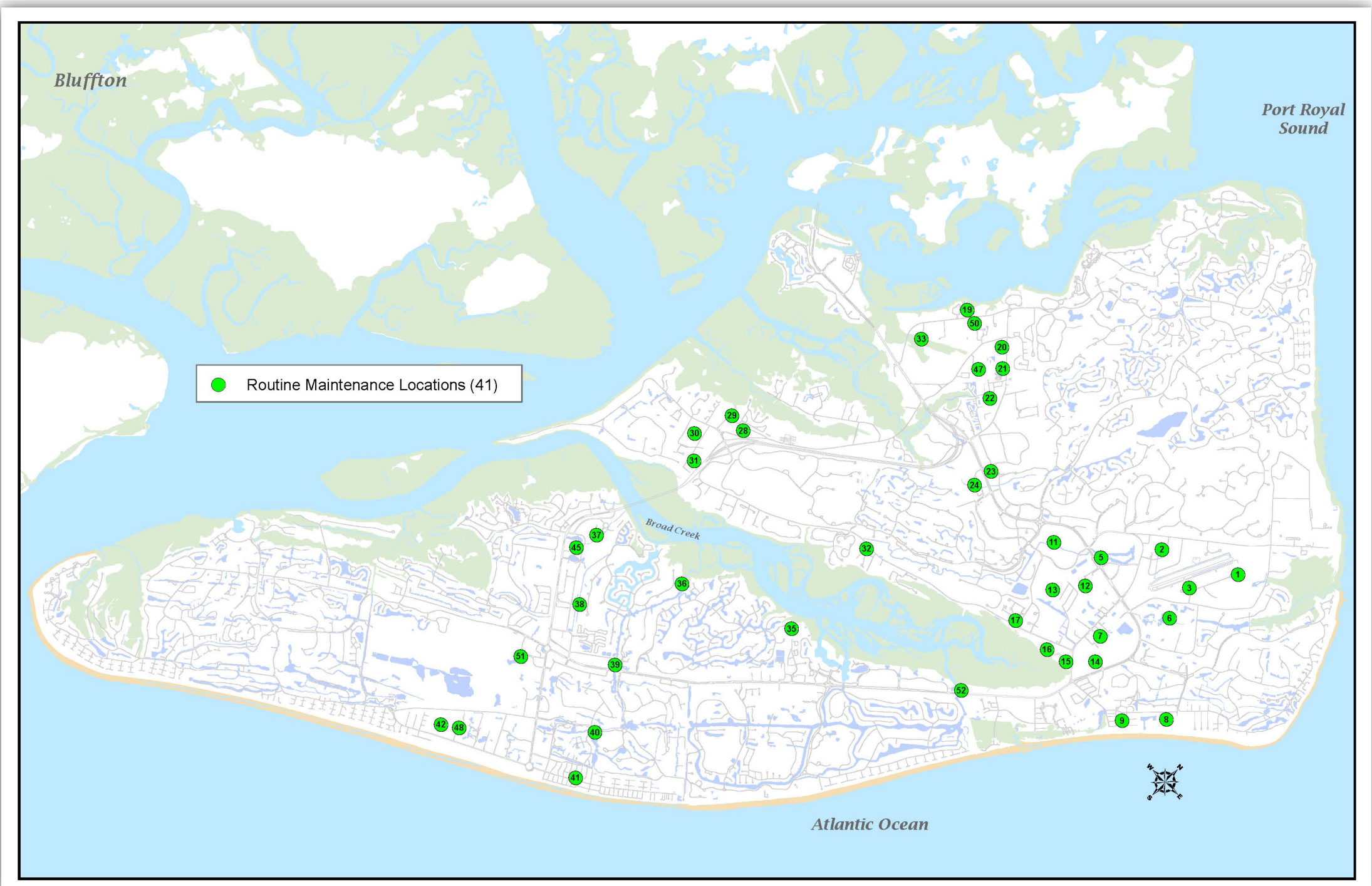
FY2025 CIP Projects

	Project Name	Budget	Project Description	FY 2025 Scope of Work
1	Wexford Pump Station Overhaul	\$ 1,190,994	Facility rehabilitation and improvement	Chamber wall rehab; consultant design
2	Gum Tree Road Drainage Improvements	\$ 85,000	Drainage system improvements	Design, permitting, and construction
3	Jarvis Creek Outfall Improvements	\$ 165,000	Resilience improvements	Design and permitting
4	Folly Field/Moonshell Rd Drainage Improvements	\$ 120,000	Drainage system improvements	Design and permitting
5	Main Street Drainage Improvements	\$ 250,000	Drainage system improvements	System cleaning and inspection
6	Palmetto Hall Outfall Improvements	\$ 100,000	Drainage system improvements	Design and easement acquisition
7	Howell Tract Access Control System	\$ 20,000	Security improvements	Control system installation
8	Cordillo Courts Drainage Improvements	\$ 70,000	Drainage system improvements	Design, permitting, and construction
9	Lawton Pump Station Overhaul – Pump Replacement	\$ 327,316	Replacement of a third pump	Purchase and Installation (complete)
	TOTAL	\$ 2,328,310		

Town of Hilton Head Island

ROUTINE MAINTENANCE PROGRAM

► CHANNELS (CONTRACTED SERVICES)

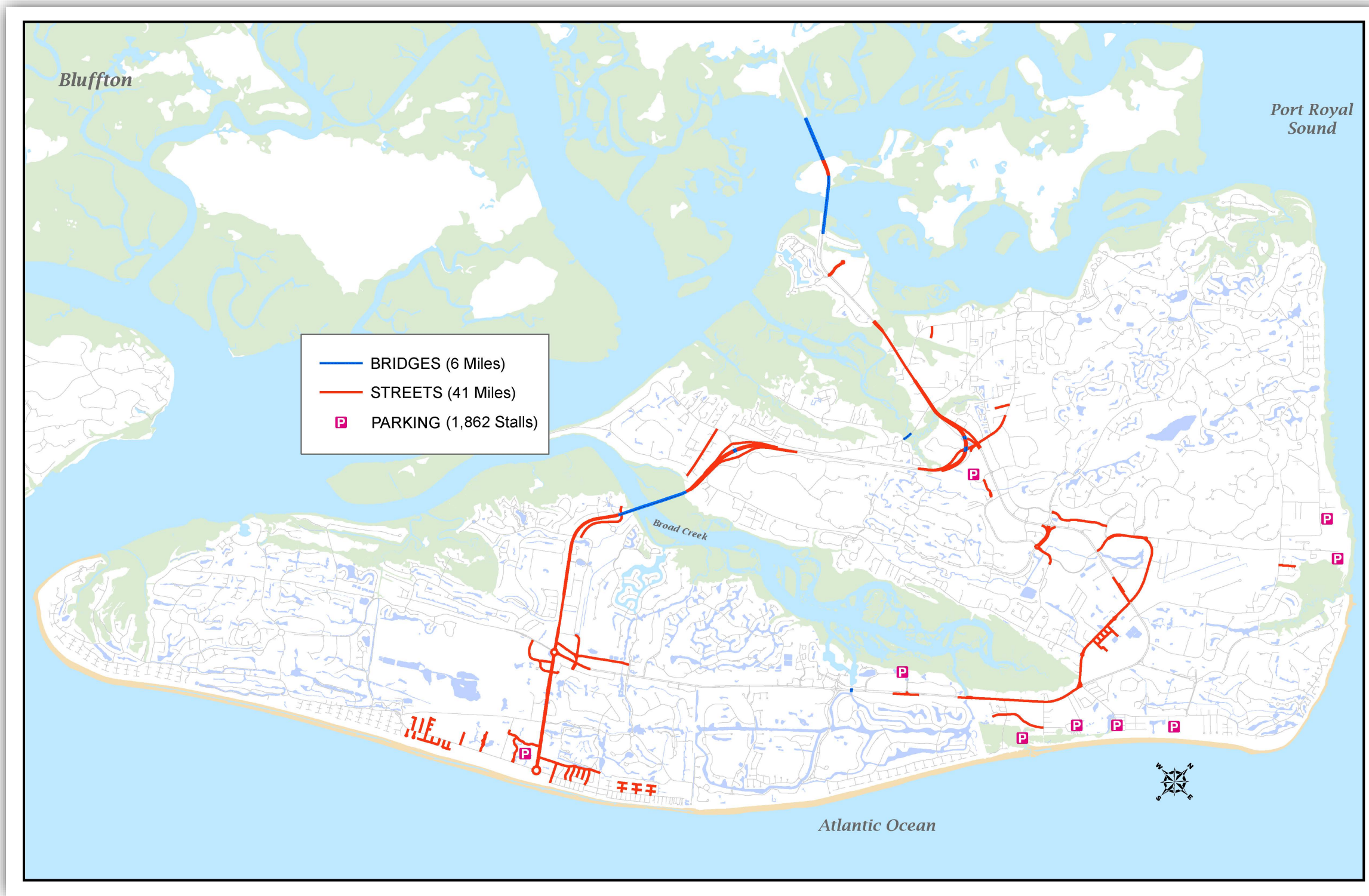


Routine System Maintenance Location Map - 41 locations

Town of Hilton Head Island

ROUTINE MAINTENANCE PROGRAM

► STREET SWEEPING (CONTRACTED SERVICES)

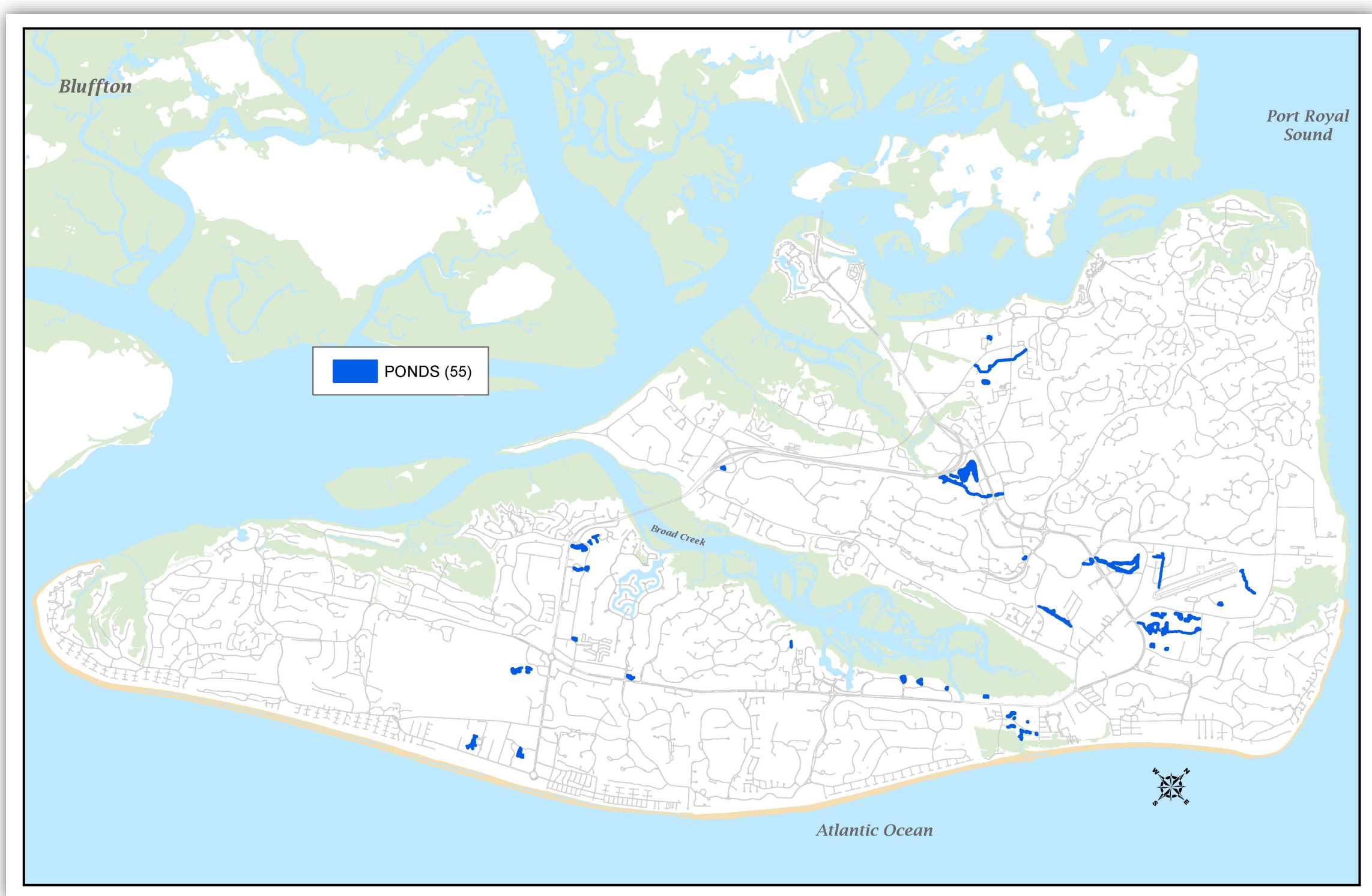


Street Sweeping Program Map

Town of Hilton Head Island

ROUTINE MAINTENANCE PROGRAM

► PONDS (CONTRACTED SERVICES)



Routine Pond Inspection & Maintenance Map

Town of Hilton Head Island

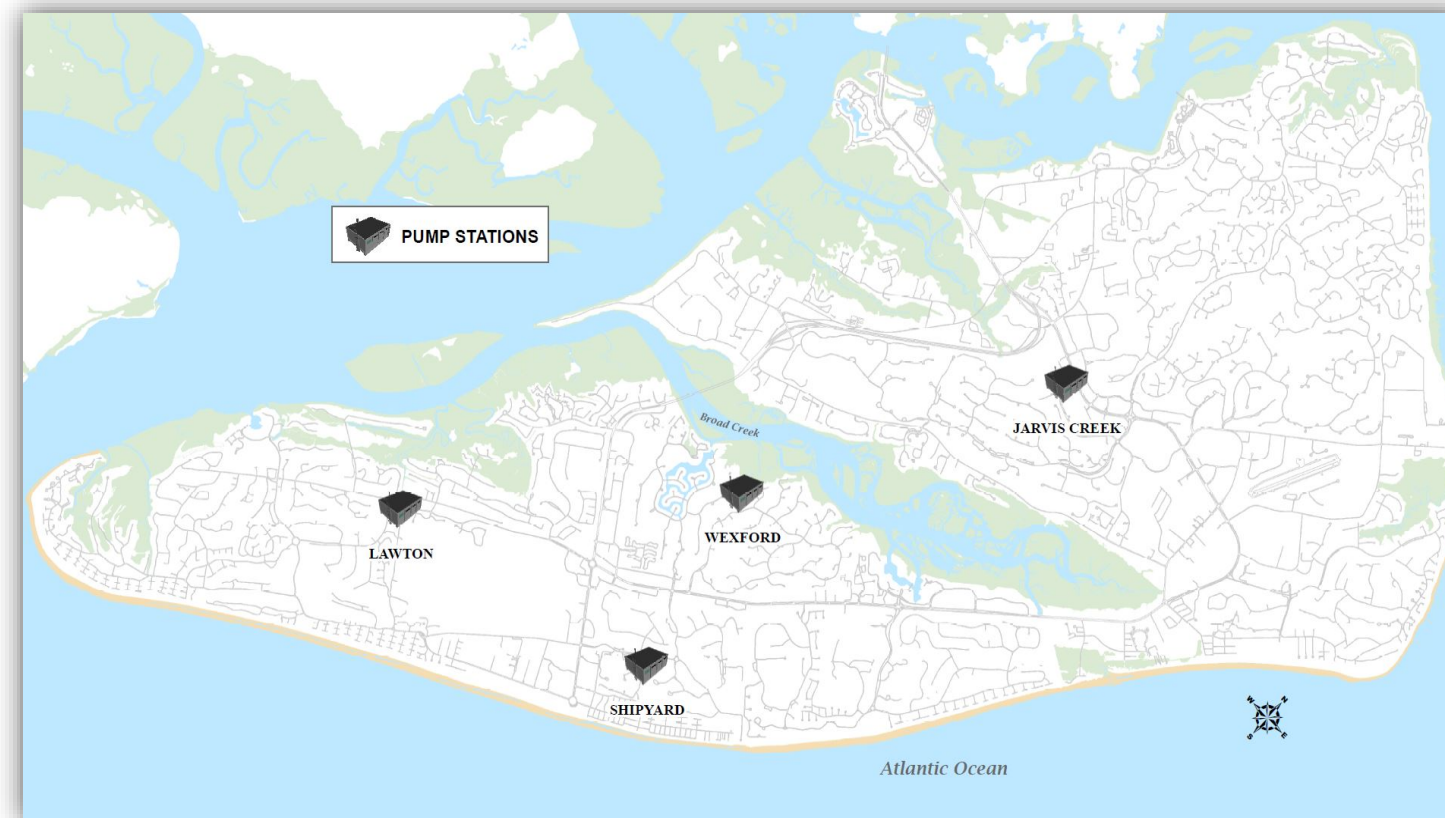
ROUTINE MAINTENANCE PROGRAM

► PUMP STATIONS (CONTRACTED SERVICES)

- The Town operates and maintains 4 stormwater pump stations:
 - **Lawton**
 - **Jarvis Creek**
 - **Wexford**
 - **Shipyard**
- Maintaining these critical facilities is imperative to protecting our community from the risk of flooding during extreme weather events
- Maintenance at each facility includes pumps, gates, screens, electrical controls, diesel generators, SCADA monitoring systems, control buildings, and pump chambers
- **Rigorous maintenance and inspections are conducted each winter** to ensure operational readiness prior to Hurricane Season
- **Each pump station is inspected weekly** by Town staff, including operational testing and exercising each pump
- A SCADA system installed at each pump station provides remote monitoring, alert notifications, daily run-time, and water volume reporting



Wexford Stormwater Pump Station (June 2021)



Stormwater Pump Station Locations



Pump Pull - Jarvis Creek SWPS

Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM

- The Corrective Maintenance Program identifies, evaluates, prioritizes and corrects system deficiencies, including:
 - Pipe Failure (collapse, joint failure, pipe wall compromise)
 - Sinkholes caused by pipe and structure failures
 - Inlet structure deterioration and safety issues
 - Blockages caused by sediment build-up or pipe failure
 - Control structure failure (weirs, risers, flapgates, etc.)
 - Channel bank erosion and instability
- **All Repair and rehabilitation projects are prioritized based on Service Request vetting and risk-based evaluation scoring**
- Staff tracks all Service Requests that qualify for Town Service in an Asset Management database



Pipe joint failure causing sinkhole in roadway



Blocked pipe causes ponding

Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM – EXTENT OF SERVICE



EXTENT OF SERVICE (EOS)

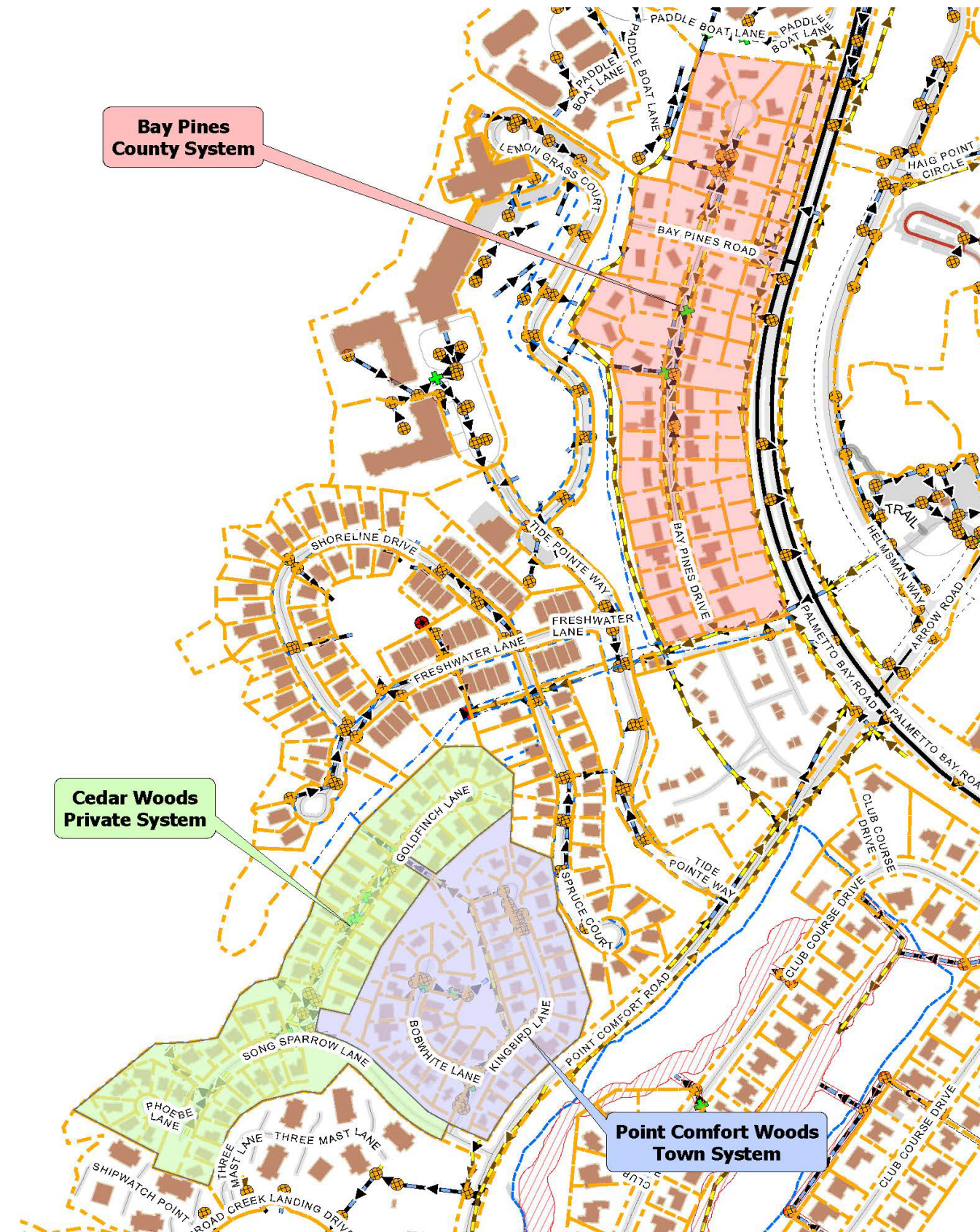
- **Town System**
 - Town ROW
 - Town Easements
 - Town Property
- **PUD/POA Agreements**
 - 22 Active Agreements
 - 4 2024 Applicants
 - 34 Potential Candidates (potential for 60 agreements)
- **Not Included in EOS**
 - State Roads & Easements
 - State Property
 - County Roads & Easements
 - County Property
 - Private Property

Corrective Maintenance Program – Extent of Service

Town of Hilton Head Island

STORMWATER SYSTEM MAINTENANCE – DISPARITIES IN EXTENT OF SERVICE

- Disparities in the Town's ability to provide equitable service to residents; an example in Point Comfort:
 - Bay Pines (42 homes) – County System
 - Services provided are outside the control of the Town
 - Cedar Woods (50 homes) – Private System
 - No public services are provided
 - Point Comfort Woods (40 homes) – Town System
 - Routine and Corrective Maintenance Services are provided
- All 3 communities were developed by Sea Pines in the 1960s and 1970s to provide housing for employees
- These communities are low-lying and susceptible to storm surge flooding
- The Dirt Road Acquisition and Paving Program involves taking over existing unpaved roads; at the same time, the Town has been historically reluctant to adopt existing paved roads



Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM – DRAINAGE AGREEMENTS

- The Stormwater Utility provides corrective maintenance service within active Drainage Agreement Partner communities
- Service is provided per the standardized terms and conditions of each Drainage Agreement
- **Routine and proactive maintenance services are not provided.**
- The Town uses contractors to correct deficiencies
- Agreement partners can also complete projects on their own. Projects are eligible for reimbursement if they comply with all procedures stipulated in the Agreement terms and conditions
- **Systems must drain a platted roadway ROW in the community to qualify for service**

34 other communities have been identified that would potentially qualify for Drainage Agreements (4 interested + 30 additional)

- Adding all of these would add approximately **2%** to the total quantity of infrastructure covered by current agreements
- Adding all of these would require additional staff time to manage agreement partner communication and request vetting

22 Active Agreements

Original PUD Agreement Partners, 2007 to 2012		11
Hilton Head Plantation	Port Royal	
Indigo Run	Sea Pines	
Leamington	Shelter Cove	
Long Cove Club	Shipyard	
Palmetto Dunes	Wexford	
Palmetto Hall		
New POA/PUD Agreement Partners, 2021		6
Bermuda Pointe	Spanish Wells	
Jarvis Creek Club	Wells East	
Seagrass Landing	Yacht Cove	
New POA/PUD Agreement Partners, 2023		5
Beach City Place	Chinaberry Ridge	
Carolina Isles	Peregrine Point	
Ashton Cove		

4 Current Applicants

Victoria Square	Broad Creek Landing
Paddocks on Jarvis Creek	Ribaut Island

4 Interested Applicants

Cedar Woods	Graham Lane Plantation
The Estuary	Salt Creek Landing

30 Potentially Qualifying Communities

Allenwood	Old Stoney Creek
Calibogue Club	Sandcastles by the Sea
Carolina Place (in SP)	Silver Moss
Crosswinds	Singleton by the Beach
Fuller Pointe	Singleton Place
Hammock Breeze	Spanish Pointe
Hanahan Place	Sunderland Point
Hilton Head Terrace	Tansyleaf
Jarvis Creek (Walking Horse)	The Marshes on Marshland
Lake Forest (in SP)	Tidal Bluff
Lands' End (in SP)	Tide Pointe
Little Cove Cottages	Timber Crest
Magnolia Place	Turtle Lane Club (in SP)
Oakview	Village at Singleton Beach
Old House Creek	The Cottages at Leg O Mutton

Potential Maximum Number of Agreements: 60

Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM – DRAINAGE AGREEMENTS

Agreement Partner Reimbursements

- The reimbursement process is clearly stipulated in the Drainage Agreement, including the following:
 - Procurement of services to correct deficiencies must comply with the Town’s Procurement Policy
 - The Town must approve the scope and cost before work begins
 - The Town must inspect and approve the work once the project is complete and receive all required documentation as stipulated in the Agreement
- The Town provides all agreement partners with a procedure and a reimbursement request checklist
- During each fiscal cycle, the average number of reimbursement requests is relatively low
- There are currently 6 open reimbursement requests in our database
- Reimbursements are scheduled based on their evaluation score in accordance with the annual budget process; **reimbursements are not guaranteed in any specific future year**

Reimbursement Request Checklist	
(all backup documentation must be included with the reimbursement request)	
Documentation of Town approvals required per Agreement terms	APPROVAL DATE
☐ Town written approval of scope of work to address/correct deficiency <u>Prior to authorizing the contractor to begin work</u>	_____
☐ Town written approval of contractor’s <u>quote/award</u> to complete repairs <u>Prior to authorizing the contractor to begin work</u> , and in accordance with the Town’s Procurement Code, § 11-1-111	_____
☐ Town written approval of successful project completion after inspection	_____
Procedures followed and documentation provided according to Agreement terms	
☐ <u>Provide</u> documentation of the deficiency , including photos and a written description. (sinkhole, road depression, flooding, erosion, damaged infrastructure, etc. Use the Town-provided service request form whenever possible)	
☐ <u>Provide</u> documentation of the cause , including photos and a written description. (grout failure, pipe failure, root damage, sediment blockage, joint offset, collapse, etc. This documentation is often only possible when the cause is exposed through excavation)	
☐ Town was notified of scheduled work start date 72 hours in advance. DATE: _____	
☐ Town was notified during work to allow Town staff an opportunity to inspect.	
☐ <u>Provide</u> documentation of the repair , including photos during and at the completion of work, including at all key points. (wrapping of joints, grouting of structures, removal of sediment, prior to backfilling or removing dewatering devices)	
☐ <u>Provide</u> a copy of contractor’s invoice to the Agreement Partner, <u>including a description of work</u> .	
☐ <u>Provide</u> proof of payment to the contractor by the Agreement Partner (copy of check).	
☐ <u>Include</u> an invoice from the Agreement Partner to the Town.	
NOTES:	
• If work is being undertaken at multiple locations to address a deficiency, this should be sufficiently described and documented, including the use of exhibits, plans and/or sketches as necessary. • If a contractor is invoicing the Agreement Partner for work that includes scope items that are not related to the reimbursable work, this should be clearly noted and clearly separated from the non-related work on the invoice.	

Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM RANKING & PROJECT PRIORITIZATION



TOWN OF HILTON HEAD ISLAND		EVALUATION DATE		Feb 25, 2022
STORMWATER UTILITY		EVALUATOR NAME		K UYESUGI
SERVICE REQUEST EVALUATION (VERSION 2022.1)				
CARTOGRAPHIC PRIORITY		REQUEST NUMBER	3184	SCORE *
IMP		REQUEST LOCATION	C. Heinrichs Circle at corner of Hwy 278	(RA + AM)
HIGH		REQUEST DATE	January 12, 2022	9
MED		BRIEF DESCRIPTION	Curb inlet has broken concrete lid at throat exposing the rebar.	* MAX IS 20
LOW				
RISK ASSESSMENT (RA)		OVERALL SCORE IS EQUAL TO THE GREATEST OF 10 COMPONENT EVALUATION SCORES ▶ 7		
FACILITY INUNDATION CONSIDERATIONS	1	ROADWAY / PATHWAY INUNDATION	Transportation facilities (arterials, collectors, local roads, driveways, pathways)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
FACILITY INTEGRITY CONSIDERATIONS	2	STRUCTURE INUNDATION	Vertical/permanent constructions (critical, residential, commercial, government, pools, accessory)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
FACILITY INTEGRITY CONSIDERATIONS	3	AMENITIES INUNDATION	Other improvements (parking lots, patios, parks, lawns, athletic fields, playgrounds)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
FACILITY INTEGRITY CONSIDERATIONS	4	ROADWAY / PATHWAY INTEGRITY	Transportation facilities (arterials, collectors, local roads, driveways, pathways)	7
		Impacted Facility Category	CUL-DE-SAC / DEAD END	7
		Problem Description / Severity *	CURB / SHOULDER INLET STRUCTURE, MAJOR SAFETY HAZARD	0
FACILITY INTEGRITY CONSIDERATIONS	5	STRUCTURE INTEGRITY	Vertical/permanent constructions (critical, residential, commercial, government, pools, accessory)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
FACILITY INTEGRITY CONSIDERATIONS	6	AMENITIES INTEGRITY	Other improvements (parking lots, patios, parks, lawns, athletic fields, playgrounds)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
DRAINAGE SYSTEM CONSIDERATIONS	7	DRAINAGE SYSTEM CONVEYANCE	Conveyance capacity of drainage system (channels, pipes, weirs, gates & lagoons)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
DRAINAGE SYSTEM CONSIDERATIONS	8	DRAINAGE SYSTEM INTEGRITY	Integrity of drainage system (channels, pipes, inlets, manholes, weirs, gates, lagoons & dams)	4
		Impacted Facility Category	TERTIARY SYSTEM	4
		Problem Description / Severity *	INLET / MANHOLE / JBOX INTEGRITY, SEVERE DEFICIENCY	0
DRAINAGE SYSTEM CONSIDERATIONS	9	SYSTEM MAINTENANCE	Maintaining access to stormwater facilities, woody growth, detention facility storage capacity	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
ILLCIT DISCHARGE	10	ILLCIT DISCHARGE	Water quality integrity (threats to the environment and public safety)	0
		Impacted Facility Category		0
		Problem Description / Severity *		0
ASSESSMENT MODIFIER (AM)		OVERALL SCORE IS EQUAL TO THE GREATEST OF 5 ASSESSMENT MODIFIER SCORES ▶ 2		
MODIFIERS	A	TOWN LEADERSHIP DIRECTIVE		0
	B	REGULATORY MANDATE		0
	C	WATER QUALITY BENEFIT		0
	D	MULTIPLE UNIQUE REQUESTS		0
	E	OWNERSHIP / EASEMENT FACTOR	LOCATED ON TOWN PROPERTY OR WITHIN TOWN ROW OR EASEMENT	2

Service Request Evaluation Tool

Town of Hilton Head Island

CORRECTIVE MAINTENANCE PROGRAM – SERVICE REQUEST EVALUATION

SERVICE REQUEST EVALUATION

- All requests received are evaluated by staff if the request is determined to qualify for Town Service
- Staff uses a customized evaluation tool (developed in 2018) to complete a **Risk Assessment** and to apply **Assessment Modifiers** for each request.
- The **Risk Assessment** evaluates a variety of deficiency components:
 - **Inundation and Flooding** Considerations as it relates to:
 - Roadway/Pathway Inundation and Flooding Impacts
 - Structure Inundation and Flooding Impacts
 - Amenities Inundation and Flooding Impacts
 - **Integrity and Safety** Considerations as it relates to:
 - Roadway/Pathway Integrity and Safety Impacts
 - Structure Integrity and Safety Impacts
 - Amenities Integrity and Safety Impacts
 - **Drainage System Integrity** Considerations as it relates to:
 - Conveyance Reduction Impacts
 - Drainage System Integrity Impacts
 - Drainage System Maintenance Impacts
- **Assessment Modifiers** are applied in several categories, including:
 - Ownership (applies a 2-point increase if Town-owned)
 - Multiple Unique requests (high level of public concern)
 - Town Leadership Directive
- **Evaluation Scores are based on a 20-point scale**

SAMPLE EVALUATION

Deficiency: Sinkhole in Parking Lot Causing Localized Flooding (Bristol Sports Arena)

○ **RISK ASSESSMENT** (greatest of each component evaluation score) **10**

○ Amenities Inundation and Flooding Impacts			10
○ Facility Category:	Parking Lot Drive Aisle		
○ Description/Severity:	Inundation >6 inches, more than 24 hours		8
○ Rainfall Event Category:	Chronic Issue; rainfall less than 4.6 inches		2
○ Amenities Integrity and Safety Impacts			8
○ Facility Category:	Parking Lot Stall(s)		
○ Description/Severity:	Sinkhole, Minor Safety Hazard		6
○ Inaction Modifier:	Severity likely to increase within 3 months		2
○ Drainage System Conveyance Reduction Impacts			9
○ Facility Category:	Tertiary System		
○ Description/Severity:	Conveyance Capacity Reduced, >90%		9
○ Inaction Modifier:	Severity not likely to increase within 1 year		0

○ **ASSESSMENT MODIFIER** (greatest of each component modifier score) **2**

○ Ownership Factor	Located on Town Property	2
○ Multiple Unique Requests	Fewer Than Three	0
○ Town Leadership Directive	No Priority Directive	0

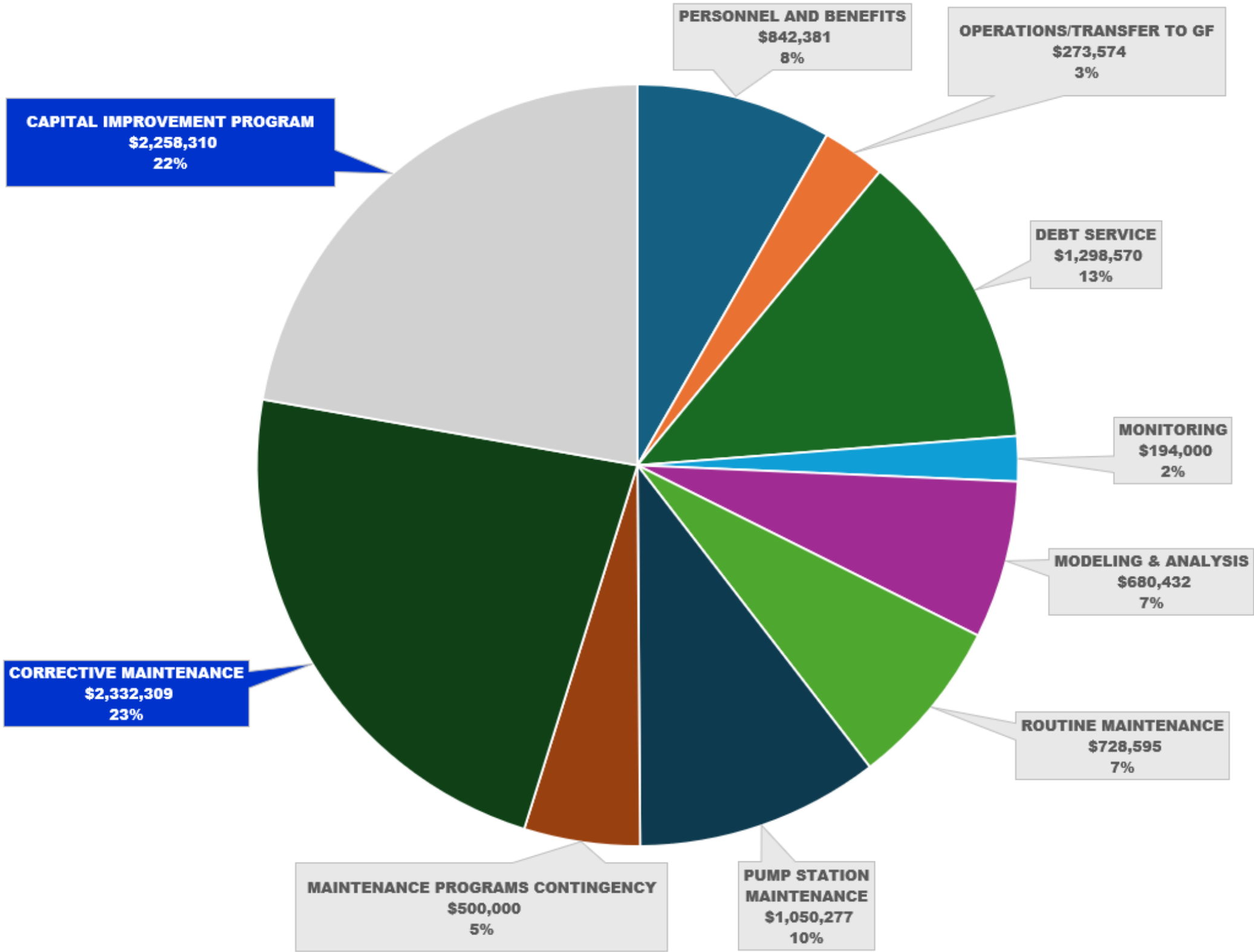
PRIORITY SCORE (**RISK ASSESSMENT** + **ASSESSMENT MODIFIER**) **12**

Town of Hilton Head Island

ANNUAL SWU & CIP BUDGET DEVELOPMENT

○ Personnel & Benefits	\$ 842,381
○ Operations/Transfer to General Fund	\$ 273,574
○ Debt Service (P&I)	\$1,298,570
○ Monitoring Programs	
○ Water Quality Monitoring	\$ 140,000
○ Tide Monitoring	\$ 4,000
○ Weather Monitoring	\$ 50,000
○ Modeling and Analysis Programs	
○ Inventory & Modeling	\$ 375,271
○ Resiliency Planning	\$ 305,161
○ Routine Maintenance Programs	
○ Channel Maintenance	\$ 360,000
○ Street Sweeping	\$ 340,000
○ Pond Maintenance	\$ 28,595
○ Pump Station Maintenance	\$1,050,277
○ Maintenance Programs Contingency	\$ 500,000
○ Corrective Maintenance Program	\$2,332,309
○ Transfer to CIP Program	\$2,258,310

Programs Total **\$10,158,448**



FY 2025 Budget Allocation, Including the 10/15 Budget Amendment

Town of Hilton Head Island

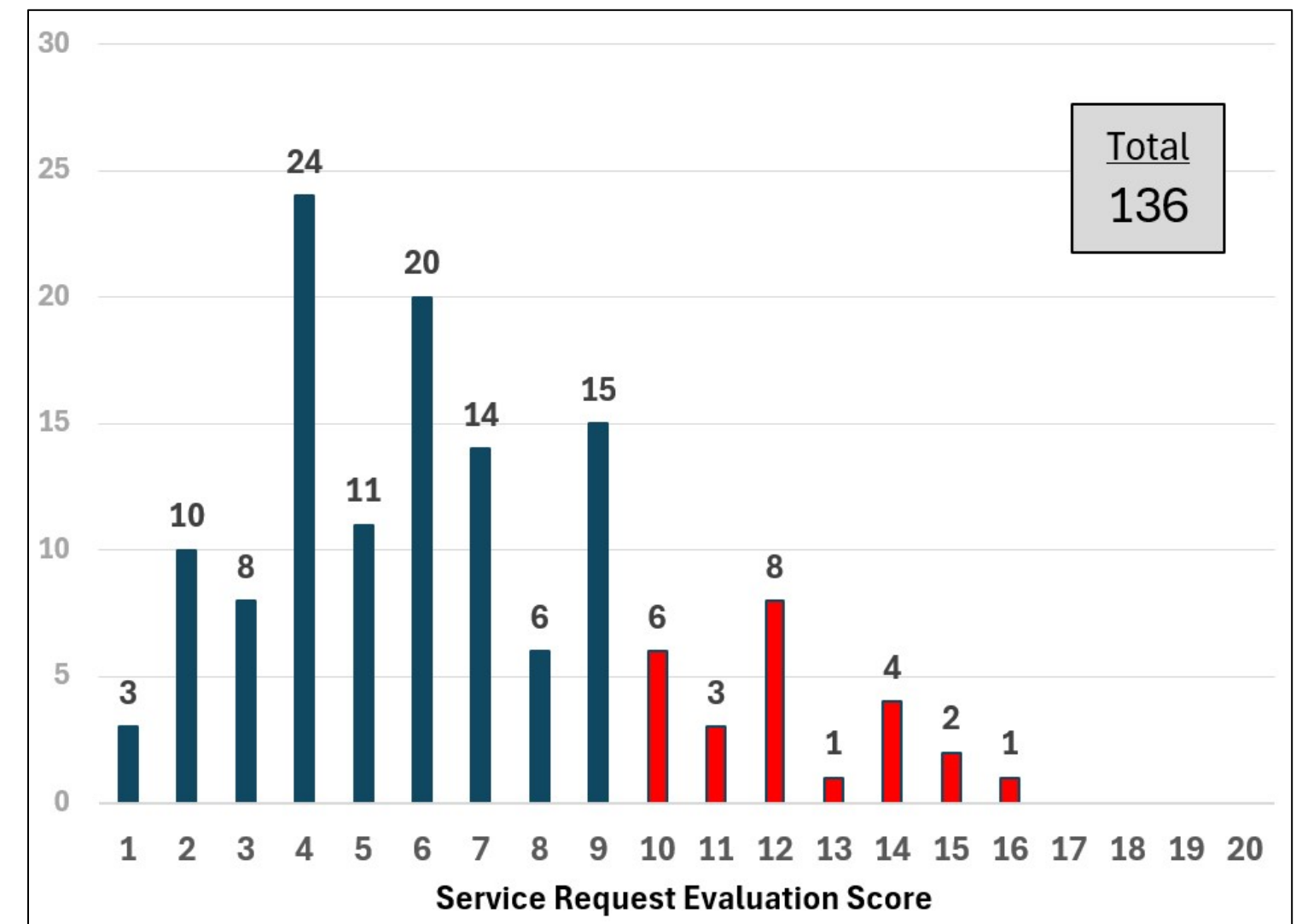
ANNUAL SWU & CIP BUDGET DEVELOPMENT

CAPITAL IMPROVEMENT PROGRAM

- Will be developed based on a 5-year program plan

CORRECTIVE MAINTENANCE PROGRAM

- As of September 26, there were **136** open, qualifying corrective maintenance projects
- **The list of qualifying projects is updated dynamically** throughout the year as new requests come in and others are completed
- Tropical Storm Debby generated **72** new service requests, 30 of which are still being evaluated by staff (as of 10/25)
- The FY 2025 Corrective Maintenance Program budget includes **twenty-one (21) projects** (5 public and 16 PUD/POA)
- **Four (4)** high-priority projects were added during the first quarter of FY 2025 (3 public and 1 PUD/POA)
- Total project budgets are summarized below:
 - **FY25 Budgeted Projects (≥10)** **25** **\$1,912,000**
 - **Non-budgeted Projects (<10)** **111** **\$1,593,000**



Open Qualifying Service Requests (09/25/2024)

The Corrective Maintenance Program Goal for FY 2025 is to complete all 25 projects with an Evaluation Score of 10 or higher

Town of Hilton Head Island

ANNUAL SWU & CIP BUDGET DEVELOPMENT

- The Corrective Maintenance Program budget is determined based on several factors, including:
 - Available funding
 - Staff capacity to implement projects
 - Contractor capacity to complete projects
- **The number of open qualifying requests is increasing**
- The increase is related to:
 - **Aging systems** experiencing increasing rates of failure (metal pipe and perforated pipe are examples) MORE REQUESTS
 - **Increasing extent of service** as the Town adds new drainage agreement partners * MORE REQUESTS
 - **Staff capacity** to implement projects remains flat
 - **Contractor capacity** is limited on Hilton Head Island; many entities compete to utilize the same pool of contractors with the necessary expertise, skilled workers, and equipment

* The amount of infrastructure that might be added via future agreements with remaining potential new partners is limited (roughly an additional 2%)

Town of Hilton Head Island

STORMWATER UTILITY – PROGRAM CHALLENGES/OPPORTUNITY

- **Extent of Service**
 - Will continue to increase as new Drainage Agreement Partners are added
 - Will increase as new drainage easements are acquired
- **Level of Service**
 - Will increasing as routine maintenance programs expand to provide improved and more consistent service
 - Will increase to allow for proactive condition assessment of existing infrastructure
- **Project Delivery Limitations for CIP and Corrective Maintenance Programs**
 - Staff Capacity
 - Funding Capacity
 - Contractor Availability
- **Emergent Needs**
 - Aging infrastructure continues to experience failure at higher rates requiring repair, rehabilitation, or replacement
 - Resilience improvements will be necessary, informed by the Resilience Study followed by an Island-wide Stormwater Master Plan
- **Opportunity for Consideration**
 - Utilize fund balance in FY26 to accommodate Drainage Agreement Partner reimbursement requests to address lower priority projects

Town of Hilton Head Island

Stormwater Utility Program Overview

*Town Council Workshop
October 30, 2024*

QUESTIONS ?

