Midnight Pass Community Event

Current Status and Path Forward

Michael G. Jenkins, Ph.D.; P.E. Senior Principal; Geosyntec

- Original County Directive: **Open Midnight Pass!**

- New County Directive: **Keep Midnight Pass Open!**

Response to Inlet Opening

- *Inlet Monitoring*
- *Updates to regional watershed modeling*
- *Engagement with regulatory agencies*
- *Development of an Emergency Response plan to address potential inlet closure*
- *Coordination with stakeholders*
- *Evaluation of additional measures*

Inlet Monitoring

- County effort focused on critical data to inform response (*Critical Inlet Cross Section and Flow Characteristics*)
- Regional Monitoring (seagrass, water quality, etc.)
- Additional Efforts (NGO's, Academic)

Inlet Cross Section

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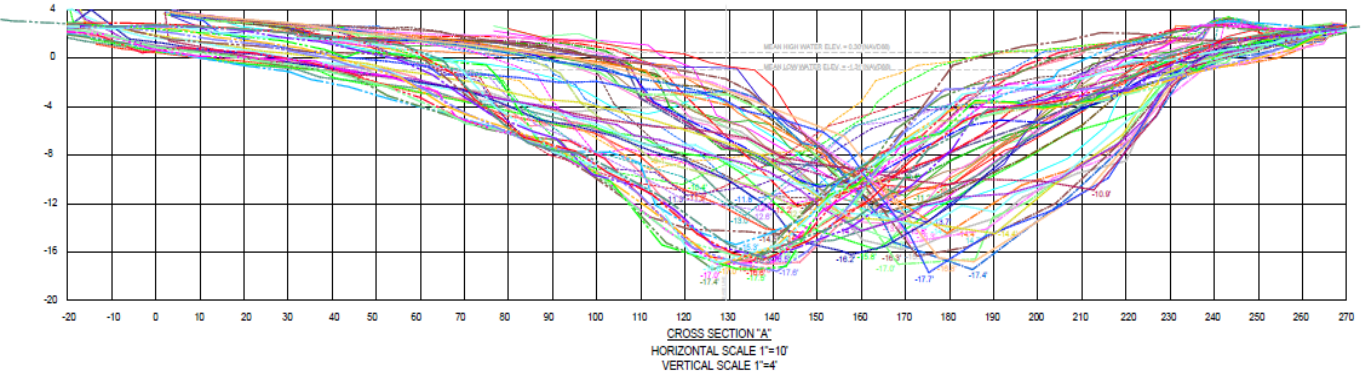
Inlet Cross Section



DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
OCT. 29, 2024	-13.8'	844
NOV. 4, 2024	-15.0'	955
NOV. 12, 2024	-10.7'	655
NOV. 18, 2024	-13.0'	1064
NOV. 25, 2024	-13.7'	686
DEC. 2, 2024	-12.0'	716
DEC. 10, 2024	-11.2'	758
DEC. 16, 2024	-12.0'	817
DEC. 20, 2024	-13.6'	902
JAN. 6, 2025	-11.7'	897
JAN. 13, 2025	-11.8'	722

DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
JAN. 21, 2025	-9.1'	629
JAN. 27, 2025	-10.4'	755
FEB. 4, 2025	-11.2'	888
FEB. 10, 2025	-11.3'	1017
FEB. 18, 2025	-12.6'	1005
FEB. 25, 2025	-13.0'	965
MAR. 3, 2025	-12.0'	1022
MAR. 11, 2025	-12.2'	950
MAR. 17, 2025	-9.4'	833
MAR. 24, 2025	-10.7'	873
MAR. 31, 2025	-10.2'	782

DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
APR. 7, 2025	-12.2'	748
APR. 14, 2025	-10.7'	873
APR. 21, 2025	-12.7'	863
APR. 28, 2025	-14.7'	1007
MAY 5, 2025	-17.0'	1175
MAY 14, 2025	-14.4'	1033
MAY 19, 2025	-15.3'	1030
MAY 30, 2025	-17.4'	1199
JUNE 4, 2025	-16.3'	1066
JUNE 9, 2025	-16.8'	1084
JUNE 17, 2025	-17.7'	1222

DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
JUNE 23, 2025	-10.9'	1326
JUNE 30, 2025	-15.8'	1468
JULY 8, 2025	-14.4'	1407
JULY 15, 2025	-14.0'	1486
JULY 21, 2025	-14.2'	1477
JULY 28, 2025	-15.8'	1543
AUG. 8, 2025	-16.2'	1487
AUG. 11, 2025	-15.3'	1470
AUG. 18, 2025	-14.4'	1457
AUG. 25, 2025	-17.0'	1293
SEPT. 2, 2025	-14.5'	1134

DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
SEPT. 9, 2025	-15.3'	1352
SEPT. 16, 2025	-16.8'	1322
SEPT. 22, 2025	-17.4'	1351
OCT. 1, 2025	-17.0'	1440
OCT. 9, 2025	-16.5'	1587
OCT. 15, 2025	-17.6'	1447
OCT. 21, 2025	-17.0'	1468
OCT. 31, 2025	-17.5'	1392
NOV. 6, 2025	-16.8'	1263
NOV. 10, 2025	-16.5'	1559
NOV. 20, 2025	-16.6'	1405

DATE OF SURVEY	LOW ELEV.	X-SEC. AREA
NOV. 24, 2025	-16.3'	1402

Min: January 21, 2025 (629 sf; 9.1 ft deep)

Max: October 9, 2025 (1587 sf; 17 ft. deep)

Regulatory Considerations

- Post storm condition meets the definition of an ‘inlet’ per 62B-41.002(19) FAC
- County intends to manage this inlet per the requirements of 62B-41.005(11) FAC
- Correspondence to this effect has been provided to FDEP

Inlet Management

- General Considerations
- “Inlet Management” under Florida Statute and Rule (161.143, 161.142 FS)
- Trigger is Engineered Corrective Action (Dredging or Structures) for formal IMP
- Requirement to offset erosion to adjacent beaches and mitigate for project impacts

State-Wide Perspective

- 66 Inlets in Florida
- 30 “Engineered” Inlets with formal Inlet Management Plans
- Management Plans typically based on minimum 10 years of survey data
- Annual FDEP Inlet Report

Emergency Response Plan

- An Emergency Response Plan (ERP) has been developed to address the possibility of unanticipated inlet closure
- Immediate corrective action under a County Emergency Declaration if an imminent closure condition arises
- This can evolve into a formal Inlet Management Plan as needed
- ERP plan is focused only on maintaining a hydraulic connection

The Formal Regulatory Process

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- Identify corrective action need (dredging or inlet structures
- Secure County approval for corrective action
- Develop plan that addresses project impacts (avoidance, minimization and mitigation)
- Seek State and Federal permits
- Develop formal Inlet Management Plan (IMP) in concert with regulatory agencies
- Implement construction, the IMP and manage inlet in perpetuity

Beyond the Formal Process

- There are a range of issues that can be addressed outside of the formal regulatory process
- For example: public safety, signage, navigational markers, interior shoreline stabilization, etc.
- The Formal Process is only required if an engineered corrective action is implemented to stabilize the inlet

Path Forward

- Continue data collection and modeling efforts
- Monitor inlet conditions relative to closure and implement response plan (Emergency or Formal) if warranted
- Develop additional management initiatives as needed based on data and stakeholder input
- Seek cost share for ongoing monitoring and management efforts

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