

BEACH MANAGEMENT PLAN

October 2023

FLAGLER COUNTY, FLORIDA BEACH MANAGEMENT PLAN

Goals and Implementation Strategies

Future beach management activities shall be consistent with the following goals and implementation strategies, as set forth in the "Flagler County Beach Management Study," and subsequent workshops on August 15, 2022, and August 28, 2023, incorporated by reference. The Beach Management Plan is to be adopted by the Flagler County Board of County Commissioners for implementation by the County through cooperation with local stakeholders and municipalities.

Goals for Beach Management:

- 1) **Establish** a comprehensive beach and dune monitoring program to evaluate beach and dune behavior and the performance of sand placement projects. Monitoring data, including LiDAR and beach profile surveys, shall be collected along all 18 miles of Atlantic Ocean shoreline from R-1 (St. Johns County line) to R-101 (Volusia County line). These monitoring data shall be used to determine erosion and accretion quantities from the County's beach and dune system.
- 2) Restore, enhance, maintain, preserve, and protect the beach and dune system through beach and dune restoration and periodic renourishment along all 18 miles of Atlantic Ocean shoreline. The recognized purpose of beach and dune restoration and maintenance is to:
 - Restore, Enhance, and Maintain a healthy beach system and recreational beach;
 - <u>Preserve</u> habitat for the numerous species of plants and animals that rely upon a healthy beach and dune system; and
 - <u>Protect</u> life and property and act as a buffer from coastal erosion, storm surges, elevated wave conditions, coastal flooding, and sea level rise.
- 3) **Restore and Maintain** the beach and dune to conditions equal to or greater than those prior to the occurrence of Hurricane Matthew (2016).
- 4) **Protect** the beach / nearshore coquina rock (hardbottom) habitat, a marine resource unique to Flagler County. The project scope along northern Flagler County shall seek to maximize sand placement volume while minimizing impacts to hardbottom.
- 5) **Conduct** periodic renourishment of the beach and dunes on a regular interval that is sufficient to maintain the protective nature of the beach and dune.
- 6) Seek to source all sand for initial restoration and future renourishment from the

offshore borrow area (Area 3). Any large post-storm reparations, classified as Federal Emergency Management Agency (FEMA) Category G projects, shall also seek to use Area 3. Smaller emergency work (e.g., FEMA Category B projects) will probably be constructed with upland sand.

7) **Protect and Preserve** the finite beach compatible sand resources located offshore of Flagler County. Restoration and long-term maintenance of the Flagler County beach and dune will require responsible management of sand resources.

Implementation Strategies:

- 1. Expand public access and parking. The County shall pursue a detailed County-wide public beach access and parking inventory and identify areas of the County where additional public access and parking could be attained. Opportunistic acquisition of undeveloped shorefront parcels shall be considered to accommodate expansion of public access opportunities in the County. Eligibility for beach management project cost-sharing from both Federal and State agencies is highly dependent upon public access. Although public access to the beach is extensive along the southern one-third of the County shoreline (City of Flagler Beach), only small, isolated beach access and parking areas are available along the northern two-thirds of Flagler County.
- 2. Maximize Federal and State cost-sharing opportunities.
 - Petition FDEP to Reassess Critical Erosion Eligibility (annually)
 - Assess Potential Benefit of New USACE Feasibility Study
- 3. Establish a dedicated local funding source to support a comprehensive beach and dune management program. A local funding source is necessary to access regular funding from State and Federal stakeholders. This local funding source would consider multiple funding strategies that include Tourist Development Tax, Special Assessments and Special Taxing Districts among others.
- **4. Secure** easements along all 18 miles of the County's shoreline. The easement shall allow the County to access private areas within the beach and dune footprint at any time for the purpose of restoring and maintaining the beach and dune. Easements shall be valid for an indefinite period.
- **5. Map** the location, extent, and biological function of the beach / nearshore coquina rock that exists along the northern 7.6 miles of the County's Atlantic Ocean shoreline (R-1 to ~R-43.5).
- **6. Initiate** detailed design investigations to identify the scope of beach nourishment projects north of the existing designed and permitted project areas (R-101-R64.5), which would include R-1 to R-64.5.
- 7. Modify existing beach and dune restoration project permits to expand the sand

placement limit northward to R-43.5 (the southern limit of hardbottom), allowing for beach nourishment from R-43.5 through R-101

- Amend the BOEM lease agreement to increase the amount of sand that will be used from Area 3 to accommodate the expanded project scope.
- 8. Collaborate with the Home Owners' Association Development of Regional Impact DRI in permit modification efforts for the existing dune permits (JCP 0405821-001), or with efforts for a new FDEP Joint Coastal Permit to allow for a larger beach and dune project within the Home Owners' Association DRI shoreline (R-35 to R-47.9). This would include allowing sand placement using sand from offshore borrow area Area 3 along the dune, and/or an expanded project scope that consists of beach and dune restoration. It is anticipated that the offshore sand will need to be stockpiled and mechanically transferred to avoid impacts to hardbottom between R-35 and R-43.5 and this activity will require coordination with BOEM. Additional studies and monitoring would be required for FDEP and USACE Department of Army permits where hardbottom impacts may be unavoidable. Should hardbottom impacts be unavoidable, it is possible that Environmental Impact Study (EIS) will be required.
- 9. Seek a new FDEP Joint Coastal Permit, USACE Department of Army Permit, and BOEM lease agreement to allow a beach and dune restoration project between the northern limit of Varn Park (R-47.9) and Marineland (R-1). It is anticipated that the location and extent of hardbottom will be a significant influence in the project design and permitted project.
- 10. Seek to implement cost-effective construction techniques that include, but may not be limited to, a) hydraulic dredging with direct placement and b) hydraulic dredging with stockpile creation and mechanical placement. The latter will benefit from multiple stockpile areas that reduce the alongshore distance that sand must be transported mechanically between stockpile and placement areas.

References

Olsen Associates, Inc, (2022). "Flagler County Beach Management Study," Planning report prepared for the Flagler County Board of County Commissioners, Olsen Associates, Inc., Jacksonville, FL.