

**BEACH MANAGEMENT PLAN
FEASIBILITY STUDY
CITY OF DEERFIELD BEACH, FL**

OUTLINE

- I. INTRODUCTION
 - a. Regional setting and general beach use
 - b. Comprehensive Plan - Coastal Management Element
- II. STUDY AREA BACKGROUND
 - a. Literature review of available background data, studies, and reports
 - b. History of coastal protection activities in Deerfield Beach
 - c. Public access & parking inventory
 - d. Daily usage rates, lifeguard surveys, beachgoer surveys
 - e. Existing shoreline protection structures and prominent features
 - f. Present (ongoing) shoreline management activities
 - g. Potential sand sources (upland, offshore, inlet)
- III. OBJECTIVES
 - a. Establish scope of the plan (meetings with City staff)
 - b. Stakeholder engagement (public meetings)
 - c. Concerns, issues, visions, awareness, expectations, framework, etc.
 - d. Time-frame for implementation (short, medium, long-term strategies)
 - e. Stated objectives and purpose
- IV. COASTAL PROCESSES ASSESSMENT
 - a. Identify sections for analysis: North, Central, South
 - b. Shoreline and volumes changes by section
 - c. Qualitative analysis of erosion trends by section
 - d. Regional sediment budget and littoral transport analysis
 - e. Sea level rise & coastal flooding
- V. ENVIRONMENTAL SETTING
 - a. Potentially affected listed species in local area (turtles, manatees)
 - b. Nearshore resources (nearshore hardbottom, corals)
 - c. Regulatory allowances and limitations
 - d. Mitigation strategies/opportunities/responsibilities
- VI. STORM VULNERABILITY EVALUATION
 - a. Storm impact history
 - b. Storm modeling analysis (SBEACH or XBEACH)
 - c. Current level of storm protection from different return interval storms
 - d. Alternatives to address future storms (retreat, beach fill, dunes, structures)
 - e. Resiliency considerations for sea level rise, king tides, etc.
 - f. Feasibility assessment of project alternatives

VII. COST ESTIMATE COMPARISONS

- a. Feasible plan components
- b. Sand source cost comparisons
- c. Estimated annual maintenance costs
- d. Potential contingency costs & budgetary reserve
- e. Preliminary budget for engineering, permitting, construction, monitoring

VIII. BENEFITS & PUBLIC INTEREST

- a. Storm protection benefit
- b. Recreational benefit
- c. Economic benefit over short, medium, and long term
- d. Stakeholder input
- e. Beach ownership/easement issues
- f. State statutes and regulatory considerations
- g. Cost-Benefit analysis of most likely plan components

IX. FUNDING OPPORTUNITIES

- a. City, County, State & Federal cost sharing evaluation
- b. Grant eligibility & opportunities
- c. Parking revenue, public access benefit, storm water fee
- d. Special tax/assessment districts, municipal service benefit units, etc.

X. ADDITIONAL CONSIDERATIONS

- a. Public awareness campaign
- b. Beach maintenance (ongoing, post-storm)
- c. Dune plantings
- d. Hurricane preparedness
- e. Inland waterways
- f. Regional projects
- g. New technologies
- h. Long-term planning (~30 years)
- i. Population growth
- j. Tourism theme

XI. BEACH MANAGEMENT PLAN

- a. Overview of beach history and justification for beach management
- b. Summary of feasible strategies and recommended actions
- c. Selected plan components with conceptual designs and cost estimates
- d. Proposed implementation schedule and budget
- e. Recommendations for pursuit of funding
- f. Monitoring program, agency engagement, project planning, etc.
- g. Integration with City's Comprehensive Plan (Coastal Management Element)