

Jeb Bush

Governor

Marjory Stoneman Douglas Building

3900 Commonwealth Boulevard

Tallahassee, Florida 32399-3000

David B. Struhs

Secretary

CONSOLIDATED JOINT COASTAL PERMIT AND INTENT TO GRANT SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE/AUTHORIZED ENTITY:

Lee County

c/o Mr. Stephen J. Boutelle

Lee County Natural Resources Division

1500 Monroe Street

Fort Myers, FL 33902

Permit/Authorization No.: 0174403-001-JC Date of Issue: March 15, 2002

Expiration Date/

Construction Phase: March 15, 2012

County: Lee

Project: Gasparilla Island Beach Restoration

Project

This permit is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62 and 40, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

ACTIVITY DESCRIPTION:

Beach fill will be placed between DNR Reference monuments R-10 and R-26. The primary borrow area for this project covers approximately 90 acres and contains approximately

1.1 million cubic yards of sand. The project will use approximate 920,000 cubic yards of this material. The beach construction profiles will have a seaward slope of 1/10 and a berm width varying between 145 to 215 feet at elevations between 5 feet (NGVD) at the landward end of the berm and 4.2 feet at the seaward end of the berm. A segmented breakwater will be located approximately 325 feet offshore from R-25, and two T-head groins will be constructed in the vicinity of R-26 and approximately halfway between R-25 and R-26, on State Park Property.

The breakwater, will consists of 2 segments with a small gap, and it will be a rubble mound type structure. The total length of the combined breakwater segments is 550 feet with a crest elevation of 3 feet (NGVD). The T-groins are to be constructed of sheet piles with a rock apron in the seaward side of the T-head segments. The length of each T-head is 200 ft having a crest elevation of 2 feet (NGVD). The average size of the rock for the breakwater armor and T-groin aprons is 5 tons and 2 tons respectively. The rock will have a minimum density of 160 lb/ft3 for the breakwater armor and 155 lb/ft3 for the T-groin aprons.

The activity includes consideration of an application for a 10-year sovereign submerged lands public easement containing 23.411 acre or 1,019,783 square feet, more or less for the erosion control structures and 630 acres or 2.744 X10+7 square feet, more or less for the proposed borrow area.

The applicant has also requested a variance (File No. 0174403-002-EV) from Rule 62-

4.244(5)(c), F.A.C., to establish a temporary mixing zone of 2,400 meters along shore and 300 meters shore perpendicular from the point of sand discharge onto the beach disposal area, not to extend into the Gasparilla Sound - Charlotte Harbor Aquatic Preserve.

As mitigation for 0.85 acres of surfzone rock habitat that will be buried by this project, hardbottom substrate will be placed near DEP Reference Monument R-11, directly offshore from the existing natural surfzone hardbottom. The mitigation will be performed within six months after construction of the beach restoration project. The hardbottom substrate will consist of a minimum of 0.9 acres of native limestone boulders placed in water depths ranging from 8.0 to

10.0 feet (NGVD). The boulders will range in size from ¼ to ¾ ton, and the hardbottom relief will be a nominal 1.5 feet. A total area of 0.9 acres of hardbottom substrate will be constructed.

ACTIVITY LOCATION:

The activity is located along and offshore of Gasparilla Island, Lee County, fronting the Gulf of Mexico, Class III Waters, adjacent to Outstanding Florida Waters, Section 02, 11, 14, 23 and 26, Towhship 43 South and Range 20 East.

This permit constitutes a finding of consistency with Florida’s Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act. This permit also constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341. The Department has determined, pursuant to Section

380.0651(3)(e), F.S., that the project is located so that it will not adversely impact Outstanding Florida Waters or Class II waters, and will not contribute to boat traffic in a manner that will adversely impact the manatee.

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and

253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Department has the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter

62-113, F.A.C. In addition to the above, this proprietary authorization has been reviewed in accordance with Chapter 253 and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the activity described above, and has determined that the beach fill activities and hardbottom mitigation area qualify for a consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein.

Therefore, consent is hereby granted, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

As staff to the Board of Trustees, the Department has reviewed the activity described above, and has determined that the borrow area and erosion control structures require a Public Easement for the use of those lands, pursuant to Chapter 253.77, F.S. The Department intends to issue the public easement, subject to the conditions in the previously issued Consolidated Intent to Issue Joint Coastal Permit, Authorization to Use Sovereign Submerged Lands, and Variance.

The final documents required to execute the Public Easement have been sent to the Division of State Lands. The Department intends to issue the Public Easement, upon satisfactory execution of those documents. You may not begin construction of this activity on state- owned, sovereign submerged lands until the Public Easement has been executed to the satisfaction of the Department.

A copy of this authorization has been sent to the U. S. Army Corps of Engineers (USACOE) for review. The USACOE may require a separate permit. Failure to obtain this authorization prior to construction could subject you to enforcement action by that agency. You are hereby advised that authorizations also may be required by other federal, state, and local entities. This authorization does not relieve you of the requirements to obtain all other required permits and authorizations.

The above named permittee is hereby authorized to construct the work shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof. This permit and authorization to use sovereign submerged lands is subject to the limits, conditions, and locations of work shown in the attached drawings, and is also subject to the General Conditions and Specific Conditions, which are a binding part of this permit and authorization. You are advised to read and understand these drawings and conditions prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor also should read and understand these drawings and conditions prior to commencing the authorized activities.

GENERAL CONDITIONS:

1. All activities authorized by this permit shall be implemented as set forth in the plans and specification approved as a part of this permit, and all conditions and requirements of this permit. The permittee shall notify the Department in writing of any anticipated deviation from

the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to section 62B-49.008, Florida Administrative Code.

2. If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

3. This permit does not eliminate the necessity to obtain any other applicable licenses or permits which may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land of Florida seaward of the mean high-water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.

5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.

6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.

7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted activity. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

8. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy

any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

9. At least forty-eight (48) hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.

10. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the State Historic Preservation Officer and the Bureau of Beaches and Coastal Systems.

11. Within 30 days after completion of construction or completion of an subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specification, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on two copies of as-built drawings submitted to the Department.

12. The Department shall require additional permit conditions based on sites specific circumstances to insure compliance with the provision of this Chapter. Any such additional conditions will be specified in the Intent to Issue.

SPECIFIC CONDITIONS:

1. The terms, conditions, and provisions of the required public easement shall be met.

Construction of this activity shall not commence on sovereign submerged lands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all public easement documents have been executed to the satisfaction of the Department.

2. No work shall be conducted under this permit for the initial dredging or subsequent maintenance dredging events until the permittee has received a written notice to proceed from the Department. Prior to the issuance of the notice to proceed, the permittee shall

submit two copies of detailed final construction plans and specifications for all authorized activities, certified by an engineer duly registered pursuant to Chapter 471, Florida Statutes, or other appropriate individual. The plans shall include details of construction, including general construction procedures and equipment to be used.

3. The permittee shall conduct a monitoring program to assess the effects of the excavation of the ebb shoal borrow area and construction of the erosion control structures on erosion and accretion patterns within the fill placement area and adjacent shorelines and on the inlet littoral system in order to identify any adverse impacts attributable to the construction authorized by this permit.

4. Prior to issuance of a notice to proceed, the permittee shall submit a detailed monitoring plan. The plan shall specify aerial photography and the collection of topographic and bathymetric survey data sufficient to calculate annual shoreline position and volumetric changes in the project area and along the adjacent shorelines fronting Boca Grande Pass and Charlotte Harbor, the ebb shoal system of Boca Grande Pass and along the gulf shoreline of Cayo Costa from the inlet to Johnson Shoal. The plan shall describe the specific data is to be collected, the time period for data collection, the analysis to be conducted, and the print and electronic format in which the results are to be reported. A pre-construction survey shall be conducted followed by annual post-construction surveys for a period of five years, at which time the Department will determine the necessity for continued monitoring. Aerial photography shall be conducted concurrently with each survey. The permittee shall submit a monitoring report within 90 days of completion of each post-construction survey.

5. Prior to issuance of a notice to proceed, the permittee shall submit a contingency plan to mitigate any significant erosion to the downdrift Gasparilla Island shoreline attributable to the erosion control structures or to the Cayo Costa shoreline attributable to the excavation of the ebb shoal borrow area as identified in the monitoring reports. The contingency plan shall identify the specific shoreline changes and conditions by which the permitted activities will be deemed to have caused adverse impacts that trigger mitigation by the permittee. Corrective actions shall include the placement of beach fill material sufficient to restore and maintain the impacted shoreline through the next monitoring period and/or adjustment of the erosion control structures to alleviate the impacts to the impacted shoreline.

6. Prior to issuance of a notice to proceed, the permittee shall submit plans and specifications for the installation of signage to mark the erosion control structures in accordance with Section 327.40, F.S., for navigation and boating safety. In addition, signage shall be provided along the shoreline adjacent to the breakwaters and groins to warn recreational beach users of hazardous conditions to swimmers in the immediate vicinity of the structures. The permittee or their assignee approved by the Department shall maintain the signage in perpetuity unless the structures are removed.

7. Prior to construction of the beach restoration project, the permittee shall establish an erosion control line as follows. The line of mean high water for the area to be restored shall be determined, to the standards of the Department's Division of State Lands, to establish the boundary line between sovereignty lands of the state bordering on the Gulf of Mexico and the upland property. Within ninety (90) days from being notified of its acceptability by the Department's Division of State Lands, this mean high water determination shall be recorded in the public records of Lee County, Florida. A copy of the recorded mean high water determination shall be sent to the Department within 5 days of recording.

8. The permittee shall conduct a pre-construction conference with all contractors, the engineer of record, the FWC, the marine turtle permit holder, and a staff representative of the Department to establish an understanding among the parties as to the items specified in the special and standard conditions of the permit. The pre-construction conference

will be held at least 30 days prior to construction activities. The permittee shall provide a minimum of 10 days advance written notification to the following offices advising of the date, time and location of the pre-construction conference:

DEP, Office of Beaches and Coastal Systems DEP, South District Office

Mail Station 300 2295 Victoria Ave, #364

3900 Commonwealth Boulevard Ft. Myers, Florida 33901-3881

Tallahassee, Florida 32399-3000 (941) 332-6975 phone: (850) 487-4471 Fax (941) 332-6969 fax: (850) 488-5257

FWCC, Bureau of Protected Species

Management

620 South Meridian Street Mote Marine Laboratory Tallahassee, Florida 32399-1600 1600 Ken Thompson Parkway phone: (850) 922-4330 Sarasota, Florida 34236

9. During all dredging operations the permittee shall require the dredging contractor to have electronic positioning equipment that continuously measures the vertical and horizontal location of the cutterhead, at all times during operations. The horizontal positioning equipment shall be installed on the dredge so as to monitor the actual location of the dredge equipment and be interfaced with the depth monitoring device. This equipment shall provide a permanent record of the equipment's position referenced to State Plane Coordinates and NGVD. As a part of the final report the permittee shall provide a daily record of the position of the dredge equipment which includes the dredge area limits with actual and maximum authorized dredge depth referenced to state plane coordinates and NGVD. Vertical and horizontal accuracy of the positioning equipment shall also be

reported.

10. The permittee will immediately report to the Office of Beaches and Coastal Systems in Tallahassee any damage to natural hardbottom reefs located outside the project area, which can reasonably be attributed to the project.

11. Per the attached “Gasparilla Island Beach Nourishment Project – Hardbottom Mitigation and Monitoring Plan”, the permittee will place hardbottom substrate near DEP Reference Monument R-11, directly offshore from the existing natural surfzone hardbottom being impacted by the beach project. The mitigation will be performed within six months after construction of the beach restoration project. The hardbottom substrate will consist of a minimum of 0.9 acres of native limestone boulders placed in water depths ranging from

8.0 to 10.0 feet (NGVD). The boulders will range in size from ¼ to ¾ ton, and the hardbottom relief will be a nominal 1.5 feet. Because the existing natural sufzone hardbottom exhibits a “patchy” configuration, four (4) individual mitigation areas will be constructed in close proximity to each other, to create the combined total area of 0.9

acres of substrate.

12. Per the attached mitigation and monitoring plan, and as modified below, the mitigation reef shall be monitored in the following manner:

a. A detailed post construction hydrographic survey and report will be performed. The report will document the acreage of exposed artificial reef.

b. A one year biological survey and report listing epibenthic species present on each of ten quadrates and the density of colonization will be performed.

c. A follow up survey to be conducted prior to the first renourishment. The follow-up surveys will consist of a repeat of 1 and 2 above. The results of the final survey will be submitted with the construction plans for the renourishment.

13. Although, the mitigation reef may become temporarily buried by seasonal sediment fluctuations, a persistent 0.9 acre reef shall be required. Therefore, a prolonged duration of burial, i.e., more than a year, shall require corrective action by the applicant. If seasonal burial occurs, and the full 0.9 acre reef is not exposed within a year, or if subsidence permanently reduces the acreage of exposed reef, the permittee shall submit a plan for corrective action. The plan shall describe the cause of burial or subsidence, propose additional mitigation to reestablish and maintain the required acreage of artificial reef, and include a request for any necessary permit modification. The plan for corrective action shall be submitted to the Department within three months following the survey

that revealed the problem. Once approved by the Department, the permittee shall implement the plan within six months.

The following conditions are required to minimize impacts to marine turtles:

14. Construction-related activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) during the nesting season under the following conditions.

a. A daily marine turtle nest survey of the nesting beach in the vicinity of the project (including areas of beach access) shall be conducted starting April 15 and continue until October 31. Only those nests that may be affected by construction activities shall be relocated. Nests requiring relocation shall be moved no later than 9 a.m. the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests. Nests deposited within areas where construction

activities have ceased or will not occur for 65 days shall be marked and left in place unless other factors threaten the success of the nest. Such nests will be marked and the actual location of the clutch determined. A circle with a radius of ten (10) feet, centered at the clutch, shall be marked by stake and survey tape or string. No construction activities shall enter this circle and no adjacent construction shall be allowed which might directly or indirectly disturb the area within the staked circle.

b. Except within the immediate vicinity of the dredge pipeline discharge where hydraulic filling, grading, and temporary lateral dike construction will be a 24 hour per day activities, no construction activity may commence until completion of the marine turtle survey each day.

c. It is the responsibility of the permittee to ensure that the project area and access sites are surveyed for marine turtle nesting activity. All nesting surveys, nest relocations screening or caging activities etc. shall be conducted only by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by the Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code 68E-1.

15. From April 15 through October 31, staging areas for construction equipment shall be located off the beach. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities.

16. Immediately after completion of the each fill placement event and prior to April 15 for 3 subsequent years if placed sand still remains on the beach, the beach shall be tilled as described below. During the 3 years following each fill placement event, the permittee may measure sand compaction in the area of restoration in accordance with a protocol agreed to by the FWC, the Department, the U.S. Fish & Wildlife Service, and the applicant to determine if tilling is necessary. At a minimum, the protocol provided under a and b below shall be followed. If required, the area shall be tilled to a depth of 24

inches. All tilling activity must be completed prior to May 1. If the project is completed during the nesting season, tilling shall not occur in areas where nests have been left in place or relocated unless authorized by the U.S. Fish and Wildlife Service in an Incidental Take Statement. A report on the results of compaction monitoring shall be

submitted to the FWC and a copy sent to the Department prior to any tilling actions being taken. If compaction surveys are conducted, an annual summary of compaction surveys and the actions taken shall be submitted to the FWC and a copy sent to the Department. This condition shall be evaluated annually and may be modified if necessary to address sand compaction problems identified during the previous year.

a. Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area) and one station shall be midway between the dune line and the high water line (normal wrack line).

b. At each station, the cone penetrometer shall be pushed to a depth of 6, 12, and 18 inches three times (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lay over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final

6 averaged compaction values.

c. If the average value for any depth exceeds 500 psi for any two or more adjacent stations, then that area shall be tilled prior to April 15. If values exceeding 500 psi are distributed throughout the project area but in no case do those values exist at two adjacent stations at the same depth, then consultation with the FWC shall be required to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling shall not be required.

17. Visual surveys for escarpments along the project area shall be made immediately after completion of the beach nourishment project and prior to April 15 for 3 subsequent years. Results of the surveys shall be submitted to the FWC and the Department prior to any action being taken. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet shall be leveled to the natural beach contour by April 15. If the project is completed during the sea turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. The FWC shall be contacted immediately if subsequent reformation of escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet occurs during the nesting and hatching season to determine the appropriate action to be taken. The FWC will determine if escarpment leveling is required. If it is determined that escarpment leveling is required during the

nesting or hatching season, the FWC will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken shall be submitted to the FWC and a copy sent to the Department.

18. From April 15 through October 31, all project lighting shall be limited to the immediate area of active construction only and shall be the minimal lighting necessary to comply with U.S. Coast Guard and/or OSHA requirements (Figure 1). Stationary lighting on the beach and all lighting on the dredge shall be minimized through reduction, shielding, lowering, and appropriate placement of lights to minimize illumination of the nesting beach and water. Lighting on offshore equipment shall be minimized through reduction, shielding lowering, and appropriate placement of lights to avoid excessive illumination of the water, while meeting all U.S. Coast Guard and OSHA requirements.

19. The applicant shall arrange a meeting between representatives of the contractor, the Department, the FWC, and the permitted person responsible for egg relocation at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures.

20. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of three additional nesting seasons shall be provided for the nourished and adjacent beaches on Gasparilla Island. Due to the potential impact of shoal excavation and the erosion control structures on the downdrift beach, nesting activity shall also be monitored on Cayo Costa for two nesting seasons following shoal excavation. Monitoring of nesting activity shall include daily surveys and any additional measures authorized by the FWC. Reports submitted shall include daily report sheets noting all

activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any), dates of construction and names

of all personnel involved in nest surveys and relocation activities. Data should be reported separately for filled areas and nonfilled areas in accordance with the attached Table. All reports should submitted by January 15 of the following year.

21. In the event a sea turtle nest is excavated during construction activities, all work shall cease in that area immediately and the permitted person responsible for egg relocation for the project should be notified so the eggs can be moved to a suitable relocation site.

a. Upon locating a dead, injured, or sick endangered or threatened sea turtle specimen, initial notification must be made to the FWC at 1-888-404-FWCC. Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials

from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. The FWC shall provide direction as to the handling of any specimen prior to the FWC taking custody of the specimen.

22. Prior to initiating construction of either the nearshore breakwater or the t-head groins, the permittee shall receive authorization from the U.S. Fish & Wildlife Service for incidental take due to these structures. All terms and conditions included in the FWS’s revised Incidental Take Authorization and Biological Opinion shall be incorporated into this permit through a minor modification. Any monitoring plans or experimental designs for marine turtles developed as part of the Incidental Take authorization shall also be incorporated into this permit through a minor modification.

Table 1

Marine Turtle Monitoring for Beach Restoration Projects

The following monitoring is required for beach restoration projects. Reports summarizing the nesting should be submitted to the Tequesta office with a copy to the Tallahassee office and to the Department by January 15 of the subsequent year. Data for nesting activity on filled and nonfilled areas should be reported separately, and should include numbers of nests lost to erosion or washed out.

|  |  |  |  |
| --- | --- | --- | --- |
| Characteristic | Parameter | Measurement | Variable |
| Nesting  Success | False crawls -  number | Visual assessment of all false  crawls | Number and location of false crawls  in fill areas, groin areas, and nonfill areas: any interaction of the turtle with obstructions, such as groins, seawalls, or scarps, should be noted. |
|  | False crawl -  type | Categorization of the stage at  which nesting was abandoned | Number in each of the following  categories: emergence-no digging, preliminary body pit, abandoned egg chamber |
|  | Nests | Number | The number of marine turtle nests in  filled and nonfilled areas should be noted. If possible, the location of all marine turtle nests shall be marked on map of project, and approximate distance to the groins, sea walls or scarps measured using a meter tape (optional). Any abnormal cavity morphologies should be reported as  well as whether turtle touched groins, seawalls, or scarps during nest excavation |
|  |  | Lost Nests | The number of nests lost to  inundation, erosion or the number with lost markers that could not be found |
| Reproductive  Success | Emergence  & hatching | Standard survey protocol | Numbers of the following: unhatched  eggs, depredated nests and eggs, live |

|  |  |  |  |
| --- | --- | --- | --- |
|  | success |  | pipped eggs, dead pipped eggs, live  hatchlings in nest, dead hatchlings in nest, hatchlings emerged, disoriented hatchlings, depredated hatchlings |

MONITORING REQUIRED:

Parameter: Turbidity – Nephelometric Turbidity Units (NTUs)

Borrow Site:

Frequency: Once a day, midway through the dredging operation.

Background: At least 500 meters from the dredge in the opposite direction of the prevailing current flow, clearly outside the influence of any turbid plume. Samples shall be collected 1 meter above the bottom.

Compliance: No more than 150 meters from the dredge or at the boundary of the Aquatic Preserve (whichever is closer to the point of discharge) down current from the dredge, in the densest portion of any visible turbidity plume. Samples shall be collected from 1 meter above the bottom.

Beach Fill Site:

Frequency: Twice daily (at least 4 hours apart) while the hydraulic dredge discharges on the beach or upland sand is placed/graded on the beach within the surf zone.

Background: At least 500 meters up current from the point where discharge water is re-entering waters of the State (discharge point) or where upland sand is placed/graded into the surf zone, clearly outside of the influence of any turbid plume. Samples shall be collected 1 meter above the bottom, at the same distance offshore as the compliance station.

Compliance: No more than 2,400 meters down current and no more than 300 meters off shore, or at the boundary of the Aquatic Preserve, or at the boundary of the mitigation reef (located approximately 240 meters offshore from the range light near DEP Reference Marker R-17), whichever is closer to the point of discharge, down current from the discharge point or where upland sand is placed/graded into the surf zone, in the densest portion of any visible turbidity plume. The sample shall be collected from 1 meter above the bottom.

The compliance locations given above shall be considered the limits of the mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the compliance sites to be greater than 29 NTUs (or if a turbidity plume from this project extends into the Aquatic Preserve, causing turbidity to be elevated) above the associated background turbidity

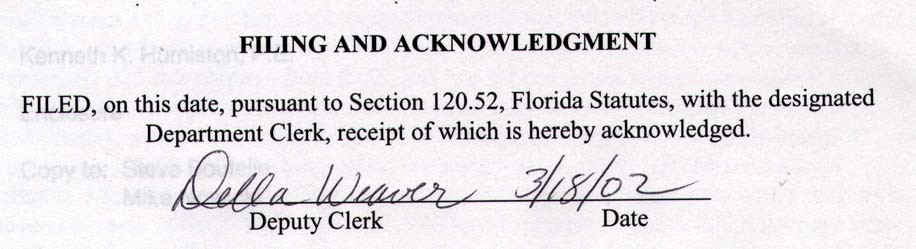
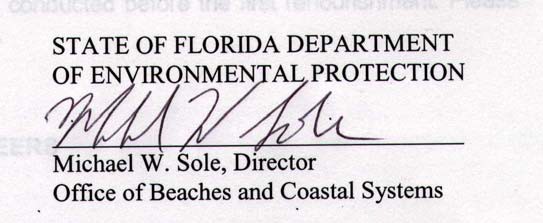
levels, construction activities shall cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

Copies of all reports shall be submitted to the Office of Beaches and Coastal Systems in Tallahassee on a weekly basis within seven days of collection. The data shall be submitted under a cover letter containing the following information: (1) permit number; (2) a statement

describing the methods used in collection, handling, storage and analysis of the samples; (3) a map indicating the sampling locations; and (4) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data. Monitoring reports shall also include the following information for each sample that is taken: a) time of day samples taken; b) depth of water body;

c) depth of sample; d) antecedent weather conditions; e) tidal stage and direction of flow; f) wind directions and velocity, and g) wave height.

Executed in Tallahassee, Florida.



Prepared by Michael C. Corrigan. Hardbottom mitigation Plan attached.