

**The post construction requirements in this document only apply to Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin Counties.**

Post construction requirements are subject to congressional authorization and the allocation of funds. If the Corps or Applicant cannot fulfill these Reasonable and Prudent Measures, the Corps must reinitiate consultation.

Reporting Requirements for projects that include sand placement from beach nourishment, sand bypass, and sand back pass activities for shore protection:

Sea Turtle Protection:

A9. Daily early morning surveys for sea turtles shall be required as outlined in Table 1. If nests are constructed in the area of sand placement, the eggs shall be relocated to minimize sea turtle nest burial, crushing of eggs, or nest excavation as outlined:

For sand placement projects in Franklin, Gulf, Bay, Walton, Okaloosa, Santa Rosa, and Escambia Counties that occur during the period from May 1 through October 31, daily early morning (before 9 a.m.) surveys and egg relocation shall be conducted. If nests are laid in areas where they may be affected by construction activities, eggs shall be relocated per the requirements listed in (a)i through (a)iii (see nest relocation exceptions for Franklin and Gulf Counties).

i. Nesting surveys and egg relocations will only be conducted by persons with prior experience and training in these activities and who are duly authorized to conduct such activities through a valid permit issued by Florida Fish and Wildlife Commission (FWC), pursuant to FAC 68E-1. Please contact FWC's Imperiled Species Management Section in Tequesta at (561) 575-5407 for information on the permit holder in the project area. Nesting surveys shall be conducted daily between sunrise and 9:00 a.m.

ii. Only those nests that may be affected by sand placement activities will be relocated. Nest relocation shall not occur upon completion of the project. Nests requiring relocation shall be moved no later than 9 am the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. Relocated nests shall not be placed in organized groupings. Relocated nests shall be randomly staggered along the length and width of the beach in settings that are not expected to experience daily inundation by high tides or known to routinely experience severe erosion and egg loss, predation, or subject to artificial lighting. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests.

iii. Nest deposited within areas where construction activities have ceased or will not occur for 65 days or nests laid in the nourished berm prior to tilling shall be marked and left in situ unless other factors threaten the success of the nest. The turtle permit holder shall install an on-beach marker at the nest site and a secondary marker at a point as far landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. No activity will occur within this area nor will any activities

occur that could result in impacts to the nest. Nest sites shall be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the project activity.

For St. Joseph Peninsula State Park, St. Joseph peninsula, and Cape San Blas in Gulf County, and St. George Island in Franklin County, sand placement activities shall not occur from June 1 through September 30, the periods of peak sea turtle egg laying and egg hatching for this area. If nests are laid between May 1 and May 31 in areas where they may be affected by construction activities, eggs shall be relocated per the requirements listed in (a)i through (a)iii.

Table 1: Beach Sand Placement and Sea Turtle Nest Monitoring/ Relocation Windows

Region	Nest Laying Season	Hatchling Season Ends	Beach Placement Window	Nesting Season Monitoring and Relocation
Gulf County (St. Joseph Peninsula State Park, St. Joseph peninsula, and Cape San Blas), and Franklin County (St. George Island)	1 May – 4 September	15 November	1 Oct – 31 May	1 May – 15 September
All other beaches in Gulf and Franklin Counties, and Escambia, Santa Rosa, Okaloosa, Walton, and Bay Counties	11 May – 5 September	15 November	All Year	1 May – 31 August

A10. Daily nesting surveys shall be conducted for two nesting seasons in accordance with the FWC’s Statewide Nesting Beach Survey Protocol by the Corps or the Applicant following construction if placement still remains on the beach. Post construction year-one surveys shall record the number of nests, nesting success, reproductive success, and lost nests due to erosion and/ or inundation. Post construction year-two surveys shall only need to record nest numbers and nesting success. This information will be used to periodically assess the cumulative effects of these projects on sea turtle nesting and hatchling production and monitor suitability of post construction beaches for nesting.

A11. Two surveys shall be conducted of all lighting visible from the beach placement area by the Applicant or Corps, using standard techniques for such a survey, in the year following construction. The first survey shall be conducted between May 1 and May 15 and a brief summary provided to the Service. The second survey shall be conducted between July 15 and August 1. A summary report of the surveys, including any actions taken, shall be submitted to the Service by December 1 of the year in which surveys are conducted. After the annual report is completed, a meeting shall be set up with the Applicant, county or municipality, FWC, Corps, and the Service to discuss the survey report, as well as any documented sea turtle disorientations in or adjacent to the project area. If the project is completed during the nesting season and prior to May 1, the Corps may conduct the lighting surveys during the year of construction.

A12. Sand compaction shall be monitored in the area of sand placement immediately after completion of the project and prior to April 15 for 3 subsequent years. If tilling is needed, the

area shall be tilled to a depth of 36 inches. Each pass of the tilling equipment shall be overlapped to allow more thorough and even tilling. All tilling activity shall be completed at least once prior to the nesting season. An electronic copy of the results of the compaction monitoring shall be submitted to the Panama City Field Office prior to any tilling actions being taken or if a request not to till is made based on compaction results. The requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post construction compaction levels. Additionally, out-year compaction monitoring and remediation are not required if placed material no longer remains on the dry beach.

(NOTE: If tilling occurs during shorebird nesting season (February 15-August 31), shorebird surveys prior to tilling are required per the Migratory Bird Treaty Act; see [http://myfwc.com/docs/Conservation/FBCI\\_BNB\\_SeaTurtleMonitors.pdf](http://myfwc.com/docs/Conservation/FBCI_BNB_SeaTurtleMonitors.pdf))

- a. Compaction sampling stations must be located at 500-foot intervals along the sand placement template. One station must be at the seaward edge of the dune/bulkhead line (when material is placed in this area), and one station must be midway between the dune line and the high water line (normal wrack line).
- b. At each station, the cone penetrometer must 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 lie over less compact layers. Replicates must be located as close to each other as possible, without interacting with the previous hole or disturbed sediments. The three replicate compaction values for each depth must be averaged to produce final values for each depth at each station. Reports will include all 18 values for each transect line, and the final six averaged compaction values.
- c. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area must be tilled immediately prior to April 15.
- d. 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 Service will be required to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling will not be required.
- e. Tilling must occur landward of the wrack line and avoid all vegetated areas 3 square feet or greater with a 3 square foot buffer around the vegetated areas.

A13. Visual surveys for escarpments along the project area must be made immediately after completion of the sand placement and within 30 days prior to the start dates for Nesting Season Monitoring in Table 1 (above) for 3 subsequent years if sand in the project area still remains on the dry beach.

Escarpmnts that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet must be leveled and the beach profile must be reconfigured to minimize scarp formation by the dates listed above. Any escarpment removal must be reported by location. If the project is completed during the early part of the sea turtle nesting and hatching season (March 1 through April 30), escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. The Service must 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. If it is determined that escarpment leveling is required during the nesting or hatching season, the Service or FWC will provide a brief written authorization within 30 days that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken must be submitted to the Panama City Field Office.

22. An excel sheet with the information listed below shall be submitted to the Service by July 31 of the following year of construction. The excel sheet shall be available on the Service's website.

Information to include in the report following the project completion

All Projects	Project location (include Florida DEP R- monuments and latitude and longitude coordinates)
	Project description (include linear feet of beach, actual fill template, access points, and borrow areas)
	Dates of actual construction activities
	Names and qualifications of personnel involved in sea turtle nesting surveys and relocation activities (separate the nests surveys for nourishment and non-nourished areas)
	Descriptions and locations of self-releases beach sites
	Sand compaction, escarpment formation, and lighting survey results by project shall be reported as listed in the Terms and Conditions by December 31 to the Florida Fish and Wildlife Conservation Commission and the Service (Panama City Ecological Field Office)
Beach mice	Acreage of new or widened access areas affected in beach mouse habitat
	Vegetation completed for new or widened access areas
	Success rate of vegetation of restoration

A report with the following listed information shall be submitted to the Service by the Corps by December 31 of the year following construction.

Sea Turtle monitoring following sand placement activity

CHARACTERISTIC	PARAMETER	MEASUREMENT	VARIABLE
Nesting Success	False Crawls - number	Visual assessment of all false crawls	Number and location of false crawls in nourished areas and non-nourished areas; any interactions of the turtles with obstructions, such as groins, seawalls, or scarps, should be noted.
	False Crawls - type	Categorization of the stage at which nesting was abandoned	Number in each of the following categories: emergency – no digging, preliminary body pit, abandoned egg chamber.
	Nests	Number	The number of sea turtle nests in nourished and non-nourished areas should be noted. If possible, the location of all sea turtle nests shall be marked on a project map, and approximate distance to seawalls or scarps measured in meters. 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 or erosion of the number with lost markers
	Nests	Relocated Nests	The number of nests relocated and relocation area on a map of the areas. The number of successfully hatched eggs per relocated nest.
	Lighting Impacts	Disoriented sea turtles	The number of disoriented hatchlings and adults shall be documented and reported in accordance with existing FWC protocol for disorientation events.