

HABITAT CONSERVATION PLAN

EXECUTIVE SUMMARY

Section 161, Florida Statutes, and Chapter 62B-33, Florida Administrative Code, set forth the rules and regulations governing the issuance of permits for shoreline protection activities along Florida's coastline. Under these guidelines, Indian River County has been delegated authority to authorize emergency shoreline protection measures to protect eligible and vulnerable private property and public infrastructure from acute erosion caused by storms that have been declared an emergency. IRC issued its first Emergency Permit in 1996, and a total of six permits, encompassing 20 upland structures and 1,675 feet of beach, have been issued since then.

Two shoreline protection structures installed under Emergency Permits issued by Indian River County led to legal challenges alleging that activities authorized by the County were inconsistent with State rules and regulations and that the structures were causing unauthorized "take" of sea turtles. As a result of these challenges, the County, the Florida Department of Environmental Protection (FDEP), the Caribbean Conservation Corporation (CCC), and the owners of the structures involved (the Summerplace and Gerstner Petitioners) entered into an Interim Agreement. The Interim Agreement constrained all parties from further legal action while the County prepared a Habitat Conservation Plan (HCP) and applied to the U.S. Fish and Wildlife Service (USFWS) for a Section 10 Incidental Take Permit.

Take of any federally listed species of plants and animals is prohibited under the Endangered Species Act (ESA) of 1973, as amended, unless specifically authorized through a Section 10 Incidental Take Permit (ITP). Take, as defined by the ESA involves both direct injury or harm to listed species, as well as indirect impacts, such as modification of habitat that could affect an animal's breeding or feeding behavior or eliminate requisite shelter.

Indian River County is applying to the USFWS for a Section 10 ITP that will authorize the take of five species of sea turtles nesting on County Beaches causally related to shoreline protection measures initiated under the County's emergency authorization. The ITP will be in effect for a 30-year period, which corresponds to the time frame during which the County will implement its Beach Preservation Plan.

This HCP is a mandatory element of the County's ITP application. It: (a) describes the geographical boundaries of the Plan Area, (b) characterizes the social, economic and environmental conditions along the County's coastline, (c) identifies natural and human factors potentially affecting sea turtles on County Beaches, (d) describes measures that will be undertaken to minimize impacts to sea turtles during emergency shoreline protection activities, and (e) proposes mitigative measures to offset unavoidable take.

To receive an Emergency Shoreline Protection Permit from Indian River County, a beachfront property owner must be able to demonstrate that his/her habitable structure was constructed prior to current Coastal Construction Control Line (CCCL) regulations

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and is vulnerable to erosion as a result of a storm event for which a State or local declaration of emergency has been adopted. A structure is considered vulnerable if its foundation is undermined or if the dune escarpment is within 20 feet of its seaward most edge.

Following the passage of the storm event, the property owner has 10 business days to make formal application to the County for an Emergency Permit. Upon issuance of an Emergency Permit, the property owner then has a total of 60 days to complete authorized shoreline protection activities. Any structures erected through an Emergency Permit must be removed within 60 days of installation, unless the property owner has submitted a complete application to FDEP to either retain the temporary structure as a permanent structure or install alternative protection. If an application is submitted to FDEP within the allotted time frame, the temporary structure can remain in place until FDEP makes a determination as to the disposition of the permit application. The County will enter into a Memorandum of Agreement with FDEP to formalize the relationship of the two permitting processes.

Any take resulting from the implementation of shoreline protection measures initiated under an Emergency Permit issued by Indian River County will be authorized by the USFWS pursuant to the terms and conditions of the ITP. In addition to future shoreline protection measures authorized by the County, the Summerplace and Gerstner Petitioners will be eligible for FDEP permits for the retention of their temporary structures as permanent structures at their current locations pursuant to the terms and conditions of the Interim Agreement and the ITP. Any future take resulting from the Petitioner's armoring structures will be covered from the date of ITP issuance.

The following types of emergency shoreline protection measures are authorized under the HCP:

- ▶ Placement of beach-compatible fill from upland sources on the beach;
- ▶ Creation of a temporary barrier using sand bags and/or geo-textile (fabric) tubes filled with sand;
- ▶ Shoring up (reinforcing) foundations; and
- ▶ Installation of temporary wooden retaining walls, cantilever sheetpile walls or similar structures seaward of the vulnerable structure.

The County's Coastal Engineer will make a determination as to the most appropriate protective measure(s) for each vulnerable structure based on site-specific conditions. The goal of the HCP is to provide effective temporary protection for the vulnerable structure while minimizing impacts to sea turtle nesting habitat and the coastal system. Any physical structures placed on the beach as the result of an Emergency Permit issued by Indian River County shall be designed and sited to minimize excavation of the beach and frontal dune and impacts to native vegetation, sea turtle habitat, and adjacent beachfront properties. These temporary structures must also be designed and sited to facilitate their removal.

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Temporary structures shall be sited at or landward of the dune escarpment and as close to the vulnerable structure as practicable to provide adequate protection. In no case may the armoring structure be sited farther than 20 feet from the seaward most edge of the vulnerable structure.

Alternatives to the County's proposed emergency shoreline protection program were evaluated and rejected, because they were impractical, cost prohibitive, and/or would devalue the County's tax base. In conjunction with planned beach nourishment projects identified in the County's Beach Preservation Plan, the shoreline protection measures authorized under this HCP will provide coastal residents with an effective method of responding to emergency erosion events in a manner and extent compatible with the protection of sea turtles.

Minimization of impacts resulting from shoreline protection activities authorized under the ITP shall be achieved through the following:

- ▶ Development and distribution of a public awareness brochure describing the dynamic nature of the coastline, identifying areas of critical erosion, and providing information on beach management issues related to shoreline protection in Indian River County;
- ▶ Establishment of specific conditions under which Emergency Permits will be issued;
- ▶ Regulation of the type and siting of temporary structures;
- ▶ Requirements for sea turtle monitoring and nest protection during implementation of shoreline protection measures authorized by the ITP; and
- ▶ Implementation of a Memorandum of Agreement with FDEP to coordinate local and State permitting activities to ensure compliance with State rules and regulations governing shoreline protection activities.

The biological goal of the HCP is to increase the productivity of the County's beaches as sea turtle nesting habitat. This requires systematic monitoring of the County's shoreline to identify natural and human factors negatively affecting the sea turtle reproductive cycle. To achieve this goal, the County will coordinate the monitoring activities of the various groups currently monitoring sea turtle nesting activity in Indian River County. This will be accomplished by standardizing data collection techniques, providing limited logistical support, maintaining a Countywide sea turtle database, and conducting annual HCP program evaluations. Additionally, to ensure complete coverage, the County will be responsible for conducting sea turtle monitoring along approximately five miles of coastline where no current monitoring program is in place. The County may also assume responsibilities of other entities currently monitoring County Beaches if it is deemed mutually beneficial to do so.

As mitigation for unavoidable impacts to sea turtles resulting from shoreline protection measures initiated under the County's emergency authorization, the County has proposed the following:

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- ▶ Previous acquisition of the Jungle Trail Conservation Area (CARL property) as a means of preserving sea turtle habitat;
- ▶ Development and implementation of a Predator Control Plan for non-federal lands within the Archie Carr National Wildlife Refuge; and
- ▶ A proactive light management program for unincorporated portions of the County.

During the 30 years that the ITP is in effect it is projected that 31 structures encompassing 3,196 feet of shoreline will be eligible for Emergency Permits. Changes in the quality of nesting habitat resulting from the installation of permanent armoring structures at these locations could result in the displacement of 1,150 loggerhead, 56 green, and 3 leatherback turtle nests over the life of the ITP. Collectively, the mitigation identified above is estimated to save a total 4,905 loggerhead, 231 green, and 11 leatherback turtle nests from predators, artificial beachfront lighting, and human disturbances on the beach. Thus, the County proposes to mitigate the destruction and/or displacement of turtle nests caused by emergency shoreline protection activities at the ratio of about 4:1.

The County will fund the programs described above with monies derived from its Beach Preservation Fund. No Emergency Permits may be issued by the County pursuant to this HCP until sufficient resources are in place to comply with the terms and conditions of the ITP.

The County will meet annually with the USFWS to review HCP performance and discuss the County's monitoring program during the first three years that the ITP is in effect and periodically thereafter. The HCP is intended to be a dynamic document. Adjustments to monitoring, minimization, and mitigation programs will be made, as needed, to ensure that the biological goals of the HCP are achieved.