

CHAPTER 9 – ALTERNATIVES ANALYSIS

Introduction

FDEP is seeking Federal authorization under section 10(a)(1)(B) of the ESA for the incidental take of five species of sea turtles, five sub-species of beach mice, and the piping plover causally related to activities permitted under the CCCL program. Federal take authorization is also being requested for several other species should they become federally listed over the term of the ITP (Chapter 5).

The actions proposed herein by the FDEP to minimize and mitigate take of covered species to the maximum extent practicable will result in a net conservation benefit to those species and will also provide a number of tangible benefits to both the FDEP and to CCCL program stakeholders. Nevertheless, the FDEP is obligated under the National Environmental Policy Act (NEPA) process to consider alternatives to the proposed action and to assess their potential impacts to the human environment. This does not require an evaluation of every possible alternative, as there are nearly an infinite number of iterations to the myriad programs and policies proposed in the FBHCP, but rather consideration of a suite of alternative actions that broadly encompasses the range of options available to the FDEP. Four alternatives to the proposed action are discussed in this analysis. None effectively resolve the conflict between current management of traditional coastal zone activities and compliance with the ESA. Alternatives to the proposed action would likely place substantial burdens on coastal property owners and local governments, and most are impractical.

Proposed Action (Preferred Alternative)

The proposed action consists of all of the programs, policies, and measures described in this HCP that the FDEP will implement as part of its CCCL program to avoid, minimize, and mitigate incidental take of covered species. The proposed action is the Preferred Alternative, because it will result in a net conservation benefit to covered species, allow the FDEP to administer the CCCL program in full compliance with the ESA, ensure a unified approach to the protection of Florida’s beach-dune system, and provide CCCL program stakeholders with a number of tangible benefits, as described below.

Section 161.053, F.S., establishes the CCCL program and mandates that in those counties where a CCCL has been established, “no person, firm, corporation, or governmental agency shall construct any structure whatsoever seaward thereof, make any excavation, remove any beach material, or otherwise alter existing ground elevation, drive any vehicle on, over, or across any sand dune, or damage or cause to be damaged such sand dune or the vegetation growing thereon” without first obtaining a CCCL permit. The CCCL program imparts order and consistency upon development and associated activities throughout the state’s coastal zone to meet the intent of the Dennis L. Jones Beach and Shore Preservation Act (Part I, Chapter 161, F.S.), namely the protection of sandy beaches and adjacent coastal dunes from “imprudent construction which can jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, or

interfere with public beach access.” The numerous and varied types of activities permitted under the CCCL program are described in Chapter 4.

The FBHCP describes potential threats (direct, indirect, and cumulative) to covered species associated with CCCL activities (Chapter 7), the actions the FDEP will implement to avoid and minimize impacts to the greatest extent practicable (Chapter 10), and those actions the FDEP will undertake to mitigate unavoidable impacts (Chapter 11). Under the Preferred Alternative, the FDEP will consider potential impacts to all federally listed species, not just sea turtles, when issuing CCCL permits. The minimization and mitigation measures proposed by the FDEP will collectively result in a net conservation benefit to all covered species, as well as other natural resources within the Plan Area, and thereby achieve the biological goal of the FBHCP (Chapter 2).

The FDEP has both a legislative mandate and legal authority to issue CCCL permits, and acquisition of a Federal ITP will allow the FDEP to carry out its CCCL permitting responsibilities in a manner that fully complies with the ESA. The CCCL program is critical to the social, recreational, and economic vitality of beachfront communities. It allows property owners and local governments to protect habitable structures and public infrastructure from storm damage and erosion, ensures responsible development within the coastal zone, establishes standards for construction and other traditional activities to safeguard the stability of the beach-dune system, maintains public access to the beaches, and promotes effective stewardship of coastal resources.

To comply with the terms and conditions of its ITP, the FDEP will request amendments to the Beach and Shore Preservation Act, and enact, develop, and revise companion CCCL rules, regulations, and policies, as necessary, to provide comprehensive protection for all covered species and their respective habitats within the Plan Area as prescribed by the FBHCP. Considering the geographic scale of the Plan Area and the importance of Florida’s beaches and dunes to sea turtles, beach mice, and shorebirds, these changes will be of considerable conservation value. However, benefits of the FBHCP extend beyond covered species to human stakeholders who utilize the CCCL program. Those benefits include, but are not limited to, the following:

1. The FBHCP addresses an area of uncertainty in the current regulatory process. The BPCS will have a standard set of terms and conditions it can apply to CCCL permits within discrete areas of the state depending on shoreline conditions, protected species occurrences, and the type of activity being proposed. Those conditions will remain consistent over time.
2. CCCL permit applicants will know, in advance, what avoidance and minimization measures can be expected for their geographic location and proposed activity. They will also know, up front, what mitigation measures and/or costs they can expect.
3. The FDEP will be able to issue CCCL permits without consultation with the FWC to address potential impacts to covered species on a project-by-project basis, as all requisite protective measures are prescribed in the FBHCP. This should expedite processing of permit

applications and will eliminate the potential for unanticipated conditions in CCCL permits that sometimes result from current consultations.

4. In those instances where the FDEP has determined that a project will likely result in take of sea turtles, CCCL permit applicants will not have to delay their projects until they have obtained the necessary Federal authorizations. Obtaining an individual ITP from the USFWS can be a lengthy and very costly process. Any incidental take that might occur as the result of the CCCL permitted activity will be authorized under FDEP's Federal ITP, provided the authorized activity is conducted in accordance with CCCL permit terms and conditions. This will help ensure that property owners, local governments, and others engaged in CCCL activities remain compliant with ESA regulations.
5. The FBHCP provides an opportunity for local governments that anticipate issuing emergency permits for temporary armoring structures to receive Federal incidental take authorization for their actions without first having to obtain an individual ITP, as currently recommended under Chapter 62B-33.0051(4)(k)4, F.A.C. Counties entering into voluntary partnerships with FDEP will be afforded these Federal authorizations under the umbrella of FDEP's ITP. Similar protections would be afforded to local governments exercising authority for emergency response and cleanup activities following storm events, as provided under Chapter 161.085(3) F.S.
6. The ITP will shield both the FDEP and CCCL permittees from potentially costly third-party lawsuits alleging unauthorized take of federally listed species.

The Preferred Alternative balances human social, economic, and recreational needs within the coastal planning area while providing for the long-term protection of threatened and endangered species and their habitats. By addressing protected species issues in a practical and comprehensive manner, rather than on a project-by-project basis, the FBHCP will streamline the CCCL permitting process.

Alternatives to the Proposed Action

In the absence of Federal authorization for incidental take, the FDEP is presented with few reasonable options for administering the CCCL program. It can continue to issue CCCL permits without the legal protections afforded under the ESA; it can restrict its permitting actions to only those activities that will not result in take, as broadly defined under the ESA; it can delegate its CCCL permitting responsibilities to local governments; or it can engage in a massive program to remove habitable structures from high hazard areas along the coastline. The, legal, social, and environmental implications of each of these various options are briefly discussed below.

No-Action

Under this alternative, the FDEP would continue to issue CCCL permits under its existing rules, regulations, and policies without the benefit of protection for incidental take afforded under section 10 of the ESA. The FDEP presently restricts its permitting actions to those activities that will not kill or injure sea turtles (nesting adults, eggs, and hatchlings) or significantly alter their nesting habitat. Each project is viewed individually, and the determination of take is based solely on site conditions at the time the action is undertaken. Although the FDEP attempts to avoid impacts to sea turtles via permit conditions and consultations with the FWC, incidental take that was not anticipated at the time of permit issuance may still occur. Furthermore, under state law the FDEP is not authorized to consider impacts to any federally listed species other than sea turtles. If during its review of a CCCL permit application, the FDEP makes a determination that take of sea turtles is likely to occur, the applicant must submit a request for an individual section 10 ITP to the USFWS.

Continued issuance of CCCL permits in the absence of an ITP places the FDEP at risk of prosecution under the ESA should incidental take be documented, and exposes the FDEP to third-party lawsuits alleging unauthorized take of federally listed species. This alternative is not preferred, as it resolves none of the ESA conflicts that precipitated the FDEP's decision to develop an HCP and apply for an ITP. It would perpetuate the permitting uncertainty and regulatory burdens to stakeholders that exist under the current CCCL program for projects that are likely to impact protected species. Furthermore, it does not provide any of the long-term conservation benefits to federally listed species and other natural resources within the Plan Area that accrue from the Preferred Alternative.

The No-Action Alternative would perpetuate the current uncertainty in the regulatory process with respect to projects likely to impact federally listed species. The FDEP would continue to consult with the FWC on a project-by-project basis for any activity potentially affecting sea turtles or their habitat and could, as a prerequisite to commencement of CCCL construction activities, require applicants to first obtain an individual ITP if it is determined that take is likely to occur. These actions delay the permitting process and place additional burdens on permit applicants.

With respect to covered species, the No-Action Alternative provides none of the conservation benefits proposed in the FBHCP. Although the FDEP would continue to avoid and minimize impacts to sea turtles to the extent allowed under Florida law, none of the mitigation proposed in the FBHCP for unavoidable impacts would be implemented, and no protective measures would be in place for listed species other than sea turtles. All of the comprehensive, long-term planning and adaptive management measures contained in the FBHCP to benefit the conservation of listed species within the Plan Area would be absent under this alternative.

Take Avoidance

Under this action alternative, the FDEP would eliminate or modify its existing programs and policies on CCCL activities to completely eliminate the potential for incidental take of sea turtles following completion of authorized activities, including unanticipated changes in site conditions. This alternative is not preferred, because it would require significant revisions to current policies related to CCCL project assessments and reviews based on the broad potential for direct, indirect, and cumulative impacts to sea turtles (see Chapter 7). It would essentially curtail many of the traditional activities currently permitted within the beach and dune system, and thus, could result in a number of legal challenges. Furthermore, this alternative would not provide protection for any federally listed species other than sea turtles.

Under the Take Avoidance Alternative, permitted activities would be largely restricted to areas landward of the primary dune. Even then, indirect impacts from permitted activities may occur. Insofar as FDEP staff typically does not have the requisite expertise or practical experience to conduct a comprehensive assessment of all direct, indirect, and cumulative impacts to sea turtles associated with a particular project, they would have to continue to consult with experts at FWC. Even then, CCCL permits issued with the best of intentions could result in incidental take, posing the same risks to FDEP as described above under the No-Action Alternative. Furthermore, under current statutes, FDEP does not have the authority to consider impacts to protected species other than sea turtles during its processing of CCCL permit applications. Thus, the potential for impacts to beach mice, shorebirds, and other federally listed species would continue, and CCCL permit applicants would have to obtain individual ITPs for projects likely to cause take of those species.

Chapter 161, F.S., assigns the responsibility for regulating activities along the state's sandy beaches to the FDEP. Section 161.053, F.S., and Chapter 62B-33, F.A.C., prohibit private or public entities from conducting any excavation, constructing any structure, removing beach material or otherwise altering existing ground elevations, or driving on, over, or across any sandy dune, or damage or cause to be damaged the sand dune or the vegetation growing thereon without first obtaining a CCCL permit. Thus, the Take Avoidance Alternative would not allow the FDEP to fully exercise its mandated regulatory responsibilities and would effectively preclude a broad range of activities currently undertaken by beachfront property owners and other coastal stakeholders unless they first obtained an individual ITP, which as noted earlier can be a lengthy and costly process. Should property owners undertake any regulated activities without first obtaining an individual ITP, they would not only be in violation of state law, they would also be particularly vulnerable to prosecution under the ESA and/or third-party lawsuits, as the FDEP would have pre-determined that the proposed activity would likely result in take. The inability of affected stakeholders to obtain CCCL permits for otherwise lawful activities would undoubtedly result in a number of legal challenges for the FDEP.

If a CCCL permit application involved an activity within sea turtle nesting habitat, the FDEP would have several options:

1. It could default on the application (*i.e.*, not issue a permit within 90 days of receiving a complete application, as prescribed by state law [s.120.60, F.S.]). This would allow the work to proceed, and as long as the regulated activities were performed as described in the CCCL permit application, the permit applicant would not be in violation of state law, even if take were to occur. (The applicant would still be in violation of the ESA if take was documented.)
2. It could condition the permit on the applicant receiving an ITP prior to initiating any work. This would result in considerable delays and expense to the applicant.
3. It could deny the permit. Should an applicant elect to engage in proposed activities without a CCCL permit, they would be in violation of state law and subject to compliance and enforcement action.

Under this alternative, impacts to sea turtles would likely be exacerbated if the FDEP elected to install either Options 1 or 3 above, and impacts to federally listed species other than sea turtles would continue unabated. No avoidance or minimization measures would be in place, and incidental take would not be mitigated. Over time, the integrity of the beach-dune system would likely be compromised, and the ability to achieve the important goals of the Beach and Shore Preservation Act would be jeopardized. Consequently, all of the associated benefits to coastal resources would be diminished, and recovery efforts for species that utilize the state's beaches would be hindered. Furthermore, affected stakeholders would be presented with few attractive options. Projects would be delayed and considerable expense incurred if applicants had to obtain individual ITPs before proceeding with the work. If they conducted the proposed work in the absence of an individual ITP and take was documented, they would be subject to prosecution under the ESA. They would be subject to prosecution under state law if the FDEP denied the permit application and they decided to perform the work anyway.

Delegation of CCCL Responsibilities to Local Governments

Under this action alternative, the FDEP would effectively delegate all of its permitting responsibilities to local governments. This alternative is not preferred, because it would simply transfer the burden and liabilities of complying with the ESA from the state to local governments. Even if local governments accepted the challenge, the transfer would take a considerable amount of time to fully implement and could ultimately result in a mosaic of local regulations, rather than the existing unified approach to beach management in Florida. During the transition, the FDEP would have to continue to fulfill its CCCL permitting responsibilities with all of the liabilities and consequences associated with the No Action and Take Avoidance Alternatives.

Subsection 161.085(3), F.S., already provides local governments with authority to issue emergency permits for temporary structures (*e.g.*, seawalls) to protect habitable structures from damage or prevent

additional damage following a major storm event. Subsection 161.053(3), F.S., further allows counties and municipalities to adopt their own zoning and building codes in lieu of CCCL provisions, provided they are approved by the FDEP as being adequate to preserve and protect the beaches and coastal barrier dunes under the FDEP's jurisdiction from imprudent construction. The local government must demonstrate to the FDEP that it has sufficient funds and personnel to adequately administer the program. If the program is not properly administered, the FDEP can revoke the authority granted to the local government. Subsection 161.053(15), F.S., also allows the FDEP to limit the activities named in the delegation and agreed to by the local government.

To date, no local government has sought to adopt their own codes in lieu of the FDEP's CCCL program. It is assumed that none wanted to assume the burdens and liabilities associated with managing coastal zone activities. Thus, there is no reason to believe that there would be wholesale participation of local governments under this alternative. The state could amend Florida Statutes to mandate counties assume this regulatory role, but local governments are unlikely to accept an unfunded mandate, and would likely bring legal actions against the state.

Even if counties were willing to support local management of CCCL regulated activities, most of the undesirable effects of the previous alternatives would remain unresolved. Local governments would have no legal protection, as afforded under the ESA, for incidental take of listed species resulting from their regulation and/or management of CCCL activities. They could presumably apply for a county-wide ITP, with the same time constraints and fiscal burdens otherwise borne by the FDEP under the Preferred Alternative. This could ultimately result in 25 separate ITPs (assuming no municipalities wanted to implement their own programs), thereby placing a burden on the USFWS (permit processing and compliance monitoring). USFWS could reduce this burden by developing a General Conservation Plan (GCP) that would serve as an umbrella to the local governments seeking an ITP for CCCL activities they manage and regulate. The GCP would greatly resemble the HCP prepared by the FDEP under the Preferred Alternative, but because it would be developed solely by USFWS without negotiation with affected stakeholders, it could impose more stringent conditions than prescribed by the FBHCP.

Another key consideration is that under this alternative, instead of having one entity overseeing a unified, state-wide CCCL program, there would now be 25 coastal counties, each with their own set of regulations and policies in place. Even if the FDEP were to establish a model set of codes for adoption, there would be varying approaches as to how those regulations are implemented and monitored for compliance. The fragmentation of the current CCCL program would be even greater if some municipalities decided to regulate coastal construction activities within their respective jurisdictions. The absence of a unified statewide program to protect Florida's sandy beaches from imprudent coastal construction would undoubtedly have a detrimental effect on those protected species that depend on them. It would also have a profound effect on the state's human population by diminishing the social, recreational, and economic values of the coast.

The establishment of local programs to regulate coastal construction would take time, and until that transition was complete, FDEP would have to select from the same suite of options described herein: obtain an ITP so it could issue CCCL permits with the full protection afforded under the ESA; continue issuing permits without the legal protections afforded under the ESA; or only issue permits for projects that completely avoid the potential for take, as broadly defined under the ESA. Furthermore, the delegation of CCCL permitting responsibilities to local governments would not address the seminal goal of the FBHCP, which is to allow for the continuation of otherwise legal and traditional activities within the coastal zone in a manner that fully complies with the ESA and minimizes and mitigates impacts to federally listed species to the maximum extent practicable. It would simply transfer the responsibility for achieving that goal from the state to local governments, and each entity to which CCCL permitting responsibility was delegated would encounter the same suite of challenges faced by the FDEP under the No-Action and Take Avoidance Alternatives.

Post-disaster Relocation

Under this action alternative, the state legislature would have to enact or amend applicable statutes to authorize the FDEP to develop a comprehensive strategic program to remove habitable structures from vulnerable coastal areas following major storm events, thereby reducing the need for future armoring. Any resultant rules and regulations would likely be implemented through the Florida Building Code. This alternative is not preferred because of the political, legal, regulatory, and logistical challenges that would undoubtedly arise and the time frame required for its full implementation.

The Post-disaster Relocation Alternative could be accomplished through building prohibitions in high hazard areas, property acquisition, relocation of vulnerable structures further landward, regulations preventing rebuilding of structures severely damaged by storms or erosion, and/or other methods. Although this alternative has considerable appeal from an environmental perspective, particularly considering the threats posed by climate change and sea level rise, it does not appreciably alleviate any of the social, economic, and legal issues currently facing the FDEP relative to its CCCL program, as discussed earlier in this chapter.

First and foremost, a program to remove all habitable structures from high hazard areas would likely take a considerable amount of time to fully implement, even if it were economically feasible. Considering the legislative changes needed to force abandonment of properties damaged by storms, it would likely face strong public opposition and both legal and fiscal challenges, particularly considering the enormous impact it would have on local tax bases. All of these hurdles would impede, if not preclude, its implementation. Until these issues were resolved and the program was fully implemented, the FDEP would still have to administer its CCCL program under one of the alternative actions described above. Furthermore, the CCCL program encompasses a broad range of permitting activities other than those dealing with habitable structures. Many of those activities would persist regardless of a

strategic program to remove habitable structures from the coast, although their frequency of occurrence would likely diminish over time. Thus, some type of permitting program would have to remain in effect. Additionally, some of the methods for moving structures out of harm's way, such as landward relocation, could have their own set of impacts to protected species and other sensitive coastal ecosystems. The Post-disaster Relocation Alternative is fraught with so many social, legal (*e.g.*, eminent domain), economic, and logistical impediments that its selection as an alternative action is rendered infeasible.