

## CHAPTER 9: ALTERNATIVES ANALYSIS

### Proposed Action (Preferred Alternative)

Walton County is seeking Federal authorization for take of sea turtles, Choctawhatchee beach mice, and piping plovers as afforded under Section 10(a)(1)(B) of the ESA, causally related to emergency shoreline protection and other activities managed and/or regulated by the County. As provided under Florida law, the County has been delegated emergency permitting authority and wishes to continue to exercise that authority, because it feels it can provide its citizens with a more timely and effective response to emergency situations following major storm events. Similarly, the County engages in other lawful activities that enhance the recreational value of the beach for tourists and resident beachgoers alike and wishes to continue those activities in a manner that minimizes risk of harm to coastal wildlife.

The primary action for which Walton County is seeking take authorization involves those activities undertaken as the result of an emergency shoreline protection permit issued by the County: Those activities include:

- Placing beach-compatible sand from upland sources on the beach;
- Creating a temporary barrier seaward of the threatened structure using sand bags;
- Shoring up (reinforcing) foundations; and
- Installing temporary wooden retaining walls, cantilever sheetpile walls (without concrete caps, tie backs, or other reinforcement), or similar structures seaward of the vulnerable structure.

Any structures placed on the beach as the result of an emergency permit issued by Walton County are intended to be a temporary response to threatening erosion conditions. However, following initiation of emergency shoreline protection measures, property owners can petition the FDEP to retain the temporary structure or construct alternative protection. Consequently, permanent structures may replace temporary measures initiated under the County's emergency authorization. Any take resulting from permanent structures that replace temporary emergency structures permitted by the County will be authorized under the County's ITP. This will allow both the County and property owners who install the armoring to be compliant with ESA regulations regarding incidental take of federally listed species. If the FDEP denies application for a permanent structure, the temporary structure must be removed from the beach in accordance with provisions contained in this HCP (see Chapter 10, Removal of Temporary Structures).

The County is committed to the actions and policies described in Chapter 11 to avoid and/or minimize take of listed species causally related to emergency shoreline protection and other County-managed/regulated activities. Despite these minimization measures, some take may be unavoidable. Consequently, the County has developed and commits to implementing a mitigation program that will provide conservation benefits to sea turtles,

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beach mice, and piping plovers commensurate with the level or extent of take likely to result from the proposed action. These mitigation measures are described in detail in Chapter 12 of this HCP.

**Alternatives to the Proposed Action**

In the absence of Federal authorization for take, the County is presented with several options. It can either relinquish all emergency permitting authority back to the State or continue to issue emergency permits without the legal protections afforded under the ESA. The County could also pursue measures to reduce the need for emergency shoreline protection by either acquiring threatened properties or by requiring property owners to relocate vulnerable structures landward. As described below, there are financial and/or social costs associated with each of these alternatives.

***No Action Alternative***

Under this alternative (rescind its application for an ITP), Walton County could either relinquish local emergency permitting authority or continue to issue emergency shoreline protection permits without the benefit of protection for take as afforded under Section 10 of the ESA. Continued issuance of emergency permits in the absence of an ITP places a liability on the County under Federal law. Although shoreline protection activities could still be sanctioned through the State of Florida's CCCL permitting process, the elimination of local permitting authority could potentially delay a timely response to emergency situations and thereby increase the vulnerability of eligible structures to storm-related damage. In the absence of local authorization to respond to emergencies, the extent of damage to habitable structures might increase. This could lead to legal challenges from property owners, loss of beachfront property, a reduction in tax revenues, and impacts to historic and cultural resources and/or public infrastructure.

Should the County decide it does not want to exercise its emergency permitting authority, the State of Florida could issue emergency permits with or without Section 10 ESA protection for take. Under current State rules and regulations, the FDEP cannot permit the installation of armoring structures that would cause the take of sea turtles. Thus, to issue an emergency permit, the State would have to make a determination that a structure is either not likely to result in incidental take or that any take that may result has been authorized under an individual Federal ITP. Currently, if a determination is made by the State that no take is anticipated, it is because either no suitable habitat is present at the site or the structure has been sited to alleviate take.

The ITP being requested by Walton County would not only authorize take resulting from temporary shoreline protection measures implemented under its emergency permitting authority, but also any take resulting from the State's subsequent permitting of permanent structures that replace those temporary structures. The USFWS has long considered that permanent shoreline armoring structures are likely to result in the loss of nesting habitat and diminish the functional value of available sea turtle nesting habitat and therefore cause take, as defined under the ESA. Additionally, current State rules do not address

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take of species other than sea turtles during FDEP's review of CCCL permit applications. Thus, in the absence of an ITP, it is not known what measures might be implemented by the State to avoid conflicts with ESA regulations during the permitting of shoreline protection structures in Walton County.

The County is committed to reducing the necessity of shoreline armoring through the support of beach nourishment projects and other measures. This will reduce but not eliminate the need for future emergency shoreline protection measures. Some structures will undoubtedly remain vulnerable to severe erosion events and will need the benefit of emergency protection, as allowed under State law. Thus, regardless of whether the State reassumes emergency permitting authority or the County continues to issue emergency permits in the absence of an ITP, take is likely to occur.

***Land Acquisition Alternative***

One method for reducing the need for emergency shoreline protection would be for the County to purchase threatened properties, to demolish or relocate vulnerable structures, and to convert the properties to beachfront conservation land. This would basically require the County to buy all threatened structural properties built prior to the State's current CCCL regulations along those sections of beach with a history of erosion problems. As of June 2008, 14.3 mi (23.0 km) of beach had been designated as critically eroded by the State of Florida. Of those, 9.3 mi (15.0 km) are outside the County's existing beach nourishment project area. Habitable structures, including hotels, motels, condominiums, and single-family residences located there are likely to require emergency shoreline protection over the 25-year term of the County's ITP. Although the assessed value of these properties has not been calculated, it is clear that it would be cost prohibitive. Additional costs would be incurred during demolition or relocation of the structures, although some of those costs could be recovered if some of the purchased structures were sold at auction and moved at the new owner's expense.

In addition to the prohibitive acquisition costs, there are a number of pitfalls associated with the acquisition strategy:

- There are no assurances that only structures within critically eroded areas will be vulnerable to erosion caused by storms over the life of the County's ITP;
- Because of potential shifts in erosional patterns, there is no precise way of knowing precisely which structures will be vulnerable;
- Assuming that all vulnerable structures could be accurately identified, it would take considerable time for all of the real estate transactions to be completed, and in the interim some of the vulnerable properties might still require emergency protection;
- Although some property owners may be willing to sell, others may not, and thus the need to address the emergency armoring issue would remain;
- County taxes would necessarily have to be raised to generate the money needed for property acquisition; and

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- The County's tax base would be diminished, as developed private oceanfront parcels are converted to public ownership.

***Retreat Alternative***

Another option for reducing the need for emergency shoreline protection would be to require property owners to relocate vulnerable structures further landward. This alternative could be required for all existing structures or just those structures damaged during future storm events. Although this alternative would take many structures out of harm's way, it too has substantial drawbacks. For this approach to be effective, all structures potentially vulnerable over the life of the ITP would have to be identified. As for the acquisition alternative, there is no reasonable way of determining precisely which structures may be affected.

It is likely that even if every structure potentially vulnerable to erosion could be identified, not all could be relocated. In some cases there may be inadequate landward space to accommodate the move. In others, relocation might be constrained by regulations regarding the proximity of septic fields, utilities, set backs, and rights of ways. However, the County could provide variances to these constraints if it would benefit property owners having sufficient property to accommodate relocations.

Additionally, relocation of structures would likely include unforeseen and unmitigated environmental impacts. The construction activities involved in moving the structures landward could impact sea turtles, CBM, and piping plovers in much the same manner as construction of emergency shoreline protection activities. Relocation might also cause impacts to other sensitive ecosystems. If property owners have preserved coastal strand and maritime hammock on the property, plants and animals found there could be harmed during land clearing to accommodate the relocation.

Although the technology exists to safely move most beachfront structures, the cost would undoubtedly be prohibitive for many property owners. In addition to the actual moving costs, additional expenses would be incurred for engineering, planning, permitting, new foundations, utility hookups and related contractual services.

The legal constraints associated with requiring a property owner to move his/her structure landward are also at issue. Property owners highly regard their ocean views, which might be forfeited as the result of a landward retreat. The extent to which property owners could be forced to move is unknown. Those that are forced to move might seek compensation. Thus, as for the acquisition alternative, the retreat alternative could have substantial financial impact on the County.

Under the retreat alternative, the County would incur substantial economic impacts without assurances that efforts would completely eliminate the need for future emergency shoreline protection measures. Thus, some take might occur, and it would be without the benefit of the minimization and mitigation measures contained in this HCP under the preferred alternative.