

SHORE BIRDS

Ken, et al:

Lack of specificity in the project description (draft BA) makes the application of this programmatic with regard to shorebird conservation uncertain and therefore difficult to apply an overall impact analysis. We have taken the Corps Conservation Measures [avoidance of primary constituent elements when practicable, pre-project surveys, design alterations to minimize impacts as determined by working group] and added clarity. We recommend that the Corp consider incorporating all or some into the final Biological Assessment.

Overall Programmatic Management Conservation Measures:

CM:1 The Corp will support actions to this programmatic an adaptive living document to further minimize shorebird impacts.

Task a. The Corp will establish a shorebird and engineers working group (Shorebird Advisory Committee) that will meet yearly. This group will at least include regional representatives FWS, FWC, DEP, Corp, and interested NGOs. This group will review completed projects, results of monitoring, etc to improve structure and applications of the programmatic conservation measure. [we need to make sure no violation of FACA]

Task b. Sites can be added or removed from Tier I and Tier II as new data demonstrates their habitat qualities and potential bird use or lack of habitat and bird use. These will be determined at annual meeting as described in CM #1, task a (yearly shorebird advisory committee).

CM:2 The Corp shall track all projects implemented by their agency.

Task a. The Corp shall maintain or contract out a database which includes DEP's project database that will assist the FWS in effectively evaluating direct, indirect, and additive impacts to shorebird habitat. This project spreadsheet shall have an associated GIS component and has been initiated by American Bird Conservancy personnel (Casey Lott, ABC in draft 2007). This database shall be updated no less than every 12 months. [Casey Lott to demo at meeting]

CM:3 The Corp shall adhere to high quality work standards.

Task a. Qualified professionals with shorebird/habitat survey experience shall conduct required work per this programmatic. FWS and FWC reserve the right to reject the use of unqualified contractors hired to do this work.

Tier I Conservation Measures: sites that due to past habitat alterations and possibly recreational impacts are minimally important for shorebirds. These projects will have minimal conservation measures.

CM:1 The Corp and the local sponsor shall minimize direct impacts to shorebirds and take provisions to enhance the shorebird habitat post project.

Task a. MBTA protections require nesting shorebird surveys prior to and during project construction. FWC project guidelines must be followed to minimize direct impact to nesting shorebirds. See Conservation Recommendations for specific protections required under MBTA.

Task b. To preserve shorebird feeding and roosting habitat, the mechanical removal of natural organic material (fresh and old wrack [wrack is defined as seaweed or ocean vegetation pushed ashore]) shall be prohibited year-round from the beach. Fresh wrack is moist and has living invertebrates that have been identified as important foraging and roosting habitat, whereas old wrack is important roosting habitat for snowy and piping plovers on the breeding, wintering and migration grounds as well as an abundance of other shorebirds. Trash and litter may be manually removed. Exceptions apply when health of humans may be affected such as with red tide events.

Task c. If tilling is needed under sea turtle requirements, it shall only occur above the primary wrack line and outside of the shorebird nesting season to avoid nesting disturbances and migrating shorebirds as the roost or forage (February 1-August 31 on Gulf Coast and April 1-August 31 on Atlantic Coast). If tilling occurs during shorebird nesting season, shorebird surveys prior to tilling will be required.

CM:2 The Corp and local sponsor shall minimize direct and indirect impacts to shorebirds and apply provisions to enhance the shorebird habitat pre- and post project.

Task a. Through cost sharing with local sponsor, a percentage ?? of the Corp's monitoring budget or a minimum of \$??? per project shall be allocated to implement a statewide shorebird conservation/ management/ monitoring program This Shorebird Protection Program (SPP) can allow outside sources to contribute to the funding portion of this program. For example, other consultations taking place that do not fall under Corp jurisdiction may require provided funding as part of their "conservation measures" or "terms and conditions". The SPP must accomplish at minimum **i-vi below**.

-OR-

The local sponsor (County/Municipality) or land manager must develop and

implement a Beach Management Plan to incorporate adaptive management to evaluate activities on their beaches and minimization measures to incorporate species conservation on their beaches. The Plan must be enforceable by the County/Municipality and approved by the Corps, Service, and FWC. The Plan must include and implement at minimum the following:

- i) Status surveys [need specifics- who often, where]**
- ii) Reduce project-induced effects of increased recreational disturbance through intensive protection of plovers/red knots/shorebirds on all habitats (natural, artificially enhanced, and stabilized) in the project area from human disturbance and predation (cats, coyotes, raccoons,etc).**
 - (1) Adaptively, as used, shorebird nesting, foraging and concentrated roosting sites will be posted and roped for the life of the project (as long as a beach exists); FL FWC guidelines for roping off nesting areas shall be followed.**
 - (2) The local sponsor must post and rope sections of upper beach areas (out of common pedestrian use areas) prior to nesting season with the goal of enticing nesting shorebirds. These areas will be no larger than XXXX and will not occur in greater density than XX number within XX miles. FL FWC guidelines for roping off nesting areas shall be followed.**
 - (3) Local sponsor shall place educational signs where appropriate at beach access points explaining the importance of the imperiled species (e.g. sea turtles, beach mice, shorebirds) that are dependent on coastal habitats and ways to minimize human impacts. The Fish and Wildlife Service can provide sign examples. These should be approved by FWS and FWC and the local sponsor.**
 - (4) Public education (no feeding crows or seagulls, trash in receptacles, etc) must occur via TV announcements, kiosks, direct monitors on the beaches.**
 - (5) Enforcement of protection zone as needed, this is especially true for holiday weekends.**
- iii) Work with land managers/owners to improve habitat for nesting, roosting, feeding shorebirds.**
 - (1) The local sponsor shall install and maintain predator proof trash receptacles at all public beach accesses throughout the project area.**
 - (2) Vegetation plantings shall be minimized in designated shorebird use area**
 - (3) Pole placement/pier pilings in vicinity of shorebird use areas shall be made avian predator free (pointy tops).**

- iv) Purchase land for shorebird conservation when reasonable which should include identifying areas where natural barrier beach processes can operate unimpeded. These might include not only undeveloped areas, but the potential “buy-out” of developments in areas that are sparsely developed and/or have high potential habitat value (e.g., proximity to feeding areas, prone to overwashes, etc.).
 - (1) Creation or improvement of habitats, especially on baysides may be applicable as demonstrated by Snook Island Natural Restoration Areas project in Lake Worth, Palm Beach County, FL. The Corp was part of this.

- v) Notices of specific Animal Control Ordinance must be posted, where appropriate, at each beach access point, informing beach users about the County/Municipality’s leash ordinance. Annually, a notice must be placed in the local paper informing beach users of the leash ordinance. Warnings and citations should be issued when appropriate to minimize harassment of sea turtles, beach mice, piping plovers and other shorebirds;
 - (1) If no ordinance, County or local sponsor must initiate an ordinance that excludes pets on the beach (preferred) or requires pets on a leash while on the beach.

Tier II Conservation Measures: very important areas for birds where we would prefer that projects not occur but, if necessary these specific areas considered high priority towards piping plover, snowy plover and red knot conservation will require **very stringent** conditions prior to project implementation.

Impacts within the following areas will require a higher degree of coordination with the Service. Sites placed as Tier I or II are subject to change as determined by Shorebird Advisory Committee:

- NW Panhandle (List Counties): List specific locations with attached maps
- NE Florida (List Counties): List specific locations with attached maps
- SW Florida (List Counties): List specific locations with attached maps
- E Florida (List Counties): List specific locations with attached maps

CM:1 The Corp and the local sponsor or land manager should implement increased levels of protection for breeding and non-breeding shorebirds that contribute to their conservation post project into perpetuity.

Task a. Apply all Tier I Conservation Measures to projects that impact Tier II areas.

CM:2 Spatially explicit maps will be used for project planning that will provide estimates of habitat amount and bird densities. Negative survey data and the amount of recreational pressures (i.e. number of people and dogs seen while surveying) shall also be counted. [Methods will be provided – Casey Lott roped into writing monitoring program]

Task a. The Corp or local sponsor shall fund surveys during an entire 12-month period (covering the non-breeding season for plovers and knots and the breeding season for SNPL) to document the spatial extent of site use, delineate the major forage and roost areas by season, and document all nesting areas.

Task b. Prior to placement of dredged material a qualified biologist using results of above required surveys, will mark avoidance areas (such as washovers and access points) using obvious identifiers (for example, pink flagging on poles) to clearly mark the beginning and end marks to prevent accidental impacts to protected areas.

Task c. At least one of the bi-monthly shorebird surveys in April, May, September and October will occur on a weekend to document the amount of recreational pressure potentially occurring during migration months.

Task d. Post Project surveys will occur for a full 12-month period (as above) starting 2 years after sand placement and 4 years after sand placement. Comparisons of these surveys with initial surveys will be used to determine if there have been long-term impacts to habitat amounts or bird use due to sand placement. These surveys will follow the same protocol as in the step above.

CM:3 Existing optimal shorebird foraging, nesting and roosting habitat shall be protected through preservation of optimal habitat and by allowing geomorphologic processes necessary to maintain these optimal habitats. Projects with permanent impacts to shorebird habitat shall not be allowed.

Task a. Repair or replacement of jetties outside of original footprint will require separate consultations.

Task b. The Corp shall coordinate and host a pre-contract meeting at least 3 months prior to letting the construction contract. Meeting participants shall include the FWS, primary land manager, FWC, DEP?, and local sponsor to discuss avoidance areas and placement specifications. All required data as explained in CM 2 (Tier II section) above shall be collected prior to this meeting. The final project designs and avoidance areas must be approved by the FWS. The following exceptions to optimal shorebird habitat protection apply:

- a. When protected beach mice habitat protection shall take precedence. No shorebird habitat is to be protected within certain areas unless it is

compatible with beach mice protection as determined by the Service in consult with FWC and primary land manager.

- b. When the Service in coordination with FWC and the land manager agree that loss of optimal shorebird habitat is in the best interest of overall island dynamics.

Task c. The Corp must demonstrate that the project is designed so that sand placed in foraging areas will not preclude long term use of the area.

- i) Sand placed in or near foraging areas will not interrupt geomorphologic processes that lead to habitat renewal (e.g., if birds are using an overwash area, sand placement will not occur as a berm in front of this area; if birds are using mudflats that receive sediment from a littoral drift cell, sand placement should not change circulation patterns so as to starve these areas of sediments). This may require independent technical review of project design proposals by coastal geomorphologists.
- ii) Consideration may be given to placing a portion of dredged material at mid-island locations on optimal shorebird lands but not in optimal foraging areas, in coordination with and approved by the primary land managers, FWS, and coastal geologists. Mid-beach placement could reduce impacts to the Gulf beaches and baysides as well as provide additional protection for other rare species.

Task d. Two years post-specific projects completion, the Corp shall be required to rectify any unforeseen circumstances that dredge placement may have on the project area, for example, remove or lower fill material should it prove sufficiently impenetrable to restrict sufficient overwash for the island or peninsula to function as determined in Conservation Measures #. ??

Task e. If permanent negative effects to habitat or birds are demonstrated from required monitoring pre and post project, similar sand placement projects will not be allowed without major modification to designs. Review and discussion of reports that compare initial bird/habitat surveys with 2-year and 4-year follow-up bird/habitat surveys will be the primary means for adaptive management (e.g., improving sand placement design templates so that they will not have negative impacts to birds). Areas that have importance to birds, negative project performance (in terms of bird habitat or bird use) will argue strongly against sand placement in important bird areas in the future, without major design modifications.

Task f. On rare occasions, at the discretion of the FWS and DEP, and depending on severity of the project, sediment dynamics and island morphology monitoring may be required and if so, shall be funded by the Corp or local sponsor. A

research project should improve our knowledge of the success of dredged material placement and how it may affect the long term management of sediment removal and/or placement on selected barrier island or peninsula area. This may be more applicable to re-occurring actions in Tier II areas.

- i) The Corp, with approval by and in coordination with FWS, FWC, primary land managers and coastal geomorphologists (either used from agency or contracted by the Corp) shall initiate a study to evaluate if the project is successfully being integrated into the coastal system as intended. The Corp should initiate a pre-nourishment survey/sampling for baseline purposes and be prepared to monitor quarterly for up to two years post any sediment placement. The possible goals of the evaluation are to identify current patterns and trends in morphological changes to the island such as 1) is the island widening and moving landward as it should; 2) is the island narrowing from a continued unnatural rate of erosion affected by Pass maintenance; and 3) is any additional information or actions needed to offset island morphological changes that may affect the piping plover, beach mice and sea turtle habitat as a result of the long term erosional influence of the dredged navigational entrance; 4) site specific goals per project will be discussed at the required pre-project meeting.

CM:4 The Corp and the local sponsor or land manager should implement increased levels of protection for breeding and non-breeding shorebirds that contribute to their conservation post project into perpetuity.

Task a. If surveys determine there is human disturbance to the primary or optimal foraging, nesting and roosting areas used by shorebirds in these areas should be posted and protected by symbolic roping at a distance sufficient to avoid disturbance to the birds, especially when migration overlaps with boating season as boaters are more apt to anchor at primary areas such as washover flats for recreation and to access the beaches from the baysides.

CM:5 The Corp and their contractors shall minimize impacts to shorebirds and their habitat during project construction.

Task a. Only dredged material suitable for sea turtle nesting, successful incubation, and hatchling emergence, beach mouse burrow construction and food plant sources, and piping plover food prey species substrate shall be placed within the project area. [The specifics of dredged material quality is handled specifically by DEP and under sea turtles terms and conditions. If other data comes to light relative to shorebird impacts, this may be altered].

STANDARED TERMS AND CONDITIONS FWS WILL APPLY TO BO:

RPM:1 The Corp and local sponsor/applicant shall arrange a meeting between representatives of the contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission 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 shorebird protection measures

RPM:2 The Corps permit shall include a special condition to ensure full implementation of the Project Conservation Measures and RPM's that address

RPM:3 Construction equipment and materials shall be staged and stored in a manner that will minimize impacts to shorebird foraging, roosting and nesting to the maximum extent practicable. The storage locations shall be approved by FWS and the public landowner prior to the project contract advertisement.

T&C 1) All construction equipment, vehicles, pipe, and other project materials including temporary (less than one week) storage of pipe and staging areas for construction equipment shall be located off the beach to the maximum extent possible. No construction equipment, vehicles, pipe, and other project materials shall be located within optimal shorebird nesting, roosting or foraging habitat any time unless decided during pre-project meetings. Nighttime storage of construction equipment not in use shall be off the beach and dune habitats to minimize disturbance to shorebird nocturnal activities.

RPM:4 Existing beach access points shall be used for vehicle and equipment beach access to the maximum extent practicable. The access points shall be delineated by fence or other suitable material to ensure vehicles and equipment transport stay within the access corridor. The final location of the beach access areas shall be approved by the Service and public landowner when applicable prior to the project contract advertisement. Access areas will be delineated by fence or other suitable material to ensure vehicles and equipment transport stay within the access corridor.

RPM:5 Lighting associated with the project night work shall be minimized to reduce the possibility of disrupting shorebird nesting, roosting and foraging activities. [Sea turtle folks have detailed requirements that should appropriately cover this]

RPM:6 The Corp shall ensure that contractors conducting the project work fully understand the shorebird protection measures detailed in this incidental take statement.

RPM:7 The Corp shall ensure that the terms and conditions are accomplished and completed as detailed in this incidental take statement including completion of surveys and reporting requirements and the notification of any documented unauthorized take of shorebirds.

RPM:8 The Corp shall ensure that the contractors conducting the work provide predator proof trash receptacles for the construction workers. All contractors and their employees shall be briefed on the importance of not littering.

Reporting

1. A report describing the actions and the results of the actions taken to implement the terms and conditions of this incidental take statement shall be submitted to the Fish and Wildlife Service Panama City Florida Field Office, 850-769-0552, within 90 days of completion of the proposed work for each year when the activity has occurred. This report will include the dates of actual construction activities, names and qualifications of personnel involved in turtle nest and **shorebird surveys, shorebird survey results**, and any turtle nest relocation activities, descriptions and locations of self-release beach sites, and the required Florida Fish and Wildlife Conservation Commission beach restoration data (**Appendix 2**).
3. The Corp or their designee shall be immediately notified by the project contractors upon locating an injured or dead shorebird. The permittee or its designee shall be responsible for notifying FWC Wildlife Alert at 1-888-404-FWCC (3922) and the U.S. Fish and Wildlife Service Office (850) 769-0552 and GUIS (850) 934-2617. Care should be taken in handling injured animals to ensure effective treatment or disposition and in handling dead specimens to preserve biological materials in the best possible state for later analysis if deemed necessary.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. Many shorebirds not protected by the ESA rely on the swash zone along the beach front for foraging. The **Corp** should study the impacts of macro benthic invertebrate recovery rates and assemblages at minimum where the impacts are expected to reoccur on a regular basis.
2. Replacement of lost or smothered drift would provide possible nesting attractants and cover for roosting birds. Driftwood could be spread out between the primary dune and primary wrack line. IS THIS EVEN POSSIBLE, IS DRIFTWOOD OR SMAL TREE LIMBS? REMOVE PRIOR TO PROJECT STARTING.
3. Specific research that would be useful for future planning/minimizations?
4. Efforts to artificially create and maintain high quality plover habitats. However, consideration of such habitats to off-set perpetuation of habitat loss elsewhere must be contingent on empirical evidence that such habitats will support productive breeding (snowys) or roosting and foraging (snowy and piping, red knots?) and long-term commitments to maintain these habitats. (Loegering and Fraser 1995 suggest this and FWS 1996 task 1.24).

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

The Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory bird. Under the provisions of the MBTA it is unlawful “by any means or manner to pursue, hunt, take, capture or kill any migratory bird except as permitted by regulations issued by the Fish and Wildlife Service. The term “take” is not defined in the MBTA, but the Service has defined it by regulation to mean to pursue, hunt, shoot, wound, kill, trap, capture or collect any migratory bird, or any part, nest or egg of any migratory bird covered by the conventions or to attempt those activities.

The permittee must follow FWC’s standard guidelines **[FWC to provide current guidelines?]** to protect against impacts to **all nesting shorebirds** during implementation of projects under **Tier I** and **Tier II** during the periods from February 15-August 31.

The Fish and Wildlife Service will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712) or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668-668d), if such take is in compliance with the terms and conditions specified here.

