



United States Department of the Interior

U. S. FISH AND WILDLIFE SERVICE

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JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:
FWS Log No. 41910-2013-I-0095

November 15, 2013

Mr. Eric Summa, Chief
Environmental Branch
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019
(Attn: Paul Stodola/Kenneth Dugger)

Dear Mr. Summa:

The U.S. Fish and Wildlife Service (Service) has reviewed your cover letter dated February 15, 2013 and the enclosed Biological Assessment (BA) on the proposed deepening and widening of the Jacksonville Harbor in Duval County, Florida. The deepening is proposed to occur from the river's outer entrance channel in the Atlantic Ocean to river mile 13.6 in the vicinity of the Port of Jacksonville's Cruise Ship Terminal. In addition to the dredging and widening of the authorized Federal channel, the work includes channel widening for two ship turning basins, dredging a turning basin and berthing areas for the MOL facility, and some realignment of the Federal channel. The current National Economic Development plan calls for deepening to 45 feet mean low water, with a required additional foot for advanced maintenance and one foot allowable overdepth dredging. The non-federal sponsor, Jacksonville Port Authority, has requested additional deepening to 47 feet, and the USACE, as a result, is requesting consultation on the full scope of study, which is deepening to 50 feet. A variety of hydraulic and mechanical dredge methods may be used, as well as blasting to break up rock that is too hard for other methods. A bed-leveling device may be used to remove high spots or ridges. Depending on its suitability, the dredged material is expected to be placed within existing upland spoil sites located on Bartram Island and Buck Island, an expanded or new Ocean Dredged Material Disposal Site (ODMDS), on the beach or nearshore marine environment south of the harbor entrance, within one or more artificial reef sites (rocky material only), and/or shallow open water to create marsh or island habitat within Mill Cove in the vicinity of Bartram Island West. In addition to the direct impacts to in-water habitats, the expanded and deepened channel is expected to increase salinity levels within the main stem of the St. Johns River as well as a portion of the Ortega River and potentially other tributaries. Ecological modeling indicates such changes are likely to increase the salinity stress on fresh water eel grass (*Vallisneria americana*) in the vicinity of southern Duval and northern St. Johns County and Clay County. Eel grass is the primary native forage base for the West Indian (Florida) manatee (*Trichechus manatus latirostris*) within the freshwater portions of the St. Johns River watershed.

The following is provided in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

The USACE determined that the proposed project is within the range of the following federally - listed species and any designated critical habitat, and considered them in its effects review.

- endangered West Indian (Florida) manatee (*Trichechus manatus latirostris*)
- threatened piping plover (*Charadrius melodus*)
- endangered wood stork (*Mycteria americana*)
- threatened loggerhead sea turtle (*Caretta caretta*)
- endangered green sea turtle (*Chelonia mydas*)
- endangered leatherback sea turtle (*Dermochelys coriacea*)
- endangered Kemp's ridley sea turtle (*Lepidochelys kempii*)
- endangered shortnose sturgeon (*Acipenser brevirostrum*)
- endangered Atlantic sturgeon (*Acipenser oxyrinchus*)
- endangered smalltooth sawfish (*Pristis pectinata*)
- endangered North Atlantic right whale (*Eubalaena glacialis*)

The USACE also evaluated the potential effects of the proposed project on the red knot (*Calidris canutus rufa*), proposed for listing as threatened, and a unit of its proposed designated critical habitat, as well as the eastern population of the gopher tortoise (*Gopherus polyphemus*), a Federal candidate for listing. The National Marine Fisheries Service has ESA and other statutory/regulatory authorities for the two species of sturgeon, the smalltooth sawfish, North Atlantic right whale, and all sea turtle species within open waters. We as a result will not consider these species and sea turtles in open water, within our additional comments.

Sea turtles

Two of the proposed project actions involve disposal of beach-quality/nearshore-quality dredged material on the beach south of the harbor entrance and/or nearshore placement within the swash and sublittoral zones, respectively, in the same area. The USACE determined that such placements may affect nesting and hatchling sea turtles, and as a result has proposed to follow the August 22, 2011 Statewide Programmatic Biological Opinion (SPBO) on beach placement and shore protection in Florida. Although the proposed work is technically outside the scope of the SPBO, we support its application to, and use with, the proposed harbor deepening and placement of dredged material on the beach and within the swash zone.

The easternmost extent of the deepening includes the outer, inner, and entrance reaches of the authorized navigation channel of the St. Johns River (SJR). Dredging conducted within these reaches generally is visible from the beaches contiguous to Huguenot Memorial Park immediately north of the SJR north jetty, and/or Naval Station Mayport and the city of Jacksonville's Hanna Park south of the SJR south jetty. The USACE did not consider the potential effects of lighting associated with nighttime dredging within these reaches on nesting and hatchling sea turtles during their primary nesting season, May 1 through October 31. As a result, it is our view that to avoid take of nesting and hatchling sea turtles from lightening associated with dredging the above reaches during the primary sea turtle nesting season, the USACE must incorporate the following in its project plans and specifications.

- All lighting used to illuminate the immediate dredge area shall be shielded and/or positioned, and/or the dredge barge oriented, such that the lighting is not directly visible from the beaches immediately north and south of the dredging location.
- Lighting needed for safety and security shall, to the maximum extent consistent with applicable laws and regulations, be shielded and/or positioned to illuminate only the area of concern and not be directly visible from the above beaches.

Piping plover

Known piping plover occurrences within the area affected by the project include part of its designated critical wintering habitat unit (Unit FL – 35) along the northern shoreline at the mouth of the St. Johns River, the shoreline of the Atlantic Ocean contiguous to Naval Station Mayport and Hanna Park immediately south of the harbor entrance, and within the Bartram Island Dredged Material Management Area (DMMA). The portion of FL-Unit 35 within the project's area of effect is less than one percent of the total amount of habitat within this unit. Sightings of birds within this portion are rare, as is the case for the above shorelines south of the harbor entrance. Occasional observations of individual birds within the Bartram Island DMMA are thought to be a result of fortuitous foraging opportunities resulting from ongoing spoil disposal operations there. The project's potential disposal of beach quality sand south of the harbor entrance likewise can present additional foraging opportunities within an area generally exhibiting net beach erosion.

Based on the preceding, and the USACE statement within the BA that "outside of the....disposal operation, the sand placement would not alter the ongoing management of the shoreline nor significantly alter the character of the shoreline.....", the USACE determined that the proposed action may affect, but is not likely to adversely affect, piping plovers and Unit FL-35 of its critically designated winter habitat. We concur with that determination.

Wood storks

Wood storks are widely distributed within the project's area of effect. They forage within shallow waters subject to fluctuating levels in both natural and artificial fresh, brackish, and estuarine habitats. There are three active nesting colonies and one inactive colony within the 13-mile foraging buffer of some portions of the project area. The three active colonies are within locations and at elevations that will not likely be impacted by any increase in salinities resulting from the proposed deepening. These colony locations and their resulting productivity have remained stable for many years, so any salinity impacts to potential new nesting expansion locations is not expected to affect these core nest sites. In addition, the USACE is proposing to mitigate for any such wetland impacts supporting both foraging and breeding habitat. As a result, the USACE determined that the proposed action may affect, but is not likely to adversely affect, the wood stork. We concur with that determination.

West Indian (Florida) manatee

Like the wood stork, the manatee is widely distributed with the project's area of effect. In addition, much of the in-water work is located within designated critical manatee habitat.

Manatees occur most frequently along shorelines in relatively shallow waters, where they feed on a variety of benthic, emergent, floating, and bank vegetation. Within the estuarine and brackish water segments of its habitat within the project's area of effect, manatees feed primarily on attached algae (*Ulva* spp., etc.) and saltmarsh cordgrass (*Spartina alterniflora*) where such stands are contiguous to deeper water. As waters transition from brackish to fresh water within the southern range of the expected area of effect, the primary forage becomes eelgrass (*Vallisneria americana*). Other fresh water submerged, emergent, and floating aquatic vegetation is present to a lesser degree and utilized as needed and available.

The USACE has indicated potential impacts to manatees may result from blasting activities, altered behaviors, impediments to seasonal migrations, as well as a decrease in the amount of fresh water foraging habitat due to changes in submerged aquatic vegetation coverage from increased salinity.

The most recent models concerning how the proposed river deepening may affect salinity within the St. Johns River and its major tributaries within the area of effect indicate that such changes will have slight to no impact on salinities within the southern portion of the area of effect. As a result, the proposed action is not expected to have significant effects on submerged aquatic vegetation (SAV) within the southern reaches of the project's area of effect. The southern reach supports the highest concentration of manatees during the spring, summer, and fall months. As a result, and due to no substantive change to the existing estuarine and brackish water habitats, it is our view that effects to critical habitat from the proposed action will be insignificant or discountable.

As to altered behaviors, the area of effect undergoes regular, periodic maintenance dredging with hydraulic cutterhead, hopper, and clamshell dredging. Any impacts from these dredge methodologies used as part of the proposed action are likewise not expected to have any permanent, significant effects on manatee behavior. The USACE also notes in the BA that it will follow the 2011 Standard Manatee Conditions for In-Water Work. We support this effort, but recognize that the standard conditions do not cover all possible dredging scenarios associated with the proposed action. As a result, we recommend the USACE incorporate the following additional measures concerning dredging, into its project plans and specifications.

- At least one person shall be designated as a manatee observer when in-water work is being performed. That person shall have experience in manatee observation during dredging activities, and be equipped with polarized sunglasses to aid in observation. The manatee observer shall be on site during all in-water construction activities and advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Two observers who have experience in manatee observation during nighttime dredging activity shall be used when nighttime clamshell dredging is conducted during the months of April through November. The distance at which the nighttime clamshell operation shall cease when a manatee is present shall be expanded to 75 feet of any in-water construction activity. Lighting of this expanded area shall be comparable to that used at nighttime to observe the clamshell bucket and dragline during bucket entry and exit from the water.

- During clamshell dredging, the dredge operator shall gravity-release the clamshell bucket only at the water's surface, and only after confirmation that there are no manatees within the safety distance identified in the standard construction conditions, and expanded to 75 feet during nighttime clamshell operations.

During the scoping process, the USACE identified potential areas within the proposed harbor deepening footprint having rock with an unconfined compressive strength (> 5000 psi) that exceeds the dredging ability of either hopper or cutterhead suction dredges. In those instances, the USACE has proposed using blasting or an impact hammer to pretreat such rock prior to its removal by the more conventional methods. The USACE estimated that the extent of such rock could result in over 365 days of blasting if multiple blasts within different reaches could not be conducted within the same day. To address the potential impact to manatees from blasting, the USACE is committing to implementing the confined underwater blasting protective measures developed for the Miami Harbor dredging for both the actual production blasting and test blasting in the St. Johns River navigation channel.

Past blasting events in the river have provided insight into the difficulty of observing marine animals from aerial and elevated platforms on watercraft because of its depths, low visibility, and fast currents. Due to these added challenges, and the failure of the monitoring/watch plan within the Integrated General Reevaluation Report II and Supplemental Environmental Impact Statement (GRRII/SEIS) to address observer qualifications, it is our view that the USACE needs to substitute the revised and improved language for protected species observers used for the most recent blasting (Phase III) of the Miami Harbor project undertaken in 2012-2013, for its proposed plan within the GRR II/SEIS, and referenced in the BA.

In addition to the preceding, we have identified the following additional measures that the USACE will need to incorporate into the project plans and specifications, in order to reduce the likelihood of adverse effects to manatees from dredging, to insignificant or discountable levels.

- Due to the USACE identifying rock pretreatment other than blasting, such as punch barge/hydro-hammer, or pneumatic hammers, as having effects similar to those of underwater unconfined blasting, the measures used to protective wildlife during confined production blasting shall be used for any rock pretreatment other than blasting, and incorporated into the project plans and specifications.
- In order to offset the risk of adverse effects resulting from the potential duration of blasting and impact hammering throughout the area of effect, and manatee abundance and distribution within this area during the spring, summer, and fall, the USACE shall include in its project plans and specifications a requirement to confine blasting and impact hammering to the months of December through February, when manatee presence and distribution within the area of effect is expected to be minimal. The USACE has indicated that it will consider a blasting window, but did not provide any specifics
- In order to maximize observer visibility during blasting, the timing of the blasting shall be limited to slack tide to the maximum possible extent.

By incorporating all of the preceding measures in the proposed action, it is our position that the USACE can avoid adverse effects to manatees from construction of the proposed action. By USACE agreement to these measures, we would concur with an amended determination by the USACE that by including these measures in the project plans and specifications, the proposed action so conditioned may affect, but is not likely to adversely affect, the manatee.

Red knot and Gopher tortoise

Within the area of effect, the red knot occupies similar foraging and roosting habitat as the piping plover. Unlike the piping plover, red knot presence within this area generally is limited to a couple of months within both its spring and fall migrations through the area. As a result, the general information and evaluation considered in the BA, and the analysis included in this document for the piping plover, may be applied to the red knot.

As a Federal candidate for listing, the eastern population of the gopher tortoise, which includes individuals within the area of effect, does not have the same protections afforded federally-listed species. The USACE in its BA recognizes the potential for project impacts to gopher tortoises occupying existing and any new upland spoil disposal sites associated with the proposed action. As a result, the USACE is proposing to conduct gopher tortoise burrow surveys prior to the maintenance or expansion of any existing upland dredged material management areas (DMMA), and prior to the construction or maintenance of any new upland DMMA. The USACE further intends to relocate individual gopher tortoises or engage in some other mitigative measures to minimize or compensate for any impacts. We recommend that the USACE coordinate any gopher tortoise issues related to the proposed actions in advance of any construction with the Florida Fish and Wildlife Conservation Commission.

This concludes our comments on the BA for the Jacksonville Harbor General Reevaluation Report for the authorization to deepen the lower 13.6 miles of St. Johns River within Duval County, Florida.

Although this does not represent a biological opinion as described in section 7 of the Act, it does fulfill the requirements of the Act and no further action is required. If modifications are made to the project that may affect the species or their habitats considered in the informal portion of this response; if the USACE or project sponsor fails to comply with the measures and conditions stated previously; if additional information involving potential effects to the species or their habitats considered in this response becomes available, or if unauthorized take of such species occurs during project construction, the USACE should contact our office to determine what additional actions may be necessary.

Fish and Wildlife Coordination Act

Our office has reviewed the Draft Coordination Act Report (DCAR) dated October 2013 for the Jacksonville Harbor Channel Deepening, Draft Navigation Study in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and provides the following recommendations:

1. The Service is not currently in the process of identifying critical habitat for the gopher tortoise. Please remove that sentence from the document each time it occurs. Additionally, the actual listing of the gopher tortoise has been precluded by higher priority listing actions. This is a recommendation for the language used in those instances:

“It should be noted that while the gopher tortoise is currently listed as a threatened species by the State of Florida, the Service has determined that the species in its eastern range should be Federally listed as threatened, however the actual listing of the gopher tortoise has been precluded by higher priority listing actions. The USACE implements protective measures for this species such as buffer zones (work exclusion areas around any tortoise burrow) as well as periodic surveys.”

2. Please update Appendices C and D to match those used within the DEIS. The Standard Manatee Construction Conditions should be the most current version dated 2011 and the Blasting Specs should include aerial observers as well as any of the recommendations provided in our Section 7 response.

Provided that these recommendations are included in the CAR, the Service concurs that this CAR and the information contained in the Jacksonville Harbor Navigation Study, GRRII/SEIS, prepared by the USACE, fulfills the requirements of the Fish and Wildlife Coordination Act.

If you have any questions or require clarification regarding this letter, please contact Mr. John Milio at john_milio@fws.gov or by calling (904) 731-3098, or Ms. Erin Gawera at erin_gawera@fws.gov, or by calling (904)-731-3089.

Sincerely,



Michael Jennings
Acting Field Supervisor

cc:

Ms. Carol Knox/Dr. Robbin Trindell
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