United States Department of the Interior

FISH AND WILDLIFE SERVICE

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January 22, 2014

John Kennelly, Chief
Planning Branch
Department of the Army
New England District
U.S. Army Corps of Engineers
696 Virginia Rd
Concord, Massachusetts 01742

Dear Mr. Kennelly:

This letter is in response to your August 20, 2013 letter and our continuing consultation on the Saco River and Camp Ellis Beach Shore Damage Mitigation Project under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*). In that letter, the New England District Army Corps of Engineers (Corps) requested that the U. S. Fish and Wildlife Service (Service) concur with the Corps determination that the proposed action will not adversely affect the piping plover (*Charadrius melodus*), a federally threatened species and the red knot (*Calidris canutus rufa*), a candidate for Federal listing as threatened. The Corps believed that the Service inappropriately broadened the definition of the proposed action to include environmental baseline effects as defined in 50 CFR 402.2 and effects outside of the authority and purpose of Section 111 of the 1968 Rivers and Harbors Act, as amended. The Corps believed that the proposed action, when properly defined, is not likely to adversely affect listed species or critical habitat, and that a formal ESA section 7 consultation in accordance with 50 CFR 402.14 is not necessary.

Project Name/Location: **Saco Camp Ellis Beach Shoreline Protection Project (Sect 111)**

Log Number: **53411-2011-I-0034**

The Service does not concur with your determination that this project is not likely to adversely affect listed species. We explain our rational below.

Since our receipt of your letter, the Service and the Corps have continued section 7 consultation or discussed this project on several occasions, including:

- A conference call on November 26, 2013;
- A meeting with the Corps, Service and City of Saco officials on December 10, 2013;

- A conference call on January 15, 2014.

In addition, the Service and Maine Department of Inland Fisheries and Wildlife met for the first time with the Saco Shoreline Commission on January 9, 2014. The City of Saco charged the Commission with developing a beach management agreement for piping plovers and red knots.

The details of the Saco River and Camp Ellis Beach Shore Damage Mitigation Project are still evolving, and the action is not fully described in the draft Environmental Assessment (EA). The Corps and the Service cannot completely evaluate effects of this action on listed species until there is sufficient information describing the project, its location, and the scope of activities. Although the EA provides a basic description of the project, our recent conversations indicate there are many aspects of the project that have yet to be determined, some of which may affect listed species. Based on the information we have available at this time:

- The location of the inland source of sand for beach nourishment has not been identified;
- The qualities (grain size, color) of sand used for beach nourishment has not been identified;
- The location and restoration of beach access for trucks carrying sand to the beach has not been identified;
- The northernmost extent of beach nourishment has not been decided;
- The responsible party for paying for maintaining the spur jetty and conducting future beach nourishment has not been confirmed;
- Details are not known concerning possible interim harbor dredging and beach nourishment by the City;
- Details are not known about whether the Beach Management Agreements with the municipalities of Saco, Old Orchard Beach, and Scarborough will meet the Service piping plover guidelines;
- Details are not known concerning the nature of landowner agreements or easements and the degree of participation to allow access to manage the beach for plovers and knots;
- The Corps has not described how sand moving northward will affect frequency of maintaining the Scarborough Federal Navigation Project.

These components of the Federal action may affect piping plovers and red knots (see table below). The Service will begin formal consultation with the Corps, when these aspects of the action and their effects on listed species have been fully described. We recommend the Corps prepare a biological evaluation or assessment that describes the likely effects of the action on listed species. The Service cannot concur on a determination of not likely to adversely affect based on an incomplete project description and incomplete evaluation of the effects on listed species. Nor can we "conditionally concur" based on hypothetical conditions. We need to review and evaluate the final project description and associated commitments to avoid adverse effects to listed species.

Sometimes we offer "conditional concurrence" in a programmatic consultation with a Federal agency. A programmatic biological opinion outlines measures to avoid adverse effects for an action that is repeated by a Federal agency. This approach to consultation has been used by the Service and the Corps in New Jersey. We have recommended this approach to the Corps for

beach nourishment projects associated with dredging federal navigation projects in Maine. Abbreviated "second tier" biological opinions are completed for each subsequent project under the programmatic. For the Saco project, many decisions have yet to be made, plans completed, and agreements finalized before we can understand the effects of the action on listed species.

We agree with your letter of August 20, 2013 that there could be beneficial effects from the beach nourishment project to piping plovers and red knots by restoring some of the habitat lost from over a century of beach erosion caused by the Saco River jetties. However, based on our current knowledge of the project, we also believe the direct and indirect effects of this action may affect or take these listed species. Our regulations require that whenever a Federal project results in both beneficial and adverse effects or take that formal consultation is required.

This is how the Service interprets key aspects of this consultation:

Discretion: The Corps has discretion in doing this project. This project to construct a spur jetty to mitigate for shoreline erosion is not inherent in the authority to construct the Saco River Federal Navigation Project. The Corps had discretion in selecting this as a Section 111 CAP project. The Corps selected the spur jetty and beach nourishment as the preferred alternative to address the erosion caused by the jetties. Other alternatives were evaluated, including those to remove all or a portion of the jetties, which has been discussed in Maine for decades. The proposed action commits the Corps to maintain the jetties for the foreseeable future. The impacts of this decision will result in beach erosion into the foreseeable future, potentially at a reduced rate because of the spur jetty and possibly periodic beach nourishment in the future.

Action area: Our regulations (section 402.02) define the action areas as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." Numerous studies from the University of Maine, Maine Geological Survey and Woods Hole Group predict that the nourished sand will erode and will migrate north along the Saco Bay shoreline until it encounters the ebb tide delta associated with the Corps jetty on Pine Point. Thus, the action area includes the inland location where sand will be mined, the road route that thousands of trucks will take to deliver the sand, and the temporary roadway developed for trucks to enter the beach. The action area also includes the north jetty at the Saco River to the jetty at the Scarborough inlet including the spur jetty, dunes, intertidal, and sub-tidal areas that will be influenced by the nourished sand migrating northward. If the City intends to periodically dredge the Saco River and harbor to maintain Camp Ellis and Ferry Beach, then these areas are part of the action area as well.

Environmental baseline: Our regulations (section 402.02) state that "environmental baseline includes the past and present impacts of all Federal, State, or private actions and of other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process." According to our Section 7 Handbook, the environmental baseline is a "snapshot in time" of the species' health at the time of consultation in the action area.

The adverse effects of the Saco River jetties on piping plovers and red knots and their habitat has been ongoing without ESA consultation for nearly 150 years since the first rock jetty was constructed in 1867. The pre-existing jetties have independent utility without the spur jetty, although at a greatly reduced purpose from 150 years ago. Although the jetties create boat access for a small harbor at the mouth of the river and a yacht club further up the river, we understand there are few deep-draft craft accessing the up-river portion (the textile mills are long closed). Baseline will also include State, local, private actions, and unrelated Federal actions (including beneficial action) affecting the species or that will occur contemporaneously with the consultation in progress. To our knowledge, the only ESA consultation on the Saco River Navigation Project was a maintenance dredging in 1992. There has never been a consultation on the construction and several addition to the jetties, as all this activity this was prior to the ESA (1973).

Effects of the action: Our regulations (section 402.02) define effects of the action as "the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action that will be added to the environmental baseline." "Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration." Indirect effects may occur outside of the area directly affected by the action. Cumulative effects are "those effects of future State or private activities, not involving Federal activities that are reasonably certain to occur within the action area of the Federal action subject to consultation."

Based on our incomplete knowledge of the project, we anticipate the following effects of the Saco River and Camp Ellis Beach Shore Damage Mitigation Project on piping plovers and red knots:

Action	Effects	Opportunities to avoid adverse effects
Sand mining.	Direct effect to listed species if present.	Insufficient information to assess at this time.
Beach access for trucks.	Direct effect to plover and red knot habitat.	Insufficient information to assess at this time. Will there be beach or dune restoration?
Beach nourishment.	Noise, trucks, heavy equipment on beach. Could be adverse effect on nesting plovers and migrating knots.	Conduct beach nourishment outside of the plover nesting and knot migration season (March 15 to September 15). Delay nourishment until spur jetty is complete.
Beach nourishment.	Dune construction may be part of the plan. Direct effect to habitat; could be positive or negative.	Insufficient information to assess. Dunes were built at Wells? Dune management plan that meets USFWS guidelines.
Beach	Direct effect. Burying intertidal	Conduct beach nourishment

nourishment.	invertebrates could be an adverse effect on nesting plovers and migrating knots.	outside of the plover nesting and knot migration season (March 15 to September 15) to allow time for inverts to recolonize nourished beach.
Beach nourishment.	Direct effect. Incorrect sand grain or color. Contaminants? If incorrect, could affect invertebrate community. Plovers may not nest.	Select clean sand source with correct grain size and color.
Beach nourishment.	Indirect effect. Cycles of good and poor habitat when nourished beach erodes.	More frequent interval of beach renourishment.
Beach nourishment.	During periods of beach erosion landowners and City will use emergency beach stabilization – geotubes, creating dunes, repairs to existing seawalls.	Monitor and mitigate for erosion by more frequent beach nourishment. Address emergency measures in Beach Management Agreement (e.g. install beach stabilization outside of plover nesting and knot migration period. Standards for vegetating newly-created dunes.)
Beach nourishment.	Proposed legislation allowing Maine municipalities to address erosion caused by Corps projects.	Monitor and mitigate for erosion by more frequent beach renourishment. Address emergency measures in Beach Management Agreement (e.g. install beach stabilization outside of plover nesting and knot migration period. Standards for vegetating newly-created dunes.)
Beach nourishment.	Nourished sand will erode and move north along Saco Bay. Indirect effect will benefit plovers and knots, but will result in take if beaches in Saco, Old Orchard, and Scarborough are not managed properly.	Beach Management Agreements should be in place throughout the action area: with Saco, Old Orchard Beach, and Scarborough. BMAs currently with Old Orchard and Scarborough. All three towns do not meet USFWS plover guidelines to avoid take.
Beach nourishment.	Nourished sand will reach Pine Point and be deposited at the ebb tide shoals at Scarborough FNG. This indirect effect increases the frequency of maintaining this FNP and exacerbate the present adverse effects of the ebb tide shoal, which prevents the natural movement of	Frequent sand by-pass from the ebb tide shoal over Scarborough River channel to Western Beach.

	sand to Western Beach.	
Beach nourishment.	Nourished sand will move north and likely block Goosefare Brook. Indirect effect that may increase plover and knot habitat at Goosefare Brook, but will result in take if stream is blocked and heavy equipment is used to maintain channel.	No heavy equipment on beach during the nesting and migration season. Special Use Permit with Refuge and agreements between Old Orchard and Saco on responsibilities and protocols to avoid damaging habitat at Rachel Carson NWR.
Beach nourishment.	Responsible party will have to nourish the beach. Future responsibility and frequency of nourishment is unknown (City, Corps, and State?). Potential, interrelated, indirect effects. City may purchase dredging equipment. Will there be future section 7 consultation or not?	Cannot determine how to avoid adverse effects until details of future responsibility and actions are described.
Increased recreational use of Saco Bay beaches.	Indirect effect. If recreational activities in plover and knot habitat are not managed properly, this will result in take. Also increased recreation results in increased predation from pets and wild predators.	Ensure beach is managed in accordance with *Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitat on the U. S. Atlantic Coast to Avoid Take Under Section 9 of the Endangered Species Act* and follow the 6 guidelines in our December 16, 2010 letter. Beach Management Agreements should be in place throughout the action area: with Saco, Old Orchard Beach, and Scarborough.
Construction of spur jetty.	Direct effect (harm, harass) on red knots that roost on the north jetty.	Construction outside of the migration season. On-site monitor to cease construction if knots are present. May not be able to avoid adverse effects.
Armoring the north jetty.	Will extend the life of the jetty and prolong associated adverse effects into the foreseeable future.	May not be able to avoid all adverse effects of future beach erosion. More frequent beach nourishment when Camp Ellis/Ferry Beach begins to erode and plover and knot habitat is diminished.

Our section 7 regulations require that a biological assessment be prepared for projects that are a "major construction activity." A major construction activity is a construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly

affecting the quality of the human environment as referred to in the National Environmental Policy Act (NEPA 42 U. S. C. 4332(2)(C)). We recommend considering this $27 million project as a major construction activity. We recommend that the effects on listed species should be described in a biological assessment or evaluation. The decision by the Corps to retain and add to the jetties will affect the human environment of Saco Bay and the habitat for the piping plover and red knot for the foreseeable future.

The piping plover is briefly mentioned in the Endangered and Threatened species section of the EA (p. 47), but the red knot is not evaluated. The effects of the alternatives on the piping plover are discussed briefly in the EA (pp. 68-69). The EA outlines measures to avoid adverse effects. Beach nourishment will be done outside of the nesting season. Beach slopes will be less than 1 foot rise: 10 foot run, and planting of dune grass is not anticipated. Finally, the City of Saco will develop a beach management plan that is approved by the Service, which will meet the Service's piping plover guidelines.

The EA does not consider many of the direct, indirect, interrelated and interdependent effects enumerated above. The EA does not fully describe all of the activities associated with the project needed to assess effects on listed species. Nor does it describe the action area that will be directly and indirectly affected by this project. Given the complexity and magnitude of this project, we recommend a full analysis of effects is warranted in a biological assessment or evaluation.

The Service and the Corps continue to be in informal ESA consultation on this project. Once the project details are fully known and a biological assessment or evaluation is completed, we can fully understand the range of effects on listed species and begin formal consultation. Given our incomplete knowledge of the project action, the Service believes there are many opportunities to avoid adverse effects. However, the Service currently does not have assurances that these measures will be implemented. Furthermore, we believe there some adverse effects that cannot be completely avoided.

Completing and signing beach management agreements with communities directly and indirectly affected by this project (Saco, Old Orchard Beach, and Scarborough) that meet the Service's piping plover guidelines and address red knots is instrumental to avoiding many, but not all, adverse effects to these species (see table above). The City of Saco does not have a beach management agreement, and we have only had one meeting to begin working on a draft. After that meeting, we question whether an agreement will be developed that meets our guidelines. We learned the City's dog ordinance does not meet our guidelines, the geographic extent of the agreement was in question, agreements with landowners may be difficult to obtain, and the City likely does not have funds to hire a piping plover coordinator. The Service currently has beach management agreements with Old Orchard and Scarborough, but neither meets our guidelines. Both communities have dog ordinances that do not meet our guidelines and both have not hired a piping plover coordinator to implement the plan.

Developing beach management agreements and ensuring they are properly funded and implemented is one of several measures the Corps should take to avoid adverse effects to listed species. The Corps should take the lead for developing and negotiating beach management

agreements that meet our guidelines. We request that the Corps be actively involved in this process and negotiate these difficult terms with the affected municipalities. The Corps may be able to help provide funding, as it has for similar beach nourishment projects on the East Coast, to assist these communities in implementing agreements.

Please contact me if you have any questions. We look forward to continue to consult with you on this project.

Sincerely,

Laury Zicari
Field Supervisor
Maine Field Office

cc: Catherine Rogers, USACE
Ward Feurt, USFWS, Rachel Carson National Wildlife Refuge