

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Herring River Restoration, Phase 1 - 05E1NE00-2022-TA-0386

Originating Person: Suzanne Paton

Telephone Number: 401-585-6563

Date: November 10, 2021

I. **R5**

II. **Service Activity (Program):** Partners for Fish and Wildlife

III. **Pertinent Species and Habitat:**

A. **Listed species and/or their critical habitat within the action area**

Endangered Roseate Tern (*Sterna dougallii dougallii*), Threatened Red Knot (*Calidris canutus*)

B. **Proposed species and/or proposed critical habitat within the action area:**

None

C. **Candidate species within the action area:**

None

IV. **Geographic area or station name and action:** Cape Cod, Massachusetts

V. **Location (attach map):**



- A. **County and State:** Barnstable County, Massachusetts
- B. **Section, township, and range (or latitude and longitude):** Wellfleet, MA (41°56'36"N, 70°03'44"W)
- C. **Distance (miles) and direction to nearest town:** approximately 1 mile

- D. **Species/habitat occurrence:** Red knot – marginal foraging, no roosting habitat;
Roseate tern – potential foraging, also marginal, no roosting habitat

VI. **Description of proposed action (attach additional pages as needed):**

The Project proposes to restore approximately 570 acres of tidal wetlands. Replacing the existing Chequessett Neck Road dike and culverts with a new bridge and electrically controlled sluice gates is the restoration project's main tidal restoration element. A portion of the existing earthen dike and three-bay culvert structure at Chequessett Neck Road will be removed, and a new 165-foot bridge with adjustable sluice gates will be installed. The new bridge and sluice gates will allow for the gradual transition from the current restricted tidal flushing regime to conditions more closely resembling the River's natural flow prior to construction of the Chequessett Neck Road dike.

The new Chequessett Neck Road Bridge and sluice gates and the Mill Creek water control structure will be configured to allow partial tidal flow into Herring River and Mill Creek up to a maximum water level specified for each respective basin. Phase 1 includes partial restoration of tides in the Mill Creek sub-basin. A water control structure equipped with slide/flap tide sluice gates will be constructed across Mill Creek near the entrance to Lower Herring River. This structure will enable a controlled reintroduction of tidal exchange while protecting structures on private properties. The Pole Dike Road will be raised to a sufficient elevation and with a larger culvert opening and a sluice gate structure will be installed at the culvert to restrict flow into Upper Pole Dike Creek. The Pole Dike Road culvert has been designed to include a combination slide/flap gate to restrict flood tide flow. Phase 1 will exclude tides from the Upper Pole Dike Creek sub-basin to protect several low-lying private properties that would require mitigation measures to prevent tidal flow impacts. The Pole Dike Creek crossing will be equipped with gates that allow unidirectional flow (drainage only) while preventing any tidal flow from entering Upper Pole Dike Creek basin as a result of Phase 1 restoration. Maximum water levels in all areas of the estuary affected by Phase 1 tidal restoration will be kept below elevations that could impact any private structures that are not protected by Phase 1 protection measures.

Complete removal of the earthen causeway and culvert crossing of Herring River at High Toss Road is a tide control component of the Project. A new Herring River channel will be excavated to its prior width of approximately 30 feet to match the natural channel width and depth above and below the roadway crossing for tidal water conveyance; the new banks of the River will be loamed, seeded, and treated with erosion control blanket.

The Project area consists of several low-lying roadways that are vulnerable to high tide water levels with restored tidal flow. Pole Dike, Bound Brook Island and Old County Roads form a generally north-south roadway extending between Wellfleet Center and South Truro, crossing Pole Dike Creek, Herring River and Bound Brook. To prevent overtopping during the storm-of-record, segments of these roadways will be elevated to a minimum of six inches above the predicted water surface elevation during the modeled storm-of-record.

The limits of disturbance include the footprint of the respective tide control element and any ancillary area necessary during construction (i.e., staging areas). The limits of disturbance for the Chequessett Neck Road Bridge and High Toss Road causeway removal occur entirely on land owned by either the Town of Wellfleet or National Park Service.

VII. Determination of effects:

A. Explanation of effects of the action on species and critical habitats in items

Based on information in our files and a review of recent observation in eBird for both species, we anticipate that only transient red knots and roseate terns may occur in the Project Area. There is marginal foraging habitat for both species, although the project, upon completion of all phases, is anticipated to benefit the species by 1) providing tidal flushing of the creek and increasing saltmarsh habitat benefitting red knots; and 2) improving the herring run thus providing additional forage fish for roseate terns. Disturbance to transient individuals in the project area is anticipated to be extremely limited and unlikely to occur.

B. Explanation of actions to be implemented to reduce adverse effects:

No measures needed to reduce adverse effects.

VIII. Effect determination and response requested: [* optional]

A. Listed species/critical habitat:

<u>Determination</u>	<u>Response requested</u>
no effect (species: _____)	___ *Concurrence
is not likely to adversely affect (species: <u>Red Knot, Roseate Tern</u> _____)	___ <u>X</u> Concurrence
is likely to adversely affect (species: _____)	___ Formal consultation
may affect; beneficial effect (species: _____)	___ Concurrence
_____	_____

signature
[Suzanne Paton, Supervisory Fish and Wildlife Biologist]
[following discussion with Susi VonOettingen]

date

IX. Reviewing ESO Evaluation:

A. **Concurrence** X **Noncurrence** _____

B. **Formal consultation required** _____

C. **Conference required** _____

D. **Remarks (attach additional pages as needed):**

signature

date

[Audrey Mayer, Supervisor, New England Field Office]