

**Certificate of Inclusion in the Massachusetts
Habitat Conservation Plan for Piping Plover
Sandy Neck Beach Park,
Town of Barnstable
March 17, 2017**

The United States Fish and Wildlife Service (“USFWS”) issued to the Massachusetts Division of Fisheries and Wildlife (“DFW”) an Incidental Take Permit (“Permit”) No. TE01281C-0, on July 8, 2016, for a period of 25 years, pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973 (ESA), as amended, 16 U.S.C. 1539(a)(1)(B). The Permit authorizes the Take of Piping Plover (*Charadrius melodus*) in accordance with the terms and conditions of the Permit, and the Massachusetts Statewide Habitat Conservation Plan (“HCP”). Under the Permit, the Town of Barnstable (“Participant”) is authorized to perform covered activities that may result in the Take of Piping Plover, provided such covered activities are conducted in compliance with all applicable terms and conditions of the Permit and the HCP.

As the owner of the property depicted in Figure 1 and 2 of Exhibit “A”, or an entity with written permission to use property including Piping Plovers or their habitat, attached hereto and incorporated by reference into this Certificate of Inclusion (“COI”), you are entitled to the protection of the Permit for the activities that may result in a Take of Piping Plover as authorized by the HCP and by DFW in Conservation & Management Permit No. 017-297.DFW, including but not limited to the Impact Avoidance and Minimization Plan and the Mitigation Plan and other exhibits attached thereto (collectively, “CMP”), which DFW has issued to you pursuant to the Massachusetts Endangered Species Act, MGL c. 131A, (“MESA”) and the MESA regulations at 321 CMR 10.00. The CMP and all attachments thereto are depicted at Exhibit “A,” attached hereto and incorporated by reference into this COI.

This COI shall be valid for a period of three (3) years from the date signed by the Director of DFW unless otherwise suspended or revoked by DFW for noncompliance. However, plan participants are required to obtain reauthorization from the DFW on an annual basis, prior to carrying out covered activities in a given year. DFW may grant extensions or renewals of this COI or require the submittal of a new application for a COI, including in cases where your request for continued coverage under a COI would exceed the available number of statewide Take allowances under the Permit because DFW cannot grant more Take exposure allowances than allowable pursuant to the Plan. As set forth in Exhibit “A,” DFW reserves the right to unilaterally adjust on an annual basis the amount of Take exposure authorized pursuant to this COI.

The undertaking of activities authorized by this COI and the associated CMP does not relieve the Participant of its obligation to comply with any other applicable federal or state law or regulation or municipal bylaw, ordinance or regulation.

In the event the Participant fails to comply with the terms and conditions of the Permit, the HCP or the CMP the Participant shall be subject to enforcement action, including but not limited to, the immediate suspension or revocation of the COI and/or the CMP. DFW shall notify the USFWS within 2 business days of DFW’s discovery of the infraction, and within 1 business day of its decision to suspend or revoke the COI.

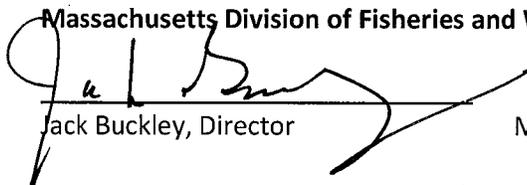
Administrative, judicial or other action on the part of DFW does not foreclose the possibility that FWS may seek its own remedy against Participant or DFW.

By signing this Certificate of Inclusion, you signify your election to receive Take Authorization to expose *one* Piping Plover broods per year to covered activities under DFW's Permit, subject to the terms and conditions in the Permit and the associated CMP. You also assent to the requirement under both the ESA and MESA, and as explained in the HCP, that beach use and management, excepting the above-listed covered activities, must be comply with the State Guidelines and Federal Guidelines, effective at the time of COI issuance, or as amended during the term of the COI.

This Certificate of Inclusion does not impose additional regulatory control over the signatory nor require the signatory to provide additional information not called for in the HCP, Permit or COI, but instead ensures compliance with 50 Code of Federal Regulations, section 13.25(d).

Coverage under the Permit will become effective upon receipt of the executed COI by DFW and Participant, subject to all requirements of the Plan and COI Attachments. In the event the subject property is sold or leased, the Participant must inform the buyer or lessee of these provisions in writing with a copy to DFW. If the new owner or lessee desires to be covered under the ESA and MESA for Piping Plover Take, it must: assent to the terms of the HCP, Permit, and CMP; demonstrate its financial ability and provide assurances to undertake the IAMP and mitigation plan requirements; demonstrate its eligibility under the provisions of the HCP. Otherwise the Participant should terminate the COI.

Massachusetts Division of Fisheries and Wildlife



Jack Buckley, Director

March 17, 2017

Town of Barnstable



Nina Coleman, Sandy Neck Park Manager

3/20/17
Date

EXHIBIT A: Conservation & Management Permit
(Includes Impact Avoidance & Minimization Plan (IAMP) and Mitigation Plan as
attachments)



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

Jack Buckley, Director

MA ENDANGERED SPECIES ACT (G.L. c.131A) CONSERVATION AND MANAGEMENT PERMIT

DATE	March 17, 2017
CONSERVATION PERMIT NO.:	017-297.DFW
NHESP FILE NO.	16-35448
PERMIT HOLDER	Town of Barnstable
ACTIVITY	Use of reduced proactive symbolic fencing and oversand vehicles associated with recreational beach management, Sandy Neck Beach Park, Barnstable, MA

Pursuant to the authority granted in the Massachusetts Endangered Species Act (“MESA”) (G.L. c. 131A) and its implementing regulations (321 CMR 10.23), the Director of the Massachusetts Division of Fisheries & Wildlife (the “Division”) hereby issues a Conservation and Management Permit to the Town of Barnstable (the “Permit Holder”). This permit and associated Town of Barnstable Certificate of Inclusion in the Massachusetts Habitat Conservation Plan (HCP) issued in accordance with the Endangered Species Act (ESA) for Piping Plover, dated March 17, 2017 (the “COI”), authorize the Taking of the State and Federally listed Piping Plover which is listed as “Threatened” pursuant to the MESA and “Threatened” pursuant to ESA, arising out of reduced proactive symbolic fencing more particularly described in documents attached hereto (the “Activity”), at Sandy Neck Beach Park, Barnstable, Massachusetts (the “Property”). This permit also authorizes the Taking of the state-listed Least Tern (*Sternula antillarum*) and Diamondback Terrapin (*Malaclemys terrapin*) listed as Special Concern and Threatened, respectively, pursuant to MESA, associated with the use of oversand vehicles as described with the aforementioned Activities and essential vehicle traffic on the Marsh Trail.

During a given beach season, a maximum of 1 pair of Piping Plovers could be exposed to reduced proactive symbolic fencing and up to 15 Least Tern chicks could be exposed to oversand vehicle (OSV) use. Similarly, Diamondback Terrapin adults, nests and hatchlings are exposed to some mortality risk associated with the Marsh Trail. However, intensive monitoring of the site, the ability to temporarily halt traffic, the installation of symbolic fencing should a Piping Plover pair nest, and a variety of other impact avoidance and minimization procedures required by way of this Permit and the HCP will significantly decrease risk.

Under the authority granted by and in accordance with MGL c131A§3 and 321 CMR 10.23, the Director may permit the Taking of a State-listed Species for conservation and management purposes provided that there is a long-term Net Benefit to the conservation of the impacted species. If the Director determines that the applicant for a permit has avoided, minimized and mitigated impacts to the State-listed Species consistent with the following Performance Standards, then the Director may issue a conservation and management permit, provided:

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- (a) the applicant has adequately assessed alternatives to both temporary and permanent impacts to State-listed Species;
- (b) an insignificant portion of the local population would be impacted by the Activity or Activity, and;
- (c) the applicant agrees to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of the State-listed Species that has been approved by the Director, as provided in 321 CMR 10.23(5), and shall be carried out by the applicant.

The Director has determined that the applicant for this permit has met the above noted Performance Standards and that the conservation and management plan described herein provides a long-term Net Benefit to the affected state-listed species.

Pursuant to this permit, impact avoidance and minimization measures, including but not limited to, intensive monitoring of habitat subject to reduced proactive symbolic fencing, signage, traffic management, staff training, narrow travel corridor, enhanced Least Tern chick monitoring, and relocation of Diamondback Terrapin nests will be implemented in order to minimize disturbance and risk of direct mortality; funding will be provided for off-site selective predator management to benefit Piping Plovers and Least Terns; Diamondback Terrapin nests will be relocated if found on the Marsh Trail so that the nests are not at risk of destruction from essential vehicle traffic, terrapin nests will be protected from predators with milk crates, and hatchlings will be collected for headstarting to augment the Great Marsh population.

Therefore, the Activity can be permitted pursuant to the MESA. This Conservation and Management Permit (the "Permit") is issued to condition the Activities and to provide a long-term Net Benefit to the affected species.

In accordance with the document submitted to the Division entitled:

- "Massachusetts Habitat Conservation Plan for Piping Plover, Request for Certificate of Inclusion" (January 2017) (the "Plan"; Attachment A).

Incorporated by reference into this permit, and any other plans and documents referenced herein, this Conservation and Management Permit is issued with the following conditions:

Conditions:

1. This Permit authorizes the exposure of up to one Piping Plover pair to the Activity, reduced proactive symbolic fencing; exposure of up to 15 unfledged Least Tern chicks to the use of OSVs, as well as use of the Marsh Trail to essential vehicles in the vicinity of Diamondback Terrapins, subject to limitations described in Attachment A, and set forth in this Permit and the COI.
2. All Activities must be confined to the Town-owned Property shown in Figures 1 and 1a of Attachment A.
3. Other than the exceptions authorized by this Permit, the Permit Holder shall carry out beach use and management in compliance with the relevant State Guidelines and Federal Guidelines for management of recreational beaches with breeding plovers and terns effective during the term of the Permit.

4. This Permit authorizes only otherwise lawful activities. All activities carried out pursuant to this Permit must be carried out in accordance with applicable local, state, and federal statutes and regulations.
5. As set forth in the COI, all activities authorized by this Permit must be carried out in accordance with the Final Massachusetts Division of Fisheries & Wildlife Habitat Conservation Plan for Piping Plover (HCP), dated June 2016, and Incidental Take Permit (ITP) No. TE01281C-0, dated July 8, 2016. The COI, HCP and ITP are incorporated by reference into this Permit. By acceptance of this Permit, the Permit Holder acknowledges receipt of copies of the COI, HCP and ITP, official copies of which are located at the Division's field headquarters, 1 Rabbit Hill Rd., Westborough, MA.
6. Division representatives shall have the right to enter and inspect the Property subject to this Permit at reasonable hours to evaluate permit compliance and require the submittal of any reasonable information not otherwise required by this Permit but deemed necessary by the Division to complete its evaluation.
7. Any change to the proposed Plan shall require the Permit Holder to inquire of the Division, in writing, whether the change is significant enough to require the filing of a new Conservation and Management Permit Application, and or require additional long-term Net Benefit for affected State-listed species. The Division retains the right to require the submittal of additional, reasonable information to evaluate the plan change.
8. Prior to implementing the Plan, the Permit Holder shall notify the Division in writing of the name, address, business and home telephone numbers of the manager responsible for compliance with this Conservation and Management Permit. The Permit Holder shall provide updated information in writing to the Division should a new or additional manager be hired after the Activity has commenced.
9. The Permit Holder shall notify the Division at least 24 hours prior to initiating any covered Activity affecting a new brood of Piping Plover not previously exposed. 24 hour notice shall also be provided prior to carrying out the covered activity affecting Least Terns.
10. Prior to the implementation of the Plan or any covered activity in any given year, the Permit Holder shall provide the Division with proof that it has secured adequate funding to implement the annual requirements of the Plan consistent with the budget provided in the Plan.
11. Impact avoidance and minimization procedures to protect Piping Plovers, Least Terns, and Diamondback Terrapins shall be implemented in accordance with the Plan.
12. Finding, relocation, and caging of Diamond Terrapin nests, and headstarting shall be carried out as described in the Plan, and by qualified personnel approved and permitted in writing in advance by the Division.
13. Interim and annual reporting shall be conducted in accordance with the Plan.
14. Prior to April 1, 2017, the Permit Holder shall execute the escrow agreement shown in [Appendix H](#) and fund the escrow account with \$5,800. Prior to carrying out covered activities in 2018 and 2019, the Permit Holder shall provide additional funding of up to \$5,800 per year by February 15 of that year in order to ensure that a minimum of \$5,800 of mitigation funding is provided

for each Piping Plover brood or nest exposed to covered activities.

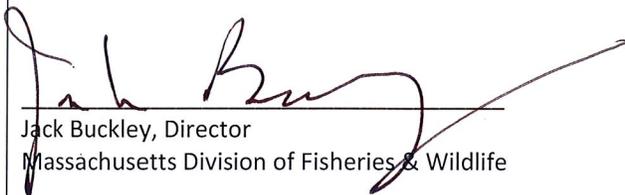
15. In accordance with the HCP, the Permit Holder must obtain written reauthorization from the Division to carry out covered activities prior to the 2018 and 2019 beach seasons. No covered activities may be carried out in 2018 or 2019 prior to receipt of written reauthorization. As set forth in the HCP, the Division may, in its sole discretion, reduce the allowable Take exposure for those years or decline to reauthorize any exposure.
16. A violation of any condition of this Permit, COI, HCP or the ITP will result in an unauthorized Take pursuant to M.G.L. c. 131A or under the HCP or ITP may be subject to civil and or criminal penalties pursuant to M.G.L. c. 131A. In the event of such non-compliance, the Division may suspend, or revoke this Permit and the COI. The Permit Holder shall have the right to request an appeal within 30 days of any suspension or revocation of this Permit or COI in accordance with the requirements of Condition No. 16 below.
17. Notice of Appeal Rights: This Determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.23. Any person aggrieved by this decision shall have the right to an adjudicatory hearing at the Division pursuant to M.G.L. c. 30A, s.11 in accordance with the procedures for informal hearings set forth in 801 CMR 1.02 and 1.03.

Any notice of claim for an adjudicatory hearing shall be made in writing and be accompanied by a filing fee in the amount of \$500.00. The notice of claim shall be sent to the Division by certified mail, hand delivered or postmarked within 21 days of the date of the Division's Determination to:

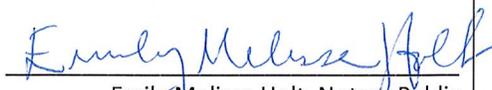
Jack Buckley
Director
Division of Fisheries and Wildlife
Field Headquarters
One Rabbit Hill Road
Westborough, MA 01581

Any notice of claim for an adjudicatory hearing shall include the following information:

1. The file number for the Activity;
2. The complete name, address and telephone number of the person filing the request, and the name, address and telephone number of any authorized representative;
3. The specific facts that demonstrate that a party filing a notice of claim satisfies the requirements of an "aggrieved person," including but not limited to (a) how they have a definite interest in the matters in contention within the scope of interests or area of concern of M.G.L. c. 131A or the regulations at 321 CMR 10.00 and (b) have suffered an actual injury which is special and different from that of the public and which has resulted from violation of a duty owed to them by the Division;
4. A clear statement that an adjudicatory hearing is being requested;
5. A clear and concise statement of facts which are grounds for the proceeding, the specific objections to the actions of the Division and the basis for those objections; and the relief sought through the adjudicatory hearing; and a statement that a copy of the request has been sent by certified mail or hand delivered to the applicant and the Record Owner, if different from the applicant.


Jack Buckley, Director
Massachusetts Division of Fisheries & Wildlife

On this 17th day of March 2017, before me, the undersigned notary public, personally appeared Jack Buckley, Director, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.


Emily Melissa Holt, Notary Public
My Commission expires: July 28, 2017

Conservation Permit 017-297.DFW
Issued this 17th day of March, 2017
Permit Expires: 1 December 2019



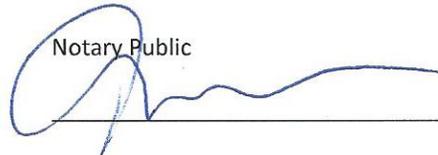
ACKNOWLEDGEMENT AND ACCEPTANCE OF ALL TERMS OF THIS CONSERVATION PERMIT

The undersigned below agrees that commencement of any work authorized by and described in this Conservation and Management Permit constitutes acknowledgement and acceptance of all terms of this permit.

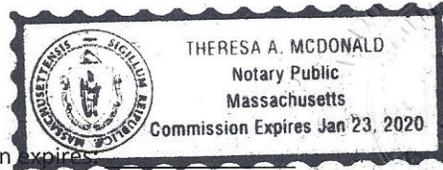

Nina Coleman, Town of Barnstable

COMMONWEALTH OF MASSACHUSETTS

On this 30th day of March, 20 17, before me, the undersigned notary public, personally appeared Nina Z Coleman, proved to me through satisfactory evidence of identification which was personally known to me to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

Notary Public


SEAL



My commission expires

Distribution List

Nina Coleman, Town of Barnstable
Barnstable Board of Selectman
Barnstable Conservation Commission
DEP Southeast Regional Office, Wetlands Program
David Simmons, USFWS

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**MASSACHUSETTS PIPING PLOVER HABITAT CONSERVATION PLAN
CERTIFICATE OF INCLUSION REQUEST 2016
SANDY NECK BEACH PARK
BARNSTABLE MASSACHUSETTS**

Prepared for submission to:

**Natural Heritage & Endangered Species Program
Massachusetts Division of Fish & Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

Prepared by:

**Nina Z. Coleman, Sandy Neck Park Manager
Marine and Environmental Affairs Division
Town of Barnstable
1189 Phinney's Lane
Centerville, MA 02632**

**April 2016
Amended: January 2017**

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1.0 INTRODUCTION AND OVERVIEW

This request for a Certificate of Inclusion (COI) is prepared as part of an application from the Town of Barnstable in order to participate in the statewide Plover Habitat Conservation Plan (HCP). This document also serves as an application for a Conservation and Management Permit (CMP) pursuant to the Massachusetts Endangered Species Act (MESA; MGL c. 131A; 320 CMR 10.00). The Town is requesting the opportunity to implement “Recreation and Beach Operations Associated with Reduced Proactive Symbolic Fencing,” a covered activity described in the HCP. No more than one nesting territory would be exposed to this activity (2.5% of the breeding pairs on site, based on 40 breeding pairs in 2015). The activity and associated impact minimization procedures would be confined to a portion of the suitable habitat along 2,000 linear feet of beach. This area supported a Plover nest in 2013, which caused a complete closure of the Off Road Vehicle Beach (ORV). The intent is to reduce symbolic fencing in this area to allow recreational activities that would not otherwise occur, and to use coverboards or the like to reduce the risk of interaction between beachgoers and Plovers attempting to breed in this section of beach. In addition, the Town would like the opportunity to escort recreational vehicles past unfledged least tern chicks in the ORV corridor (Amendment: January 2017, page 30). The Town is proposing that mitigation be in the form of funding to implement selective off-site predator management, educational outreach and increased law enforcement, overseen by the Natural Heritage & Endangered Species Program (NHESP), as set forth in the HCP.

2.0 GEOGRAPHIC SCOPE

The geographic area encompassed by this request includes suitable Plover habitat from the east edge of the parking lot to 40 feet east of Trail 1 (Figure 1). We are also requesting that two small blow-outs (known as “Shoo” and “Scram”) be included (Figure 1, Photographs 1 & 2). This area of suitable habitat equals 1.347 acres. We obtained this figure by using the Arc View measuring tool on a 2015 aerial map of the beach. Measurements were taken from the toe of the dune to the extreme high tide line. We would like to re-evaluate the geographical scope each year as winter storms may change the beach and dune profile which could shift the desirable Plover nesting habitat.



Figure 1: Proposed "Recreation Zone" at Sandy Neck Beach Park.



Photograph 1: Blow out area known as “The Shoo.”



Photograph 2: Blow out area know as “Scram.”

3.0 SITE DESCRIPTION

Sandy Neck Beach Park is a 1,390 acre barrier beach that is located on Cape Cod Bay. It is owned and operated by the Town of Barnstable (Figures 2 & 3). Most of the park has been preserved as conservation lands. The property is approximately 6.5 miles long by 0.5 miles wide and is located as a protective landform for The Great Marsh and Barnstable Harbor.

Sandy Neck Beach Park allows ORV access with a permit and this activity occurs on the front beach corridor, which is 4.5 miles long. However, the ORV corridor is reduced in length for much of the summer season due to nesting Plovers and Least Terns that require protection under state and federal law. Along the south side of the property is the Marsh Trail that runs east to west. There are six (6) trails that run north-south between the front beach and the Marsh Trail (Access Trail, Trail 1, Trail 2, Trail 4, Trail 5 and Trail 6). Trail 3 was abandoned. These trails are used by hikers and are also utilized for vehicular access to Sandy Neck cottages. There are 50 privately owned cottages. Some are on private lands and those that are located on town owned land require a yearly property lease. These cottages are situated along the Marsh Trail and within the Cottage Colony, which is also where the Sandy Neck Lighthouse is located.

On the front beach, east of Trail 6 is an area known as Little Neck, which is the most prolific section of the beach for shorebird nesting due to many acres of high quality habitat. East of Little Neck is Beach Point, which is a destination for boaters in the summer season particularly during low tide. This section of beach is closed to vehicular access, year-round.

Access to the beach (unless traveling via boat) occurs in one location at the western end of the property. Vehicles travel down Sandy Neck Road and patrons are greeted by Sandy Neck Gatehouse personnel. Some patrons park at the Gatehouse and enjoy the hiking trails. Others travel to the 200+ spaces parking lot (north of the Gatehouse) and use the public bathing beach known as Bodfish Park. Within this section of the property is the bathhouse which includes a concession stand and lifeguard room where first aid is provided. ORV and camper traffic is checked in at the Gatehouse and then they travel to the Access Trail and ultimately the front beach.

The summer season at Sandy Neck is bustling with the majority of patrons using Bodfish Park and the ORV beach. During the shoulder seasons, horseback riders, dog walkers, fisherman, hunters, birdwatchers, fat tire bike riders and hikers are more prevalent. Winter months often include nor'easters that hit the northern exposed shoreline head-on and change the landscape due to high rates of erosion and accretion.

Figure 2: Sandy Neck Beach Park Map for Patrons

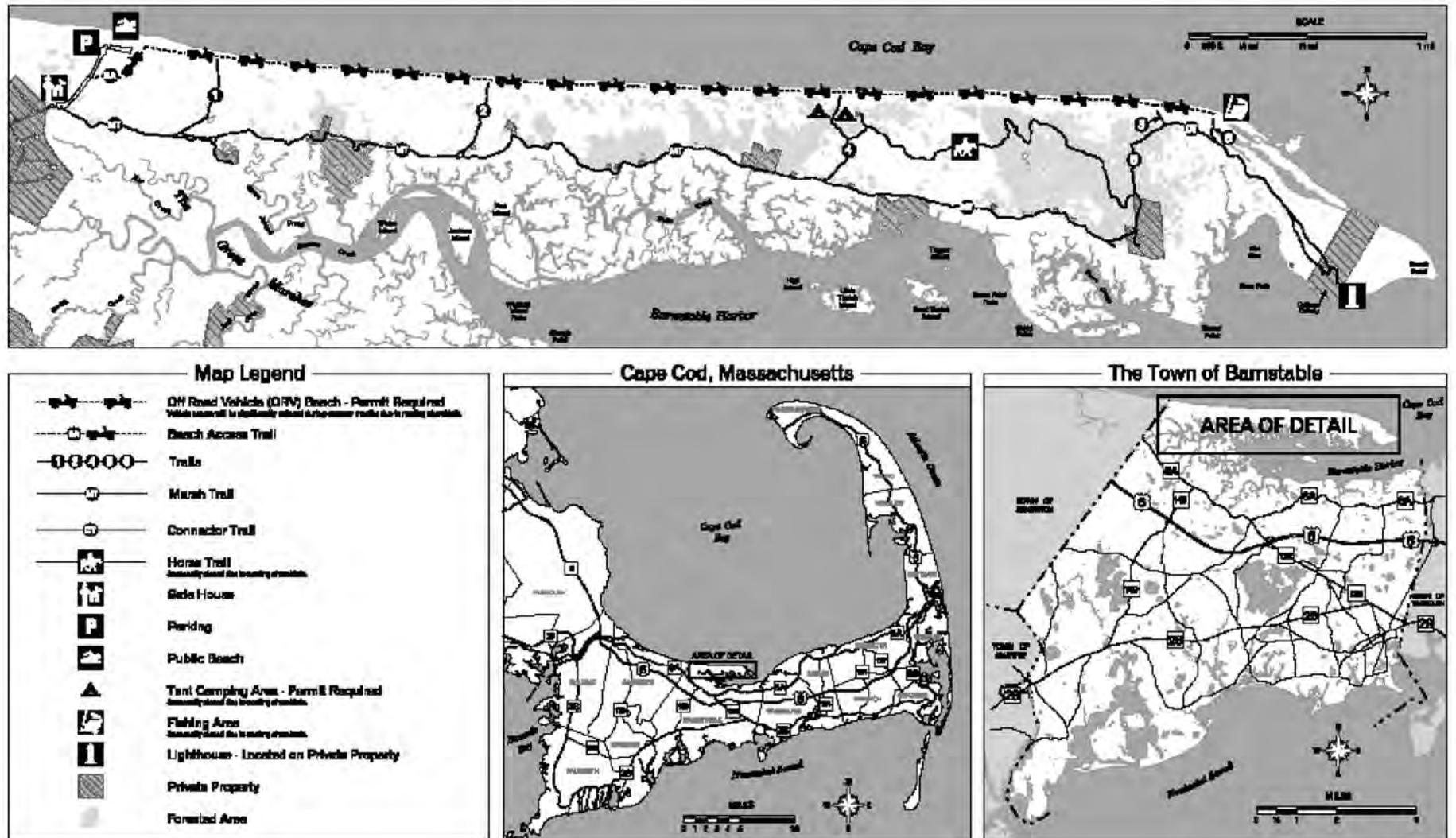


Figure 3: Sandy Neck Beach Park Landforms



4.0 NATURAL HISTORY OF SANDY NECK

Most of 4.0 and 5.0 were taken from the Sandy Neck Management Plan (2003). For a complete copy visit:

<http://www.townofbarnstable.us/SandyNeckPark/fileuploads/managementplan.pdf>

Sandy Neck is a valuable and beautiful barrier beach that has been recognized as a significant natural resource at the private, municipal, state, regional, and federal levels. It is included in the state's designation as an Area of Critical Environmental Concern (ACEC), and has been identified by the Nature Conservancy as one of the best barrier beach systems remaining in the North Atlantic Coast Ecoregion. For this reason, the Nature Conservancy, the Town of Barnstable, and other leading organizations invest resources into conservation and research efforts at Sandy Neck. For all of the attributes of Sandy Neck, there are a variety of stakeholders and interests that, at times, conflict, but share the undisputed importance of Sandy Neck as a valuable environmental resource. Sandy Neck includes one of the largest stretches of publicly accessible coastline in the Commonwealth, and has a pristine character. With its diverse and unique wildlife habitat, including migrating dunes, coastal beaches, tidal flats, wetlands, and maritime forests, Sandy Neck offers a coastal wilderness experience for the public only 15 minutes from the center of Hyannis or Sandwich.

4.1 Geology

Sandy Neck is a barrier beach system located on the north shore of Cape Cod, MA that extends approximately 6 miles east from its sole mainland connection. The barrier shelters on its leeward side extensive estuarine salt marsh and Barnstable Harbor. This narrow neck of sand varies in width from approximately 200 feet to a maximum of 1/2 mile. Shaped by glacial activity and longshore drift, Sandy Neck is geologically quite young, although relatively stable for this type of landform. The front beach is relatively stable with erosion rates on the order of one-quarter to one-half foot per year. The eastern tip of Sandy Neck at Beach Point has a substantial historical accretion rate of more than 1.5 feet per year. Pioneering work by Alfred Redfield in 1972 characterized the system, and dates the oldest sections of Sandy Neck at about 3500 years. Despite its historical evolution, the recent relative stability of the barrier spit has facilitated the establishment of a variety of soil types and natural communities, including migrating sand dunes, fresh and saltwater marshes, bogs and both deciduous and coniferous forests.

4.2 Hydrology

The topography of the surrounding embayment at Sandy Neck results in large fluctuations in local sea level due to tidal action. The mean tidal range at Sandy Neck exceeds 9 vertical feet and can reach 13 feet during full and new moon periods, with storm tides exceeding peak lunar values. During high tide periods, Sandy Neck is often inundated with water along its coastal and salt marsh boundaries, making human access along these ecotones nearly impossible. During winter storms and hurricanes, the storm surge often penetrates the primary dunes. These storms leave standing pools of salt water deep in the interdune area. Although rare, these storms provide

crucial nutrients to the plant communities within the dunes and help shape the topographic features of the beach. They do, however, present challenges to the management of permanent transportation corridors along the barrier beach. Current vehicle travel corridors are situated in the most dynamic areas of the beach that are at highest risk to tidal and storm action.

Freshwater wetlands at Sandy Neck are made possible by the presence of a freshwater supply that sits atop and slightly displaces the salty ground water. This lens of freshwater is nourished solely by rainwater. The freshwater table varies considerably throughout the annual cycle with the peak being in early spring. During spring, temporary ponds and flooded natural bogs dominate the landscape at Sandy Neck. These ephemeral freshwater ponds, called interdunal swales, are crucial resources for many organisms that complete their life cycles on Sandy Neck. Many species of amphibians, insects, and plants exploit these seasonal resources.

4.3 Wetland Resource Areas

Nearly all of Sandy Neck is considered a resource area with respect to the Massachusetts Wetlands Protection Act. These wetland resources include barrier beach, coastal beach, coastal dunes, salt marsh, land under the ocean, land containing shellfish, bordering vegetated wetlands, coastal banks, and estimated habitats of rare wildlife for coastal and inland wetlands.

Additionally, all of Sandy Neck has been designated by the Secretary of Environmental Affairs as an Area of Critical Environmental Concern (ACEC) by the Massachusetts Office of Coastal Zone Management. The importance of Sandy Neck as an environmental resource is undisputed. As such, all proposals for management changes at Sandy Neck receive a higher level of scrutiny and review by various authorities.

5.0 RARE AND ENDANGERED SPECIES

Sandy Neck supports a wide range of biological diversity that includes significant numbers of endangered species. Its large size, isolation and relatively pristine ecology provide some of the most important habitats for rare and endangered species anywhere in Massachusetts. The Massachusetts Division of Fisheries and Wildlife has recorded and certified the presence of at least eight endangered or threatened species on Sandy Neck (Table 1). They include two species of plants, one invertebrate species, one amphibian species, one reptile species, and three species of shore birds. Other species observed and documented at Sandy Neck (but not resident) include transient Roseate terns (*Sterna dougallii*), Yellow-crowned night herons (*Nycticorax violaceus*), and a variety of sea turtles and marine mammals.

Table 1. Summary of federal and state-listed species of plants and animals that occur within the Barnstable portion Sandy Neck Beach not including the Great Marsh.

Common name	Scientific name	Listing status ^a
Coastal Heathland Cutworm	<i>Abagrotis crumbi benjamani</i>	SC
Diamondback Terrapin	<i>Malaclemys terrapin</i>	T
Plymouth Gentian	<i>Sebatia kennedyana</i>	SC
Eastern Spadefoot	<i>Scaphiopus holbrookii</i>	T
Bristly Foxtail	<i>Setaria geniculata</i>	SC
Least Tern	<i>Sterna antillarum</i>	SC
Common Tern	<i>Sterna hirundo</i>	SC

^a FE = federal endangered, FT = federal threatened, E = state endangered, T = state threatened, SC = state Species of Special Concern

6.0 STEWARDSHIP EFFORTS

The Sandy Neck Program is known for its excellent stewardship of the land and endangered species. The following is a synopsis of our projects and programs.

6.1 Mapping

Using GIS/GPS, close to 300 interdunal swales have been mapped and attribute data collected. This project is a culmination of fifteen (15) years of fieldwork and we are presently working with Massachusetts (MA) Audubon (Long Pasture) to calibrate our spatial data with their Spadefoot Toad observation data.

6.2 Ecological Restoration

In 2000, the Sandy Neck Program and the Nature Conservancy, began an ambitious wetland restoration project. To date over 130 interdunal swales and over five (5) acres of Salt Marsh have been restored. Restoration refers to application of herbicides on Common Reed (*Phragmites australis*) and Bittersweet (*Celastrus orbiculatus*) and mechanical removal of Purple Loosestrife (*Lythrum salicari*) and an introduced grass (*Panicum amarum ssp. amarulum*). In addition, we mechanically remove Spotted Knapweed (*Centaurea maculosa*) from all dunes and roadways within the park. These activities are permitted under active Orders of Conditions (OOC) SE3-4129.

6.3 Vascular Plant Survey

We are working with the Cape Cod Botany Club to create a complete inventory of vascular plants on Sandy Neck Beach Park. This work is funded by a Mehrhoff Botanical Research Award. Locations of state listed plant species will be verified and documented on our GIS database.

6.4 Least and Common Tern Monitoring Program

Least and Common Terns are monitored during the nesting season and data is reported to NHESP as required. Management of state listed Terns conforms to state and federal guidelines for management of recreational activities as well as our active Orders of Conditions SE3-4712 and SE3-4713 (Appendices A & B). The rest of the Tern discussion will occur in this document under 7.0 (Sandy Neck Piping Plovers).

6.5 Sea Turtle Strandings

Every fall, the Sandy Neck staff participates in a massive sea turtle rescue effort that includes around the clock beach patrols to collect animals that wash up on our 6.5 miles of coastline. We work closely with MA Audubon (Wellfleet) to improve survivorship rates for these rare turtle species.

6.6 Spadefoot Toad Headstart Program

For the past seven (7) years we have been supporting the MA Audubon Spadefoot Toad research and headstart program at Sandy Neck Beach Park. This research and specimen collection is permitted by NHESP under Ian Ives, MA Audubon Long Pasture, Barnstable, MA.

6.7 Diamondback Terrapin Monitoring and Headstart Program

Sandy Neck Beach Park lies at the northern-most range for the Diamondback Terrapin (*Malaclemys terrapin*). Every year, from early June until mid-July, adult females are observed leaving the waters of the Barnstable Great Marsh in order to nest among the expansive dune systems on the south side of this barrier beach. On hot, sunny days, these turtles will crawl across the Marsh Trail in search of a good nesting site. There has never been any documented evidence of adults coming up to the beach from Cape Cod Bay. While a nest was found on the front beach in 2013, the track led to and from the dunes, and into the marsh. Last year track was observed at the south side of Sandy Neck Beach point, but no nest was discovered in the area.

Throughout this nesting season our Turtle Monitor patrols this trail via all terrain vehicle (ATV), looking for signs of nesting terrapins emerging from the marsh. Staff will follow these turtle tracks to the nest site, and determine if a clutch of eggs was deposited (Table 2). Female terrapins in this location generally lay between 10-20 eggs per clutch, and may lay up to two clutches per season. If eggs are observed, the monitor will then dig a small trench around the nest cavity and will cap the site with a plastic milk crate. These act as deterrents to the many predators that frequent these locations such as coyote, fox, skunk and raccoon. Plastic crates are used in place of metal materials, as research suggests that wire cages can interfere with a hatchling's ability to properly navigate after emerging from the nest. These milk crates have worked well at preventing predators from digging up nests, and the holes within the crate are large enough to allow hatchlings to successfully emerge from the sand after hatching. The ability for a milk crate to affect incubating nest temperatures has not yet been studied in-depth. However, there is a direct correlation between nest caps and predation rates of Terrapin nests at Sandy Neck (Table 2). Capping nests has shown tremendous success in protecting eggs through the hatching period. Milk crates are also buried deep enough in the sand to minimize shading effects on Terrapin nests, and to maximize their effectiveness against predator interaction.

The Marsh Trail runs parallel west-east on the south side of the beach where the marsh and sand dune habitats connect. This trail is composed almost entirely of sandy sediments, causing female terrapins to sometimes nest directly in the trail. Because this trail is still used by vehicles to access private properties, these nests run the risk of being crushed or destroyed. Any nest that is deposited directly in the Marsh Trail is carefully dug up and relocated to a safe location for monitoring. When these selected nests hatch out in the fall, they are collected and sent to be used for our Headstart Program. Every year, schools and other organizations help us to raise these turtles over the course of the winter. Instead of these turtles digging into the mud and brumating, they will be raised in warm water and fed a proper diet so that they may continue to grow all winter long. By the time they are released into the marsh, these terrapins are generally the size of a 3-year old terrapin in the wild. At this point, they no longer run the risk of being eaten by many

of the predators that go after smaller hatchling turtles. We believe that our nest capping and Headstart Program is improving the reproductive success rates of our terrapin population. An overwhelming majority of nests are laid north of the marsh trail. In 2015, only seven nests (including nests laid directly in the marsh trail) were discovered outside of this trend (4.7%).

During the terrapin nesting season, there are times when essential vehicles are using the Marsh Trail as the front beach is closed due to nesting shorebirds.² During these times essential vehicles travel the front beach to Trail 2 and then turn east on the Marsh Trail. As such, essential vehicles only travel through a small section of Marsh Trail where adult females may be crossing to reach nesting grounds. However, there is a small probability of a “take” and the Town is committed to continue our nest capping and headstarting programs for the next three years during the duration of this permit request. The benefits of this program will more than offset any small risk of harm associated with limited vehicular use of the Marsh Trail.

This headstarting project is permitted by NHESP under Nina Coleman, Sandy Neck Park Manager.

² Recreational ORVs *never* use the Marsh Trail, and implementation of the proposed covered activity is limited to one small section of the beachfront. Therefore, HCP implementation will in no way adversely affect Diamond-back Terrapins and their habitat, and actually stands to benefit this species by potentially reducing essential vehicle use on the Marsh Trail in years when Plovers nest in the covered activity area.

Table 2. Summary of Diamondback Terrapin Breeding Success and Management Activities, 2001-2015.

Year	Total # Nests	# Nests Capped for Predator Deterrence	# Nests Collected for Headstarting	# Nests Predated	Total # Nests Hatched
2001	85	0	5	40	45
2002	42	6	6	37	5
2003	48	22	3	21	27
2004	70	31	7	35	35
2005	32	29	1	2	30
2006	44	28	7	2	42
2007	36	19	0	0	36
2008	59	49	2	2	57
2009	119	111	7	0	119
2010	122	113	6	1	121
2011	116	N/A	6	4	112
2012	109	N/A	3	1	108
2013	87	79	4	4	83
2014	153	121	5	11	142
2015	147	124	5	14	133
2016	176	135	7	21	155

7.0 SANDY NECK PIPING PLOVERS

The number of Sandy Neck Piping Plovers breeding pairs has been slowly increasing with an average of 29 pairs from 1996-2005 to an average of 34 pairs from 2006-2015 (Table 3). However, the data demonstrates large variability between years so this small upward trend in number of nesting pairs needs further analysis to determine significance (Chart 1). Further, the number of chicks fledged has varied dramatically over this same time-period (Chart 2).

Threats to Plover and Tern breeding success are numerous and vary from year to year making management challenging. For instance, in 2012 and 2013 we experienced summer storms that caused nearly 100% loss of nests due to over-wash. Other years, fox, coyote, crow and seagulls are problem species that caused low productivity rates.

Sandy Neck has acres of potential Plover and Tern nesting habitat along the toe of the dune, the entire Little Neck area, as well as blow-outs in the secondary dunes. Presently the highest quality habitat is located from the Sandwich Town-line to Trail 1, in the Trail 2 area, and from approximately Trail 4 to Beach Point (Figure 4). The rest of the beach has patches of decent habitat, which supports scattered nests. The less utilized habitat is generally due to erosion creating very soft shifting substrate void of pebbles or beach grass, which does not appear to attract nesting pairs. Within the interior of the beach, pebbly blowouts are sometimes habitat and nests have been located in odd areas. Of course, Plover and Tern nesting trends change overtime as storms alter the beach and dune profiles.

Table 3. Summary of abundance and reproductive success of Piping Plovers on Sandy Neck, 1995-2016.

Year	Number of Plover Pairs	Index Pair Count	Number of Chicks Fledged
1995	25	20	49
1996	29	28	74
1997	33	33	29
1998	30	30	34
1999	32	32	32
2000	29	29	28
2001	26	23	43
2002	26	25	57
2003	31	27	74
2004	34	29	41
2005	28	26	29
2006	23	23	20
2007	35	34	53
2008	35	32	43
2009	28	28	28
2010	38	37	60
2011	44	41	57
2012	40	40	3
2013	27	24	14
2014	32	30	42
2015	40	37	55
2016	34	31	24

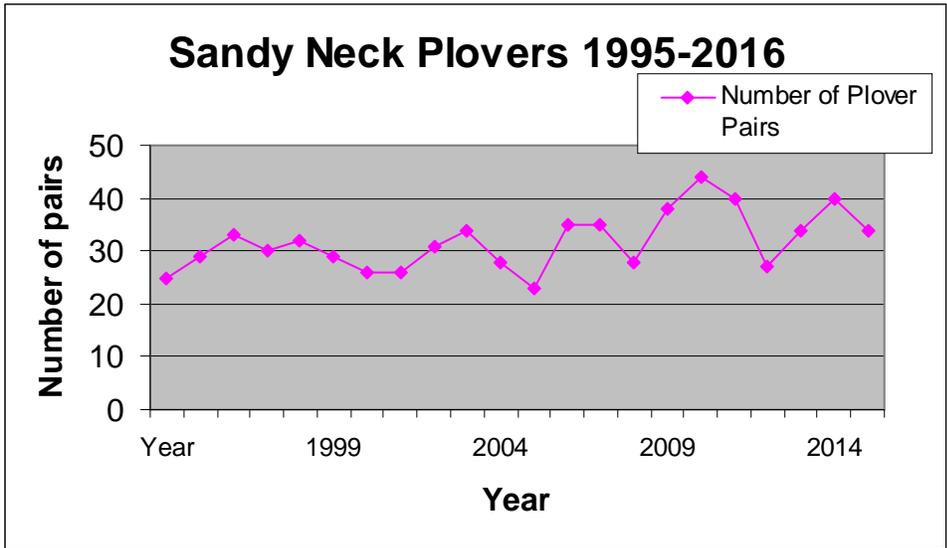


Chart 1. Number of Sandy Neck Piping Plover Pairs 1995-2016

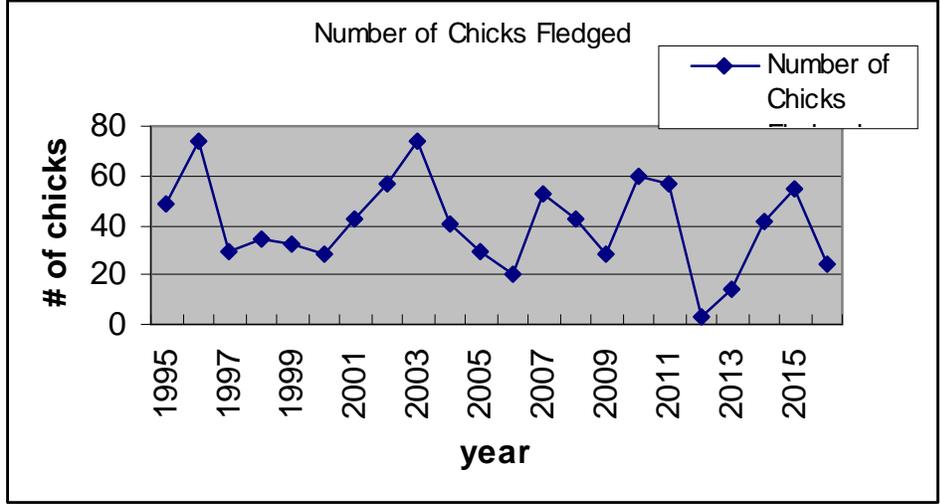
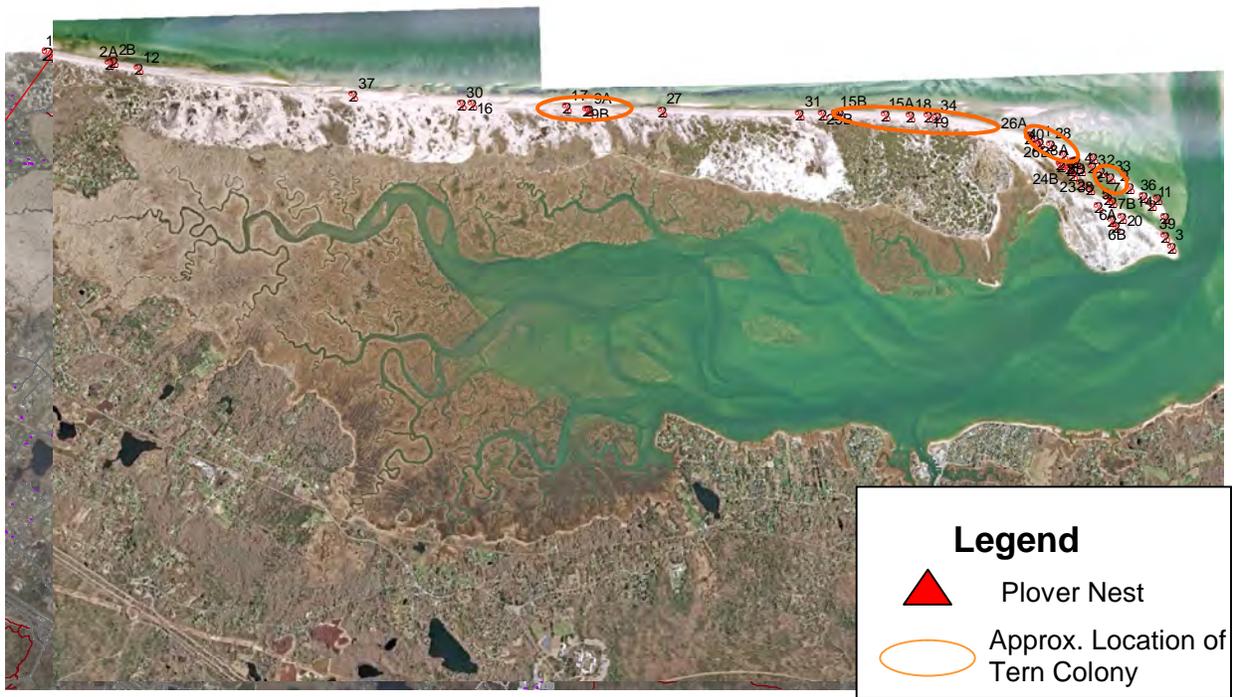


Chart 2. The Number of Sandy Neck Piping Plover Chicks Fledged 1995-2016

Figure 4: Plover and Tern Nesting Locations for 2015. Chosen beach location in 2015 represent recent nesting trends on Sandy Neck Beach Park.

Sandy Neck Beach Park Plover & Tern Locations 2015



Increases in the Sandy Neck Beach Park's population of Piping Plovers that have occurred during the past two decades are likely the result of our intensive monitoring and management program. Sandy Neck staff includes a full time Park Manager, one full time Natural Resource Officer, four seasonal Natural Resource Officers, two Seasonal Shorebird Monitors and a Seasonal Turtle Monitor.

Management of Sandy Neck Piping Plovers conforms to state and federal guidelines for management of recreational activities as well as our active Orders of Conditions SE3-4712 and SE3-4713 (Appendices A & B). Beginning in early April, off-road vehicles are restricted (by symbolic fencing) to discrete travel corridors along the outer edges of suitable Plover/Tern nesting habitat. Once nest areas are established, the protection zone is increased by symbolic fencing and warning signs. In addition, some nests are protected by wire mesh predator enclosures in order to increase the percentage of eggs that survive to hatching. These nests are selected by analyzing the predator tracks in the area and the number of nesting attempts by the pair.

Once the nests hatch, sections of beach where unfledged Plover/Tern chicks are present are completely closed to recreational vehicles until chicks reach 35 days of age or are observed in flight. Only staff escorted caravans of essential vehicles pass within areas of unfledged Plover and Tern chicks.

8.0 RESPONSIBLE STAFF

The Sandy Neck Program employs a full time Park Manager Nina Coleman and a full time Natural Resource Officer Sean Kortis (see attached résumé Appendices C & D). Both of these individuals are scientists with extensive experience in endangered species monitoring and management. Ms. Coleman and Mr. Kortis spend hours in the field and they hire, train and oversee daily operation of the seasonal staff. In addition, all seasonal field staff receives training from both the Barnstable Police Department and the West Barnstable Fire Department plus the seasonal shorebird staff participates in the MA Audubon shorebird training that is held at Long Pasture.

9.0 BEACH MANAGEMENT

9.1 Human Activities

As noted earlier, multiple recreational activities occur at Sandy Neck Beach Park. The most popular areas are the ORV and Public Bathing Beach. Sandy Neck also hosts primitive tent camping that requires a 3.3 mile hike to the sites, horseback riding, boating (including paddle boarding and kayaking), fishing and shellfishing, hunting, hiking, bird watching, fat tire biking and numerous events such as campfire gatherings, weddings and other celebrations. We also provide access to essential vehicles to the privately owned cottages and we support many research projects on a variety of topics.

9.2 Education and Enforcement

Over many years, the Sandy Neck Program has developed and implemented Sandy Neck Beach Park Regulations and Policies that address public safety and natural resource protection (Appendices E & F). Uniformed Natural Resource Officers (NROs) and Barnstable Police Department Officers patrol the beach, trails and Beach Point to ensure compliance with the rules and regulations of the beach. Staff uses multiple enforcement tools to achieve compliance including verbal and written warnings, citations, permit revocations and no-trespass orders. Patrons that cannot achieve respectful and responsible pet ownership could have their pet's beach privileges revoked. All warnings are tracked digitally so that decisions can be made about increasing our response to repeat offenders.

To educate the public, all vehicles must pass by the Gatehouse and staff is tasked with providing the rules and regulations to the different user groups along with trail maps and information about our Park. Our web site is at www.townofbarnstable.com and it includes a blog to provide updates and beach information including beach closures due to nesting shorebirds. In addition, we have recording surveillance cameras in multiple locations to help with the enforcement of beach laws. To educate the public about our endangered species populations and other Sandy Neck flora and fauna, we have scheduled walks and talks that take place throughout the year.

9.3 ORV Beach Use

All ORV and essential vehicle use is governed by our active OOCs (Appendices A & B) and each permit holder receives the Beach Park Regulations (Appendix E), which are designed to keep the Town in compliance with federal, state and local laws as well as ensure public safety. Beach closures for nesting Terns and Plovers follow strict requirements set forth by our OOC. In addition, escort procedures, fencing and signage requirements are all discussed within our OOCs.

Essential vehicle access was a contentious topic for much of the 1980s and 1990s. To avoid a lawsuit the town entered into a memorandum of understanding (MOU) with the cottage owners that in part promises "reasonable access." This is a balancing act but has been achieved by providing daily scheduled escorts on the front beach during the shorebird nesting season. In addition, the Town (via a Notice of Intent (NOI) opened the Marsh Trail for non-escorted essential vehicle access. Staff therefore is tasked with five scheduled escorts a day during the shorebird nesting season. We are also willing to escort outside of this schedule with reasonable notice. Staff also patrols the Marsh Trail for Diamondback Terrapins and closes the trail on days of high nesting activity. In an effort to reduce the number of essential vehicle escorts past unfledged chicks, the Sandy Neck Program has worked with the Barnstable Department of Public Works' (DPW) Highway Division to repair the Marsh Trail for improved vehicle access. This is achieved under active OOCs SE3-4207.

9.4 Shorebird Monitoring

Staff responsible for shorebird monitoring includes both Nina Coleman and Sean Kortis (Appendices C & D) who spend many hours in the field ensuring monitoring quality. In addition, two seasonal shorebird monitors are on duty from April 1 through Labor Day weekend. Further, the Turtle Monitor is cross-trained to help with shorebird monitoring as the bulk of the shorebird-nesting season precedes the turtle-nesting season. In addition, our four seasonal NROs are trained in escort procedures and basic shorebird ecology and identification.

Plover nests are checked daily within the ORV corridor and at a minimum every other day in the more remote locations. Further, nests within the ORV corridor with unknown hatch dates are monitored twice a day per our Orders of Conditions.

Our OOCs (Appendices A & B) reference the State Guidelines for Managing Recreational Use of Beaches for additional monitoring and escorting protocol, enclosures, fencing and signage, etc. This document is required reading for our two seasonal shorebird monitors and the OOCs and Guidelines are available in the Gatehouse staff room for reference during the season. Over the years, Sandy Neck has developed our own Shorebird data collection sheets (Appendix G).

Sandy Neck field staff participates in weekly meetings to ensure good communication and daily changes in brood locations are written on a white board in the staff area of the Gatehouse. This insures that NROs are briefed on shorebird information each time they are tasked with an escort. In addition, all field staff is equipped with a two-way radio.

9.5 Public Beach (Bodfish Park)

Our lifeguarded public beach is a busy place during the summer season. It has been many years since a Plover nested within this area but if this occurred, protocols would be followed as set forth by our OOCs and the Guidelines. Limited removal of the seaweed line is achieved by hand tools only within the lifeguarded area of the front beach (approximately 600 feet). Plover and Tern nests are often located to the west of the lifeguarded area and this habitat is fenced by April 1st and adjusted when nests are established. Campfires and dogs are not permitted within this section of beach (from the west edge of the lifeguarded beach to the Sandwich Town-line). Campfires are permitted from the east edge of the lifeguarded area to the ORV beach (see campfire discussion).

9.6 Campfires and Fireworks

The ORV Beach and sections of the public beach allow evening campfires weather permitting. ORV permit holders are provided the campfire regulations when they purchase their permit. All other campfire patrons must purchase a fire permit at the Gatehouse at which time they are provided the regulations. In addition, our regulations booklet states that fireworks (including sky lanterns) are prohibited by state law. NROs and Barnstable Police address firework problems by issuing citations when appropriate and by confiscating fireworks from beach patrons.

9.7 Special Permits

Gatherings of over 20 people and all weddings require a special permit. This permit gives the patrons “Special Conditions” for their event that help with compliance with the regulations and ensure better safety protocols. Research projects also require a special permit and will not be issued until all other applicable permits have been secured.

9.8 Refuse Management

The ORV Beach is patrolled for trash pick-up and fencing repaired daily by NROs and maintenance personnel. We pride ourselves on presenting a clean, well run beach. Further, we provide portable toilets on the ORV beach for customer’s comfort and also for environmental protection. We ask beach patrons to recycle and we provide a recycling dumpster that is located on the Access Trail. Trash barrels (and stand-alone recycling containers) are emptied daily and dumpsters are emptied three times a week (in season).

9.9 Bikes and Horses

Horseback riding on Sandy Neck Beach requires a permit and patrons are provided the regulations that address beach use. Horses (and fat tire bikes) are treated like vehicles in so much as they may not travel within the sections of beach where unfledged Plover or Tern chicks are present. Information about beach closures is available on the website which has updates for each beach use (ORV, Cottage Owner, Fat Tire Bikes, Horseback Riding, Fishing/Shellfishing and Campfires).

9.10 Boating

Boating activities are monitored by the Marine & Environmental Affairs Division - Harbormaster Program that shares our two-way radio channel making communication efficient. Beach Point is patrolled by the Harbormaster’s Program by boat for vessel operation infractions and by land via Sandy Neck staff for issues such as dogs off leash, alcohol issues and walking in the dunes. Beach Point and Little Neck are symbolically fenced and signed to keep foot traffic out of the nesting areas. The adjacent boat ramps have signs reminding boaters in route to Sandy Neck to keep their dogs on leash and stay out of the fenced in areas due to endangered species protection.

9.11 Hunting and Fishing

Hunting and fishing are generally shoulder season activities and are overseen by our full time Natural Resource Officer who is also a shellfish constable. We would work with state Environmental Police if there was an egregious fishing or hunting violation.

9.12 Dogs

In season, dogs are allowed on the ORV beach as long as they are leashed. No dogs are allowed within the tent camping area because it is only patrolled a few times a day. Citations are issued for dogs off leash and patrons will be asked to leave the beach and/or lose their beach privileges if compliance is not achieved. We can also suspend beach privileges for a specific dog that owners cannot/will not keep under control.

9.13 Reporting

Under our Orders on Conditions, we are required to present a yearly report to the Conservation Commission each November. This report consists of data on endangered species nesting success as well as the park financials, number of permits sold, number of vehicular trips on the beach, enforcement efforts, and number of escorts. Reports can be made available upon request.

10.0 COVERED ACTIVITIES

The Sandy Neck Program has developed into a multifaceted stewardship effort that includes providing recreational opportunities to the public, ensuring property owner access rights, ecological restoration, environmental education, endangered species protection and public outreach. Starting in 2006, the Sandy Neck Program became an Enterprise Account and is tasked with self-funding via user fees. The bulk of our revenue is collected from the ORV program. Other sources include cottage leases, public bathing beach parking, concession stand revenue, merchandise sales and donations. However, our business plan is tenuous because any summer we could have the ORV beach close due to one nesting pair of Plovers. In addition, complete beach closures are extremely controversial and create negative sentiment for endangered species protection and the Sandy Neck Program.

The Sandy Neck Program is asking for the ability to ensure that at least a small portion of the beach is available for ORV use by allowing increased recreational use associated with reduced proactive symbolic fencing along 2,000 linear feet of beach hereon referred to as The Recreation Zone (Figure 1). This will assure that the delicate balance of recreation and endangered species protection can be better achieved. We are suggesting that discouraging nesting include reduced buffer, raking and using plywood or other objects to create undesirable nesting locations.

10.1 Reduced Buffer Zone

Within The Recreation Zone we are requesting the ability to reduce the area of symbolically fenced nesting habitat. Beach habitat above the high tide line would not be fenced, but a narrow buffer extending from the toe of the dune would be retained to help protect the dune. This activity is already permitted under our OOCs SE3-4713 (Conditions 2.1 and 10) therefore our OOC would not need to be amended. Reduced fencing would only occur once a territorial piping Plover or pair is observed in the area and fencing would only be reduced in the area where activity is observed. This will ensure that impacts are limited to a single territory in the unlikely event that more than one pair attempts to breed in the area.

10.2 Nesting Deterrents:

Within The Recreation Zone, as an impact minimization procedure (see Section 11.0), we are requesting the opportunity to deter one breeding pair from nesting thereby ensuring at least some ORV access throughout the year.

11.0 IMPACT MINIMIZATION

The proposed activity of reducing required symbolic fencing consists of 1.7% of Sandy Neck's potential nesting habitat (1.347 acres), which falls well below the site-specific limit specified in the HCP. The actual acreage to be impacted is likely to be considerably lower because it will be confined to a portion of the Recreation Zone where Plover activity is detected. The low percentage means that the displaced pair will not likely be under significant competition for other sites. In addition, Sandy Neck supports an average of 34 nesting pairs per year. Exposing one pair to a reduced buffer and deterrents, will not reach the stated maximum thresholds for numbers of pairs affected by the activity.

The primary impact minimization procedure will be to place boards within a portion of the nesting habitat to reduce the likelihood of interaction between breeding Plovers and recreational beach users in the area that will not be symbolically fenced. Cover boards would only be deployed at the very first signs of territorial behavior and courtship *before* the period of intensive scraping and mating. The purpose of this procedure is to reduce the likelihood that a pair attempting to breed would be disturbed later in the breeding cycle when recreational beach use increases by users such as pedestrians and ORV operators. If the procedure is not effective and more persistent scraping and courtship is observed the use of cover boards would cease. The NHESP would make the final decision about when to cease the use of cover boards.

12.0 MONITORING/COMPLIANCE REQUIREMENTS

All monitoring associated with the Covered activity shall be undertaken by Sandy Neck professional staff (Nina Coleman and/or Sean Kortis). Because these staff members are not involved in day to day monitoring of Plovers and terns, their involvement in COI monitoring will not in any way impact the routine Plover and tern monitoring and protection described in Section 9.4. Ms. Coleman and Mr. Kortis will continue to be involved in training and oversight of the seasonal shorebird monitors, but will allocate an additional estimated 1-1.5 hours per day to intensively monitor the Recreation Zone.

Beginning in early April, prior to initiation of the covered activity, the recreation zone will be monitored intensively on a daily basis (estimated 1-1.5 hours/day) to ensure early detection of territorial Plovers. Monitors will keep a daily log describing in detail all territorial, scraping, and courtship behaviors in order to ensure that cover-boards are deployed very early in the breeding cycle. Should cover boards be deployed, the deployment area will be monitored at least twice daily during the first three days of deployment to document Plover response. Any movement of boards or deployment to a new area within the recreation zone will trigger twice daily monitoring.

As described above, at baseline in most years, Piping Plovers do not nest in the Recreation Zone. Prior to initiation of the covered activity, if after several weeks no Plover activity is detected, the Beach Manager may elect to turn back the monitoring of breeding activity to this area to the seasonal monitors with the understanding that this may preclude early enough detections of

breeding to deploy coverboards. If the seasonal monitors detect activity the professional staff will reassume the intensive daily monitoring described above.

As long as any Plover activity is detected and the covered activity is implemented, supplemental daily monitoring will continue. After a period of ten days of no activity, increased monitoring can be suspended and the area of reduced symbolic fencing may remain in place. If new activity is detected, increased monitoring may be resumed to allow for additional modification of fencing (as long as the site-specific limit has not been exceeded) or redeployment of coverboards (if activity is detected early in the breeding cycle).

A log shall be maintained in which we will record Plover sightings, observations and activity within the Recreation Zone, as described above, as well as observations of Plover responses to recreational activities within the reduced fencing zone. This will include observations of disturbance (e.g. calling and broken wing displays), as well as accidental disturbance of scrapes incidental to the recreational activities. The log will include documentation of the dates and times of any fencing alterations, the areal extent of the habitat affected, and the dates, times, and areal extent of all coverboard placements. As required by the HCP, all logs will be made available to NHESP upon request. On or before October 1 of each calendar year the COI is in effect, the Park Manager will submit to NHESP a report that describes and quantifies monitoring effort, date range covered activity was implemented, extent and locations of fencing reduction and placement of coverboards, detailed description of Plover activity and behavior within The Recreation Zone, and management recommendations and lessons learned.

13.0 BUDGET

As we will be using existing full time professional staff, and this is a very limited request with regard to staffing hours, we do not feel that any additional staff salary allocation is needed to achieve this proposal. The estimated budget for Ms Coleman's and Mr. Kortis' salary is 35 hours costing \$1,300 (field time and report preparation). This is a very small percentage of their annual work hours and it will not result in a reduction in time spent training and supervising field staff. The funding provided for mitigation will be secured through the budget process and will be paid for by the Sandy Neck Enterprise Account (Table 4) prior to the "take" activities.³ Therefore, the total annual cost of HCP implementation is estimated to be \$7,100 per year for each year during the three year COI term when covered activities are implemented.

³ This is the rate per take exposure set by DFW in the HCP

Table 4: Sandy Neck Enterprise Account revenue Fiscal Year 11 through Fiscal Year 15

	FY11	FY12	FY13	FY14	FY15
Dune Fees (ORV)	\$379,827	\$549,593	\$431,782	\$541,363	\$567,069
Beach Parking	\$109,590	\$130,050	\$123,634	\$113,336	\$116,158
Sandwich Revenue	\$39,599	\$40,589	\$41,605	\$42,654	\$43,711
Beach Concession	\$14,499	\$13,711	\$15,996	\$10,500	\$7,500
Cottage Lease Fees	\$35,343	\$41,522	\$43,115	\$37,435	\$34,700
Parking Stickers	\$31,146	\$31,321	\$31,095	\$58,965	\$58,316
Merchandise	\$16,783	\$18,390	\$16,659	\$24,168	\$25,150
Miscellaneous	\$1,832	\$671	\$1,057	\$1,130	\$1,393
Earnings on Investments	\$4,698	\$7,848	\$9,643	\$11,466	\$10,833
Sale of Bond	0	\$5,629	0	0	0
Total Revenue	\$633,317	\$839,324	\$714,586	\$841,017	\$864,830

14.0 MITIGATION PLAN

The Town of Barnstable is proposing to provide funding for one “take” to NHESP to implement predator management, educational outreach and increased law enforcement off site, as described in the HCP. To fund the mitigation, in advance of carrying out covered activities, the Town will establish an escrow agreement in substantially the same form as Appendix H. Prior to the implementation of covered activities in any given year, the Town will deposit \$5,800 into said escrow account in accordance with the schedule set forth in the Escrow Agreement.

15.0 LIST OF APPENDICES

- A. Orders of Conditions SE3-4712 (Revised)
- B. Order of Conditions SE3-4713
- C. Résumé: Nina Z. Coleman, Sandy Neck Park Manager
- D. Résumé: Sean Kortis, Sandy Neck Natural Resource Manager
- E. Sandy Neck Beach Park Regulations
- F. Sandy Neck Beach Park Policies
- G. Plover Monitoring Datasheet Example
- H. Escrow Agreement-DRAFT

**MASSACHUSETTS PIPING PLOVER HABITAT CONSERVATION PLAN
CERTIFICATE OF INCLUSION REQUEST 2016
SANDY NECK BEACH PARK
BARNSTABLE MASSACHUSETTS
Amendment: January 2017**

10.0 COVERED ACTIVITIES

Off Road Vehicle (ORV) Use in Vicinity of Unfledged Least Tern Chicks

11.0 IMPACT MINIMIZATION

Sandy Neck has been providing cottage owner escorts past both tern and plover chicks for over 20 years under OOCs SE3-4712. Therefore, protocol, staff training and scheduling procedures are already in place. Historically, cottage owner escorts commence in late May or early June. Field staff (Plover Monitors, Terrapin Monitors and Natural Resource Officers) are trained to escort on ATVs past multiple broods of plover chicks as well as tern colonies. Full time professional staff is responsible for training the seasonal field staff. Seasonal staff escort assignments do not occur until both the trainer and the trainee feel comfortable with the procedures. Weekly field staff meetings are used to communicate brood locations and movement trends. Daily chick location updates are noted on the Escorting Information Board that is posted in the Gatehouse. By August, most plovers have fledged and field staff are well versed in escort procedures. This “infrastructure” will be used late in the season to provide escorts to recreation vehicles past least tern chicks.

During escorts, the majority of the time, tern chicks are expected to be located 30-50 feet from the vehicles (Figure 1a). This figure was calculated using historic tern colony location data and the existing beach profile. However, there may be some occasions, depending on tides and chick movement, when the escort caravan could be <15 feet from tern chicks.

The escorting activity is designed to minimize impacts to the Sandy Neck least tern population:

- Escorts past 15 unfledged tern chicks or less. To estimate the number of unfledged least tern chicks present, two chick counts will be conducted by qualified shorebird monitors in the 5 days prior to commencing the covered activity, with one count within 24 hours of commencing the activity. The number of chicks will be estimated by monitors observing the colony from a distance with binoculars and marking on a sketch map the approximate locations where chicks or chick feeding behavior is observed. If adults are observed feeding chicks in dense vegetation it should be assumed that two chicks are present unless it is possible to confirm the presence of a single chick through continued observation. In general, it will not be necessary to enter the colony to obtain an estimated

chick count. Chick counts and associated sketch maps of chick locations will be reported to NHESP prior to commencing the covered activity.

- Escorted caravans limited to daylight hours on Thursday (noon and pm), Friday (am, noon and pm), Saturday (am, noon and pm), Sunday (am, noon and pm), and Monday (am, noon and pm).
- Caravans will be limited to one round trip during each daily travel window listed above (two travel windows on Thursday and three per day, Friday- Monday). Each one-way escort is expected to take (conservatively) 30 minutes. Therefore, total tern chick exposure time for this program would be 3 hours/day.
- Four trained Sandy Neck staff members will be on-site during each escort. They will each be equipped with a two-way radio in order to communicate with each other simultaneously. Two staff members will be in the vicinity of the tern colony but outside of the symbolic fencing monitoring chick locations. One member will be at the head of the escort caravan and the second will be at the rear of the caravan (Note: when escorts are past two or less chicks, only one staff member will be needed to monitor chicks within the tern colony).
- Escorting will begin at least 200 feet from the closest unfledged chick, and will end at least 200 feet past the last unfledged chick. Chick monitors will arrive at the colony at least one half hour before each caravan to assess approximate chick locations and adjust the caravan escort zone on an as-needed basis.
- Escorts will drive as low as the tide will permit in order to minimize disturbance.
- The speed limit will be less than 5 mph (mimicking walking speed), which will be dictated by the lead staff member.
- To the extent practical, Sandy Neck cottage owner escorts will be combined with this service thus reducing exposure times and combining staff efforts.
- No parking areas will be set up at either end of the escort corridor in order to minimize tern disturbance and to provide an area to organize the caravans. All parking will be located >100 yards from unfledged least tern chicks.
- The caravan will halt in place if a chick moves within the travel corridor. The monitors will allow traffic to resume once it has been determined that no chicks remain within the travel corridor. To minimize risk associated with halted vehicles adjacent to the colony, monitors may walk in the vicinity of the chick in an effort to displace it from the corridor.
- Monitors will also halt traffic if chicks move <10 ft from the travel corridor, depending on chick behavior. Specifically, if the chicks appear to be moving towards the corridor to access wrack or the intertidal zone.
- Vehicle ruts will be hand-raked and smoothed out after the last travel window of each day, whenever chicks estimated to be <11 days old are present using the U.S Army Corps Least Tern Aging Guidelines.
- Once the escorting is underway, monitors will record the number of chicks observed during each escort travel window (see below). In addition, estimated chick counts for the colony as a whole will be obtained 1-2 times per week, using the procedures described above, and reported to NHESP.

The proposed activity of escorting past terns consists of 1.38% of Sandy Neck's potential tern nesting habitat (0.62 acres), which falls below the site-specific limit specified in the HCP (Figure 1a).

12.0 MONITORING/COMPLIANCE REQUIREMENTS

All escort activities shall be undertaken by Sandy Neck seasonal field staff (Shorebird Specialist, Turtle Monitor and Natural Resource Officers) under the direct supervision of full time Natural Resource Officer Sean Kortis and/or Park Manager Nina Coleman. The requested activity would occur late within the shorebird and terrapin nesting season when the field biologists have more free time as plover/terrapin nesting attempts diminish with the season. In addition, field staff members will be well trained and well versed in escort procedures by late in the season as Sandy Neck provides escorts to cottage owners as early as May depending on plover hatch dates.

The organization and management of the escorting programs will be tasked to full time Division Assistant Donna Bragg who is under the direct supervision of the Park Manager. Ms Bragg will be freed from the many daily duties at the Gatehouse by the hiring of additional seasonal staff. This will allow Ms. Bragg to accomplish more operational duties and have her physically at large in the park rather than limited to the Gatehouse. One of her duties will be community outreach and education so that the escorting opportunities and limitations are portrayed to the recreation beach users. Each year, Ms. Bragg will update the escort policies and procedures which will be an opportunity to learn, and adjust, from the previous year's experiences (Attachment A).

Tern nesting activities are monitored by counting nests at least twice during the tern census window which is reported to NHESP along with estimates on productivity. This is achieved under the direction of Natural Resource Officer Sean Kortis using trained seasonal field staff. In addition, monitoring of the tern colony will be increased to daily during the time period that escorts are allowed within this area. Data collected within this colony will include: number of tern nests, number of chicks, location of chicks and estimated chick age.

During escorts, staff will document dates and times of each escort effort, number of vehicles, staff utilized for the escorts and number of chicks observed when the escort activity occurred, all observations of chicks within the travel corridor, evidence of chick injury or mortality, observations of chick and adult behavior during caravanning (e.g. flushing/mobbing). This information will be provided in interim reports to NHESP at least weekly when the escorting program is operating. Observations of chick injury or mortality will be reported immediately.

On or before October 1 of each calendar year that the COI is in effect, the Park Manager will submit to NHESP a final report that describes and quantifies tern monitoring efforts within the escort zone as well as a summation of the escort season.

13.0 BUDGET

The estimated annual budget for an additional seasonal staff member is \$9,000. Again this will free up full-time staff to devote professional oversight of the escort program. We have submitted a request for this additional funding through the FY18 budget process.

The funding provided for mitigation will be secured through the budget process and will be paid from the Sandy Neck Enterprise Account prior to the “take” activities. Therefore, the total additional annual cost of HCP implementation of the escort program is estimated to be \$14,800 per year for each year during the three-year COI term when covered activities are implemented.

*Mitigation Fee	\$5,800
Increase in Seasonal Staff	\$9,000
<i>Total Cost of COI</i>	<i>\$14,800</i>

*It is the Town of Barnstable’s understanding that this mitigation fee will cover the “take” for both reduced proactive symbolic fencing in the “Recreation Zone” and the least tern escorting program. Therefore, this is not an additional mitigation fee and the entire COI (including this amendment) will require the town to set aside \$5,800 in an escrow account.

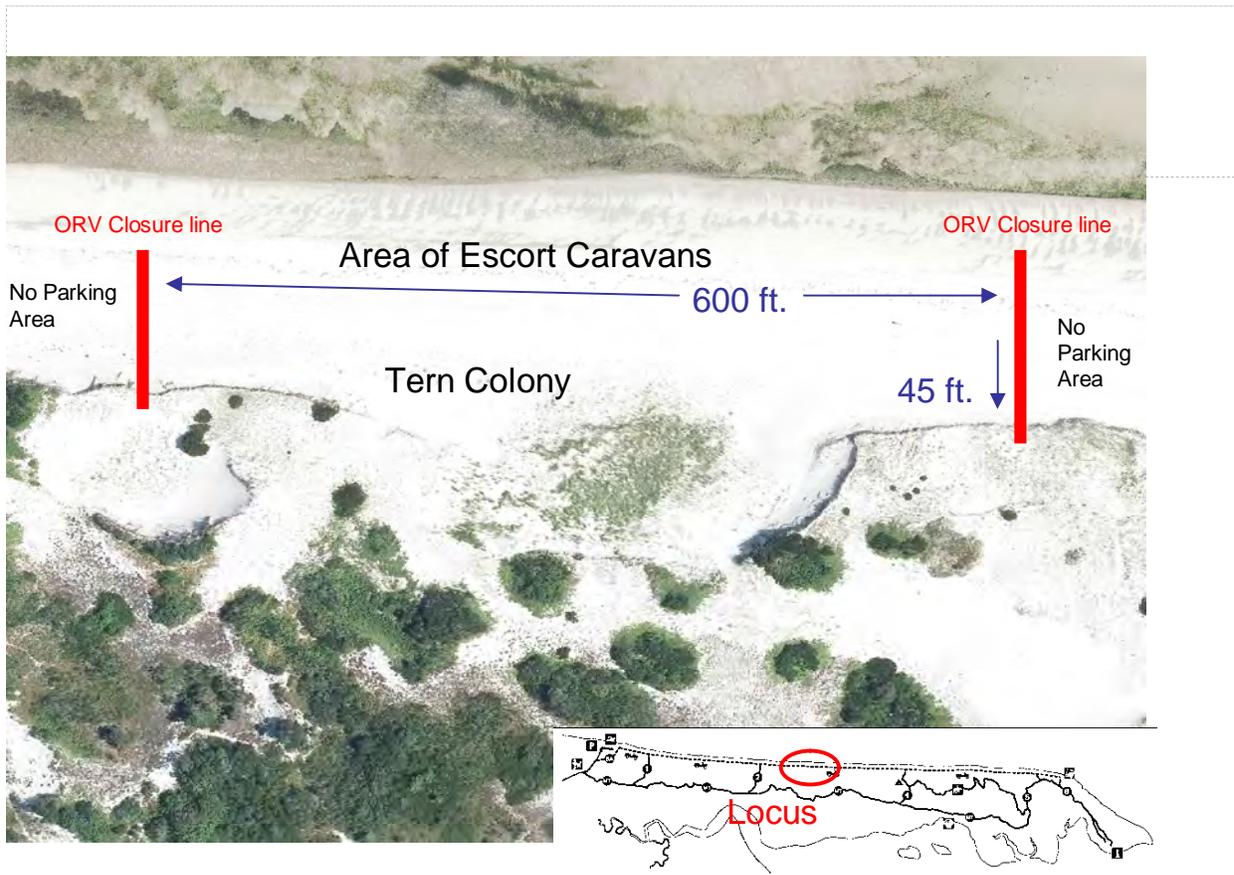


Figure 1a. Example of the proposed least tern escorting zone. Least tern area of impact has been estimated as 600-ft. X 45-ft. = ~0.62 acres

Attachment A

2017 Tern Escort Program Policies and Procedures-DRAFT 01/11/17 Donna Bragg, Sandy Neck Division Assistant

This is a summary of the implementation for providing escorts past the least tern colony that is located between Trail 2 and Trail 4.

For at least the first year of this program (2017), Sandy Neck will offer escorts to camper and designated chase vehicles only (as well as cottage owners).

Sandy Neck staff has been escorting cottage owners past plovers and tern colonies and protocols have been in place to ensure safe, scheduled and orderly escorting past endangered shorebirds. The following is the prescribed method.

1. All requests for escorts are handled by supervisory staff.
2. All those requesting escorts will follow the written schedule for times on and off the beach.
3. All those requesting an escort must read and sign an agreement requiring adherence to all escort rules set forth by the Sandy Neck Management.
4. Non-compliance of escort rules will result in immediate permit revocation.
5. Escorts will be logged by management staff on a form that includes: date, name, cell phone number and time.

Staffing and mechanics of the escort:

Sandy Neck field staff are present on the ORV corridor at all times during summer operational hours. Staff members are assigned by management to perform the escorts either at the beginning of their shift or via two way radio contact. This method minimizes any disruption of other duties assigned to staff members.

Staff is instructed to meet all those being escorted at the escort closure line at the designated time and then safely escort vehicles past the endangered species. This system is the done in the same method for escorting patrons both on and off the beach.

Public Outreach:

1. Sandy Neck website
2. Sandy Neck Blog
3. Informational handouts



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 5 – Order of Conditions

SE3- 4712

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



From: Barnstable
1. Conservation Commission

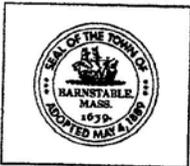
2. This issuance is for (check one): a. Order of Conditions b. Amended Order of Conditions

3. To: Applicant:

a. First Name	b. Last Name	Town of Barnstable/MEA Division	
<u>1189 Phinney's Lane</u>		c. Company	
d. Mailing Address			
<u>Centerville</u>		<u>MA</u>	<u>02632</u>
e. City/Town		f. State	g. Zip Code

4. Property Owner (if different from applicant):

a. First Name	b. Last Name	Town of Barnstable	
<u>367 Main Street</u>		c. Company	
d. Mailing Address			
<u>Hyannis</u>		<u>MA</u>	<u>02601</u>
e. City/Town		f. State	g. Zip Code



Project Location:

<u>Sandy Neck Beach</u>	<u>W. Barnstable</u>
a. Street Address	b. Village
<u>263 (et al)</u>	<u>001 (et al)</u>
c. Assessors Map Number	d. Parcel Number
Latitude and Longitude, if known (note: electronic filers will click for GIS locator):	<u>41 deg 44" 19.58"N</u>
	<u>70 deg 22"51.04"W</u>
	e. Latitude f. Longitude

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

<u>Barnstable</u>	<u>C121665 Land Plan 14099-A</u>
a. County	b. Certificate (if registered land)
c. Book	d. Page

7. Dates:

<u>February 29, 2008</u>	<u>March 31, 2015</u>	<u>April 22, 2015</u>
a. Date Notice of Intent Filed	b. Date Public Hearing Closed	c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

N/A

a. Plan Title

b. Prepared By

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act. Check all that apply:

- a. Public Water Supply
- b. Land Containing Shellfish
- c. Prevention of Pollution
- d. Private Water Supply
- e. Fisheries
- f. Protection of Wildlife Habitat
- g. Groundwater Supply
- h. Storm Damage Prevention
- i. Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect these interests, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

3. Buffer Zone Impacts: Shortest distance between limit of project disturbance and wetland boundary (if available)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
	e. cu.yd dredged	f. cu.yd dredged		



WPA Form 5 - Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 and § 237-1 to § 237-14 Town of Barnstable Code

B. Findings (cont.)

Table with 5 columns: Resource Area, Proposed Alteration, Permitted Alteration, Proposed Replacement, Permitted Replacement. Rows include Bordering Land Subject to Flooding, Isolated Land Subject to Flooding, and Riverfront area with various sub-categories and measurement units.

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

Table with 5 columns: Resource Area, Proposed Alteration, Permitted Alteration, Proposed Replacement, Permitted Replacement. Rows include Designated Port Areas, Land Under the Ocean, Barrier Beaches, Coastal Beaches, Coastal Dunes, Coastal Banks, Rocky Intertidal Shores, Salt Marshes, Land Under Salt Ponds, Land Containing Shellfish, Fish Runs, and Land Subject to Coastal Storm Flowage.



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

C. General Conditions Under Massachusetts Wetlands Protection Act

(only applicable to approved projects)

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
7. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
8. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to this Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MA DEP"]

"File Number SE3- 4712 "



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

C. General Conditions Under Massachusetts Wetlands Protection Act

10. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before DEP.
11. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
12. The work shall conform to the plans and special conditions referenced in this order.
13. Any change to the plans identified in Condition #12 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
14. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
15. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
16. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
17. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
18. All work associated with this Order is required to comply with the Massachusetts Stormwater Policy Standards.

Special Conditions:

If you need more space for additional conditions, select box to attach a text document



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No

2. The Barnstable Conservation Commission hereby finds (check one that applies):

3. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

§ 237-1 to § 237-14 Town of Barnstable Code

a. Municipal Ordinance or Bylaw

b. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

4. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

§ 237-1 to § 237-14 Town of Barnstable Code

a. Municipal Ordinance or Bylaw

b. Citation

The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

c. The special conditions relating to municipal ordinance or bylaw are as follows:

See pp. 7.1 - 7.6

If you need more space for additional conditions, select box to attach a text document



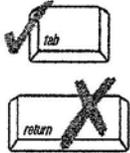
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
SE3-4712
 MassDEP File #

 eDEP Transaction #
Barnstable
 City/Town

E. Signatures

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.
 Please indicate the number of members who will sign this form.
 This Order must be signed by a majority of the Conservation Commission.

APR 22 2015
 1. Date of Issuance
5
 2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy must be mailed, hand delivered or filed electronically at the same time with the appropriate MassDEP Regional Office.

Signatures:

[Handwritten signatures on lines]

by hand delivery on

by certified mail, return receipt requested, on

Date

Date

APR 22 2015

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

SE3-4712 AMENDED
ORDER OF CONDITIONS GOVERNING ESSENTIAL VEHICLE AND
GUEST VEHICLE USE AT SANDY NECK

Findings:

1. Proposed vehicle use at Sandy Neck is required to meet several stringent performance standards of the Wetlands Protection Act Regulations:

1.1 No short or long term adverse effect on the habitat of a local population of a state listed wildlife species.

The relevant state-listed wildlife species occurring at Sandy Neck and potentially affected by proposed vehicle use are:

<u>Species</u>	<u>Status</u>
Diamond terrapin	Threatened
Least tern	Special concern
Common tern	Special concern
Piping plover	Threatened
Roseate tern	Endangered

Hereafter this list or component species may be referred to as 'indicated species'.

1.2 Since in an ACEC area, no adverse effect is permitted on any regulatory interest found significant by the issuing authority.

2. Among other interests, the Conservation Commission finds Sandy Neck significant to storm damage prevention, flood control, historic (Ch. 237 only) and protection of wildlife habitat.

3. In addition to regulation under the MA Wetlands Protection Act and Town Code Ch. 237- Wetlands, vehicle use at Sandy Neck is also regulated under the MA Endangered Species Act and the Federal Endangered Species Act.

3.1 This Order of Conditions incorporates the State Endangered Species Act requirements as special conditions, but does not include all aspects of the Federal requirements. The Town is advised to observe the Federal requirements as well so that potential violations of the Federal Endangered Species Act may be avoided.

4. In addition to providing breeding, nesting and feeding habitat for state and federal listed species, Sandy Neck is an important provider of feeding and resting habitat for great numbers of migratory birds along the Atlantic flyway. This is particularly the case at the eastern portion of Sandy Neck.

5. The following special conditions achieve, in the perspective of the Conservation Commission, a way to meet the pertinent performance standards while allowing essential vehicle and guest vehicle use to continue at Sandy Neck.

Definitions

Essential vehicles – vehicles used for law enforcement, public safety, public property maintenance, species monitoring and management; and vehicles operated by cottage owners, spouses and immediate family of cottage owners, cottage lessees, spouses and immediate family of cottage lessees and contractors providing necessary repairs for cottage owners.

Guest vehicles - vehicles that possess a trail pass and whose purpose of travel is for the visiting of cottages. Access by guest vehicles during periods of special protection for indicated species shall be at the discretion of the Park Manager.

Trail pass – passes that are issued at the discretion of the Park Manager to qualified applicants.

Special Conditions of Approval:

1. This Order of Conditions shall be recorded at the Registry of Deeds within two weeks of issuance.
2. On beaches where off-road vehicles are driven, all areas of habitat suitable for nesting by piping plovers or terns, as determined by the Division of Fisheries and Wildlife (hereafter the 'Division'), shall be identified and delineated with posts, warning signs, and/or symbolic fencing on or before April 1. Delineations shall be expanded to include nesting territories that become established as determined by the Town or the Division. Areas of suitable nesting habitat for all species of terns shall be so identified and delineated on or before May 15, and shall be expanded as nesting territories become established as determined by the applicant or the Division. All vehicular access into or through delineated nesting habitat shall be prohibited, although vehicles may pass by such areas while birds are incubating. Fenced habitat areas shall be expanded, and travel corridors moved, narrowed, or temporarily closed, if incubating plovers or terns are disturbed by passing vehicles, or if disturbance is anticipated because of unusual tides or expected increases in vehicle traffic during weekends, holidays, or special events.

2.1 The Park Manager shall provide a minimum 15 ft. protective buffer staked from the toe of all dunes along the Beach Trail where vehicles pass. Discretion by the Park Manager is allowed in prescribing a reduced buffer width where beach conditions create a narrow pass, as in the portion of the Beach Trail between the Access Trail and Trail 1.

2.2 The annual location of symbolic fencing (set on or by 1 April) shall be moved further seaward later in the spring or early summer if the applicant or the Division determines that areas of suitable nesting habitat for piping plovers or terns have become significantly wider as a result of natural processes of beach accretion.

2.3 Travel by essential vehicles shall avoid the wrack line and should be infrequent enough to avoid creating deep ruts that could impede chick movements. Open all-terrain vehicles (ATVs) shall be used whenever possible for monitoring and law enforcement because of the improved visibility afforded the operator.

2.4 Area of dune, beach, or intertidal habitat used as nursery areas by unfledged or recently fledged tern chicks, as identified by the Division of Fisheries and Wildlife, shall be delineated with symbolic fencing no later than June 21. All access by vehicles into posted tern nursery areas shall be prohibited while unfledged or recently fledged tern chicks are present in those areas, until it is determined that use of nursery areas by young terns has ended, i.e. young terns are no longer being fed by adult terns.

3. Sections of beaches where unfledged plover chicks are present shall be temporarily closed to all but essential vehicles. Access by guest vehicles during periods of special protection for indicated species shall be at the discretion of the Park Manager. Closure to all but essential vehicles (and guest vehicles as allowed by the Park Manager) shall begin as soon as hatching begins and shall continue until plover and tern chicks have fledged. For purposes of off-road vehicle management, plovers are considered fledged at 35 days of age or when observed in flight, whichever occurs first. Terns are considered fledged when they are capable of flight. For unfledged plovers, all but essential vehicles shall be excluded from all areas of dune, beach, and intertidal habitat within 100 yards of either side of a line drawn through the nest site perpendicular to the long axis of the beach. For unfledged terns, all but essential vehicles shall be excluded from all areas of dune, beach, and intertidal habitat within 100 yards of either side of lines drawn through the outermost nests in the colony and perpendicular to the long axis of the beach.

4. If plover nests are discovered with incomplete clutches (< 4 eggs), off-road vehicle restrictions shall begin on the 26th day after the last egg is laid and full-time incubation begins. This assumes an average incubation period of 27 days, and provides a 1-day margin of error. If nests are discovered with complete clutches (4 eggs), thus precluding prediction of hatch date, either of 2 options shall be implemented. Either off-road vehicle restrictions shall begin on May 19 (the earliest recorded hatching date for Massachusetts), or the nest shall be monitored twice per day, before 0600 and after 1900 hours, from a distance with a spotting scope or binoculars, beginning on May 19, and closure to all but essential vehicles shall begin immediately when hatching begins. If nests with complete clutches are discovered after May 19, vehicle restrictions shall begin immediately unless nests are checked each day before 0600 hours and after 1900 hours. On beaches where nesting terns are present, vehicle restrictions shall ensue as soon as hatching begins.

5. Closure to all but essential vehicles (and guest vehicles as allowed by the Park Manager) shall begin at least five days prior to the anticipated hatching date of plover nests if ruts are present that are deep enough to restrict movements of chicks or if vehicle impacts on wrack have been so severe that wrack must be allowed to accumulate naturally prior to hatching. If a plover nest is found with a complete clutch, precluding estimation of hatching date, and availability of wrack has been significantly reduced by vehicle passage, or deep ruts created that could reasonably be expected to impede chick movements, that section of beach shall be closed to all but essential vehicles immediately.

6. Use of essential vehicles (and guest vehicles as allowed by the Park Manager) shall be kept to a minimum when unfledged plover or tern chicks are present. These vehicles shall only travel on closed sections of the Beach Trail if travel is absolutely necessary. Travel shall be during daylight hours only, except in emergencies, and vehicles shall be escorted through closed areas by a qualified monitor employed by the Town in that capacity who has first determined the location of all unfledged plover and tern chicks. Users shall minimize the number of trips by essential and guest vehicles through closed areas. Users should consider other means of access (for example, by water where possible) during periods when chicks are present. A log shall be maintained by the beach manager of the date, time, vehicle license number and operator, and purpose of each trip through areas where unfledged chicks are present.

6.1 The Town shall provide a reasonable schedule of escorts for cottage access.

7. The following further restrictions shall apply to essential vehicle use (and guest vehicle use as allowed by the Park Manager) on the Marsh Trail during periods of special protection for indicated species:

- 7.1 Night travel shall be limited to essential vehicles only.
- 7.2 During periods of terrapin nesting activity, use of the Marsh Trail shall be at the discretion of the Park Manager, unless for direct access to Marsh Trail properties.
- 7.3 If one or more terrapin nests are located in or within 1 meter of either side of the Marsh Trail, then that section of Trail shall be immediately closed to vehicle traffic until the nest is moved to a safe location. A valid collecting permit shall be obtained from the division prior to the moving of any terrapin nests. (See also 7.6).
- 7.4 During the period of terrapin hatching as designated by the Park Manager, use of the Marsh Trail shall be limited to the purpose of direct access to Marsh Trail properties.
- 7.5 Allowed users of the Marsh Trail during periods of terrapin nesting and hatching shall first check with the Gatehouse for latest information on same. Users shall also report any observations of terrapins to Gatehouse staff when exiting.
- 7.6 Properly trained monitors (under the direction of a State permit holder with specific approvals to move terrapin nests) shall patrol the Marsh Trail between the Gatehouse and Trail 2 (at minimum) each morning at or as close as possible to the morning's high tide in order to determine if any nests have been laid in the trail. If nests need to be relocated, they shall be relocated consistent with Division protocol.
- 7.7 The applicant shall ensure that an effective monitoring effort is extended to the Marsh Trail during periods of special protection for the Diamondback Terrapin. Matters of scheduling, provision of necessary back-ups, reporting etc. shall be clearly addressed by the applicant.
- 7.8 The opening of the Marsh Trail between the Gatehouse and Trail 1 for cottage access shall be strictly seasonal. During periods when no special protection of indicated species is prescribed, the gate shall remain closed and locked, with access to cottages provided by the Beach Trail and Connectors.
- 7.9 Prior to use for cottage access, the Marsh Trail between the Gatehouse and Trail 1 shall be symbolically fenced if necessary to ensure travel remains on the intended path.
8. Cottage-access users of Sandy Neck who also engage in ORV recreational vehicle use there shall be subject to the provisions of Order of Conditions SE3-4713.
9. Use of Trail 6 Connector
- 9.1 Essential vehicles using the Beach Trail between Trails 5 and 6 through the former 'tern colony' area shall be escorted when unfledged piping plover or least tern chicks are in the vicinity, as determined

by the Sandy Neck Park Manager. The Connector Trail shall still serve as an access way to and from the cottage colony for essential vehicles using the Marsh Trail. The Connector shall be maintained in passable condition for this purpose.

9.2 Once fledging is complete, cottage access may resume via 'old' Trail 6 in addition to the connector.

9.3 Essential vehicles other than cottage access-related shall use the new connector trail and avoid the 'tern colony' area whenever possible when en-route to Little Neck or Beach Point.

10. The Town shall provide a written summary of the past vehicle season (including all data collected on state-listed species, guest passes, enforcement, terrapin monitoring effort, maintenance work performed, etc.) to the Conservation Division and the Commission for its meeting on the 2nd Tuesday of November. The Park Manager shall attend this annual discussion.
11. Vehicles shall keep to the footprint of existing trails.
 - 11.1 The applicant shall keep trails (especially the Marsh Trail) clearly marked as necessary to prevent unauthorized secondary spurs from developing.
 - 11.2 Should unauthorized spurs become evident, the applicant shall immediately identify the authorized traverse, symbolically fence the unauthorized one, and routinely monitor thereafter.
12. This Order anticipates that a concerted effort be extended by the Town in the monitoring and protection of piping plover, tern and diamondback terrapin habitats. The Town shall continue to provide an adequate monitoring program as a requisite to continued essential vehicle and guest vehicle use at Sandy Neck.
13. The Conservation Commission herein incorporates the provisions of any future Section Ten permit that may be granted for Sandy Neck.
14. A Certificate of Compliance shall be requested upon expiration of this Order of Conditions.



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant. Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, § 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

Section G, Recording Information is available on the following page.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

DEP File Number:

WPA Form 5 – Order of Conditions

SE3- 4712

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on Page 7 of this form shall be submitted to the Conservation Commission listed below.

Barnstable
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Barnstable
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Sandy Neck Beach, W. Barnstable, MA
Project Location

SE3- 4712
DEP File Number

Has been recorded at the Registry of Deeds of:

Barnstable
County

Book

Page

for:

Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

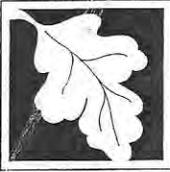
If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



From: Barnstable
1. Conservation Commission

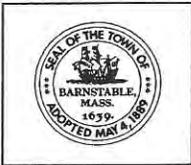
2. This issuance is for (check one): a. Order of Conditions b. Amended Order of Conditions

3. To: Applicant:

_____		Town of Barnstable/MEA Division
a. First Name	b. Last Name	c. Company
<u>1189 Phinney's Lane</u>		
d. Mailing Address		
<u>Centerville</u>	<u>MA</u>	<u>02632</u>
e. City/Town	f. State	g. Zip Code

4. Property Owner (if different from applicant):

_____		Town of Barnstable
a. First Name	b. Last Name	c. Company
<u>367 Main Street</u>		
d. Mailing Address		
<u>Hyannis</u>	<u>MA</u>	<u>02601</u>
e. City/Town	f. State	g. Zip Code



Project Location:

<u>Sandy Neck Beach</u>	<u>W. Barnstable</u>
a. Street Address	b. Village
<u>263</u>	<u>001</u>
c. Assessors Map Number	d. Parcel Number
Latitude and Longitude, if known (note: electronic filers will click for GIS locator):	<u>41 deg 44" 19.58" N</u> <u>70 deg 22' 51.04" W</u>
	e. Latitude f. Longitude

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

<u>Barnstable</u>	<u>C121665 land plan 14099-A</u>
a. County	b. Certificate (if registered land)
c. Book	d. Page
	<u>APR 14 2008</u>

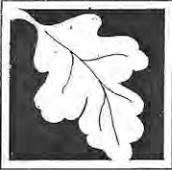
7. Dates: February 29, 2008 April 1, 2008 _____
a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

N/A

a. Plan Title

_____	_____
b. Prepared By	c. Signed and Stamped by
_____	_____
d. Final Revision Date	e. Scale
_____	_____
f. Additional Plan or Document Title	g. Date
_____	_____



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act. Check all that apply:

- a. Public Water Supply
- b. Land Containing Shellfish
- c. Prevention of Pollution
- d. Private Water Supply
- e. Fisheries
- f. Protection of Wildlife Habitat
- g. Groundwater Supply
- h. Storm Damage Prevention
- i. Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

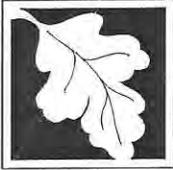
Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect these interests, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

- 3. Buffer Zone Impacts: Shortest distance between limit of project disturbance and wetland boundary (if available)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet e. cu.yd dredged	b. square feet f. cu.yd dredged	c. square feet	d. square feet



WPA Form 5 – Order of Conditions

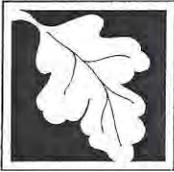
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

B. Findings (cont.)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
7. <input type="checkbox"/> Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. <input type="checkbox"/> Riverfront area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	a. square feet	b. square feet		
	c. cu.yd dredged	d. cu.yd dredged		
12. <input checked="" type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	No alteration			
	a. square feet	b. square feet	c. c/y nourishmt.	d. c/y nourishmt.
14. <input checked="" type="checkbox"/> Coastal Dunes	No alteration			
	a. square feet	b. square feet	c. c/y nourishmt.	d. c/y nourishmt.
15. <input type="checkbox"/> Coastal Banks	a. linear feet	b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	a. square feet	b. square feet		
17. <input type="checkbox"/> Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	a. square feet	b. square feet		
	c. cu.yd dredged	d. cu.yd dredged		
19. <input type="checkbox"/> Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. cu.yd dredged	b. cu.yd dredged		
21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

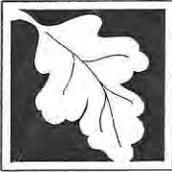
C. General Conditions Under Massachusetts Wetlands Protection Act

(only applicable to approved projects)

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
7. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
8. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to this Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MA DEP"]

"File Number SE3- 4713 "



WPA Form 5 – Order of Conditions

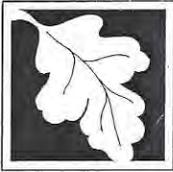
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

C. General Conditions Under Massachusetts Wetlands Protection Act

10. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before DEP.
11. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
12. The work shall conform to the plans and special conditions referenced in this order.
13. Any change to the plans identified in Condition #12 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
14. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
15. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
16. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
17. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
18. All work associated with this Order is required to comply with the Massachusetts Stormwater Policy Standards.

Special Conditions:

If you need more space for additional conditions, select box to attach a text document



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No
2. The Barnstable Conservation Commission hereby finds (check one that applies):
3. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:
§ 237-1 to § 237-14 Town of Barnstable Code
a. Municipal Ordinance or Bylaw _____ b. Citation _____

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

4. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:
§ 237-1 to § 237-14 Town of Barnstable Code
a. Municipal Ordinance or Bylaw _____ b. Citation _____

The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

- c. The special conditions relating to municipal ordinance or bylaw are as follows:

See pp. 6.1 - 6.8

If you need more space for additional conditions, select box to attach a text document

SE3-4713

ORDER OF CONDITIONS GOVERNING RECREATIONAL VEHICLE USE
AT SANDY NECK

Findings:

1. Proposed vehicle use at Sandy Neck is required to meet several stringent performance standards of the Wetlands Protection Act Regulations:

1.1 No short or long term adverse effect on the habitat of a local population of a state listed wildlife species.

The state-listed wildlife species occurring at Sandy Neck are:

<u>Species</u>	<u>Status</u>
Diamond terrapin	Threatened
Least tern	Special concern
Common tern	Special concern
Piping plover	Threatened
Roseate tern	Endangered

1.2 Since in an ACEC area, no adverse effect is permitted any regulatory interest found significant by the issuing authority.

2. Among other interests, the Conservation Commission finds Sandy Neck significant to storm damage prevention, flood control, historic (Ch. 237 only) and protection of wildlife habitat.

3. In addition to regulation under the MA Wetlands Protection Act and Town Code Ch. 237-Wetlands, vehicle use at Sandy Neck is also regulated under the MA Endangered Species Act and the Federal Endangered Species Act.

3.1 This Order of Conditions incorporates the State Endangered Species Act requirements as special conditions, but does not include all aspects of the Federal requirements. The Town is advised to observe the Federal requirements as well so that potential violations of the Federal Endangered Species Act may be avoided.

4. In addition to providing breeding, nesting and feeding habitat for state and federal listed species, Sandy Neck is an important provider of feeding and resting habitat for great numbers of migratory birds along the Atlantic flyway. This is particularly the case at the eastern portion of Sandy Neck.

5. The following special conditions achieve, in the perspective of the Conservation Commission, a way to meet the pertinent performance standards while allowing recreational vehicle use to continue at Sandy Neck.

Definitions

Recreational vehicles – vehicles possessing a valid ORV sticker issued by MEA and which provide a means of access for camping, beach going, fishing and other recreational pursuits on Sandy Neck. Recreational vehicles are non-essential vehicles on Sandy Neck.

Special Conditions of Approval:

1. This Order of Conditions shall be recorded at the Registry of Deeds within two weeks of issuance.
2. On beaches where off-road vehicles are driven, all areas of habitat suitable for nesting by piping plovers or terns, as determined by the Division of Fisheries and Wildlife (hereafter the 'Division'), shall be identified and delineated with posts, warning signs, and/or symbolic fencing on or before April 1. Delineations shall be expanded to include nesting territories that become established as determined by the applicant or the Division. Areas of suitable nesting habitat for all species of terns shall be so identified and delineated on or before May 15, and shall be expanded as nesting territories become established as determined by the applicant or the Division. All vehicular access into or through delineated nesting habitat shall be prohibited, although vehicles may pass by such areas while birds are incubating. Fenced habitat areas shall be expanded, and travel corridors moved, narrowed, or temporarily closed, if incubating plovers or terns are disturbed by passing vehicles, or if disturbance is anticipated because of unusual tides or expected increases in vehicle traffic during weekends, holidays, or

special events.

2.1 The Park Manager shall provide a minimum 15 ft. protective buffer staked from the toe of all dunes along the Beach Trail where vehicles pass. Discretion by the Park Manager is allowed in prescribing a reduced buffer width where beach conditions create a narrow pass, as in the portion of the Beach Trail between the Access Trail and Trail 1.

2.2 The annual location of symbolic fencing (set on or by 1 April) shall be moved further seaward later in the spring or early summer if the applicant or the Division determines that areas of suitable nesting habitat for piping plovers or terns have become significantly wider as a result of natural processes of beach accretion.

2.3 Area of dune, beach, or intertidal habitat used as nursery areas by unfledged or recently fledged tern chicks, as identified by the Division of Fisheries and Wildlife, shall be delineated with symbolic fencing no later than June 21. All access by vehicles into posted tern nursery areas shall be prohibited while unfledged or recently fledged tern chicks are present in those areas, until it is determined that use of nursery areas by young terns has ended, i.e. young terns are no longer being fed by adult terns.

2.4 Vehicles shall not travel or park upon dune or beach vegetation on the Beach

Trail.

3. Sections of beaches where unfledged plover chicks are present shall be temporarily closed to recreational vehicles. Closure to recreational vehicles shall begin as soon as hatching begins and shall continue until plover and tern chicks have fledged. For purposes of off-road vehicle management, plovers are considered fledged at 35 days of age or when observed in flight, whichever occurs first. Terns are considered fledged when they are capable of flight. For unfledged plovers, recreational vehicles shall be excluded from all areas of dune, beach, and intertidal habitat within 100 yards of either side of a line drawn through the nest site perpendicular to the long axis of the beach. For unfledged terns, recreational vehicles shall be excluded from all areas of dune, beach, and intertidal habitat within 100 yards of either side of lines drawn through the outermost nests in the colony and perpendicular to the long axis of the beach.

4. If plover nests are discovered with incomplete clutches (< 4 eggs), recreational vehicle restrictions shall begin on the 26th day after the last egg is laid and full-time incubation begins. This assumes an average incubation period of 27 days, and provides a 1-day margin of error. If nests are discovered with complete clutches (4 eggs), thus precluding prediction of hatch date, either of 2 options shall be implemented. Either off-road vehicle restrictions shall begin on May 19 (the earliest recorded hatching date for Massachusetts), or the nest shall be monitored twice per day, before 0600 and after 1900

hours, from a distance with a spotting scope or binoculars, beginning on May 19, and closure to all but essential vehicles shall begin immediately when hatching begins. If nests with complete clutches are discovered after May 19, vehicle restrictions shall begin immediately unless nests are checked each day before 0600 hours and after 1900 hours. On beaches where nesting terns are present, vehicle restrictions shall ensue as soon as hatching begins.

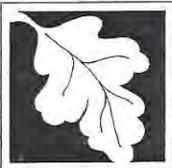
5. Closure to recreational vehicles shall begin at least five days prior to the anticipated hatching date of plover nests if ruts are present that are deep enough to restrict movements of chicks or if vehicle impacts on wrack have been so severe that wrack must be allowed to accumulate naturally prior to hatching. If a plover nest is found with a complete clutch, precluding estimation of hatching date, and availability of wrack has been significantly reduced by vehicle passage, or deep ruts created that could reasonably be expected to impede chick movements, that section of beach shall be closed to all recreational vehicles immediately.
6. Restrictions currently in force which prohibit recreational vehicle use on tidal flats, in proximity to foredunes, on the Marsh Trail and Connector Trails (excluding the Access Trail) and on Beach Point shall remain in force.
7. Eastern Closure Point on the Beach Trail

- 7.1 Recreational vehicle use east of Trail 6 and west of the swale-tidal flat shall be specially reserved for fishing access only, at the discretion of the Park Manager. Overnight camping or general recreation shall not occur in the 'reserved for fishing' area. The Trail 6 closure point for all other east-bound recreational vehicles shall be clearly demarcated in the field and maintained and enforced year-round by the Town.
- 7.2 No vehicle shall remain east of Trail 6 for more than 1 complete tidal cycle.
- 7.3 The 'reserved for fishing' access area shall be symbolically fenced on the south and east sides prior to its opening.
8. The Town shall provide a written summary of the past vehicle season (including all data collected on state-listed species, enforcement, plover monitoring effort, compliance in the new 'reserved for fishing' area, etc.) to the Conservation Division and the Commission for of its meeting November. The Park Manager shall attend this annual discussion.
9. This Order anticipates that a concerted effort be extended by the Town in the monitoring and protection of piping plover, tern and diamondback terrapin habitats. The Town shall continue to provide an adequate monitoring program as a requisite to continued

recreational vehicle use at Sandy Neck.

10. The Conservation Commission herein incorporates the provisions of any future Section Ten permit that may be granted for Sandy Neck.

11. A Certificate of Compliance shall be requested upon expiration of this Order of Conditions.



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

E. Issuance

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

APR 14 2008

Please indicate the number of members who will sign this form:

1. Date of Issuance

This Order must be signed by a majority of the Conservation Commission.

2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

Louise R. Foster

Dennis R. Houle

Notary Acknowledgement

Commonwealth of Massachusetts County of

Barnstable

On this 11th Day of _____ of _____

April 2008
Month Year

Before me, the undersigned Notary Public, personally appeared

Dennis R. Houle
Name of Document Signer

proved to me through satisfactory evidence of identification, which was/were

Description of evidence of identification

Business acquaintance

to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose.

As member of

Barnstable
City/Town

Conservation Commission

Signature of Notary Public

Printed Name of Notary Public

CLAUDETTE BOOKBINDER
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
MY COMMISSION EXPIRES 11/21/08

My Commission Expires (Date)

Place notary seal and/or any stamp above

This Order is issued to the applicant as follows:

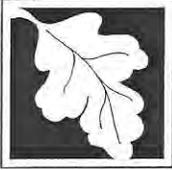
by hand delivery on

by certified mail, return receipt requested, on

APR 14 2008

Date Name Signature

Date



WPA Form 5 – Order of Conditions

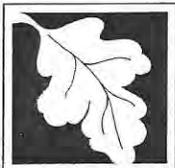
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant. Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, § 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

Section G, Recording Information is available on the following page.



WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and § 237-1 to § 237-14 Town of Barnstable Code

G. Recording Information

This Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on Page 7 of this form shall be submitted to the Conservation Commission listed below.

Barnstable
Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Barnstable
Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Sandy Neck Beach, W. Barnstable, MA
Project Location

SE3- 4713
DEP File Number

Has been recorded at the Registry of Deeds of:

Barnstable
County

Book

Page

for:

Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

Nina Z. Coleman

52 Turtleback Rd.
Marstons Mills, MA 02648

Home Phone (508) 685-1918
Email: Nina.coleman@town.barnstable.ma.us

EDUCATION

- 2003 *University of Massachusetts, Amherst, MA*
❖ M.S., Natural Resources Conservation. GPA 4.0
- 1997 *University of Massachusetts, Amherst, MA*
❖ B.S., Environmental Science with High Honors
- 1995 *Cape Cod Community College, Barnstable, MA*
❖ A.A., Liberal Arts with High Honors
- 1988 *Bellows Falls Union High School, Bellows Fall, VT*
❖ High School Diploma

EMPLOYMENT AND WORK EXPERIENCES

March 2003- Present *Sandy Neck Park Manager* *Supervisor:*
 Town of Barnstable *Dan Horn, Director*
 1189 Phinneys Lane *Martine and Environmental Affairs*
 Centerville, MA 02632

- ❖ Manages daily operations of Sandy Neck Beach Park, which is a 1,500 acre barrier beach that is designated as an Area of Critical Environmental Concern and is known for multiuse recreational opportunities: camping, hiking, hunting, swimming, off road beach driving, fishing and private cottage use.
- ❖ Administers the Sandy Neck enterprise account consisting of approximately one million dollars annually. Tasks include revenue projections, operational budgeting, salaries and capital improvement projects.
- ❖ Supervises twenty-five fulltime and seasonal employees including hiring and training.
- ❖ Drafts multiple environmental permit requests for Sandy Neck projects, and updates Sandy Neck rules and regulations to ensure beach patron compliance and safety.
- ❖ Directs protection of endangered species (piping plovers, terns and diamondback terrapins) including mandatory monitoring, predator prevention measures and nesting data and reporting requirements.
- ❖ Acts as Senior Natural Resource Officer for activities such as enforcement/beach patrol and medical emergencies.
- ❖ Coordinates Sandy Neck’s wildlife rescue program for marine mammals, injured birds and stranded sea turtles.
- ❖ Provides environmental education to the public via guided nature hikes, our diamondback terrapin headstart program, Junior Rangers and organized use of our remote educational classroom.
- ❖ Works on an ambitious coastal resiliency projects to improve the viability of Sandy Neck infrastructure.
- ❖ Engages in public relations such as presentations to boards, commission and committee, press interviews and conferences appearances.
- ❖ Achieved over 15 years of Sandy Neck ecological restoration and wetland mapping.
- ❖ Has overseen the completion of the Sandy Neck bathhouse capital improvement project.

September 2000-
January 2003

Research and Teacher Assistantships
University of Massachusetts
Amherst, MA 01003

Supervisor:
Dr. Robin Harrington
Dept. of Natural Resources Conservation

- ❖ Teacher assistantship—taught two courses to undergraduates: Applied Ecology, Plant Sampling and Identification.
- ❖ Research assistantship—involved mapping with GIS/GPS, plant inventory, invasive species removal, statistical analysis and presenting/publishing results.
- ❖ Thesis authorship—designed and implemented master thesis “Interdunal swales and the invasive plant species *Phragmites australis*.”

January 1998-
August 2000

Environmental Technician
Town of Bourne
24 Perry Ave.
Buzzards Bay, MA 02532

Supervisor:
Coreen Moore
Bourne Town Planner

- ❖ Managed the town conservation office interns and employees.
- ❖ Under the Wetland Protection Act and Bourne Town Bylaws, reviewed proposed projects and enforcement issues (site inspection, site plan review and wetland delineation).
- ❖ Coordinated salt marsh restoration via culvert replacement and vernal pool restoration (grant writing, permitting, organizing volunteers, project design and implementation).
- ❖ Initiated a year long, Town Meeting approved, dock moratorium and completed a study of the effects of docks on marine natural resources.
- ❖ Championed Town Meetings approval for the enactment of dock construction regulation.
- ❖ Advisory staff to volunteer boards on environmental issues (wetland protection, land acquisition and water quality).
- ❖ Managed town conservation areas and provided grant writing and coordination of trail restoration under the Cape Cod Pathways Program.

CERTIFICATIONS, MEMBERSHIPS & AWARDS

- ❖ MA Certified Pesticide Applicator
- ❖ CPR and AED Certified

COMPUTER SKILLS

- ❖ Word, Excel, Access, Power Point
- ❖ ArcView, GeoMedia
- ❖ Minitab, SAS

PRESENTATIONS

Coleman, N.Z., R. A. Harrington, D. L. McCullough & J. Grand (2002). A Discriminant Analysis of the relationship between *Phragmites australis* invasion of interdunal swales and landscape level variables. Poster presentation. Society of Wetland Scientists Annual Meeting, Lake Placid, NY. June 2-7, 2002.

Sean M. Kortis

307 Woodside Road, West Barnstable, MA 02668
(774) 238-8538
sean.kortis@town.barnstable.ma.us

EDUCATION: Stony Brook University, Stony Brook, NY
B.A. in Environmental Studies, Minor in Marine Science, 2012 G.P.A. 3.26

HONORS: Stony Brook University Dean's List 2008-2012
National Honor's Society 2008
Treasurer of Marine Biology Club Fall 2009-Spring 2010
3rd place in 2008 Massachusetts Envirothon

SKILLS/CERTIFICATIONS: Deputized Shellfish Constable, Licensed Pesticide Applicator (MA), CPR/AED/First-Responder Certified, Certified in Incident Command System (ICS), Certified IFAW Marine Mammal Rescue/Responder

Computer Skills: MS Word, Powerpoint, Excel, Outlook, Explorer, Adobe Photoshop, Google Earth

EXPERIENCE: Natural Resource Officer. Town of Barnstable, MA. September 2015-Present. Responsible for inspection and enforcement work to ensure compliance with laws and regulations pertaining to the preservation and use of the town's natural resources. Duties include patrolling beaches and waterways, inspecting the activities of individuals using natural resources for recreational or other purposes to ensure compliance with laws and regulations, overseeing seasonal field staff at Sandy Neck Beach to ensure proper monitoring of protected species including the Piping Plover, Least Tern and Diamondback Terrapin, coordinating with other agencies to assess/rescue stranded or injured animals including marine mammals and sea turtles, providing for the overall maintenance of the town's natural resources, and following state and federal guidelines to ensure proper monitoring and protection of endangered species is maintained.

Spadefoot Toad Project Technician/Coordinator. Long Pasture Wildlife Sanctuary. Barnstable, MA. February 2014-September 2015. Oversaw project goals and long-term studies in both research and education of the Eastern Spadefoot Toad. Coordinated with schools and organizations in environmental education projects and lectures. Led research in wetland monitoring, radio tagging, acoustic recording and other field work. Experience with handling of amphibians and amphibian husbandry.

Turtle/Shorebird Monitor, Sandy Neck Beach. West Barnstable, MA. Summer 2013-2015. Monitored nesting activities of Northern Diamondback Terrapins, Piping Plovers, and Least Terns. Patrolled and monitored six miles of barrier beach by ATV, and educated public about the importance of Sandy Neck beach as a resource. Experience in tracking and identifying wildlife, and the use of GPS. Prepared reports detailing current and past data collection and analysis of results concerning the status of Diamondback Terrapins at Sandy Neck beach for use by town officials.

Osprey Monitor, Long Pasture Wildlife Sanctuary, Barnstable, MA, summer 2011-2012. Monitored mating and nesting activities of Osprey across Mashpee, Barnstable, and Yarmouth. Searched for new Osprey nests and re-confirmed nests from previous years. Monitored and updated information through Google Earth. Contacted volunteers to collect field research/updates and to ensure the monitoring of specific nests

Riverhead Foundation for Marine Research and Preservation, Riverhead, NY. Spring and fall 2009. Trained and certified in Incident Command System (ICS). Gained experience in marine mammal identification and anatomy. Performed multiple necropsies on deceased marine mammals in order to determine cause of death. Participated in an injured seal rescue and performed a physical in order to determine injury and rehabilitation treatment. Active participant in multiple seal releases and other educational events.

Vernal Pool Certification and Monitor, Barnstable, MA, 2007-2008. Monitored the overall health and success of a number of vernal pools throughout West Barnstable, MA. Recorded water quality readings, water level and documented the presence of salamander egg masses. Compiled data and submitted it to the state for certification and protection of surrounding land. Used much of my research in preparing for the Massachusetts Envirothon in 2008.

Gatehouse Supervisor, Sandy Neck Beach, West Barnstable, MA. August 2014-September 2015. Coordinated with Natural Resource Officers and Park Manager to ensure safety, protection and proper function throughout the park. Issued new offroad permits to patrons, detailing the park's rules and regulations, and educating them on the importance of Sandy Neck beach as a resource. Maintained proper coordination via radio, Nextel and other forms of communication during emergency situations. Supervised gatehouse attendants and handled large sums of money to be counted and deposited each day.

Naturalist for Mass Audubon's Aquatic Exploration Cruises, Hyannis, MA, summers 2011-2012. Educated children on topics in marine biology and emphasized the importance of science, learning and conservation. Conducted plankton tows, trap pulls and otter trawls, providing children with first-hand experience working with marine specimens.

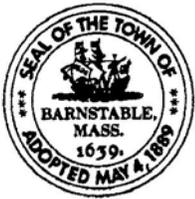
Jr. Rangers Program, Sandy Neck Beach, West Barnstable, MA. Summer 2013-2015. Taught campers ages 9-13 about the geology and ecology of Cape Cod including lessons on invasive species, endangered species and marine mammals. Educated children on the importance of conservation, protection and research of flora and fauna throughout the park.

Teacher/Naturalist, Long Pasture Wildlife Sanctuary, Barnstable, MA. Spring 2013-2015. Worked with Mass Audubon in educating children K-12 on topics including vernal pool ecology, birds, shorebirds, salt marsh and tidal flat ecology. Led field trips at various locations throughout Cape Cod, helping students engage in active and constructive research projects.

Deckhand aboard the R/V Paumanok, R/V Shinnecock, Southampton, NY. Fall 2011-Spring 2012. Ensured the safety of passengers aboard. Experience in both Physical Oceanography and Ichthyology trips. Knowledge and use of heavy equipment and machinery including winch operation, ocean trawls, core samplers, CTD, seine nets, Niskin bottles, and plankton nets.

Marine Station Assistant, Southampton, NY, fall 2011-spring 2012. Assisted in various projects throughout the facility including the health and maintenance of fish and holding tanks, transport of new vessel donations, and maintenance of docks and boats at the research station.

How Green is My Town, Long Island, NY, Fall 2010. Interviewed town officials and gathered data regarding the sustainability of town facilities and management. Worked in effort to address the issues of climate change, sustainability and environmental health.



Town of Barnstable

Sandy Neck Beach Park Regulations

Marine and Environmental Affairs Division

Barnstable Town Manager
16 FEB 25 11:57

2019 FEB 25 11:57
BARNSTABLE TOWN CLERK

Welcome to Sandy Neck:

§ 601-1. Introduction. Sandy Neck Beach Park (Sandy Neck), a coastal barrier beach, is approximately six miles long, varying in width from 200 yards to one half mile. The majority of this unique conservation and recreation area is owned by the Town of Barnstable and is under the supervision and jurisdiction of the Town Manager, with the advice of Sandy Neck Board. The Sandy Neck Park Manager (Park Manager) handles daily operations. Help us to preserve and protect the heritage and integrity of this resource by reading this brochure and abiding by the rules and regulations outlined herein.

§ 601-2. Beach closures for protection of rare and endangered species: Shorebirds, including Piping Plovers and Least Terns, nest on Sandy Neck. To protect nesting activity, shorebird nesting areas are fenced to exclude pedestrians and speed limits are reduced to 5 mph where posted. The Piping Plover, a threatened species under the Endangered Species Act, is given special protection once eggs begin to hatch. Pursuant to federal, state and local law, vehicle traffic is limited to protect developing chicks not yet able to fly.

§601-3. General Regulations:

- A. Acts of a lewd or lascivious nature (including public nudity) are prohibited.
- B. All rubbish and garbage must be kept in suitable containers and removed from the beach. Burial or burning of rubbish, garbage or refuse is prohibited.
- C. Glass beverage containers are prohibited.
- D. No person shall feed, harass, molest or disturb wildlife on Sandy Neck. No person shall injure or remove any trees, shrubs, plants or other vegetation from Sandy Neck. *Exception: edible fruits and legally hunted game.*
- E. No person shall dig, remove, damage or disturb any artifact on Sandy Neck. The discovery of any artifact(s) should be reported to the Natural Resource Officer on duty.
- F. Removal or disturbance of buoys, storm debris, marine salvage, municipal or private property is prohibited.
- G. No person shall traffic (or allow any pet to traffic) in any posted area. All persons shall stay on marked trails and keep off all vegetation, dune faces, steeply sloped dunes, foredunes, and primary dunes. People who are hunting, berry collecting, involved in professionally lead educational hikes and/or scientific studies are permitted off the marked trail. All activities require prior approval by the Sandy Neck Gatehouse.
- H. All dogs must be leashed from March 1 to September 15. At all other times, dogs must be kept leashed or under direct voice control of the owner or keeper. The owner or keeper of any dog shall clean up and properly dispose of all fecal material deposited by the animal. Dogs involved in dog-bite incidents must be removed immediately from the beach until further notice by the Park Manager.
- I. ORV Beach Curfew: *In Season:* (April 1 to October 31): No vehicles may enter the beach between 9:00 PM and 8:00 AM. Vehicles must exit prior to 11:00 PM. *Off Season:* (November 1 to March 31): No vehicles may enter the beach between 4:00 PM and 8:00 AM. All vehicles must exit prior to 4:00 PM. Self-contained vehicles, fishermen, cottage owners

and their guests may enter the beach past curfew if tidal conditions allow. *Curfew may be moved forward as tidal conditions warrant.*

- J. All organized gatherings at Sandy Neck involving twenty or more individuals must obtain a Special Permit from the Park Manager. A Special Permit is also required in order to conduct scientific research on Sandy Neck. Fees may apply. Please call the Sandy Neck Gatehouse for further information (508-362-8300).
- K. Campfires:
- (1) A Sandy Neck campfire permit is required.
 - (2) This campfire permit is included with an ORV permit.
 - (3) All other patrons wishing to have a campfire may purchase a permit at the Sandy Neck Gatehouse after 5:00 PM on the day they wish to have the campfire. Permits may be limited.
 - (4) Weather permitting, open campfires on the front beach are allowed *In Season* (April 1 to October 31) after sunset or 7:00PM only, whichever is earlier. Campfires are prohibited at all other times of the year.
 - (5) A campfire permit holder (which includes all ORV permit holders) is responsible for adhering to the Sandy Neck Beach Park Regulations.
 - (6) Campfires located on the ORV Beach must be at least 10-feet from the Cape Cod Bay side of established ORV corridor and must not impinge on vehicular travel.
 - (7) All fires shall be doused with water before being buried.
 - (8) The burning of wood pallets or garbage is prohibited at Sandy Neck.
 - (9) The Park Manager or Natural Resource Officers have final discretion on all fires.
- L. All people sleeping overnight at Sandy Neck shall remain inside self-contained vehicles. No tenting lean-tos, camping trailers, or temporary shelters are allowed. Registered owners will be responsible for anyone sleeping outside of said vehicles, i.e., in sleeping bags, tents, chase vehicles, or any other manner. Tenting in designated areas is allowed at the discretion of the Park Manager.
- M. The discharge of gray water or waste water from holding tanks, portable toilets, sinks, or any other source is prohibited.
- N. If high tide forces passage within 15' of the toe of the dune or any vegetation, the beach shall be considered closed, with no traffic being allowed to travel either off or on, until the Park Manager or the Natural Resource Officer on duty has determined the tide has receded to an appropriate level.
- O. When vehicle limits reach capacity, there will be no waiting lines (no "one off—one on policy"). Access will be on a first come, first serve basis. Cottage owners and their guests, and chase vehicles returning from emergency work, will be allowed access over the beach if tidal conditions permit.
- P. The Park Manager reserves the right to close or limit use of Barnstable's land at Sandy Neck to all oversand vehicles (ORVs), horses, and/or pedestrian and recreational traffic when public safety, wildlife habitat, tidal or extreme weather conditions warrant. This includes access for fishing, shellfishing, and hunting.
- Q. No refunds will be granted for any reason including foul weather, evacuations, personal emergencies, or limitations on access.
- R. All terrain vehicles, dirt bikes and snowmobiles are prohibited at Sandy Neck.
- S. Motorized personal watercraft (jet skis) are prohibited on Sandy Neck in all areas except Beach Point and the Great Marsh. Transporting a personal watercraft via the ORV corridor is prohibited.
- T. Permit holders are responsible for the safe operation of their vehicle and compliance with all Sandy Neck Regulations by all operators and passengers of their vehicle. The penalty for

violations by permit holders as well as non-owners and/or guests may include suspension and/or revocation of the ORV permit.

- U. Vehicle operation on those areas of Sandy Neck owned by the Town of Barnstable, by election to exercise the privilege of driving on this Town property, which is not a public way, are subject to being stopped by Natural Resource Officers or the Park Manager (or any other employee designated by the Town Manager to enforce the regulations at Sandy Neck) in order to ascertain the identification of the occupants, and to determine if there are violations of the Sandy Neck Beach Park Regulations and/or the Barnstable General Ordinances.
- V. The use of generators is prohibited between the hours of 10:00 PM and 8:00 AM.

§601-4. Required Equipment and Minimum Standards:

- A. All off road vehicles (ORVs) must carry the following equipment:
 - (1) Spare tire—spare shall be the same tire and wheel size as the other four tires mounted on the vehicle (trailer included). *Exception: intermediate size spare tires may be acceptable at the discretion of Sandy Neck Staff and two wheel drive motor homes and "dune buggies" must carry one spare tire of sufficient height and aspect ratio to allow the vehicle to drive off the beach under its own power should any of the tires mounted on the vehicle fail.*
 - (2) Tow device—minimum length 15 feet
 - (a) rope - 3/4" diameter, or
 - (b) strap - 6,800 lb. capacity, 1 1/2" wide, or
 - (c) chain - 5/16" link, or
 - (d) cable - 3/8" diameter, or
 - (e) suitable vehicle mounted winch.
 - (3) Jack—standard type jack or hydraulic jack.
 - (4) Support board—minimum size 18" x 18", 3/4" plywood or 1/4" thick steel.
 - (5) Shovel—heavy duty, equal to military folding type or better.
 - (6) Tire gauge—low pressure type, must register 10 psi or lower.
 - (7) Sandy Neck Beach Park Regulations and tide current chart (both provided).
 - (8) Self-contained vehicles must carry a measuring device that determines a 30 foot distance and an operational carbon monoxide detector.
- B. It is recommended that all ORVs are equipped with a bucket, fire extinguisher and a first aid kit.
- C. Minimum acceptable tire rim size for all ORVs is 13 inches.
- D. Trailers:
 - (1) All trailers must be inspected and receive a trailer permit at the gatehouse prior to beach access.
 - (2) All trailer tires must meet the minimum rim size of 12 inches.
 - (3) Matching spare tire is required.
- E. Self-Contained Vehicles:
 - (1) Self-contained camping vehicles are allowed to stay overnight when equipped with a permanently installed sanitary unit with holding tanks for sewage and "gray water", and adequate built-in bed space for each member of the camping party. Detachable gray or black water overflow tanks are prohibited.
 - (2) Maximum stay for self-contained vehicles is 96 hours. All self-contained vehicles shall exit the beach for a minimum of 24 hours before being readmitted. Self-contained vehicles must be attended overnight by a qualified driver. The Park Manager or Natural Resource Officers may reduce the maximum stay of a self-contained vehicle.

- (3) Properly equipped two-wheel drive permanently self-contained vehicles are allowed, subsequent to a beach driving test that is supervised by the Park Manager or a Natural Resource Officer. Tests are available Monday through Thursday only by appointment. Vehicles with ORV permits from the prior calendar year do not need to repeat the trial run unless ownership of said vehicle has changed.
- (4) Only one designated chase vehicle is permitted per self-contained vehicle.
- (5) *In Season* (April 1 to October 31), all self contained vehicles, and associated chase vehicles, must purchase an Overnight Camping Permit in order to stay on the beach past curfew. The permit must be placed in an area that is clearly visible to Sandy Neck staff.

F. Motor Vehicle Operation:

(1) Speed limit:

- (a) No person shall operate a motor vehicle on Sandy Neck at a rate of speed greater than is reasonable and proper, or in excess of posted speed limits.
- (b) *In Season* (April 1 to October 31), unless otherwise posted, speed limit shall be 15 mph. Speed shall not exceed 25 mph at all other times.
- (c) Maximum speed near shorebird nesting areas is 5 mph.

(2) Permits:

- (a) The only vehicles eligible for an ORV permit are Park Manager approved all-wheel or four-wheel drive vehicles as well as two-wheel drive motor homes and suitably equipped 'dune buggies'.
- (b) All motor vehicles operating "oversand" on Sandy Neck must have a valid Sandy Neck ORV permit affixed to the lower left hand corner of the vehicle's windshield (or as directed by the gatehouse staff).
- (c) The ORV permit does not afford access to parking in the public beach parking lot during business hours.

(3) No person shall operate a motor vehicle on the following areas:

- (a) the designated public bathing beach, or
- (b) the toe of the dune: defined as the foredune and/or vegetation area, or
- (c) below the berm: defined as the foreshores and tidal flats, or
- (d) outside of the established ORV corridor, or
- (e) posted shorebird nesting areas or other "closed" areas, or
- (f) within the inner dune routes and cross trails without a valid trail pass.

(4) Beach parking:

- (a) All vehicles shall be parked parallel to the frontal dune, at least 30 feet from the dune fence line, unless otherwise directed by the Sandy Neck Staff.
- (b) For ORV corridor safety, all portions of the vehicle and beach accessories must be at least 30 feet from the dune fencing line unless otherwise directed by the Sandy Neck Staff. This includes (but is not limited too): slide-outs, awnings, grills, etc.
- (c) Further parking location restrictions on self-contained vehicles over 33 feet in length may be enacted by the Park Manager.
- (d) No parking within posted shorebird nesting areas.
- (e) In the off season when dune fencing is absent, vehicles must be parked at least 15 feet from the toe of the dune. In addition, parking on dune vegetation is prohibited.
- (f) The Park Manager or Natural Resource Officers have final discretion on all beach parking.

(5) Self-contained vehicles shall always have the right of way due to size and weight of the vehicle. Otherwise, vehicles with the Cape Cod Bay on the driver's right have the right of way.

- (6) No person shall obstruct the established ORV corridor or park so as to impede vehicle travel within said corridor unless directed by Sandy Neck Staff.
- (7) No person shall operate a passenger vehicle (or tow a trailer) with tire pressure in excess of 18 psi. (*Self-contained campers shall maintain tire pressure appropriate for the vehicle.*)
- (8) No person shall operate a vehicle:
 - (a) without a valid driver's license, or
 - (b) so as to endanger the public, or
 - (c) engage in dunehopping, doing "zigzags", "donuts", "cutting tracks" or in any other reckless or unacceptable fashion.
- (9) Riding on tailgate, roof, bumper or any exterior portion of a vehicle not designed to carry passengers is prohibited. Standing in truck beds or sitting on truck bed rails is prohibited.
- (10) All holes, campfire remains or alterations of the beach shall be restored to natural condition.

§601-5. Hunting Regulations:

- A. Hunting possessing, taking, molesting or disturbing deer within the boundaries of Sandy Neck, unless authorized by the Town Manager or Park Manager is prohibited.
- B. Discharging a firearm within the boundaries of Sandy Neck from Memorial Day to Labor Day is prohibited.
- C. No person shall hunt any game, except waterfowl, without wearing a "hunter orange" cap or hat. "Hunter orange" vest or coat is also recommended.
- D. All hunters must check in at the Sandy Neck Gatehouse prior to and at the conclusion of their hunt.
- E. Hunting or discharging a firearm or release an arrow upon or across the "front beach", that area between the primary dune and the high water mark, without written permission from the Town Manager or the Park Manager is prohibited.
- F. Discharging a firearm or releasing an arrow is prohibited on and within 150 feet of the access trail and front beach, or within 500 feet of any public building or structure.
- G. Hunting for in-season game shall occur between ½ hour before sunrise and sunset only.

§601-6. Shellfishing, Fishing, and Boating Regulations:

- A. All shellfishing at Sandy Neck requires a valid Town of Barnstable shellfishing permit.
- B. A Sandy Neck Shellfish Trail Pass must be obtained in order to utilize the cross trails by vehicle to access the shellfishing areas. A Shellfish Trail Pass can be obtained at the Sandy Neck Gatehouse (508-362-8300).
- C. The launching of motor vessels from Sandy Neck and their operation in waters offshore must be conducted in accordance with the provisions of Massachusetts General Law Chapter 90B and Barnstable General Ordinances.
- D. All fishermen must be actively engaged in fishing to remain past curfew as well as receive approval from a Natural Resource Officer on duty. Equipment shall be no more than 10 feet from the water.
- E. Violations may result in fines and/or the revocation of trailers and/or ORV permits.

§601-7. Horse Regulations:

- A. Horseback riding shall be allowed on the Cape Cod Bay Trail (front beach to Trail #5), and on the Braley's Dune Trail (known as the Horse Trail) only. All riders must enter the beach via the Access Trail.
- B. Between the Friday before Memorial Day and the day after Labor Day, the following restrictions shall apply:

- (a) Horseback riding allowed from Monday 12:00 noon until Friday 12:00 noon. All riders shall be off the beach by 9:00 PM, Monday – Thursday.
- (b) Groups with more than two trailers must obtain a Special Permit from the Park Manager.
- C. All riders shall obtain a daily permit and register at the Sandy Neck Gatehouse before entering the beach.
- D. All organized trail rides of 8 or more horses must be approved by Special Permit issued by the Park Manager.
- E. All riders shall stay on trails designated for use by horses.
- F. All riders shall remove horse droppings from the parking lot
- G. Riders must maintain 100' buffer between the horses and all bathers.
- H. All riders must wear an ASTM/SEI approved horseback riding helmet.
- I. Note: It is recommended that riders on the front beach after sunset wear reflective clothing.

§601-8. Obtaining an Off Road Vehicle Permit:

- A. Off road vehicle (ORV) permits are available at the Sandy Neck Gatehouse.
- B. Vehicles leased for a minimum term of one year will be allowed to register for oversand travel. Vehicles rented or leased for shorter terms are ineligible for oversand permits.
- C. A valid registration is required in order to purchase an ORV permit (no dealer, farm, or repair plates).
- D. Proof of residency is required in order to obtain a Barnstable ORV permit. Residency can be proven by:
 - (a) Tax bill,
 - (b) Minimum one year property lease,
 - (c) Vehicle registration with a street address (PO Box is not sufficient),
 - (d) Other legal documents such as a deed or will (this does not include utility bills, excise tax bills, etc.).
 - (e) College students may provide a tuition bill with a Barnstable address.
- E. Barnstable residents wishing to obtain an ORV permit must have their vehicle registered in their name (or the name of a person residing at the same address) unless:
 - (a) They have written permission to use a company vehicle.
 - (b) Proof of ownership of the company on the vehicle registration.
 - (c) A minimum one year vehicle lease agreement.
 - (d) The resident's permit has been revoked.
- F. All ORV permits (issued by the Sandy Neck Gatehouse) and Resident Parking permits (issued by the Barnstable Recreation Division and the Town of Sandwich) are not valid unless they are permanently affixed to the lower left hand corner of the vehicle's windshield and the license plate number on the vehicle matches the permit (except for authorized laminated permits). The protective sheet must be removed from the adhering side of the sticker and the permit must be adhered to the windshield of the vehicle.

§601-9. Enforcement:

- A. In addition to Sandy Neck Beach Park Regulations, all applicable Town of Barnstable Ordinances and Massachusetts General Laws apply at Sandy Neck will be enforced.
- B. The Park Manager and Natural Resource Officers will enforce the provisions of Town Ordinances on all public lands at Sandy Neck including all parking areas, public ways, the Great Marsh and Bodfish Park.
- C. Warnings: Any person receiving two written warnings in one calendar year may have their rights to operate a vehicle on Sandy Neck suspended for a period of one year.

- D. Citations: Any person receiving a citation may have their rights to operate a vehicle on Sandy Neck revoked permanently or suspended for a period of up to one year.
- E. The Park Manager or his/her designee, may issue suspensions for any violation of Massachusetts General Laws, Town Ordinances, or Sandy Neck Beach Park Regulations. Suspensions of up to five years may also be issued for any action which jeopardizes the property or safety of another person, or for any action that causes another person to be fearful for their safety and/or their property.
- F. Abusive, inappropriate or aggressive behavior toward other beach users and/or Sandy Neck staff will result in the violator's removal from the beach for no less than 24 hours. In addition, violators may have their ORV permits revoked.
- G. The Park Manager reserves the right to suspend beach access to a dog as a result of aggressive behavior and/or due to irresponsible pet ownership.
- H. Any person who is issued a suspension notice will be provided the opportunity for a hearing with the Director of the Marine and Environmental Affairs Division. Any person desiring such a hearing must submit a written request for said hearing postmarked within five business days of the effective date of the suspension. An appeal of the Director of the Marine and Environmental Affairs' decision may be filed with the Office of the Town Manager within five days of issuance of said decision.

§601-10. Alcohol Policy:

- A. Alcoholic beverage regulation forbids the consumption of alcoholic beverages "while on, in or upon any public way or any place to which the public has a right of access as invitees or licensees..."
- B. Alcoholic beverage and consumption regulation – minors – forbids the possession of alcohol by minors "while on, in or upon any public way or way or any other place to which the public has a right or access as invitees or licensees..."

§601-11. Violations and Penalties:

- A. Violations of any provisions of Sandy Neck regulations may be punished by a non-criminal fine not to exceed three hundred dollars (\$300.00), and/or loss of beach privileges. Criminal acts are subject to enforcement as allowed by the Town of Barnstable Ordinances or the General Laws of the Commonwealth.
- B. The provisions of these regulations may be enforced utilizing the procedures contained in Massachusetts General Law C40 s21D as a noncriminal alternative.

§601-12. Contact Information:

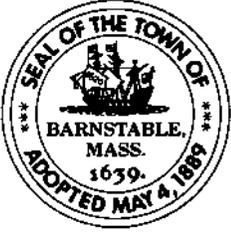
If you have any questions pertaining to Sandy Neck operations, call the Gatehouse at 508-362-8300 or the Marine and Environmental Affairs Office at 508-790-6272.



 Thomas K. Lynch, Town Manager

2/24/2012

 Date



TOWN OF BARNSTABLE
SANDY NECK BOARD
1189 Phinney's Lane
Centerville, MA 02632

Tel: 508-790-6272
Fax: 508-790-6275

Sandy Neck Beach Park Management Policies

Adopted by the Sandy Neck Board on February 7, 2005

*Revised; March 9, 2009, March 8, 2010, November 14, 2011, April 14, 2014
and March 14, 2016.*

Complaints concerning policies, regulations, and/or Sandy Neck staff conduct should be addressed to the Park Manager or Senior Natural Resource Officer.

Section 1: Sandy Neck Fees

Sandy Neck user fees are at set rates depending on residency status. Residency must be proven per the Sandy Neck Beach Park Regulations and Sandy Neck Beach Park Policies.

Section 2: No Refund Policy

It is the Sandy Neck Beach Park Policy that no refunds will be granted. Included, but not limited, in this policy are personal emergencies, foul weather, evacuations, limitations on access, beach conditions, insects (greenhead flies, etc.) and water temperature.

The No Refund Policy pertains to any and all patrons that make use of any Sandy Neck Beach Park or Gatehouse facilities. All public beach users, Off Road Vehicle (ORV) day trippers, sticker purchasers, overnight camping and chase vehicles are subject to this policy and must comply accordingly.

Section 3: Parking Lot Policies

3:1 Dogs

Dogs are prohibited from all Barnstable bathing beaches (Town of Barnstable General Ordinances §403-8) from May 15 to September 15. Dogs are not allowed past the Gatehouse between May 15 and September 15 unless they are contained within a permitted vehicle that is traveling to the Off Road Vehicle beach.

Dogs are allowed on Sandy Neck hiking trails anytime of the year as long as they remain on a leash from March 1st through September 15th.

All dogs on the ORV corridor must be leashed unless in the waters of the Cape Cod Bay from March 1st through September 15th.

3:2 Drive-Thru(s) and Drop Offs

Parking lot business hours are from 8:00 AM to 5:00 PM Memorial Day through Labor Day.

All vehicles traveling to the bathing beach during business hours must have a Sandwich or Barnstable Beach Parking Permit or a valid Barnstable Public Beach Day, Weekly or Landlord Pass.

Vehicles without one of the above attributes are not permitted to travel to the parking lot. This includes any dropping off of vehicle occupants or participation in any activity that does not involve parking.

3:3 Full Parking Lot

Per requirements of the Sandy Neck Board, only five vehicles are permitted to wait in line once the parking lot is full. This is mandatory procedure because of the need to keep the road clear for off-road and cottage owner vehicle access and to allow emergency personnel to get to the beach unimpeded.

The lot will re-open once five spaces become available and the five vehicles in line can fill the vacant spaces. The next five vehicles that arrive at the Gatehouse are then eligible to wait in line.

The Gate Attendant Supervisor or the Park Manager, for safety purposes, may deem that it is necessary for the parking lot to remain closed.

When the parking lot is full, no vehicles are permitted to travel to the parking lot for dropping off occupants, even if the vehicle has a Sandwich or Barnstable Beach Parking Permit or a valid Barnstable Public Beach Day or Weekly Pass.

Section 4: Proof of Residency

Sandy Neck provides discounted Off Road Vehicle (ORV) Permits to residents and/or property taxpayers of Barnstable. Proof of residency is defined in the regulations as:

Proof of residency is required in order to obtain a Barnstable ORV Permit. Residency can be proven by:

- 1. Tax bill,*
- 2. Minimum one year property lease,*
- 3. Vehicle registration with a street address (PO Box is not sufficient),*
- 4. Other legal documents such as a deed or will (this does not include utility bills, excise tax bills, etc.).*
- 5. College students may provide a tuition bill with a Barnstable address.*

Barnstable residents wishing to obtain an ORV Permit must have their vehicle registered in their name (or the name of a person residing year-round at the same address) unless:

- 1. They have written permission to use a company vehicle.*
- 2. Proof of ownership of the company on the vehicle registration.*
- 3. A minimum one year vehicle lease agreement.*

To clarify, the Barnstable resident/taxpayer must be the applicant. The vehicle must be (1) in the resident/taxpayer's name (2) in the name of a person living year-round at the same address or (3) in the name of the company that the resident/taxpayer owns or works for (with written proof).

Section 5: Off Road Vehicle (ORV) Permits

Barnstable General Ordinances Chapter 177, Article I, §177-2 requires that all over sand vehicles on Sandy Neck must have a current ORV permit. Only official vehicles (as determined by the Park Manager) are exempt from this requirement.

ORV permits are non-transferable. Permits may be re-issued to the same beach patron (or someone residing at the same address) providing the original permit is returned or there is documented proof that the permit was destroyed.

Section 6: User Conduct

All users of Sandy Neck Beach Park are expected to behave in a civil and responsible manner. Verbal abuse and/or aggressive behavior toward Sandy Neck Staff or other beach patrons will result in the violator's removal from the beach for not less than 24 hours. In addition, violators may have their ORV Permit revoked, incur fines for obscene language in accordance with Town of Barnstable General Ordinances §147-1 and/or be issued trespass orders.

Section 7: Property Owner Off Road Vehicle (ORV) Permits

7:1 Eligibility

Property Owner ORV Permits will be issued to Sandy Neck property owners, Sandy Neck property lessees (minimum one year lease) and immediate members of their family. Immediate family members include father, mother, sister, brother, husband/wife or partner, son and daughter (including step-son and/or step-daughter).

7:2 Proof of Eligibility

It is the responsibility of the applicant to prove ownership or lessee status. Immediate family relationships can be proven by a legal document such as a birth certificate, marriage certificate or notarized letter.

7:3 Property Owner ORV permit privileges

The Property Owner ORV Permit affords access (via open Sandy Neck trails) to the applicable cottage only. It also allows vehicle use of the front beach (open sections only) for recreational purposes and use of the air compressor. In addition, the cottage owner may use the Sandy Neck dumpster to discard ORV and household trash. Dumping of construction debris, hazardous waste, discarded equipment, or any other items that are not ORV or household trash is strictly forbidden and will result in fines.

7:4 Guests of Property Owners

Guests of property owners may park in the Sandy Neck Parking lot. However, in-season guests are responsible for appropriate daily fee or parking permit for the entirety of their stay. Guests may park in the parking lot out-of-season at no cost.

If the guest intends on driving to a cottage, he/she must purchase the appropriate Sandy Neck Non-resident or Barnstable ORV Permit. Sandy Neck staff will issue a trail pass only after the Cottage Owner has alerted the Gatehouse that a particular individual can access their cottage.

Section 8: Halfway House Usage

8:1 Intent

The purpose of this recommendation is to provide clear direction and consistency for the Park Manager and the potential users and/or advocates interested in maintaining the special nature and use of the Halfway House.

8:2 Eligibility

The Halfway House has a long and stable history of educational and research based occupancy (spanning more than 30 yrs). It was regularly used by the Barnstable High School as part of a coastal ecology program. For the last twenty years the Halfway House has been used as a college level research station.

However, there are groups of people besides scientists that can impart a lasting benefit to the ecology and unique nature of Sandy Neck and the community of greater Barnstable. These groups must receive no monetary benefit from access to the Halfway House rather they might request to access this shelter because of the uniquely serene and beautiful environs the Halfway House offers. For a set fee (or another form of donation acceptable by the Sandy Neck Park Manager) certified non-profit groups that run art or nature based educational programs should have the ability to visit and/or stay at the Halfway House.

In addition, the Halfway House should continue to be used by science based educators and researchers in exchange for services and/or monies that these groups have traditionally provided to Sandy Neck.

While the Halfway House can always provide emergency shelter for youth groups, it is not the intention of these policies to suggest that young people (who can make use of the existing camping facilities at Trail 4) should have access to the Halfway House unless there is a reason that camping is not feasible. Requests from such groups will be considered on their respective merit and judged by the Sandy Neck Park Manager on a case by case basis.

8:2 Permit Requirements

Interested non-profit educational, scientific and art groups may apply for consideration for use of the Halfway House. If selected, the organization would be granted a Special Permit that will set fees and usage guidelines. In addition, insurance and liability waver requirements will be set forth under a Sandy Neck Beach Park License Agreement.

NEW NEST

EGG/CHICK LOSS

CHICK FLEDGE

Trail 4 - Trail 6

Date: _____

Monitor: _____ Search Time: _____ Area covered? Y N

Weather and Tide: _____

Daily plan: List **Focus Nests** due to expected hatch date, re-nest, or fledglings

Adults: _____ Nests _____ Chicks _____ Fledglings _____

Nest #									
Date found									
# adults									
# eggs									
Expected Hatch Date									
Actual Hatch Date									
# chicks today # expected to see									
~ age of chicks									
(Expected) Fledge Date									
# chicks fledged total for nest									
total chicks remaining (Fledged/Unfledged)									

Priorities for next monitor (Focus Nests) and notes:

Trail 4 – Trail 6

Date: _____

Adults: _____ Nests _____ Chicks _____ Fledglings _____

