MASSACHUSETTS PIPING PLOVER HABITAT CONSERVATION PLAN CERTIFICATE OF INCLUSION REQUEST 2019

WEST DENNIS BEACH

TOWN OF DENNIS, MASSACHUSETTS

Prepared for submission to:

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

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Attachments

Attachment A: West Dennis Beach Regulations Attachment B: Locus Maps

1.0 INTRODUCTION

The Town of Dennis is requesting a Certificate of Inclusion for West Dennis Beach under the approved statewide Piping Plover Habitat Conservation Plan (HCP). This document also serves as an application for a Conservation and Management Permit (CMP) under the Massachusetts Endangered Species Act (MESA), MGL c. 131A; 320CMR 10.00.

The geographic area encompassed by this request includes suitable Piping Plover habitat located at West Dennis Beach in Dennis, MA. Suitable nesting habitat is found approximately 470' west of the main parking lot entrance in the area used for sand volleyball, as well as along the beachfront commencing approximately 3,200 Linear Feet (lf) from the entrance and extending to the Bass River (Refer to Site Locus Map, Attachment B). The area used for beach volleyball measures approximately 25,000 Square Feet (sf) and is bordered on the north, east and west by thick coastal dune vegetation, and on the south by a busy beach access roadway (Figure 4).

The Town is requesting permission for the Use of Roads and Parking Lots in the vicinity of unfledged Piping Plover chicks, a covered activity under the HCP "HCP section 1.2.1: Covered Activities (1) "Use of Roads and Parking Lots in the Vicinity of Unfledged Chicks". These activities would expose one nesting territory (West Dennis Beach). Specifically, two areas of the West Dennis Beach parking lot present potential impacts: 1) the access roadway extends past an open, isolated sandy area of approximately 25,000 sf near the beach entrance (volleyball court) which supported a nest in 2011, 2014, 2017, and 2018; and 2) the western portion of the roadway/parking area extends along the back dune measuring approximately 700 lf. The west end of the beach typically supports an average of 5 nests. In the past, at least one brood has escorted chicks back and forth across the parking area, resulting in a partial closure of the lot.

The Town proposes to install impact minimization measures including temporary barriers, such as silt fencing, to deter plover chicks and plover adults nesting on the bay side of West Dennis Beach from accessing the entrance road and parking areas. The proposed silt fences will be employed near the volleyball court nesting area and will be used to guide adults and chicks towards a temporary haybale-lined, sand-covered, road crossing. This crossing will be installed before an expected hatch date and taken down once the chicks have been safely escorted by adults from the bay side to the beach side of West Dennis Beach. A traffic escort area west of bathhouse #2 will be implemented near an area which has been historically used by adults crossing with chicks from the beach side to the bay side. Chicks in this area have been seen crossing the road at all hours of the day with adults, though crossings generally occur daily and change based on the tides. Additionally, native plantings are proposed within portions of 5 side pathways through the dunes, which provide access between the beachfront and bayside forage area. This will be conducted in an effort to limit chick movement to corridors which can be properly monitored. The Town is proposing to pay into the NHESP Plover Mitigation Fund at \$5,800 per take. The Department of Natural Resources budget is funded for \$11,600 in plover mitigation monies each year.

1.1 Site Description

West Dennis Beach is a barrier beach located on the south side of Dennis. The property is completely Town owned and operated. The beach is bordered by the Bass River to the west, private property to the east (Lighthouse Inn), Nantucket Sound to the south and Weir Creek saltmarsh to the north. A stone jetty separates the western boundary of the beach from the Bass River. The entire length of beach frontage is approximately 1.3 miles (Refer to Site Locus Map, Attachment B).

Coastal Beaches

West Dennis Beach is a south facing beach on Nantucket Sound and is therefore protected from winter Nor'easters and their associated extreme wave action. Nevertheless, the beach sustains erosion on a yearly basis. Existing permits for dredging the Bass River allow for the placement of dredge spoil along the entire length of the beach. This spoil placement helps sustain the existing beach profile and maintain plover and other shore bird nesting areas. Portions of the beach are raked during the summer season to remove seaweed and other vegetative debris which accumulates along the wrack line. No raking is allowed at the western end within the plover nesting area. Generally, a 25-foot buffer from the edge of regular nesting habitat is enforced, however raking would be even more restricted if occurring while the plovers are active on the beach during the nesting season.

Coastal Dunes

West Dennis Beach contains a significant dune system which borders the western portions of the beach. The higher elevation of the dunes provides shelter from the winds and helps protect piping plovers using the beach in the spring. Open sand areas at the foot of the dunes and within the interdunal area are favored nesting spots for the plovers. Least tern nesting occurs within the interdunal areas throughout the summer, often in close proximity to plover nesting. The dunes provide a natural barrier between the open beach and the westernmost parking lot.

Salt Marshes

The salt marshes at West Dennis Beach border the entire length of the parking area on the bayside. The public parking lot extends between the coastal dunes and the marshes. Even so, the marshes provide extensive foraging habitat for a variety of wading birds. Piping plover adults are often observed utilizing the salt marsh areas at low tide.

Manmade Structures

The main parking lot runs parallel to the entire length of the beach. In most areas, the parking lot is separated from the beach by a wooden bulkhead. Access stairs placed at intervals allow for pedestrian access. However, heavily vegetated dunes exist along the western end of the West Dennis Beach, between the parking lot and beach. Similarly, a manmade dune separates the eastern most parking area from the beach. The north side of the parking lot is bordered by a protected marsh habitat, which is used by the town as a shellfish nursery.

A large concession stand with restrooms and a playground is located at the east end of the parking lot. A second comfort station is located just east of the dunes and the plover nesting area, while a third one is located further west at the edge of the dunes (Figure 1).

1.2 Piping Plover Habitat

The beachfront of West Dennis Beach represents suitable habitat for Piping Plover nesting. The western beachfront is sloping and bordered by dense stands of dune grass. Many small pedestrian footpaths extend through the dunes from the parking area to beach. The dunes are bordered on the north side by a low wooden retaining wall which extends from the comfort station westerly approximately 900'. In this location, the parking area is constricted and the bayside is in close proximity to the roadway. Vegetation is sparse on the north side of the road and the tidal flats are accessible for plover foraging. Moving westward, the dunes become more natural and sloping where they interface with the parking lot. Access into the dunes is prohibited in some areas by posts and

heavy rope along the dune/parking lot interface. Vegetation along the north edge of the parking area becomes thicker and wider, prohibiting access to the bayside waters.

The placement of dredge spoils during the winter months occur along the entire length of the beach, associated with dredging of the Bass River, enables the Town to maintain the beach profile and provide adequate nesting areas for plovers. Although this represents a length of 1.3 miles of potential nesting area, data from the past 9 years indicated that the plovers prefer the western end of the beach for nesting purposes. Suitable nesting habitat is also found approximately 470' east of the main parking lot entrance in the area used for beach volleyball. This area has been used intermittently for nesting (Exhibit 2).

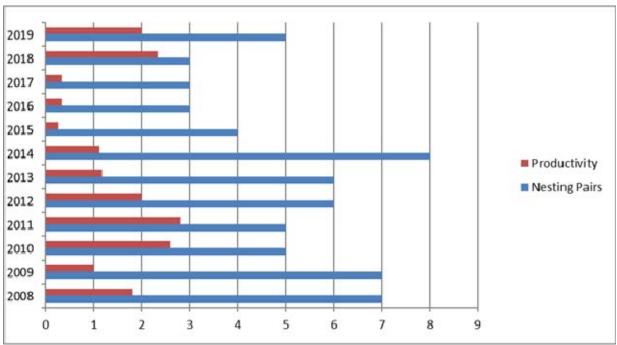


Exhibit 1: Comparison of nesting Piping Plover pairs at West Dennis Beach to successful fledglings per pair produced by year, updated 2019.



Exhibit 2: Map of all nesting locations between 2010 and 2019

1.3 Other Listed Species

Least terns (*Sternula antillarum*) have been observed nesting at the western end of West Dennis Beach for many years. Although this area boasted an active least tern nesting colony for several years, formal census counts were not conducted until 2012. Unfortunately, the number of nests declined from a total of 55 in 2012 to no active nests identified in the 2017 season. However, the West Dennis Beach tern populations has experienced a rebound in tern populations during 2018 and 2019. 2019's tern colony was estimated at 80-100 pairs, though an accurate nest count is not available. Nesting areas for the 2018 and 2019 tern populations were most dense between the two western-most bathhouses on the beachfront.

2.0 RESPONSIBLE STAFF

The Dennis Beach Department and Beach Committee is responsible for oversight of West Dennis Beach on a daily basis. The Beach Department is responsible for enforcing the Beach regulations (Attachment A). Beach employees are given the authority to issue non-criminal citations for violations of these regulations.

Piping Plover monitoring is provided by the Natural Resources Department (DNR). Each year DNR hires piping plover monitors for the specific purpose of monitoring nesting plovers on Town of Dennis beaches. One Plover Monitor is hired April 1 at the start of nesting season and leaves employment in early August. A second Plover Monitor is brought on staff in mid-May and works through late August to finalize nesting and fledging reports.

2.1 Beach Department Staffing

Southside Beach Supervisor

The Southside Beach Supervisor, along with their assistant, oversees scheduling, payroll, and day to day supervision of all lifeguards. They are also sworn in as summer parking control officers and can assist in parking control and writing tickets. The majority of their responsibility lies in managing the bathing beach areas for safety and rules enforcement.

Southside Assistant Beach Supervisor

The Southside Beach Assistant, along with the Southside Beach Supervisor, oversees scheduling, payroll, and day to day supervision of all lifeguards. They are also sworn in as summer parking control officers and can assist in parking control and writing tickets. The majority of their responsibility lies in managing the bathing beach areas for safety and rules enforcement.

Southside Bank Supervisor

The Southside Bank Supervisor, along with the Southside Bank Assistant Supervisor, oversees scheduling, payroll, and day to day supervision of the parking lots. They are also sworn in as summer parking control officers and can assist with writing tickets and parking control. The majority of their responsibility lies in the management of the parking areas and rules enforcement.

Southside Assistant Bank Supervisor

The Southside Assistant Bank Supervisor, along with the Southside Bank Supervisor, oversees scheduling, payroll, and day to day supervision of the parking lots. They are also sworn in as summer parking control officers and can assist with writing tickets and parking control. The majority pf their responsibility is the managing of the parking areas and rules enforcement.

Gate Attendants (6)**

Gate attendants are stationed at the entrance of every section of the beach to verify a vehicle sticker or to sell a day pass for that location. They can be moved around to assist with traffic flow at a particular lot. They are also tasked with relaying information to the patrons at the gates daily regarding closures, weather conditions, hazards, etc.

Lifeguards (9)**

Lifeguards are posted at all various locations along the beach for the purpose of watching the water for potential hazards, keeping patrons safe and keeping vessels out of the swim area. Lifeguards are also tasked with ensuring that wind surfers/kite boarders stay within their designated areas.

** can be adjusted depending on the daily situation

2.2 Natural Resources Department Staffing

The DNR Department employs staff to oversee the two ORV beaches in Dennis, Chapin Beach and Crowes Pasture Beach. The DNR Department contains five year-round staff which includes; Director, Shellfish Constable, Conservation Agent, Land Management Specialist and Office Assistant. With the exception of the Office Assistant, all full-time employees also serve as Natural Resource Officers (NRO) and are given enforcement powers to issue non-criminal citations in order to enforce the ORV and Conservation Area regulations (Attachment A). In addition to the year-round staff, the Department hires two Piping Plover Monitors and six seasonal Assistant Natural Resource Officers (ANRO). Seasonal ANROs are employed beginning in mid-May and working

through Labor Day. One Plover Monitor is hired April 1 at the start of nesting season and leaves employment in early August. A second Plover Monitor is brought on staff in mid-May and works through late August to finalize nesting and fledging reports. NROs and ANROs are given the authority to issue non-criminal citations. Currently, ANROs do not police the non-ORV beaches.

Natural Resource Director

Oversees the operation and administration of the activities of the Town's Departments of Natural Resources and Shellfish; supervises departmental staff; assigns work and schedules activities in accordance with the department's goals, policies and procedures. Enforces local, state, and federal environmental laws; issues permits, cease and desist orders, citations to violators; may be required to assist with litigation and testify in court.

Conducts on-site inspections of areas bordering wetlands where such work as dredging, filling and building is to be completed. Conducts other on-site inspections and regular patrols for violations of state and local ordinances. Member of town-wide emergency (weather, accident, disaster, etc.) planning and response team. Manages town-owned conservation land. Seeks grant money and state and federal reimbursements for conservation land purchases. Maintains inventory and fixed assets of departments. Updates and maintains knowledge and expertise in field through continuing education. May serve as Natural Resources Officer, Shellfish Constable and Special Police Officer w/powers limited to MGL Chapter 130,131,90B &270.

Education and Experience: Position requires a Bachelor's degree or equivalent in Natural Resources Management, Environmental Science, or related field; and three to five (3-5) years of experience in environmental management, law enforcement, or related field, some supervisory experience preferred; or any equivalent combination of education, training and experience which provides the required knowledge, skills and abilities to perform the essential functions of the job.

3 - Assistant Natural Resource Officers

Patrols all assigned areas to enforce statutes, by-laws, directives and regulations relative to the taking of marine fish, shellfish and inland fish and taking all relevant actions to pursue said enforcement. Pursues all actions to ensure compliance with all Natural Resource statues, by-laws and regulations such as checking licenses and examining take of hunters, fisherman, trappers; enforcing parking restrictions; maintaining proper conduct in conservation areas; inspecting equipment; boarding vessels to check for violations; checking off road vehicles permits; and appearing at court appearances if necessary.

Performs physical labor to establish and maintain Town's Natural Resource Programs (propagation, nature trails, community gardens, blueberry patch, conservation areas, etc.) utilizing machines and equipment to effectuate said programs. Patrols assigned areas (by auto, boat or afoot) to enforce statutes, by-laws, directives and regulations relevant to the taking of lobster, shellfish and inland fish and game; takes all relevant actions to pursue said enforcement and prevent potential hazards. Assists individuals in securing relevant permits and licenses as well providing information. Pursues actions to ensure compliance with all Natural Resource statutes, by-laws and regulations such as checking licenses and examining take of hunters, fisherman and trappers, inspecting equipment, boarding vessels to check for violations, checking off-road vehicle permits, enforces parking restrictions, maintaining proper conduct in conservation areas, court appearances, etc. Maintain required activities logs, reports, documentation, records, and manuals. Responds to citizen's requests or complaints through proper procedures, referral and response

Education and Experience: Position requires a Bachelor's Degree and three to five (3-5) years of experience in environmental management, or related field; or any equivalent combination of education, training and experience which provides the required knowledge, skills and abilities to perform the essential functions of the job.

6 - Seasonal Natural Resource Officers: 5 Full time (40 hours/week)

Work under the supervision of the Director of Natural Resources and receive day-to-day direction from the Assistant Natural Resource Officers to assist with ORV regulation and enforcement, shellfish propagation, and land management activities. This position is required to issue citations. Also assist with educating beachgoers about coastal environments, including the importance of protecting dunes, bird nesting habitat and aquatic animals. Performs physical labor to help maintain Town's Natural Resources programs (nature trails, community gardens, blueberry patches, conservation areas, and related areas) utilizing machines, equipment and tools.

Position requires a High School Diploma and one (1) to three (3) years of work experience demonstrating the ability to make decisions and follow instructions. Applicant's working towards a degree in wildlife biology/management, ecology, zoology, environmental science, biology or related field are preferred

2 - Piping Plover Monitors

2 Full time (40 hours/week)

Work under the supervision of the Director of Natural Resources. Monitors and collects data on the productivity and behavioral data on Piping Plovers, and Least and Common Terns within the Town of Dennis. Responsibilities include construction and maintenance of protective fencing in coordination with DNR staff, collecting data on field forms, talking with beachgoers about endangered species, and coordination with the Department of Natural Resources and Beach Department staff. Attendance at the Annual Waterbird meeting and compilation of an annual monitoring report is required.

Applicants working towards a degree in wildlife biology/management, ecology, zoology, environmental science, biology or related field are preferred. Position requires a High School Diploma and demonstrated ability to make decisions and follow instructions.

2 - Administrative Staff (sticker sellers) 1 Full time (

1 Full time (40 hours/week)
1 Part time (16 hours/week)

3.0 BEACH MANAGEMENT PLAN

The Town operates West Dennis Beach as a public bathing beach. In addition to the beach area, the West Dennis Beach facility includes entrance/exit roadways, two parking lots, a concession building, two individual bathhouse buildings, a sand volleyball court and playground area. The two West Dennis Beach parking lots contain parking space for 1,120 vehicles. The separate but related resident-only lot with direct access from the rotary includes 218 spaces of the total spaces available. The remainder of the parking spaces are within the western parking area which extends the entire length of the beach up to Bass River. In addition to typical pedestrian beach use, additional activities here include kite flying and volleyball which are confined to the sand area just off the entrance road, and windsurfing and kite boarding which are confined to the westernmost portions of the beach. The Town spends thousands of dollars each year to maintain and improve the facilities at West Dennis Beach. Improvements made in the last several years include upgrades to the Town

maintained rotary; installation of a new access road/turnaround; repairs to the old wooden bulkhead along the parking lot edge; concession stand and restroom upgrades; and construction of manmade dunes to protect the parking lots. Beach nourishment is permitted using dredge spoils from Bass River and Swan Pond River.

The beach is routinely raked during the summer seasons to remove seaweed and trash from the bathing area. Raking activities do not extend past the middle bathhouse building (bathhouse #2) into plover nesting and foraging areas (Figure 1). No dogs are permitted on the beach from April 1st through Labor Day.



Figure 1: Map showing the extent of raking activities between the eastern end of West Dennis Beach and bathhouse #2. Each bathhouse (#1 through #3, from right to left) are shown with green circles.

The beach is managed by the Beach Department. Gate attendants, Life guards, and Beach Supervisors are on duty to monitor parking and other beach activities from Memorial Day weekend (May $25^{th}-27^{th}$), the following weekend, then 7 days a week from the second Saturday in June through Labor Day, Monday, September 2^{nd} from 8:00am-5:00pm each day. Area police unlock the gate at 6:00am daily and lock the gates at midnight.

West Dennis Beach is a favorite of tourists coming to Dennis and represents approximately 11% of annual beach revenues for the Town. On weekdays \$25 is charged per car and on weekend and holidays \$30 is charged per car. Limited closures in the western portion of the parking lot extending roughly 35 days has resulted in a loss of approximately \$60,000 annually. A closure of the entire lot for roughly 35 days would result in lost revenue of approximately \$130,000. Therefore, it is

imperative that the Town take steps to ensure that the parking lot remains open to public access through the summer season.

3.1 Recreational Activities

Non-motorized Recreational Uses

Non-motorized recreational activities at West Dennis Beach include sunbathing, walking, jogging, swimming, picnicking, bird watching, recreational fishing and recreational shellfishing, kite flying, volleyball (off-limits after the first sign of scrapes or nesting is noted in the court area), wind surfing and kite boarding are allowed in specific areas only (Figure 2). To prevent these activities from impacting nesting plovers, signage and symbolic fencing is installed no later than April 1. Pathways leading through the dunes into plover nesting areas are closed off with signs and fencing starting April 1. Fencing is adjusted as necessary to protect nesting areas. Plover monitoring begins April 1 and beachgoers are no longer allowed to bring their dogs onto any portion of the beach. These activities are not expressly restricted outside of the Plover monitoring season and the summer season which begins on the Friday of Memorial Day Weekend and ends after Labor Day Weekend.

<u>Kite flying</u> – There is a designated kite flying area located adjacent to the volleyball court, north of the main entrance. Kite flying is a prohibited activity on the beach.

<u>Volleyball</u> – A designated volleyball area is located north of the main entrance and is not a part of the ocean facing beach. Setting up a net for coordinated volleyball activities on the beach is a prohibited activity.

<u>Kite Boarding and Wind Surfing</u>: Current Dennis Beach Regulations will continue to be enforced regarding the identification of acceptable wind surfing and kite boarding areas at West Dennis Beach. These regulations restrict windsurfing and board rigging to a designated area at the far west end of the beach near the jetty. Access to the beach is limited to specified pathways along Bass River and the jetty. No rigging is allowed within the dunes of West Dennis beach. Each spring buoys are installed off the western end of West Dennis Beach. These buoys identify a No Kite Boarding and Wind Surfing Zone. A setback of 200 meter from the nesting area is enforced by DNR and Beach staff.



Figure 2: Map with red line displaying the area which is off limits for Kiteboarding and Windsurfing. Buoys demarcate this area for recreationalists. Two small red polygons are known launching site for these activities.

3.2 Parking and Roads

The entire length of West Dennis Beach frontage is approximately 1.3 miles. The main parking lot runs parallel to the entire length of the beach. In most areas, the parking lot is separated from the beach by a wooden bulkhead. Parking is available for 1,155 vehicles (combined total from the eastern and western parking lots, as well as handicap spots). Ingress and Egress are separate. Within the parking lot, the posted speed limit is 15 mph. Parking spaces are lined on both sides of the access roadway for the entire length, with the exception of the limited parking area of 1,300' between the bathhouse #2 and the west end cul-de-sac. In this area, the bayside flats are in close proximity to plover nesting habitat on the front beach and plover chicks have been known to cross back and forth. This area is typically closed to vehicle traffic during plover nesting season.

During the season, Memorial Day through Labor Day, these lots are monitored by gate attendants who supervise entry and parking. Attendants are typically on duty from 8 am to 5 pm. The parking lot is closed to vehicle traffic at 11 pm and reopened at 6 am.

Maintenance on the parking lot is typically done in the spring. Spaces are relined, and pavement is patched as needed. Bulkhead repairs also are completed. Heavy equipment is used to install lifeguard chairs on the beach in May. These activities are escorted by Monitors. Parking areas are periodically swept with a street cleaner to remove sand and silt buildup.

Vehicle Management to Protect Plovers:

Currently barricades are established after a plover nest near the parking lot is noted, which acts to eliminate all further traffic beyond the barricaded site. These barricades are not removed until the chicks associated with the confirmed nest(s) have fledged or the nest has been confirmed to be abandoned/predated. No vehicle traffic, excepting emergency vehicles, is permitted past the barriers. The placement of these barriers cut off a significant amount of parking lot, resulting in the loss of more than half of all available parking spaces. This closure is enacted in part to protect a segment of roadway near the volleyball area where plover chicks have been recorded crossing with adults between the front beach and the bayside flats. In addition, plovers have been noted using several of the auxiliary dune paths to access the bayside flats from the beach or vice versa. This reduced the predictability of the plover's movements, especially during dawn and dusk hours, and opens a wider area where travel within paved areas could potentially occur.



Exhibit 3: Barricade established at West Dennis Beach during the periods where nests are confirmed near the parking lot and/or roadway.

3.3 Beach Cleaning and Refuse Management

<u>Dogs:</u> Current beach regulations prohibit dogs at Dennis public beaches from Memorial Day through Labor Day. However, piping plovers typically arrive at West Dennis Beach in April. Data has shown that egg laying begins as early as late April and early May. In the past it has been difficult to ensure that dogs within the plover nesting area are confined by leash between April 1 and Memorial Day. Therefore, dogs will be prohibited from the plover nesting are at the western end of the beach starting April 1. New signage will be installed near bathhouse #2 to identify the limits of the nesting area and the god prohibition zone. Enforcement of this restriction will be performed by DNR, Animal Control and Beach staff. The Town of Dennis has a By-law which requires pet owners to remove dog waste. Animal Control enforces this By-law on a daily basis.

§ 79-9 Dog waste removal required.

<u>A.</u> Removal of dog waste from public property or property of others. No person owning or having the care, custody, or control of any dog shall permit such dog to soil or defile or commit any nuisance upon any sidewalk, street, thoroughfare, beach, or wetland, in or upon any public property or in or upon the property of persons other than the owner or persons having the care, custody, or

control of such dog, unless said person picks up any such waste and disposes of same in a sanitary manner. Anyone having custody or control of a dog in a public place shall have in their possession a device or equipment to pick up and remove dog feces. Individuals with disabilities aided by service dogs and law enforcement, emergency or rescue officials with dogs carrying out official duties are exempt from this section.

B. Violations and penalties. Any person found in violation of Article V by the Animal Control Officer or Assistant Animal Control Officer shall be subject to payment of a fine of \$30 for the first offense; \$50 for the second offense and \$150 for the third and subsequent offenses. In addition to any other legal remedies that may be available, the Animal Control Officer or other designated enforcing person may enforce these penalties through the Town's Noncriminal Disposition Bylaw, Chapter 1, Article I.

Raking/seaweed

West Dennis Beach is subject to beach raking activities every other day from Memorial Day – Labor Day. Raking is performed by DPW staff. The raking removes the seaweed and wrack line debris from the beach. This work is confined to the portions of the beach east of bathhouse #2. No raking activities are undertaken in the area extending from bathhouse #2 to Bass River.

Trash

Trash barrels located along the bulkhead are emptied from the beach 1-3 times a day from Memorial Day through Columbus Day. Trash from the concession stand is deposited into a large dumpster which is also routinely emptied by DPW. Beach staff are responsible for policing the parking areas, playground, volleyball court and beach, and picking up trash where found.

3.4 Rules and Regulations

Please See Attachment A for a copy of the current Rules and Regulations at West Dennis Beach.

3.5 Law Enforcement

Full time and Seasonal Natural Resource Officers, The Director of Natural Resources, and Beach Director are appointed by the Board of Selectmen as Special Police Officers with Powers Limited to MGL C.130, 131, 90B, & 270. This enables them to give non-criminal citations for violations of the Town regulations. These officers routinely issue tickets for violations of the off-road vehicle regulations and the beach regulations. Non-criminal citations are handed out to violators and fines can be assessed. Non-payment of fines results in the case being turned over to the court. Fines are outlined in the Beach and off-road vehicle regulations.

3.6 Other Activities

Blessing of the Bikes: Event hosted by the Cape Cod & Islands Chapter of the Blue Knights International Law Enforcement Motorcycle Club which is held annually on the first Sunday of May. In past years, 1,000 to 1,500 motorcycles and 2,000 to 2,250 participants have been in attendance for a single day's event. If this event were to occur during the instatement of a Piping Plover related vehicle or foot traffic related closures, roughly 300 of the 902 parking spots would be eliminated and foot traffic on the beach would be limited or monitored.

Memorial Day Weekend: Holiday weekend which attracts a high volume of vehicle traffic in the parking lot and foot traffic on the beach. Given that this holiday weekend occurs during the Plover Nesting season, it is highly likely that parking restrictions will have gone into effect before this weekend. This will potentially result in the loss of roughly 300 of the 902 parking spots.

Fireworks: The annual town fireworks display will occur in the final week of August, depending on the year. Fireworks are launched from the easternmost parking lot. This event attracts a significant amount of vehicle traffic in the parking lot and foot traffic on the beach. If this event were to occur during the instatement of a Piping Plover related vehicle or foot traffic related closure, the fireworks display would be altered or cancelled to accommodate for the plovers. Firework are otherwise prohibited on West Dennis Beach.

Antique Car Show: The annual car show will occur on August 25th, 2019. If this event were to occur during the instatement of a Piping Plover related vehicle or foot traffic related closures, roughly 300 of the 902 parking spots would be eliminated.

4.0 PLOVER MONITORING AND MANAGEMENT

4.1 Symbolic fencing and Signage

Symbolic fencing is installed no later than April 1 each year. At this time, high tides are typically far up the beach and fencing is near the high wrack line. As the season progresses the tides recede and more beach front is exposed during high tide periods thus providing additional nesting habitat. Although portions of the fencing are adjusted dependent upon nest locations and the need for buffers, the entire fencing alignment has seldom been altered. Under this proposal, the April 1 fencing will be re-inspected in early May and June and adjusted to define all areas of suitable plover nesting habitat. However, if need be, Monitors will relocate or adjust fencing during any given day during the nesting season.

4.2 Proposed Activities

The Town is requesting permission for the Use of Roads and Parking Lots in the vicinity of unfledged Piping Plover chicks, a covered activity under the HCP "HCP section 1.2.1: Covered Activities (1) "Use of Roads and Parking Lots in the Vicinity of Unfledged Chicks". These activities would expose two nesting territory to potential impacts. Requested activities are proposed in the followings areas of West Dennis Beach, 1) the access roadway extends past an open, isolated sandy area of approximately 25,000 square feet (sf) near the beach entrance (volleyball court) which supported a nest in 2011, 2014, and 2017; and 2) the western portion of the roadway/parking area extends along the back dune measuring approximately 700 lf. In the past, at least one brood has escorted chicks back and forth across the parking area, resulting in a partial closure of the lot.

1. Volleyball Court Nest: The volleyball court area is separated from the beach by an access road and parking area. The parking area is bordered by a retaining wall, which cannot be scaled by plover chicks. The only at grade access to the beach is at the concession stand 650' linear feet eastward or at an opening 1800' linear feet westward. The Town will facilitate access to the beach for plover chicks to prevent mortality within the parking lot. When a nest is present in this location, the Town will create a "plover crossing" based on the design employed in 2017. To do this, approximately 240 linear feet of silt fencing will be attached to existing posts extending along the south side of the volleyball court (north side of the

roadway). This will prevent plovers (adults and chicks) from entering the adjacent access road. This fencing also serves to guide adults and chicks southwest towards a temporary haybale-lined, sand-covered, road crossing which will be installed, adjusted, and monitored each day to allow crossings to and from the beach foraging area. This staged crossing will have a built-up sand mound, acting as a ramp to allow plovers to cross over the bulkhead at the edge of the beach.



Figure 3: Aerial view of moveable Plover and chick pathway and silt fence utilized to facilitate safe crossing from the northern side of West Dennis Beach (Volleyball Area) to the beach front on the southern side of West Dennis Beach.



Exhibit 4: Moveable Plover and chick pathway utilized to facilitate safe crossing from the northern side of West Dennis Beach to the beach front on the southern side of West Dennis Beach.

Once a full clutch is found at the volleyball court, an estimated hatch date is determined. No less than 48 hours prior to that date the Town installs silt fencing and the sand ramp at the bulkhead. Haybales are staged for installation as well. During this time, the nest is monitored daily. Beginning on the hatch date, or earlier if signs of hatching are seen, the nest is monitored continuously between dawn and dusk. The access way is closed to traffic and western parking areas are closed as well. The portion of the "plover crossing" extending across the parking lot pavement is completed; haybales are installed lining the crossing footprint and sand is laid down extending to the ramp and beach. The family is monitored daily and once they begin to move, staff will ensure they do not stray into unprotected parking lot areas. Limited herding will be used for this purpose. Once the adults and chicks are safely established on the beach, the crossing will be dismantled and traffic will be allowed to resume 24-48 hours after the chicks have crossed and are established on the beach.

- 2. Western parking lot/roadway Nest: Plovers typically nest along the western portion of West Dennis Beach. Nests are on the beach side and are separated from the parking lot via large, vegetated sand dunes. However, at least one brood nests just west of bathhouse #2 and typically walks their chicks northward across the parking lot to feeding areas in the back marsh. This has occurred for many years with the plovers utilizing one of the sandy dune trails for access. The plovers frequently cross the pavement, with their timing seemingly coinciding with low tide cycles when foraging in the marsh is feasible. Although the trail includes steps leading from the lot to the trail, this has not impeded plover usage. Past practice has been that when a full clutch is found, a hatch date is estimated and concrete barriers are scheduled to be installed and close the parking lot to traffic 48 hours prior to that date. This creates a substantial revenue loss for the Town and a new plan is proposed. This plan includes staging of barricades, nighttime parking lot closures, and vehicle escorts.
- a. Staging of barricades at bathhouse #2 for intermittent and emergency use in the event chicks access parking areas:

Concrete traffic barricades or gates will be staged just west of bathhouse #2. Nests within 300' of parking lots/entrance roads will be identified as potential triggers for chick-vehicle interaction. When a full clutch is found in a nest located within 300' of the westernmost parking area, an estimated hatch date will be determined. Estimated hatch dates for these nests will be monitored closely. Parking lot closures are not mandated for all nests. However, if deemed necessary by the Plover Monitor and DNR Director to protect chicks, barricades will be installed and nighttime parking lot closures and a vehicle escort plan will be instituted 48 hours prior to the estimated hatch date for these nests. Once installed, barricades will be located approximately 200' west of bathhouse #2 to form the east end of the Vehicle Escort Area, and approximately 950' from bathhouse #2 to form the west end of the Vehicle Escort Area. Barricades will remain in place until hatching occurs and the Plover Monitor has verified through monitoring (a minimum of 48 hours) that chicks have entered the beach area and are not crossing the parking area. If chicks are observed crossing the parking lot, the barricades gates will remain in place with nighttime closures and escorting continuing until chicks have fledged.

b. Escorting Procedure:

Once barriers or gates are installed to prevent vehicle access, a vehicle escort plan will be implemented with Town staff. DNR Plover Monitors and Beach staff will implement the escort plan. The Vehicle Escort Area will extend from west of bathhouse #2 westward approximately 950 linear feet (See Figure 3). Once installed, barricades will be located approximately 200' west of bathhouse #2 to form the east end of the Vehicle Escort Area, and approximately 950' from bathhouse #2 to form the west end of the Vehicle Escort Area. Staff will be stationed at the east and west ends of the Vehicle Escort Area, with another rotating throughout the escort area. Communication between staff will be accomplished via walkie-talkie radios. No more than three (3) vehicles will be escorted at each time, and traffic will be allowed in a one-way direction only while escorting; i.e. vehicles entering the area and then vehicles exiting the area. This will maintain one limited path of travel. A waiting line will form just beyond the eastern side of the temporary barricades (Exhibit 3). Vehicle groups will be led by a member of staff, at a restricted 5 mph speed limit, across the escorting area until they reach the temporary barriers on the western side. Vehicles will be halted by Town escorts if chicks are observed in or adjacent to the parking lot. Vehicle traffic will be allowed to resume only when chicks are no longer nearby.

This escort process will occur between the hours of 8am and 5pm, with the last car requiring an escort being safely beyond the eastern side of the temporary barriers at 5pm. Escorting of incoming vehicles will end at 4pm. All escorted vehicles will be informed of these time restrictions before they enter the escorting area. Vehicles remaining in the west parking area after 5 pm will be given \$100 non-criminal citations and/or have their beach sticker revoked. After all vehicles have been cleared from the western side of the beach parking areas, concrete barriers will be moved to block the eastern edge of the escort area to prevents traffic after escorting hours.

c. Nighttime parking lot closures:

As outlined above, concrete traffic barricades or gates will be installed blocking access past bathhouse #2 up to Bass River. Barricades will be located approximately 200' west of bathhouse #2 to form the east end of the Vehicle Escort Area, and approximately 950' from bathhouse #2 to form the west end of the Vehicle Escort Area. Access through these barriers will be allowed by vehicle escort only, except in the case of emergency vehicles. Barricades will remain closed to vehicles from 5 pm until 8 am each day with no vehicle access allowed. Closures will continue until the Plover Monitor has verified that all chicks have fledged or are no longer accessing the lot.

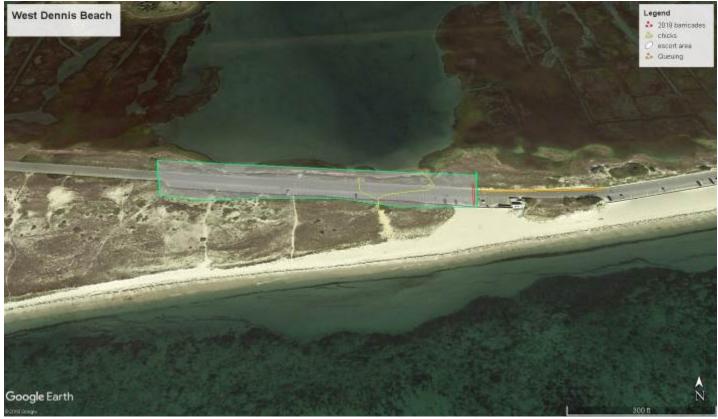


Figure 4: Aerial view of 2019 barricaded area, with the potential escort area. The yellow lines indicate chick movement to and from the beach and the orange line indicating potential queuing area for proposed escort across restricted area (See Section 4.2).

4.3 Other Management Techniques

- Delineation of suitable nesting habitat with symbolic fencing each year by April 1
 - O Town personnel installs symbolic fencing and protective signage prior to April 1 each year. Piping Plover Monitors subsequently repair and readjust the fencing as necessary throughout the nesting season to provide buffers and ensure protection of habitat.
- Reduction in the number of dune trails accessing the parking area to limit wildlife and pedestrian accessibility;
 - Approximately eight (8) pedestrian trails currently extend through the dunes at the western end of West Dennis Beach. Portions of these trails contain open sandy areas which are preferred plover nesting habitat. Although not marked by signage and closed (roped off) starting April 1 to Labor Day, pedestrian beach goers continue to use these trails to cross from the parking lot to the beach. The Town is proposing to install native plantings at the northern end of five (5) of these trails to prevent entry from the parking lot. The northern 10' of each pathway will be planted with native species. These native plantings will also provide vegetative barriers between plover nesting areas and the parking lot, thus decreasing the potential for chicks entering parking areas. Further, these

vegetative barriers may serve to minimize predator access from parking areas where trash and debris attract skunks, raccoons, coyotes, seagulls and crows.

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Figure 5: Figure displaying all paths, sanctioned and unsanctioned, west of bathhouse #2. All paths marked with green arrows will remain. All paths and side trails marked with a red 'x' will been planted from the northern edge and roped off as previously specified.

The proposed plantings will largely consist of *Ammophila breviligulata* (American Beachgrass), with *Rosa virginiana* (Virginia Rose) and *Prunus maritima* (Beach Plum) interspersed.



Exhibit 5: Path near bathhouse #2 which is most frequently used by plovers and chicks due to the proximity to nesting areas and a small foraging beach on the northern side of West Dennis Beach. Path will be maintained.



Exhibit 6: Path not frequently used by plovers and chicks, slightly further from aforementioned foraging area on northern side of West Dennis Beach. Will be planted and roped-off.

- Training for summer DNR and Beach staff regarding plover nest protection, dog regulations and beach restrictions.
 - The Town of Dennis hires one (1) Plover Monitor each season. The Monitor is assisted by other DNR staff as needed through the summer. DNR staff provides enforcement support and issue citations for unauthorized entry into protected plover habitat area. DNR staff is responsible for enforcement of all regulations related to ORV use on the beaches. DNR, Animal Control and Beach staff enforce the regulations related to dogs on the beaches. Beach staff enforce the regulations related to the use of the beach for windsurfing and kite boarding activities. The Town is proposing to provide cross training for departmental staff in order to provide more widespread and consistent enforcement of these regulations.

5.0 BUDGET

The Beach and Natural Resource Departments are staffed with seasonal employees in the summer which supplement their full-time staffing. This staffing is included within the annual budgets. Additional employees will require an increase in budgets and approval by the Board of Selectmen and Finance Committee. These Boards approved a Capital project in 2017 which provided funds for a Piping Plover Management Plan. The project includes funding for 3 gates, 4 security cameras, 6 handheld radios, 1 ATV, and plantings. The Town is proposing to pay into the NHESP Plover Mitigation Fund at \$5,800 per take. The Department of Natural Resources budget is funded for \$11,600 in plover mitigation monies each year for mitigation in the form of donations to the NHESP predator management fund.

Town of Dennis Beach Rules and Regulations

IN ORDER TO PRESERVE AND PROTECT THE HEALTH AND SAFETY OF THE PUBLIC IN THE USE OF BEACH AND PARKING AREAS OWNED BY THE TOWN OF DENNIS, THE BOARD OF SELECTMEN DO HEREBY ADOPT THE FOLLOWING REGULATIONS:

I. Parking

Admission to parking at the Town Beach Areas as designated shall be governed by the following:

A. Public Parking Areas

Northside	Southside
Chapin Memorial Beach	Glendon/Durling Beach
Corporation Beach	Haigis Beach
Howes Street Beach	Inman Road Beach
Mayflower Beach	Raycroft Beach
Princess Beach	Sea Street Beach, Dennisport
Scargo Beach	South Village Road Beach (North lot)
Sea Street Beach, East Dennis	Metcalfe Memorial Beach
Resident Only Parking Areas	
Northside	Southside
Bayview Beach	South Village Beach (South lot)
Cold Storage Beach	West Dennis Beach (East lot)
Harborview Beach	` ,

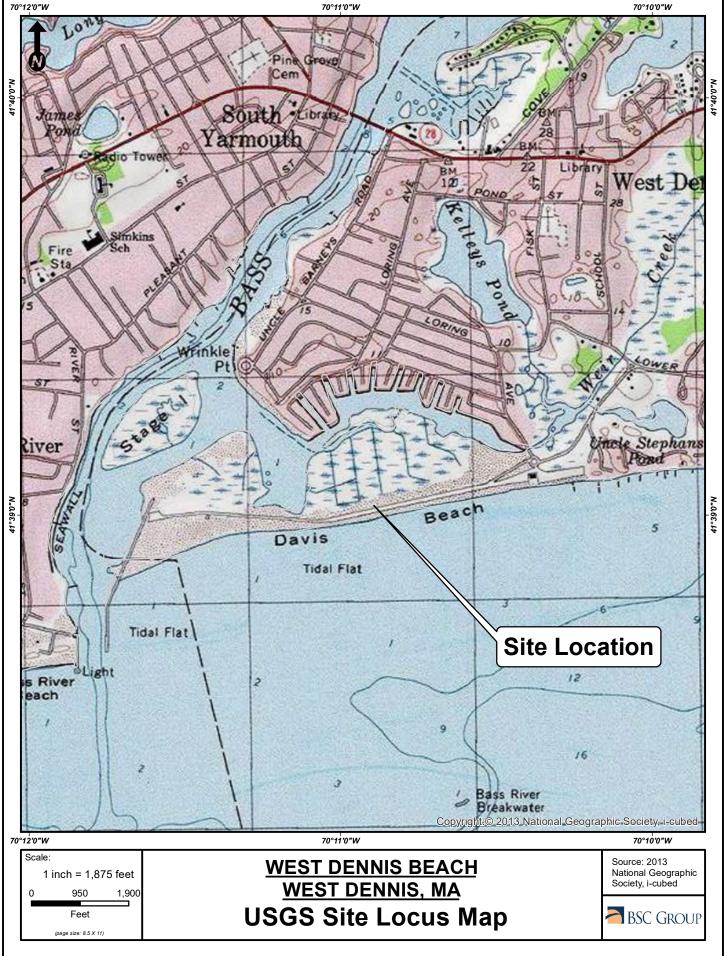
ONLY REAL ESTATE TAXPAYERS OR YEAR ROUND RESIDENTS SECURING A DENNIS RESIDENT VEHICLE PASS SHALL BE PERMITTED TO PARK IN RESIDENT ONLY BEACH LOTS.

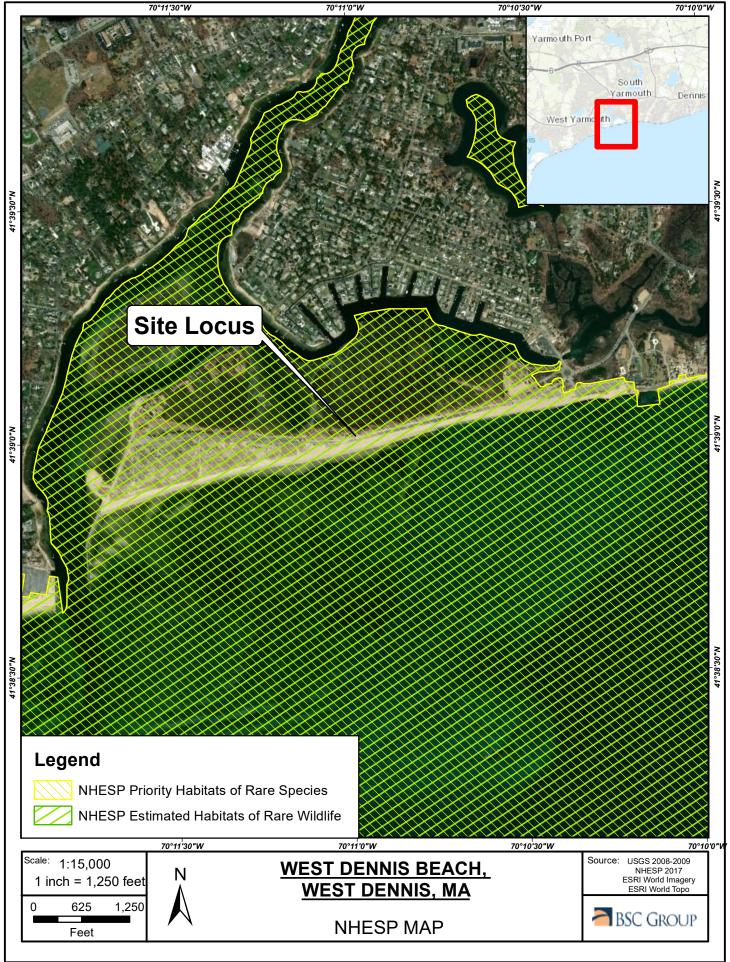
- B. A real estate taxpayer or a year round resident in the Town of Dennis, Massachusetts, may secure a Dennis Vehicle Pass for each motor vehicle registered or leased in hisname, his spouse's name, his company, or his minor dependent, which is valid in all of the above areas for a fee set by the Board of Selectmen. If the property is in a trust, only trustees are entitled to a vehicle pass.
- C. Any person not entitled under Section (B) above to receive a Dennis Vehicle Pass may request an administrative review of his claim by the Board of Selectmen or its duly authorized Agent. The decision of the Board or its Agent as to the issuance of the vehicle pass shall be final.
- D. Any person may secure a weekly vehicle pass for all the designated public parking areas for a fee, as set by the Board of Selectmen.
- E. All persons shall be charged a Beach Parking Fee for use of the above mentioned areas set by the Board of Selectmen. Upon payment of their fee, a receipt shall be displayed as to be visible.
- F. Commercial and other type buses carrying more than (15) persons will not be permitted to park in the lots. They will be required to drop off and pick up in a designated area.
- G. Each pass shall bear the registration number and make of the vehicle for which it has been issued and shall be valid ONLY for that vehicle. The pass is only valid if it is attached to the passenger side front bumper as directed. An invalid sticker will be removed from the vehicle on which it was found and that vehicle will receive a police violation. A vehicle with dealer plates will require a special permit with the photos of the property owner included. This vehicle will only be allowed into the lot with one of the property owners in the vehicle.
- H. Pass entitles vehicle to a single parking space. Vehicles will be required to pay for any additional spaces they occupy.
- I. No person shall park or cause a motor vehicle to be left or parked in the above described areas during posted beach hours without displaying a daily pass or sticker, affixed to his or her vehicle as described above. The penalty for parking in violation of this provision shall be Fifty dollars (\$50.00) and shall be enforced in accordance with Massachusetts General Law Chapter 90, section 20 A1/2. Violators may be towed from a Resident Lot at owner's expense.

II. Regulations

- Beaches are staffed by lifeguards only during posted hours. Beach use is at individual's own risk.
- No alcoholic beverages will be permitted on the beaches or in the parking areas at ANY TIME.
- 3. No smoking will be permitted on the beaches or in the beach parking areas at ANY TIME.
- No littering will be permitted on the beaches or in the parking areas at ANY TIME. No glass containers or bottles shall be allowed on the beach or in the parking areas at any time.
- No person will be permitted in the fenced-in or otherwise posted area of the dunes at ANY TIME.
- 6. No selling, advertising, soliciting or giving away of goods or services will be permitted on the beaches or parking areas, except by concessionaire under contract with the Town of Dennis or with prior approval of the Board of Selectmen.
- Unless otherwise authorized, beaches and beach parking areas are closed to the general public during posted hours as determined by the Board of Selectmen.
- No animals or pets will be permitted on the beaches, in the parking areas, or in unattended vehicles in the parking areas AT ANY TIME from the Friday of Memorial Day weekend through Labor Day.
- Access to Town owned beach parking areas may be restricted at the discretion of the appropriate Town Agents at any time.
- 10. Public nudity, including public nude bathing, by any person on the Dennis public beaches is prohibited. Gender-appropriate bathing suits or clothing are required at all times.
- 11. Use of open fires is prohibited at all times. The use of grills must be permitted only in designated parking areas with prior approval from the Beach Department.
- Rollerblades, skateboards, roller skates and scooters are prohibited from all Town beach parking lots when staffed.
- 13. Windsurfing and board rigging at West Dennis Beach are restricted to the designated area for said purpose and access to the beach is limited to specified pathways. No rigging shall occur within the dunes at any beach. Equipment shall not be left in the parking lot in such a manner to occupy an additional parking space.
- 14. No boating, fishing, windsurfing, kite boarding, paddle boarding or scuba diving will be permitted in areas designated by lifeguards and/or swim buoys as swimming areas.
- 15. No radio or any other audio device by which sound may be reproduced and/or amplified shall be operated on any beach or parking facility owned and operated by the Town of Dennis in such a manner as to be audible beyond a radius of 15 feet from its location.
- 16. No individual or group of individuals will be granted reserved parking places.
- 17. No ball playing, tossing of Frisbees, or other objects will be permitted without expressed permission of the lifeguard and in areas to be designated by the lifeguards or appropriate Town Agents.
- 18. The use of airborne devices including, but not limited to; drones, planes, personal jetpacks, other motorized flying devices are prohibited unless authorized at the discretion of an appropriate Town Agent and lifeguard.
- 19. Use of rafts, inflatable or umbrellas, skim boards, tents, or kites may be prohibited as directed by appropriate Town Agents and lifeguards.
- 20. No canopies larger than 10' x 10' are allowed on the beach. Canopies must be located behind or parallel to the lifeguard stands and be no closer than 10' to a boardwalk or may be placed at the discretion of an approriate Town Agent or lifeguard.
- 21. Children under ten (10) years of age must be accompanied by an adult or person responsible for his or her behavior within the beach area.
- 22. Town officials, lifeguards and beach monitors must be obeyed in the enforcement of these regulations and in any other situation in which the judgment of the lifeguard or appropriate town agent must be exercised for the protection and safety of persons using the beach facilities.
- 23. Regulation No.1 through 10 will be in effect at all times during the year. Regulations No. 11-21 inclusive will be in effect during posted beach hours.
- 24. Any violation of the above regulations may result in a criminal complaint for which a fine of not more than three hundred dollars (\$300.00) may be imposed for each offense. As an alternative to the criminal complaint process an enforcement official may issue a non-criminal violation notice with a fine of fifty dollars (\$50.00) for any violation of these regulations pursuant to the provision of Massachusetts General Law 40-21D and Town of Dennis By-law.

As amended March 16, 2015







Town of Dennis, MA



Phone Number

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581 p: (508) 389-6300 | f: (508) 389-7890

MASS.GOV/MASSWILDLIFE

MESA Project Review Checklist

Massachusetts Endangered Species Act M.G.L. c.131A and Regulations (321 CMR 10.00)

1) Project Location:		
Street Address/Location	City/Town	Zip Code
Assessors Map/Plat Number	Parcel /Lot Numbe	er
Property recorded at the Regi	stry of Deeds for:	
County	Certificate # (if re	gistered land)
Book	Page Number	
2) Applicant:		
First Name	Last Name	Company
Mailing Address		
City/Town	State	Zip Code
Phone Number	Fax Number	Email address
3) Property owner (if diffe	erent from applicant):	
First Name	Last Name	Company
Mailing Address		
City/Town	State	Zip Code
Phone Number	Fax Number	Email address
4) Representative (if any)	:	
Company		
Contact Person First Name	Contact Person Last Name	
Mailing Address		
City/Town	State	Zip Code

Email address

Fax Number

Additional Information	
1. Will this project require a filing with the Conservation Commission and/or DEP? ✓ No	Yes mittal
or MESA Information Request Form)? No Yes, if Yes -Tracking No	
Project Description (attach separate sheet, as needed)	
Please note, certain projects or activities are exempt from review, see 321 CMR 10.14. The MESA does not	
project segmentation. Your filing must reflect all anticipated work associated with the proposed project (C	MR 321
10.16).	
The proposed project is part of a COI application for Piping Plover management within a volleyball court at parking lot crossing at West Denr	is Beach.
Please find the COI/CMP attached.	************
Include the Following Information:	
ALL Applicants must submit:	
 * USGS map (1:24,000 or 1:25,000) with property boundary clearly outlined 	
 Project plans for entire site (including wetland Resource Areas, showing existing and pro 	posed
conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated I work)	imits of
†Assessor's map or right-of-way plan of site	
 Statement/proof that applicant is the Record Owner or that applicant is a person authority 	zed in
writing by the record owner to submit this filing	
Photographs representative of the site	
Projects altering 10 or more acres, must also submit:	
A vegetation cover type map of the site	
The state of the s	
Project plans showing Priority Habitat boundaries	
The NHESP may request additional information, such as, but not limited to, species and habitat s	urveys,
wetland reports, soil map and reports, and stormwater management reports (321 CMR 10.16). T	
NHESP will notify the applicant within 30 days if the materials submitted do not satisfy requirem	
a filing and request submission of any missing materials (321 CMR 10.18(1)).	
Filing Fee, Payable to Comm. of MA - NHESP (see website for fee information)	
a. Total MESA Fee Paid 300.00 b. Acreage of Disturbance less than 1 c. Total Site Acreage 1	30.52
Required Signatures	
I hereby certify under the penalties of perjury that the foregoing MESA filing and accompanying	plans,
documents, and supporting data are true and complete to the best of my knowledge.	
00	0
12/9/1	4
Signature of Property Owner/Record Owner of Property Date)
$N_{\rm e}$	
Signature of Applicant (if different from Owner) Date	