Habitat Conservation Plan

Curley Community Center

1663 Columbia Road
South Boston, MA 02127

City of Boston

Centers for Youth & Families

March 2024

CDM Smith

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
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MASS.GOV/MASSWILDLIFE

Request for Certificate of Inclusion for Piping Plover Habitat Conservation Plan
MESA Review Checklist & Application Cover Page

Project Location:

Address/Location	1663 Columbia Road
City(ies)/Town(s)	Boston

Applicant:

Individual	Edward McGuire
Organization	Boston Centers for Youth & Families
Mailing address	1663 Columbia Rd, Boston, MA 02127
Phone & Email	Phone: 617-635-4920 ext.2223. Email: Edward.McGuire@boston.gov

Property Owner(s) Information (if different from Applicant): ***Provide separate sheet if multiple landowners***

Individual(s)	Ryan Woods
Organization(s)	Boston Parks and Recreation Department
Mailing address	1010 Massachusetts Avenue, 3rd floor, Boston, MA 02118
Phone & Email	Phone: 617-635-4505. Email: ryan.woods@boston.gov

Representative (if any):

Individual	Magdalen Lofstedt, PWS
Organization	CDM Smith Inc.
Mailing address	75 State Street, Suite 701, Boston, MA 02109
Phone & Email	Phone: 617-452-6597. Email: lofstedtmh@cdmsmith.com

Has this project previously been issued a NHESP Tracking Number (either by previous NOI Submittal or MESA Information Request Form)? Yes If yes, Tracking no. 20-39297

Is coverage for Least Terns also being requested? (Y/N)	No			
List additional MESA-listed species in project area (if known):				

REQUESTED COVERED ACTIVITIES FOR PIPING PLOVER

Covered activity:	*Use of roads and parking lots in the vicinity of unfledged chicks*	*Recreation and beach operations*	*Oversand vehicle use in vicinity of unfledged chicks*	*Total**
*No. requested take exposures**		2		2
Max. % of total pairs at site to be exposed				50%
Acreage affected				0.47
Max. % of total nesting acreage affected for this species at site				

* The Total *No. requested take exposures* should be a maximum number of exposures for all Covered Activities combined in a given year (i.e., a not-to-exceed value). As beach operators may not be able to predict which Covered Activities will be implemented in a given year, a range of values or maximum value may be presented for each individual activity. For instance, requested exposures under each of the three activities might be 2 while the Total might be less than 6.

REQUESTED COVERED ACTIVITIES FOR LEAST TERN OR OTHER AVIAN SPECIES (identify species): _____

Covered activity:	*Use of roads and parking lots in the vicinity of unfledged chicks*	*Recreation and beach operations*	*Oversand vehicle use in vicinity of unfledged chicks*	*Total**
*No. requested take exposures**				
Max. % of total pairs at site to be exposed				
Acreage affected				
Max. % of total nesting acreage affected for this species at site				

* The Total *No. requested take exposures* should be a maximum number of exposures for all Covered Activities combined in a given year (i.e., a not-to-exceed value). As beach operators may not be able to predict which Covered Activities will be implemented in a given year, a range of values or maximum value may be presented for each individual activity. For instance, requested exposures under each of the three activities might be 2 while the Total might be less than 6.

REQUESTED SPECIFIC METHODS ASSOCIATED WITH IMPLEMENTING COVERED ACTIVITIES (check all that apply)

	Piping Plover	Least Tern	Other (identify): _____
Reduced proactive symbolic fencing	✔	☐	☐
Reduced fencing around the nest	✔	☐	☐
Beach raking	✔	☐	☐
Physical deterrents (coverboards, flagging, etc.)	✔	☐	☐
Chick herding	✔	☐	☐
Barriers	✔	☐	☐
Nest moving	✔	☐	☐
Other (briefly identify) _____	☐	☐	☐

PROPOSED PIPING PLOVER MITIGATION (Mitigation for other species should be proposed in the IAMP; see below.)

Type	Y/N	Total amount	Pairs to benefit (credits)
*Pay fee for offsite mitigation**	Yes	$ 11,600	Off-site mitigation
Applicant-implemented activities (in lieu of fee):			
· Selective predator management	No	Submit details in IAMP (see below)	MassWildlife will determine value (credits) for these activities
· Increased education & outreach	No		
· Increased law enforcement	No		
· Habitat management	No		
· Other	No		

* Mitigation ratios (mitigation credits:exposure) and fees (per pair, nest, brood, or territory) are: Use of Roads and Parking Lots (vehicular, 3:1 or $6,150; non-vehicular, 2.5:1 or $5,800); Recreation & Beach Operations, Oversand Vehicle Use (2.5:1 or $5,800)

OTHER REQUIRED ELEMENTS OF REQUEST FOR COI

(Please attach. See additional guidance available to applicants; contact coastal.waterbirds@mass.gov.)

- [x] Site map – showing parcel boundaries and provide proof of ownership
- [x] Written assent of landowner(s) to request coverage, if applicant is not landowner
- [x] Site-specific Impact Avoidance and Minimization Plan (IAMP) in format specified by MassWildlife in available guidance
- [x] Mitigation plan, including budget
- [x] MA Endangered Species Act filing fee
  ($300 payable to "**Comm of MA – NHESP**"; https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review)
- [x] Conservation and Management Permit fee
  ($600 payable to "**Comm of MA – NHESP**"; https://www.mass.gov/how-to/apply-for-a-conservation-management-permit)
- [ ] Draft Escrow/Mitigation Fund Agreement, with applicant-specific edits in TrackChanges/redline (if mitigation fee will be paid)
  Contact: Coastal.Waterbirds@mass.gov for template agreement.

SUBMITTAL

- [x] Mail a hard copy of entire application (including signed cover sheet) with checks, to:
  Environmental Review-HCP, MassWildlife-NHESP, 1 Rabbit Hill Rd., Westborough, MA 01581.
- [x] Also email entire application to: **Coastal.Waterbirds@mass.gov.**

REQUIRED SIGNATURES

Provide separate sheet if multiple landowners

I hereby certify under the penalties of perjury that the foregoing HCP/MESA filing and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

Signature of Property Owner/Record Owner of Property _____ Date 3/11/24

Signature of Applicant (if different from Owner) _____ Date 3/11/24

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Project Narrative

1.1 Introduction

The Curley Community Center site located at 1663 Columbia Road in South Boston is owned by the City of Boston through the Parks and Recreation Department (BPRD) and the facility is operated by the Boston Centers for Youth and Families (BCYF). The Curley Community Center has recently undergone extensive renovations and the site was re-opened to the public in 2023. At that time, a Long-term Beach Operations and Maintenance Plan (OMP or Beach OMP) was prepared by CDM Smith Inc. (CDM Smith) for the City of Boston (the Applicant). The Beach OMP applies to all beach areas at the site (e.g., the K/L/M beaches).

The Curley Community Center Beach OMP was prepared in consultation with the Massachusetts Division of Fisheries and Wildlife's (DFW) Natural Heritage and Endanger Species Program (NHESP), the Massachusetts Audubon Society, Inc. (Mass Audubon) Coastal Waterbird Program (CWP) and the Department of Conservation & Recreation (DCR). The Beach OMP for the Curley Center focuses on the Piping Plover (*Charadrius melodus*) which has nested on the K/L/M beaches between the Curley Community Center and Boston Harbor. The OMP was approved by NHESP on July 7, 2023 (NHESP File No. 23-8347).

In conjunction with review and approval of the Beach OMP, the NHESP indicated that the Curley Community Center site is a candidate for a Habitat Conservation Plan (HCP) which would allow for flexibility in the operational use of the Curley Community Center's beach while still supporting an Incidental Take Permit from the U.S. Fish and Wildlife Service. The HCP also relates to the Piping Plover (*Charadrius melodus;* "PIPL") that nested on the K/L/M beaches before the rehabilitation project and increased in numbers during the rehabilitation project and have continued to thrive during the first year of the City of Boston's ongoing operations and site use following construction.

Based on input from the NHESP and with submittal of this application, the City of Boston is pursuing entry into the MA HCP for Piping Plover, such that NHESP can secure a Certificate of Inclusion (COI) for the site with the United States Fish and Wildlife Service (USFWS). This HCP filing is accompanied by a Request for Certificate of Inclusion (COI) MESA Review Checklist & Application Cover Page. Note that large sections of background information necessary for this HCP submittal were previously included in the Beach OMP submittal and are included again herein. The detailed Beach OMP has been included in Section 3 below. NHESP's July 7, 2023 Decision Letter in provided in Appendix A, wherein a conditional No-Take was issued for the Beach OMP.

The Curley Community Center is the only community center operated by the BCYF with direct coastal beach access. During the recent renovations at the site, the City of Boston Public Facilities Department (PFD) partnered with the Mass Audubon's CWP in 2018 to provide seasonal monitoring and oversight of the Piping Plovers to help achieve the shorebird protection goals during construction activities at the site. In 2023, Mass Audubon provided coastal waterbird

services for the Curley Center site through a formal management agreement with the BCYF. The City of Boston intends to utilize the Mass Audubon CWP services at the site moving forward. It is anticipated that the management agreement will be utilized for these services on an annual basis. More information regarding the Mass Audubon services for the site is presented below.

1.2 Curley Community Center History and Project Location

The Curley Community Center is located at 1663 Columbia Road in South Boston (see Figure 1). The historic deco structure is a pile supported building with a yellow brick and stone façade over a concrete/steel frame, with cast concrete and copper ornament in various locations. The Curley Center is listed as BOS6581 on the Massachusetts Inventory of Historic Assets. Mayor James Michael Curley oversaw the completion of the building as a community bathhouse in 1931 in response to poor sanitary conditions in South Boston at that time. It replaced an 1865 wooden bath house that was destroyed by fire. The building also received a substantial renovation under Mayor Raymond Flynn in the 1980's.

The building follows the contour of Columbia Road, running approximately 1,400 linear feet. The north side of the building faces the street and neighborhood of South Boston, while the south side of the building opens onto the beach with views of the Old Harbor and JFK Library. The building has three prominent public entrances facing Day Boulevard: K Street, L Street and M Street - which historically functioned to separate the building into women's, men's, and boy's sections (respectively). The beach is similarly split into three sections by rock groins and large wooden fences that extend into the water (under a 1931 Chapter 91 License). These engineered structures were intended to protect the sand at the beach and at the same time served to separate the bathing areas into the various sections described above. The available beach area is approximately 2.37 acres above the mean high-water line.

1.3 Curley Community Center Restoration Project

The Curley Community Restoration Project was completed in 2023 and consisted of gut interior renovation to improve circulation, accessibility and transparency along with providing a more efficient interior configuration. The proposed work also included exterior renovations to the building façade and improving overall and ADA access to the waterfront on the beach side of the building by constructing three new wooden decks with stairs and ramps at each entrance point (K/L/M). The decks were constructed on the existing pile supported concrete platforms and within the existing footprint in accordance with all permits and approvals issued for the construction phase.

The elevation of the building and deck varies at each entrance/exit location, however each of the new decks constructed on top of the existing concrete platform was designed to allow for a minimum of 18-inches of open space under the deck. In addition, the vertical supports (6-inch wooden timbers) for the decks were spaced approximately 10 feet on center (or roughly 20 times their diameter) in accordance with guidance documents/recommendations provided by state regulators. The face of the decks has screened openings to allow for sand migration while at the same time not allowing trash and/or debris to accumulate under the decks. In addition, the

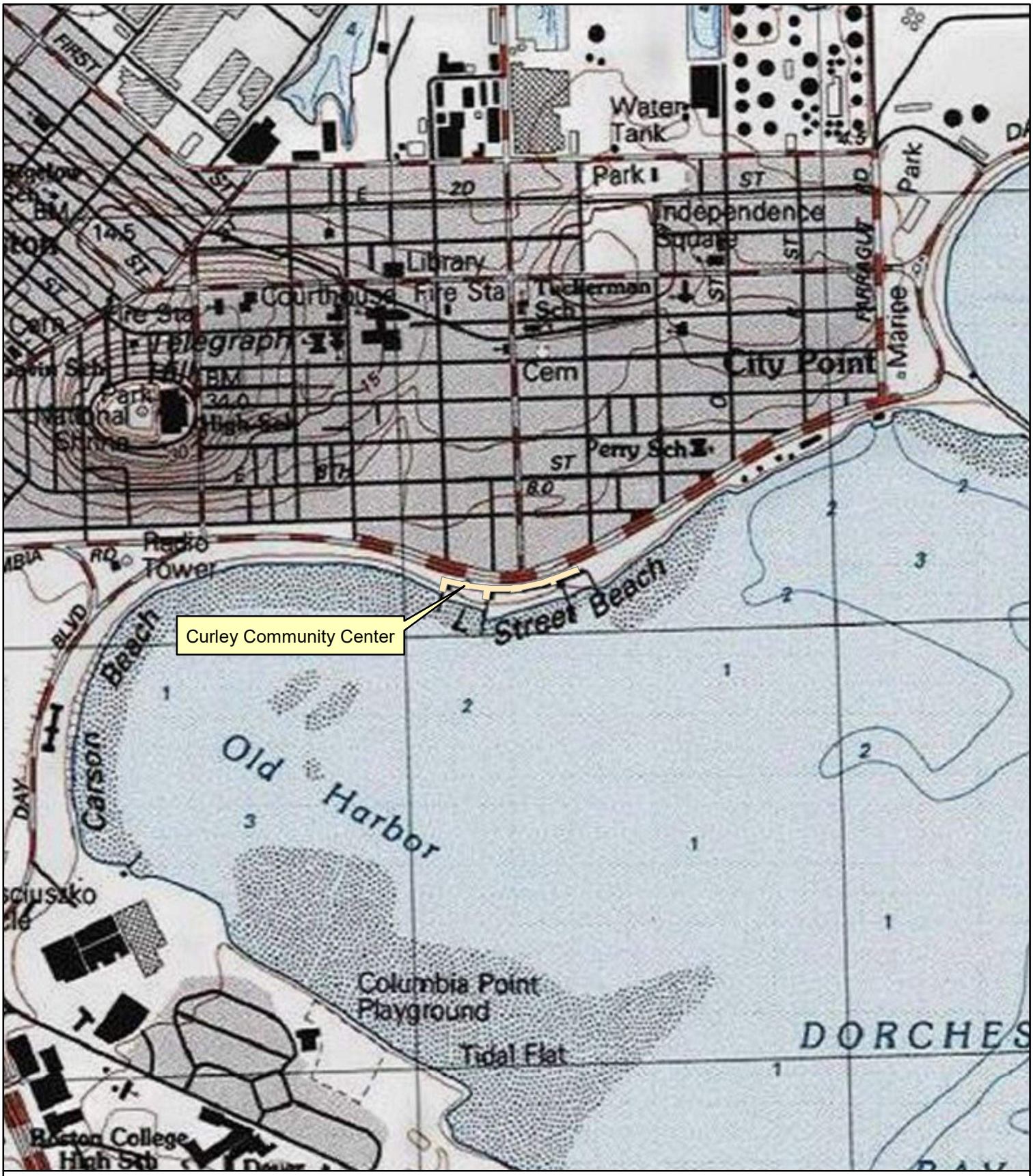

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Figure 1
USGS Locus Map

Curley Community Center Renovation
South Boston, Massachusetts

0 500 1,000
Feet

1 inch = 1,000 feet

Basemap: USA Topo Maps (1:24,000)
Source: ESRI ArcGIS Online, USGS, and MassGIS
Coordinate System: NAD83 Massachusetts State Plane Mainland FIPS 2001 (Feet)

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screened faces of the decks will discourage/prohibit people (adults and/or children) from getting under the decks thereby enhancing public safety and security at the site as part of the project.

1.4 Operation of Curley Center and Beach Access

The renovation of the Curley Center consisted of complete replanning of all interior program spaces and associated renovations consistent with the goals for operation of the building and the site moving forward. The design leveraged the three entries as primary organizers, each offering access to specific program use interior to the structure and also allowing connection to the beach on the waterfront side of the building. While users can circulate along the entire length of the building, the program is generally organized as follows:

- K Street Entrance will primarily serve the senior and youth-focused spaces, with direct access to the K Street beach and playground.
- L Street Entrance remains the primary building entrance, with access to a variety of fitness spaces and locker rooms. L-Street also provides access to the largest of the three beaches, as well as a new large community deck and open-air handball courts.
- M Street Entrance will serve a range of community spaces, with access to the M-Street beach. It offers the option for partial use of the building during off-hours, as necessitated by a range of community programming.

The Curley Center reopened in June of 2023, with operations focused on interior elements of the center and the programming for seniors, adults and children is in these areas only. For the 2024 season, the Curley Center is proposing to utilize the beach in accordance with this HCP submittal.

The Curley Community Center is open 7 days a week as follows: Monday through Saturday from 6:30 am to 9:00 pm and on Sunday from 9:00 am to 5:00 pm. The BCYF Aquatic Operations Manual is included in Appendix A.

1.5 Qualified Shorebird Monitors

The City of Boston has consistently contracted qualified shorebird monitors from the Mass Audubon CWP starting before the facility's rehabilitation project, through construction and now into the operations at the newly renovated community center. For the 2024 season the City has engaged the Mass Audubon CWP to provide qualified shorebird monitors to support implementation of the Beach OMP and this HCP. Resumes and qualifications for CWP's shorebird monitors are included in Appendix C. Working with the Mass Audubon CWP shorebird monitors the Applicant has demonstrated a continued commitment to cooperation to achieve regulatory compliance and conservation goals on the site while continuing to operate the community center for the public.

1.6 Habitat Conservation Plan Preparation and Submittal

This HCP was prepared and submitted to NHESP by CDM Smith for the City of Boston. The Statement of Owner Authorization and copies of the fee payments for this HCP filing are provided in Appendix D.

Section 2

Natural Resources and Existing Conditions

2.1 Coastal Beach Habitat and Wetland Resources

The Curley Community Center is a pile supported structure that is located above land that is jurisdictional as coastal beach. The beachfront area of the property consists of K/L/M Beaches divided by rock groins with wooden fences that extend out beyond the mean high tide line. Open Coastal Beach habitat (not counting the area beneath the pile supported community center) on K/L/M Beaches consists of approximately 3 acres which includes approximately 2.37 acres above the mean high-water line. The sand is moderately coarse to coarse with minimal cobble and no rock. Coastal vegetation including American Beachgrass (*Ammophila breviligulata*) and Seaside Goldenrod (*Solidago sempervirons*) is present on the K/L/M Beaches. Total linear feet of beach habitat on the property in front of the Curley Community Center is 1,100 feet. The wetlands resource areas on the site are shown on Figure No. 2.

Coastal Beaches are regulated by the Massachusetts Wetlands Protection Act (M.G.L. c. 131 §40) (WPA) under 310 CMR 10.27(2). Coastal Beach is defined as any "*unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of saltwater and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bank line or the seaward edge of existing human-made structures, whichever is closest to the ocean"* (310 CMR 10.27 (2)). Coastal beaches within the City of Boston are also regulated under the City's *Ordinance Protecting Local Wetlands and Promoting Climate Change Adaptation in the City of Boston* (the Ordinance) and wetland regulations.

The K/L/M Street Beach habitat is also regulated as Land Subject to Coastal Storm Flowage (LSCSF) under 310 CMR 10.21. LSCSF is defined as "*land subject to inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater* "[310 CMR 10.21]. The Federal Emergency Management Agency (FEMA) mapped the Flood Zone VE as extending up to elevation 13 feet NAVD 88. Flood Zone VE has a 1% chance of flooding to the baseline elevation annually and comprises a velocity zone due to incoming Waves during storms. FEMA mapping also shows Flood Zone AE within the K/L/M Beaches with a base flood elevation of 11 feet.

Coastal Bank is defined as, "*the toe of the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland*" [310 CMR 10.30]. Coastal Bank is located at the street side limit of the existing Curley Community Center building. The Coastal Bank on this project site provides a buffer to upland areas from storm waters and is significant to storm damage prevention and flood control.

Locally protected Waterfront Area extends 25 feet from the upper limits of the coastal beach limits. Waterfront Area is important for the protection of adjacent wetland resource areas and for public access to the waterfront.

CURLEY COMMUNITY CENTER

CONSTRUCTION PHASE

BEACH OPERATIONS AND MAINTENANCE PLAN

L STREET BEACH – SOUTH BOSTON

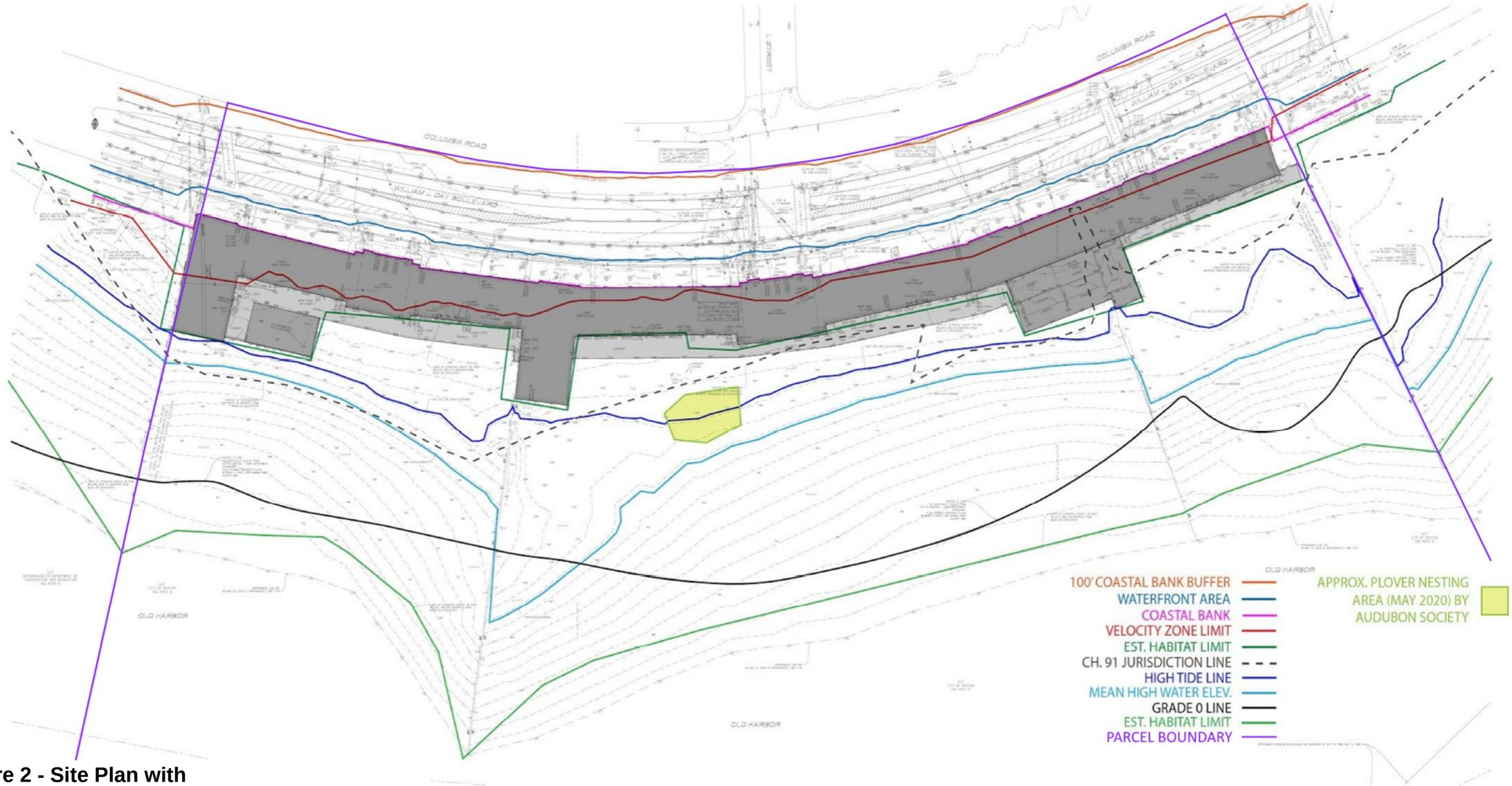


Figure 2 - Site Plan with Wetland Resource Areas

The beach operation activities and management practices presented in the Beach OMP will impact wetland resource areas regulated under the WPA or local Ordinance. Long term operation and management practices will be consistent with the Beach OMP for the Curley Community Center approved by NHESP and the Boston Conservation Commission. See Section 4.4 for WPA and local Ordinance regulatory compliance.

2.2 Prior Permits in 2020 and 2023

In September 2020, an Order of Conditions (OOC) was issued by the Boston Conservation Commission (BCC) (BCC File No. 2020-028) for the Curley Community Center Renovation Project (Massachusetts Department of Environmental Protection [MassDEP] File No. 006-1745). In conjunction with the OOC, NHESP reviewed the construction phase operations plan under the streamlined Massachusetts Endangered Species Act (M.G.L. c.131a) (MESA) Checklist filing (NHESP # 20-39297). Following NHESP review, a determination letter was issued (dated August 1, 2020) approving the proposed reconstruction work for the Curley Center structure under a Conditional "No-Take," pursuant to 321 CMR 10.18(2)(a) to avoid a prohibited Take of state-listed species (321 CMR 10.18(2)(a)) and to avoid adverse effects to the Resource Area Habitats of state-listed wildlife species (310 CMR 10.37, 10.58(4)(b), and 10.59).

NHESP issued a No-Take determination contingent upon the seven following conditions:

1. Limit of Work. As depicted on the Curley Community Center site plans (SHEET C-2.0, UTILITY DEMOLITION, SOIL EROSION, AND SEDIMENT CONTROL PLAN) dated May 29, 2020, a construction fence/perimeter control shall be established to delineate the limits of work. The Limit of Work delineates the seaward-most extent of all work and staging activities. Thus, all work, staging, and equipment shall occur landward of (or on the interior/building side) of the construction fencing.

2. Time of Year Restriction. To protect Piping Plovers and their habitats, work on the coastal beach seaward of the Limit of Work shall not be conducted during the period April 1st – August 31st, unless otherwise approved in writing by the Division. Construction activities located within the Limit of Work may continue during the Piping Plover breeding season, April 1st – August 31st.

3. Construction Phase Beach Operations and Maintenance Plan. THE CURLEY COMMUNITY CENTER CONSTRUCTION PHASE BEACH OPERATIONS AND MAINTENANCE PLAN L STREET BEACH – SOUTH BOSTON (DRAFT 8/17/2020) is approved. Modifications to and/or deviations from said plan and any activities located on the coastal beach not identified within the plan require advance written approval by the Division.

4. Operations Phase Beach Operations and Maintenance Plan. As proposed, the Applicant shall to formally submit the long-term/operations phase Beach Operations and Maintenance Plan pursuant to the WPA and MESA regulations as part of a separate streamlined Notice of Intent filing prior to occupancy and use of the of the new Curley Community Center.

5. State-listed Species Protection. The Applicant has the responsibility of protecting breeding Piping Plovers and state-listed species of terns that may be on this section of beach. Therefore, the applicant must allow regular monitoring for the presence of Piping Plovers and

terns by a qualified shorebird monitor, as determined by the Division, during the period April 1st – August 31st and shall allow any nests, scrapes, or unfledged chicks to be protected with symbolic fencing (warning signs and twine fencing).

6. Authorization Duration. This authorization is valid for 5 years from the date of issuance and limited to the project described herein.

7. Notice. Upon filing for renewal, extension, or amendment of the Orders of Conditions, the applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife.

One of the conditions in the NHESP determination letter, Condition #4, required the submittal of a "*long-term/operations phase Beach Operations and Maintenance Plan pursuant to the WPA and MESA regulations as part of a separate streamlined Notice of Intent filing prior to occupancy and use of the of the new Curley Community Center".* On September 21, 2023, BCC issued an OOC (DEP File No. 006-1950) and approved the Beach Operations and Maintenance Plan for the Curley Community Center (Beach OMP). The NHESP issued a conditional No Take contingent upon the 7 following conditions:

1. Beach Operations and Maintenance at Curly Community Center Beaches: To protect state-listed species and their habitats during the shorebird nesting season, April 1st – August 31st, beach management and operations located within state-listed species habitats must implement the protection measures detailed in the BOMP and the Guidelines, unless otherwise expressly approved in writing by the Division.

2. State-listed Species Monitoring & Habitat Protection: The Applicant has the responsibility of protecting breeding Piping Plovers that occur on the Curly Community Center Beaches. Regular monitoring for the presence of Piping Plovers must be conducted by a qualified shorebird monitor, as determined by the Division, during the period April 1st – August 31st. Areas of Piping Plover habitat must be delineated with symbolic fencing and warning signs on or before April 1st each year. These areas shall remain fenced as long as viable eggs, unfledged chicks, or territorial or courting Piping Plovers are present. All fenced areas shall be managed in accordance with the Guidelines*.

   *Greater management flexibility for plovers (i.e., deviations from the Guidelines) can only be approved by the Division as part of a valid Certificate of Inclusion (COI) and MESA Conservation and Management Permit (CMP) associated with the Statewide Habitat Conservation Plan (HCP). If the Applicant does not have a valid COI & CMP or if they expire, then recreational use and beach management must be implemented with the protection measures specified in the BOMP and fully comply with the Guidelines.

3. Beach Raking: To protect state-listed species, any raking during April or May can only occur if a qualified monitor, as determined by the Division, first has determined the locations of all territorial birds and those territories have been fenced and are excluded from raking so as not to deter prenesting birds. If state-listed nesting birds are present during April 1st – August 31st, then raking should occur as infrequently as possible, it must be conducted outside of fenced areas and in accordance with the Guidelines:

a. If, due to imminent health or human safety concerns, mechanized cleaning must occur within 100 yards of unfledged chicks, vehicles must be guided by a qualified shorebird monitor who has first determined the locations of all unfledged chicks.

b. For the benefit of beach-nesting birds, from April 1st through August 31st, mechanical beach cleaning that reduces the amount of wrack (seaweed and other organic debris) at the tide line should be minimized. If wrack is present in typical volumes and does not contain much human trash or present a health risk, it should be left in place. Trash within the wrack line must be removed by hand whenever feasible, leaving in place the majority of the wrack. If copious amounts of wrack present a health risk or are a public nuisance that necessitates removal, leave in place at least one-third of the fresh wrack from a normal tidal cycle to provide foraging and sheltering opportunities for shorebirds.

4. Motorized Equipment: All motorized equipment on the beach during April 1st – August 31st must comply with the ("Guidelines"). a. All equipment, utility vehicles (non-emergency) and beach rakes shall avoid areas of symbolic fencing and shall not travel within 100 yards of unfledged Piping Plover chicks, unless the qualified monitor is able to locate and track all unfledged chicks.

5. Debris and Trash Management: Trash or debris within fenced areas occupied by beach-nesting birds should only be removed if it presents a hazard for birds or people. It must be removed by hand. Removal should be conducted by, or under the immediate supervision of a qualified shorebird monitor who has first determined the locations of all nests and unfledged chicks.

6. Authorization Duration. This authorization is valid for 5 years from the date of issuance and limited to the project described herein.

7. Notice. Upon filing for renewal, extension, or amendment of the Orders of Conditions, the applicant shall contact the Division for written response regarding impacts to Resource Area habitat of statelisted wildlife. Any other Project or Activity not identified in the streamlined Notice of Intent application and located within Priority Habitat and Estimated Habitat as indicated in the Massachusetts Natural Heritage Atlas (14th Edition) must be submitted to the Division for review and written approval prior to implementation.

2.3 Shorebird Site Utilization

According to the Massachusetts Natural Heritage and Endangered Species Program's (NHESP's) layers available on MassGIS Oliver (see Figure 3), the L Street Beach by the Curley Community Center is mapped as Priority Habitat for Piping Plovers protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.0) and under the WPA and Regulations.

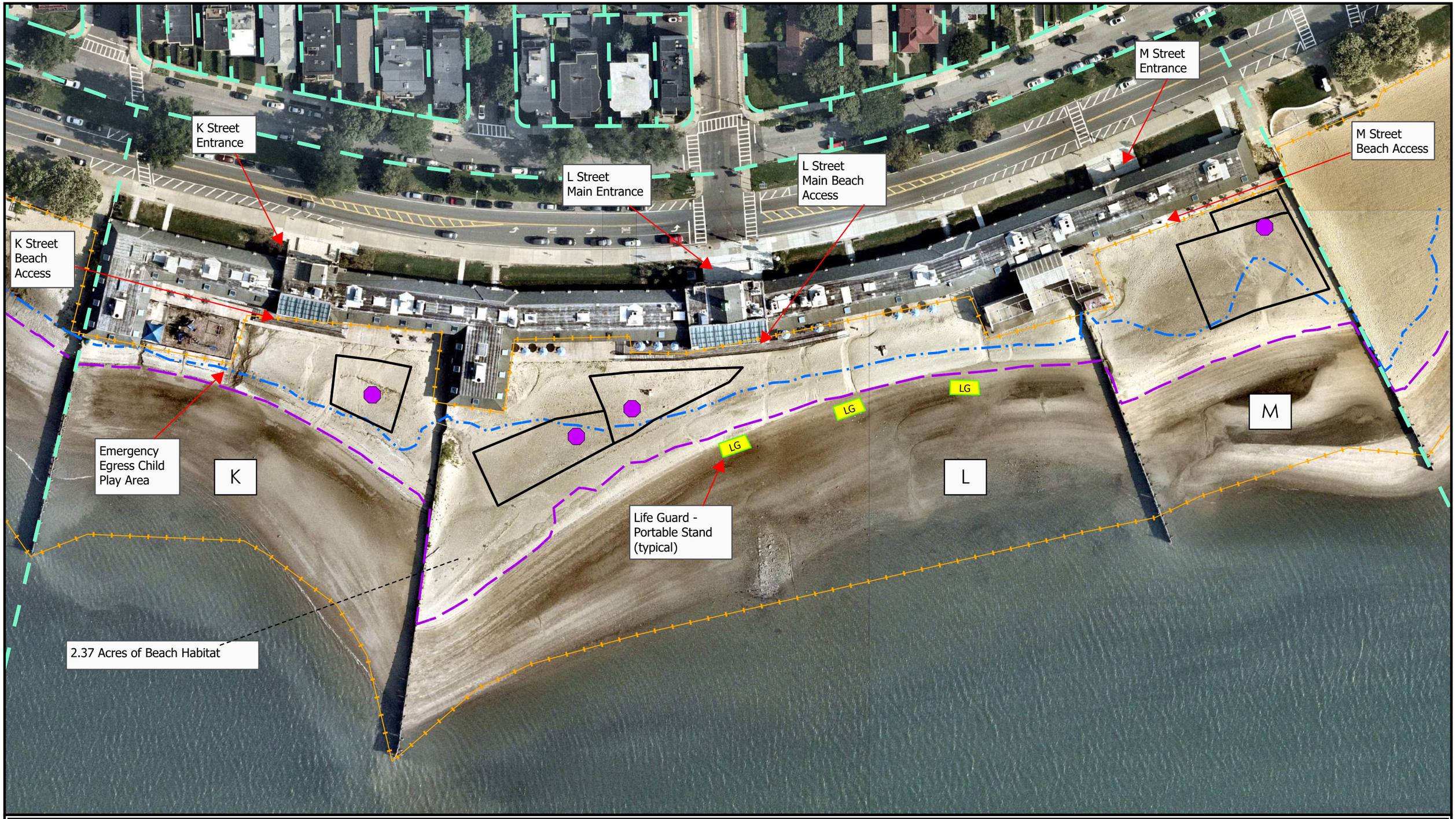


Figure 3. Aerial Map

Curley Center

March 2024

2023 Nest

2023 Nest Fencing

High Tide Line (app. 13.14 ft BCB)

Mean High Water Line (app. 10.8 ft BCB)

Priority Habitats of Rare Species

Parcel Boundary

N

0 40 80 160 240 Feet

1 inch = 80 feet

CDM Smith

Piping Plover are listed as Threatened under MESA and the species' Atlantic population is listed as Threatened under the U.S. Endangered Species Act (16 U.S.C. §1531 et seq.) (ESA) and is also protected under the Migratory Bird Treaty Act (16 U.S.C. §§ 703-712 et seq.) (MBTA).

There is approximately 2.37 acres of beach habitat on K/L/M beaches above the mean high-water line, as depicted by the maximum fencing footprint as shown on Figure 4.

2.4 Piping Plover Natural History and Site Occupancy

The Piping Plover is a small, sand-colored shorebird that nests above the high-tide line on sandy, coastal beaches. Its backside plumage is sand colored or pale brownish gray, and white breast with a black breastband that may form a complete circle. Its forehead, cheeks, and throat are also white with a black streak on the forecrown, and yellow-orange legs and bill (NHESP 2015a). Nests consists of sand scrapes or sand, gravel, and shell combinations. Nests are built on bare stretches of sand or in areas with sparse to moderately dense beach grass and other dune flora (NHESP 1993). Piping Plovers eat tiny marine worms, mollusks, insects, and crustaceans that they graze for on mud flats, along the shoreline, and in the wrack line (NHESP 2015a).

Massachusetts has the largest breeding population of Piping Plovers along the Atlantic Coast with an estimated total number of breeding pairs statewide for the entire 2022 breeding season of 1,033 pairs (NHESP 2023). The species shows high breeding fidelity and return to their breeding ground in late March or April. Both adults line the male plovers' modest hole on the ground with tiny pebbles. Both sexes contribute to the process of incubation, which lasts 25 to 28 days. Piping plovers' chicks are precocial and leave the nest shortly after hatching (NHESP 2015a).

The Mass Audubon CWP has documented utilization of the K/L/M Beach by Piping Plovers since 2018 (see Table No. 1 below). Based on these observations and the fact that the entire site has viable nesting areas, this Beach Operations and Maintenance Plan (OMP) applies to the entire Curley Community site including the K/L/M beach areas.

Table 1. Piping Plover Site Utilization and Productivity 2018-2023 (Mass Audubon CWP)

Year	# PIPL Pairs	# PIPL Fledges	Fledges/Pair
2018	1	0	0
2019	1	4	4
2020	1	3	3
2021	2	5	2.5
2022	4	5	1.25
2023	4	6	1.5

2.5 Threats to Piping Plovers at the Site

Piping Plovers are especially susceptible to human disturbances because they are ground nesting birds that make their home on open, sandy shorelines. Along with habitat loss, breeding and rearing success is threatened by vehicular/equipment and foot traffic along with increased predator populations attracted to human refuse and unmonitored pets. In addition to climate change vulnerability from rising water temperature and water levels, changes to coastal ecologies

also impact the birds' prey populations (insects and small aquatic invertebrates) and modifications to shoreline topographies may make nests more vulnerable to tidewaters, storms, and winds.

Section 3

Beach Operation and Management Plan

In 2023, the applicant prepared and NHESP approved a Beach OMP compliant with the regulatory standards and guidelines and informed by several years of experience with successful monitoring/protection of piping plovers at the site. This HCP submittal incorporates the Beach OMP as approved and described below.

3.1 Approved Shorebird Monitor

The City will use the Mass Audubon CWP to monitor the beach for state-listed species in advance of and during the 2024 nesting season. In 2023, the City of Boston entered into a Waterbird Management Agreement with Mass Audubon for the Curley Community Center site during the 2023 nesting season. It is anticipated that this Agreement will be utilized as framework for CWP monitors to protect nesting plovers at the site moving forward. The monitors will implement appropriate beach OMP protocols, collect observations and provide reporting and data.

The City has successfully employed monitors at the site since 2018. The CWP monitors will work with the public to discourage behaviors or activities that could harm the nesting plovers. In the event this does not stop inappropriate activities, should they be occurring, the monitors will report he activities to the Curley Center staff who will take further actions up to and including notifying law enforcement or animal control. The CWP staff are on site to monitor activities, the City is responsible for management and enforcement at the site.

Monitors will conduct site visits with a suitable frequency in accordance with their judgement and the breeding status of shorebirds on site. Typically, monitoring is conducted on a daily basis during the height of the nesting season and beach usage, and less frequently in early or late portions of the season (such as pre-nesting or post-fledging of young).

The City and CWP will maintain good communication throughout the season to effectively respond to changing beach conditions and incidents. The City will relay any relevant observations made by center staff to the monitor during times when the CWP is not on site. The City staff will also be responsible to engage the public and to discourage behaviors or activities that could harm the nesting plovers when the CWP staff are not on-site. In addition, the CWP monitors will be engaged to support the beach management activities described herein.

The City, through the CWP, will manage the beach in accordance with the *Massachusetts Tern and Piping Plover Handbook: A Manual for Stewards* (Blodget and Melvin, 1996) and other available established regulatory guidance.

3.2 City Staff Training and Responsibilities

In April and/or May of each field season, the CWP will conduct a brief (1 hour) training with the Curley Community Center's program director and staff, lifeguards, and the site's maintenance staff. This training will cover Piping Plover biology, beach utilization, regulatory protections, and

anticipated management measures. Other management elements will be emphasized, such as the importance of trash management, stipulations/constraints on the beach recreation areas along with considerations for larger beach events. As stated above, the City staff are responsible for management and enforcement at the site.

The training will emphasize and empower the City's staff with a clear directive to document and communicate any potential shorebird disruptions, this is important since CWP staff cannot be on site at all times. The City anticipates additional directives from CWP and NHESP that will establish management protocols ahead of the 2024 season and beyond in accordance with regulatory requirements.

As the property owner, the City's mandate for staff operating at the site will include the following:

1. Recording observed infractions within the site in a daily log when the CWP monitors are not on-site. These observations can include instances and descriptions of beachgoers entering the fence, off-leash, and leashed dogs in or near the fencing, and aerial disturbance such as kites. This tallying can be facilitated by radio and logbook.
2. This documentation will be shared with CWP on a regular basis for inclusion in reporting.
3. When no qualified monitor is present on site, a designated City representative will notify any person engaging in activities not permitted at the site that their action(s) are in violation of the rules and regulations of both the owner and potentially in violation of state and federal regulations and guidelines.
4. The City will notify the appropriate enforcement authority for any prolonged disruption.
5. The City will notify CWP staff of moderate to severe disruptions so further documentation of (e.g., dog tracks in fencing, crushed eggs, etc.) can be performed by qualified monitors in a timely manner).
6. Additional observations unrelated to human disturbance, such as presence of predators in or near the symbolic fencing or the observation of a plover nest established outside the fencing, will also be relayed to CWP in a timely manner.

3.3 Winter Beach Clean-Up

Prior to anticipated occupancy of nesting piping plovers on the K/L/M Beaches, the City maintenance staff will conduct beach clean-up including removal of accumulated natural debris and trash that have washed up from winter storms. This activity will occur no later than March 15th each year. This spring clean-up will be performed using hand removal and/or mechanized beach raking. This cleanup would be conducted before installation of preemptive symbolic fencing.

3.4 Preemptive Symbolic Fencing

A qualified shorebird monitor will install symbolic fencing and warning signs on or before April 1st of each year to restrict pedestrian access to shorebird nesting areas. This fencing will consist of wood and/or fiberglass posts connected by twine. The extent of the preemptive fencing will be

consistent with the preemptive fencing depicted in the CWP's 2023 fencing and nesting diagrams (Figure 5 in Section 5 and Figure 6 in Section 66), to protect core habitat on K/L/M beaches. These areas shall remain fenced as long as viable eggs, unfledged chicks, or territorial or courting Piping Plovers are present. All fenced areas shall be managed in accordance with the NHESP BMP 2021 Guidelines.

Preemptive fencing will be deployed at the discretion of the qualified monitor to fully protect target Piping Plover habitat. The fence will be maintained in good condition and adjusted as needed (see Section 3.6 below).

3.5 Signage

The shorebird monitor will install appropriate signage along the symbolic fence line to designate the areas within the symbolic fencing as off-limits. Additional educational signage on shorebirds may be installed to inform pedestrians about the off-limits areas. Any damaged signage will be documented by CWP and/or the City. Replacement signage will be installed as needed.

3.6 Symbolic Fencing Adjustments

In response to nesting locations, plover brood movements and foraging patterns, the shorebird monitor may expand/adjust fencing footprints throughout the nesting season. Any damage to the fencing (e.g., downed stakes or cut/torn twine) will be immediately repaired. Reasonable and compliant reductions in fencing footprint may be appropriate at the discretion of the monitor (i.e., upon observation of fledged chicks). Other adjustments to fencing, such as the addition of a second tier of twine (i.e., dog line) may be added in high traffic areas or in response to disturbance.

Ideally, fencing is deployed to protect areas with 50 yards of nesting Piping Plovers. Adjustments to symbolic fencing may only be performed by CWP staff or other experienced staff deemed qualified by NHESP.

3.7 Beach Raking Provisions

In accordance with Condition No. 3 of NHESP's conditional No Take permit issued on July 7, 2023, any beach raking during April or May will only occur if a CWP monitor first has determined the locations of all territorial birds and those territories have been fenced and are excluded from raking so as not to deter prenesting birds. Furthermore, if state-listed nesting birds are present during April 1 – August 31, then raking will occur as infrequently as possible, it must be conducted outside of fenced areas and in accordance with the NHESP BMP Guidelines, 2021.

a. If, due to imminent health or human safety concerns, mechanized cleaning must occur within 100 yards of unfledged chicks, vehicles must be guided by a qualified shorebird monitor who has first determined the locations of all unfledged chicks.

b. For the benefit of beach-nesting birds, from April 1 through August 31, mechanical beach cleaning that reduces the amount of wrack (seaweed and other organic debris) at the tide line should be minimized. If wrack is present in typical volumes and does not contain much human trash or present a health risk, it should be left in place. Trash within the wrack line must be removed by hand whenever feasible, leaving in place the majority of the wrack. If copious

amounts of wrack present a health risk or are a public nuisance that necessitates removal, leave in place at least one-third of the fresh wrack from a normal tidal cycle to provide foraging and sheltering opportunities for shorebirds (per the 1994 United States Fish and Wildlife Service Beach Management Guidance). Material collected by beach raking operations at K/L/M Beaches will be hauled away and disposed of off-site.

All motorized equipment on the beach during April 1 – August 31 will comply with the NHESP BMP 2021 Guidelines. All equipment, utility vehicles (non-emergency) and beach rakes will avoid areas of symbolic fencing and will not travel within 100 yards of unfledged Piping Plover chicks, unless the CWP monitor is able to locate and track all unfledged chicks.

In the event that mechanical raking is not possible, hand raking may be allowed depending on the specific site conditions. Any raking activities will be coordinated with the debris and trash management activities discussed below so that they occur on the same day to limit the potential for disturbance of nesting plovers. The CWP monitor will be present during both activities.

The main goal of this raking is to groom the beach while reducing any partially buried trash that was not detected by staff and to also reduce the amount of wrack and blown natural material that may have accumulated above the HTL. A qualified monitor will be present at all times for all raking events, particularly when there are unfledged chicks on the beach. There will be no raking within symbolic fencing. All raking must be conducted under the supervision of a CWP monitor, including manual raking. Staff will use a hand-rake where feasible (NHESP BMP Guidelines, 2021) and upon consultation with the CWP shorebird monitor.

3.8 Debris and Trash Management

Debris, including organic material and anthropogenic debris, will be removed from within the limit of work on the beach, other resource areas, and buffer zones (including the City's Waterfront Area) on a weekly basis. The weekly debris and trash management activities will be coordinated with the raking activities discussed above so that they occur on the same day to limit the potential for disturbance of nesting plovers. The CWP monitor will be present during both activities.

Depending on the size of the material, debris may be removed using a small front-end loader and/or other mechanical equipment when other means are not feasible, and the debris must be moved for overall public safety considerations (i.e., large pieces of debris that may wash ashore). Collected debris will be removed and disposed off-site. The weekly raking activities will be coordinated with the debris and trash management activities discussed below so that the occur on the same day to limit the potential for disturbance of nesting plovers. The CWP monitor will be present during both activities.

In accordance with Condition No. 5 of NHESP's conditional No Take permit issued on July 7, 2023, trash or debris within fenced areas occupied by beach-nesting birds will only be removed if it presents a hazard for birds or people. It will be removed by hand. Removal will be conducted by, or under the immediate supervision of a qualified shorebird monitor who has first determined the locations of all nests and unfledged chicks.

3.9 Documentation of Predation and Other Issues

The monitor will record and photograph evidence of predator activity on the site and describe changes in predator activity in regular weekly reports. All predation events of shorebird eggs, young, or adults will be fully documented to the greatest extent practicable. Other observations of natural disruptive phenomenon, such as nests lost to over wash, will be recorded. City staff, to the extent feasible, will relay any pertinent observations of predator activity to CWP staff.

3.10 Documentation of Anthropogenic Disruption

The monitor will document all relevant (NHESP-required and CWP standard) observations of human- caused disruption and/or impacts to nesting shorebirds and provide these observations to NHESP and the City in weekly and final season reports. The monitor will work with the City NHESP, other enforcement authorities, and the public to find solutions that limit any disturbance.

Along with taking steps to limit or discourage anthropogenic disruption (including enforcement), the City will implement an observation and tally system for human-caused disruptions to shorebirds at the site, particularly for times when shorebird monitors are not on site. The training provided under Section 3.2, above, will highlight the importance of the center' staff participation in these observations as well as describe which observations are to be recorded.

3.11 Interaction with Public and Education

The CWP shorebird monitor will engage members of the center and public at their discretion if active disruptive activities are observed. Additional educational engagement with guests and the public may be conducted to answer questions related to management of the property for protected species. The City will provide all new members of the Curley Center with an information packet containing public education materials related to protection of the piping plover on the site.

When the shorebird monitor is not on-site, designated City staff will inform members of the public engaging in disruptive activities of the regulations with the goal of averting continued disruptions.

Prolonged and/or disruptions will be escalated to the relevant enforcement authorities and the CWP will be notified in case immediate documentation by a qualified monitor is required to assess impacts.

3.12 Events

Moving forward it is anticipated that the event level on the beach will increase with use of the site. As new events or activities are planned, consideration will be given to the nesting activities and conditions on site. As described below, the City will work with the CWP monitors to coordinate future events including the size/scale of the event and to identify if the monitoring staff will be required (and the appropriate number of CWP monitors required) for the event (including potentially during event set-up and breakdown). Events that could cause disturbance of the plovers will not be held at the site. If an event at the site is causing disturbance based on the observations of the CWP monitor, the event will be adjusted to address the concerns of the monitor.

The number of participants in future events will vary greatly but a typical event could attract a few dozen to a few hundred attendees. Prolonged disturbance or increased disturbance magnitude is not anticipated, including for large events. Coordination with the CWP shorebird monitor will ensure that these events are monitored when necessary, and beach policies adhered to, with any event setup positioned as far from nesting birds as is feasible. Under this HCP, the City of Boston will coordinate with NHESP (and the CWP shorebird monitor) for any large events (outside of typical daily beach utilization) that are planned for the site and will occur between April 1st and August 31st of each year to ensure that the piping plovers are protected appropriately.

In the future as the activity level increases, the BCYF will furnish the qualified shorebird monitor with a schedule of events at the Curley Center where it is anticipated the beach would be used in addition to the passive recreation activities which will occur during the beach operation. Advance notice of at least one week will be given to the monitor of substantial events such that special monitoring coverage can be scheduled, if required. Events involving large groups and/or temporary equipment on the beach will be conducted at the furthest extent feasible from active pairs and the symbolic fencing. Events using accessible beach areas outside the symbolic fencing may not require dedicated monitoring and may be no more impactful than typical beach utilization.

3.13 Beach Sports

The site currently has racquet ball courts and a playground area close to the building at each end of the site. These areas will continue to be used for recreation. Future use of the beach area for sport activities will be planned so that the activities are located as far away from the symbolic fencing and nesting shorebirds as is practicable. The City and the shorebird monitor may consider installation of measures (i.e., additional and/or taller fencing in areas of beach sports) to prevent balls and other equipment from entering nesting habitat, depending upon site conditions and anticipated activities. In addition, the City will enhance public outreach to site users engaged in beach sports and the City may limit use of certain areas of the site (beyond fencing) for beach sports (as needed) based on actual nest locations and consultation with the shorebird monitor.

Only qualified monitors shall enter the shorebird fencing to retrieve blown equipment; no guest, member of the public, or general City staff-member shall enter the fencing. The City staff and CWP will ensure adequate signage to ensure no guest enters the fencing to retrieve balls. Spare equipment will be readily available to facilitate this. Any necessary adjustments to anticipated beach sports will be communicated by the qualified monitor to City staff. Due to the proximity of shorebird nesting to the existing courts and playground area, the limits of the fencing will vary year to year based on nesting patterns.

3.14 Dog Policy

The City does not allow off-leash dogs on the property and generally does not allow any pets in the beach area except for service animals to comply with the Americans with Disabilities Act (42 U.S.C. ±12101) (ADA). Members of the public access the site from the adjacent beach with leashed and off-leashed dogs at times, which have been documented by CWP in past seasons. Signs indicating dogs are not permitted on the beach shall be installed on the existing wooden fence at

each side of the site. The shorebird monitor(s) contracted by the City will engage members of the public accessing the site with a dog and inform them that dogs are not permitted. Any disturbance resulting from the presence of leashed or off-leash dogs will be documented by the monitor. City staff will also document presence of dogs when CWP staff are not on site. The City Staff will be instructed to tell people who enter the site with dogs (whether leased or not) to leave the site. As established in 3.11 above, dog owners violating this policy on the Curley Center site will be notified to the greatest extent feasible and applicable enforcement authorities called should disturbance persist.

3.15 Off-Road Vehicle Usage

No off-road vehicles are to be used within habitat on the property during the shorebird nesting season (from approximately April 1st to September each year), with the exception of public safety emergency vehicles (Police, Fire, EMS) deployed in extraordinary circumstances (beyond the control of City staff or the monitors). While law enforcement all-terrain vehicle (ATV) patrols have not historically been an issue here, the qualified monitor will note the use of any non-essential municipal/state vehicles used in non-emergency situations. If this becomes an issue, the City and/or its representatives will engage with the municipal or state agency responsible for the vehicle use. The shorebird monitor will record any observations of off-road vehicle access of the site, including evidence of tire tracks, and any discernable or potential impacts to nesting shorebirds.

The only anticipated motorized equipment to be used is beach-raking equipment described in Section 3.7 above. Under no circumstances will the City use motorized vehicles (i.e., ATVs, utility task vehicles [UTVs]) on the beach during the nesting season.

Motorized vehicles may be used on the beach outside of the shorebird season (off-season between October 1 and April 1).

3.16 Non-Motorized Vehicle Usage

The City does not permit beach bikes (i.e., fat-tire bikes) on the Curley Center site (during nesting season or during off-season). The shorebird monitor will record any observations of beach bike access of the site, including evidence of tire tracks and any discernable or potential impacts to nesting shorebirds. The monitor will engage members of the public to notify them of the policy. If activities such as beach biking become an issue, activity-specific signage will be deployed accordingly. Enforcement actions will be taken by the City as needed.

3.17 Anthropogenic Aerial Disturbance

The City and the shorebird monitoring team understand the general guidelines prohibiting kite-flying, drones and/or other aerial disturbance within 200 yards of nesting, territorial adult, or unfledged juvenile Piping Plover (NHESP, 1993). The City does not allow recreational kite-flying or drone use on the site or in the vicinity of the symbolic fencing.

Fireworks are not discharged on the property, though there have been instances where members of the public access the property and discharge fireworks illegally. The City staff and the qualified

monitor will strive to deter these occurrences and document any unapproved use. Enforcement actions will be taken if/as needed.

3.18 Reporting to NHESP

As is currently the case with the ongoing monitoring for the 2023 nesting season, the qualified shorebird monitor will furnish all necessary annual reporting to NHESP. Additionally, weekly reports on shorebird nesting, observations of predator activity and predation, and issues regarding human-related disturbance to the City and NHESP will be submitted as required. Additional reporting will include counts during Piping Plover census windows as well as furnishing of final data and observations via PIPLODES data forms. The City will regularly furnish the CWP with any observations collected during periods where they are not on site.

3.19 Adaptation of Beach Management Over Time

The Applicant recognizes that many factors which inform this Beach OMP may necessitate ongoing discussion with regulators and qualified monitors, with reevaluation of management practices on the site. These factors include changes to shorebird occupancy on the site (i.e., number and species), breeding success, beach morphology, predation pressure, anthropogenic disruptions, regulatory status of listed species, development/refinement of beach management techniques, and others.

3.20 Public/Pedestrian Compliance

Members of the public access the beach along and below the HTL from the adjacent DCR beach areas. While signage and engagement by shorebird monitors and City staff may aid in relaying information to the public and possibly curb disruptive activities. Any issues or impacts to state-listed species from the public will be documented and addressed to the greatest extent feasible. The City of Boston will engage enforcement authorities such as the Boston Police Department (BPD), the Massachusetts Environmental Police or the City of Boston Animal Control, if required to address disruptions of the nesting plovers at the site. To support the HCP implementation, the City staff have proactively notified the BPD Commander for District C-6 (South Boston) of the potential need for police to help with enforcement. Email correspondence between City staff and BPD is included in Appendix E.

Any members of the public engaging in restricted activities will be engaged by the shorebird monitor and/or City staff and asked to cease the disruptive activity or leave the property. Documentation of interactions and any impacts to rare species will be included in the monitor's reporting.

Section 4
Regulatory Compliance

The Beach Operation and Maintenance Plan (Beach OMP) for the Curley Center Site was prepared in accordance with the regulatory requirements of MESA and the Endangered Species Act (the ESA). In addition, this document was prepared to address the requirements of the current BCC Order of Conditions for the site and the requirements of the NHESP approval of the recent improvements at the site as described above.

4.1 Massachusetts Endangered Species Act (MESA)

MESA protects listed species and their habitats by prohibiting the unauthorized "Take" of any plant or animal species listed as Endangered, Threatened, or Special Concern. In reference to animals, “Take” means to harass, harm, pursue, hunt, shoot, hound, kill, trap, capture, collect, process, disrupt the nesting, breeding, feeding or migratory activity or attempt to engage in any such conduct, or to assist such conduct. Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to, the modification, degradation or destruction of habitat.

The management of Curley Community Center beach habitat, under this OMP, promotes the functionality of protected shorebird habitat and mitigates and prevents impacts to shorebirds that could otherwise result in a Take under MESA.

4.2 U.S. Endangered Species Act

The Endangered Species Act (the ESA) establishes protections for fish, wildlife, and plants that are listed as threatened or endangered; provides for adding species to and removing them from the list of threatened and endangered species, and for preparing and implementing plans for their recovery; provides for interagency cooperation to avoid take of listed species and for issuing permits for otherwise prohibited activities; provides for cooperation with States, including authorization of financial assistance; and implements the provisions of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).

This beach OMP upholds the federal ESA protections for Piping Plover, listed as Threatened in the Atlantic population region, and upholds practices at the Curley Community Center that avoid a Take under ESA.

4.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements a series of international treaties to ensure the sustainability of populations of all protected migratory bird species. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS. Piping Plover is one of the migratory birds protected under the MBTA, and the measures of this Beach Operation and Maintenance Plan uphold the MBTA’s provisions.

4.4 Massachusetts Wetlands Protection Act

The wetlands resource areas and buffer zones at the Curley Center site are described in Section 2.1. The Boston Conservation Commission (BCC) administers the Wetlands Protection Act (WPA) in the City of Boston. The Curley Center site has an existing OOC under the WPA for the implementation of the Beach OMP (DEP File No. 006-1950).

4.5 Massachusetts Environmental Policy Act

An Environmental Notification Form was filed with the Massachusetts Environmental Policy Act (MEPA) Office for the Curley Community Renovation Project and MEPA issued a Certificate for the Curley Community Center Renovation Project on July 10, 2020, stating that the project does not require an Environmental Impact Report (EIR) (EEA No. 16223). It is not anticipated that a Notice of Project Change (NPC) will be required since the HCP will not meet or exceed any MEPA review thresholds. The proposed disturbance to designated priority habitat is approximately 0.46 acre which is less than 2 acres. Greater than two acres of disturbance of designated priority habitat, as defined in 321 CMR 10.02, that results in a take of a state-listed endangered or threatened species or species of special concern would trigger additional MEPA review 301 CMR 11.03(2)(b).

4.6 Regulatory Best Management Practices

This OMP reflects state regulatory guidance as relayed in the Mass DFW's 1993 Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns, and Their Habitats in Massachusetts. Similarly, this BMP reflects federal regulatory guidance under the USWFWS's 1994 Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitat on the U.S. Atlantic Coast to avoid a Take under Section 9 of the Endangered Species Act.

4.7 Other Approvals and Permits

4.7.1 Wetlands Jurisdiction

CDM Smith Inc. on behalf of BCYF, will share the HCP document with the Boston Conservation Commission and attend a public meeting if required to seek a letter of support to include written confirmation that there will be no impacts to wetland resource areas as a result of the implementation of the HCP and that no further review is required by the Boston Conservation Commission.

CDM Smith Inc. anticipates the issuance of a support letter from the Boston Conservation Commission pursuant to the OOC for the Beach OMP (DEP File No. 006-1950).

4.7.2 Beach Management Plan Approval

NHESP reviewed and approved the Beach OMP (NHESP File No. 23-8347) on July,7, 2023 (see Appendix A). The Boston Conservation Commission also issued an OOC under the WPA and City of Boston Wetlands Ordinance for the implementation of the Beach OMP (DEP File No. 006-1950)

Section 5

Habitat Conservation Plan Covered Activities

The City seeks specific regulatory relief under a Certificates of Inclusion (COI) for anticipated impacts to Piping Plover that may occur from the proposed implementation of Covered Activities in accordance with Chapter 3 of the MA DFW Habitat Conservation Plan for Piping Plover Handbook (2016). These Covered Activities have the potential for Take under MESA and ESA and would be covered under an Incidental Take Permit (ITP) issued by USFWS. A successful inclusion under a COI would allow for limited, specific flexibility concerning regulatory best practices on shorebird fencing and beach management. Portions of activities described below represent deviations from the Beach OMP, described in Sections 3 and 4. Implementation of these Covered Activities accomplish the stated goal of an increase in viable recreational area and event space at the Curley Community Center's beach. Impact minimization details and required monitoring for each of the activities described below can be found in the Impact Avoidance and Minimization Plan (IAMP; Section 7). As described in the IAMP, should a Piping Plover nest in areas intended for exclusion/deterrence, fencing must be immediately erected, and the nest protected.

5.1 Recreational Programing Associated with Reduced Fencing Around Nests

The City is proposing a selective and limited reduction in standard fencing buffers from Piping Plover nests. The 1993 State Guidelines for Piping Plover Protection Measures listed that at a minimum, a 50-yard radius area around nests and chicks above the high tide line should be delineated with symbolic fencing. The NHESP HCP Guidelines (2016) stipulates a typical "50-yard" (45.7 meter) buffer to nests above the HTL. Symbolic fencing refers to one or two strands of light-weight string, tied between posts to delineate areas where pedestrians and vehicles should not enter.

The City is proposing selective reductions to nest fencing which will not comply with the 50-yard radius area around the affected nest(s) due to the unique configuration of the site and to allow for public safety access around the site. The selective fencing as proposed will not reduce the fencing buffers placed to nests in previous monitoring years. The City will maintain retained fencing buffers for affected nests to the maximum area possible without impacting recreational priorities in accordance with the information presented in this HCP. It is our understanding that reductions below 10 yards may be possible in certain rare circumstances for a nest located in close proximity to a critical beach access point. The City needs to maintain a 15-ft wide path for access to the Curley Community Center's M Street gate to William J Boulevard. A monitoring procedure has been developed to modify the symbolic fence (refer to Section 7.4).

NHESP and the CWP will make the final determination what minimum fencing buffers can be used. Generally, NHESP may authorize up to 30% of pairs at a site to be subject to Covered Activities resulting in Take exposure. NHESP staff indicated during preapplication virtual meetings that reduced fencing buffer under the HCP can be applied to 50% of Piping Plover nests at the site.

Based on 2022 and 2023 plover occupancy of four pairs at the site, this would effectively mean reduced fencing for up to two pairs at K/L/M Beaches. Figure No. 4 shows the nest locations and fencing limits in 2023, Figure No. 5 shows the next locations and fencing limits in 2021 and Figure No. 6 shows the fencing limits and next locations in 2022.

Note that the implementation of reduced proactive symbolic fencing (Section 5.2, below) may effectively result in reduced fencing buffers to territorial and nesting Piping Plover. Any reductions to fenced habitat conducted under this Covered Activity may not impact more than 20% of the nesting habitat on site, inclusive of initial proactive fencing reductions as described below. A sample fencing reduction pattern is shown in Figure No 4.

5.2 Recreational Program Use Associated with Reduced Proactive Fencing of Habitat with Deterrence

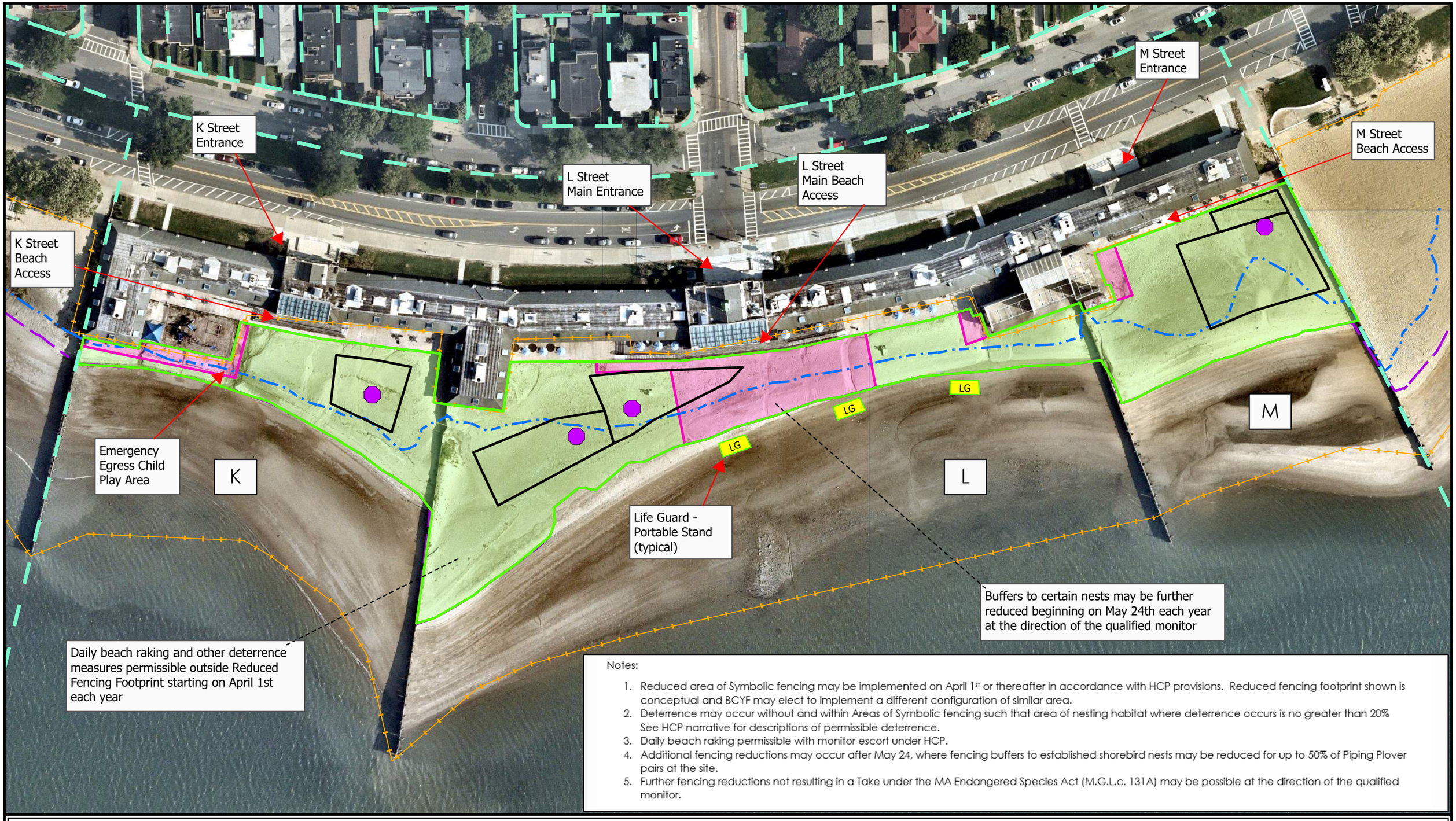
The City is proposing to reduce the proactive symbolic fencing buffers from Piping Plovers nests with deterrence as a Covered Activity under this HCP. NHESP has indicated BCYF is eligible to receive permission for up to a 20% proactive fencing reduction, whereas the typical proactive fencing reduction is limited to 10% of available nesting habitat or 2 acres, whichever is less (DFW 2016).

With ±2.37 acres of available nesting habitat on site, as depicted on Figure Nos. 3 and 4, the resulting reduced fencing footprint cannot be less than ±1.9 acres (a 20% reduction) between April 1st and May 24th of each nesting season. As shown on Figure No. 4, the City is proposing approximately a 0.34-acre reduction in symbolic fencing which is approximately a 14% reduction in the 2.37 acres available for the 2024 nesting season. Special conditions for monitoring and impact minimization of this Covered Activity are described further in the IAMP.

Reduced proactive fencing footprints were developed within permissible constraints to address the operation priorities of K/L/M Beaches. For instance, an alternative reduced proactive fencing footprint to the one depicted in Figure No. 4 could be erected, prioritizing a corridor to the water through the L Street Beach section and beach access along the building to the playground on K beach, with greater fencing on K and M beaches to compensate. Special conditions for monitoring and impact minimization of this Covered Activity are described further in the IAMP. Figure No. 4 depicts a preemptive 14% fencing reduction, though different layouts of consistent area may be implemented in different years.

The City will coordinate, with the qualified shorebird monitors and with the NHESP, implementation of reduced proactive symbolic fencing each year so as to confirm the limits and the number of take exposures resulting from this activity.

Additional symbolic fencing buffer reductions to pairs not covered under the HCP may also be possible if these reductions can be cautiously carried out with no observed impact to these pairs by qualified shorebird monitors. Such reductions would occur outside the scope of this HCP and in consultation with NHESP.



Notes:

1. Reduced area of Symbolic fencing may be implemented on April 1st or thereafter in accordance with HCP provisions. Reduced fencing footprint shown is conceptual and BCYF may elect to implement a different configuration of similar area.
2. Deterrence may occur without and within Areas of Symbolic fencing such that area of nesting habitat where deterrence occurs is no greater than 20% See HCP narrative for descriptions of permissible deterrence.
3. Daily beach raking permissible with monitor escort under HCP.
4. Additional fencing reductions may occur after May 24, where fencing buffers to established shorebird nests may be reduced for up to 50% of Piping Plover pairs at the site.
5. Further fencing reductions not resulting in a Take under the MA Endangered Species Act (M.G.L.c. 131A) may be possible at the direction of the qualified monitor.

Figure 4. Proposed Symbolic Fencing under HCP

Curley Center

March 2024

- 2023 Nest
- 2023 Nest Fencing
- High Tide Line (app. 13.14 ft BCB)
- Mean High Water Line (app. 10.8 ft BCB)
- Symbolically Fenced Nesting Habitat (2.37 ac)
- Conceptual 14% Fencing Reduction Footprint (.34 ac)
- Priority Habitats of Rare Species
- Parcel Boundary

N

0 40 80 160 240 Feet

1 inch = 80 feet

CDM Smith

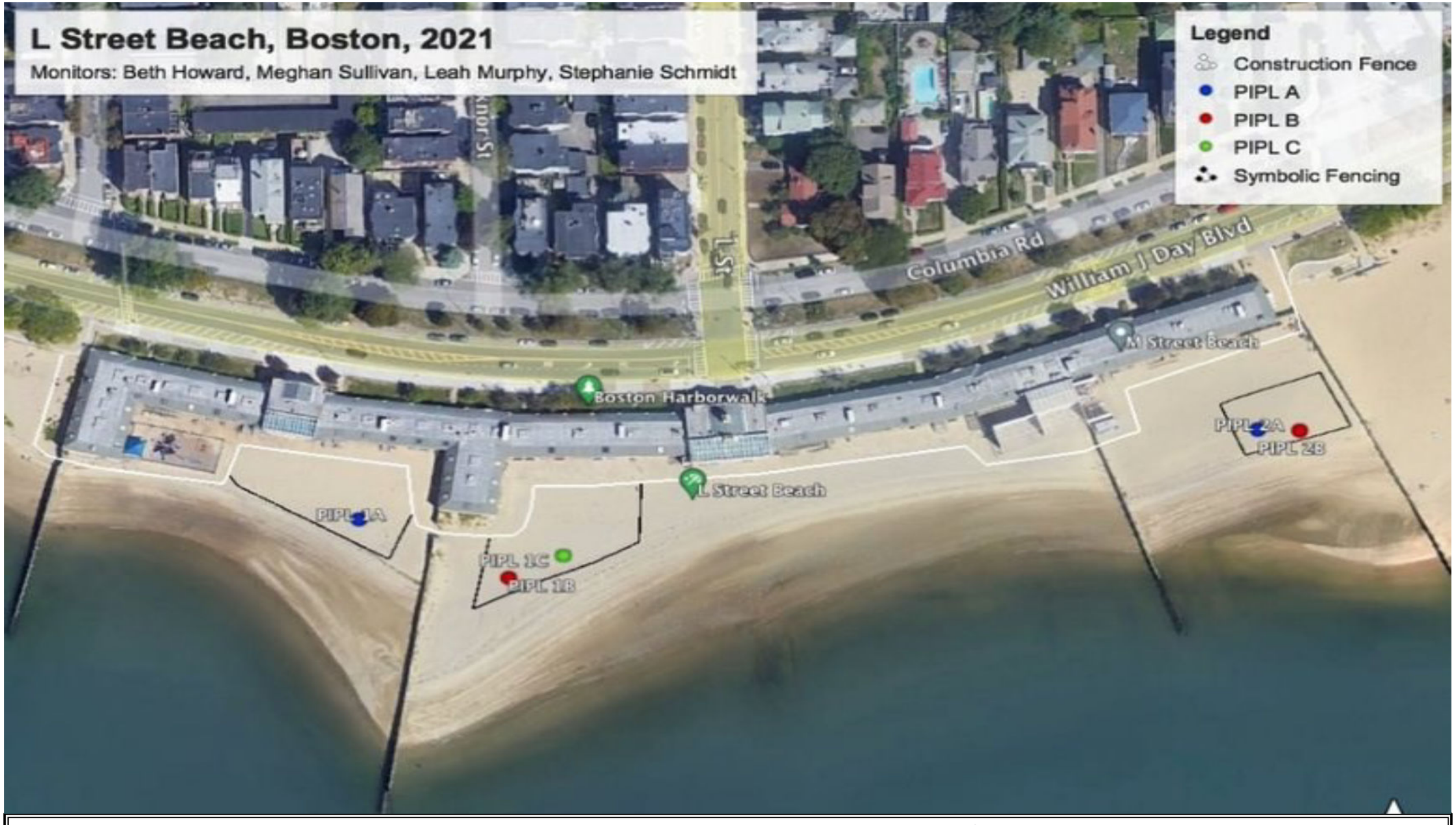


Figure 5. 2021 Nests and Fencing

Curley Center

March 2024

0 40 80 160 240 Feet

1 inch = 80 feet

CDM Smith

Figure 6. 2022 Nests and Fencing

Curley Center

. March 2024

N

0 40 80 160 240 Feet

1 inch = 80 feet

CDM Smith

The City proposes a range of viable deterrence strategies for approval under the COI to work in tandem with reductions in proactive symbolic fencing as well as with reduced fencing buffers. These deterrent measures would only apply to areas subject to reduced proactive fencing or to shorebird pairs covered under the HCP. These strategies can be implemented in up to 20% of nesting habitat on the site, including areas within symbolic fencing where fencing reductions are anticipated, assuming symbolic fencing reductions have not yet surpassed 20% in a given season.

The strategies described below would not necessarily all be implemented concurrently, with some possibly never implemented. If approved, they represent a range of strategies that the qualified monitor can consider that will in turn assist the City with site management and operational goals within the confines of the HCP.

These strategies are described here with additional implementation provisions in the IAMP.

5.2.1 Frequent Beach Raking

NHESP has recommended frequent mechanized beach raking as a deterrent to discourage nesting in areas earmarked for expanded recreational beach use under the HCP. The City is seeking permission under the HCP to conduct manual beach raking five (5) days per week, beginning in April to discourage the establishment of Piping Plover territories in areas designated for symbolic fencing reduction. In addition, mechanized beach raking would occur 1 time per week for the 2024 season.

All beach raking sessions would be compliant with the 2023 Order of Conditions. One or more qualified monitors will be present at all times for beach raking activities, to be accomplished as frequently as possible as monitoring availability allows (currently estimated at 5 times per week) Additional details are included in the IAMP. Beach raking would continue to take place across the site, including in areas outside the reduced footprint of symbolic fencing after May 24 for beach grooming purposes.

5.2.2 Strategic Monitor Deterrence

During monitoring sessions and coverage for special events, qualified shorebird monitors from the CWP will observe Piping Plover pair behavior and site utilization. Should a monitor observe Piping Plover territorial establishment and/or courtship outside of the symbolic fencing in areas designated for deterrence under this HCP, BCYF seeks permission for the monitor to provide proximity disruption on foot at a gentle walking pace. No adult Piping Plover would be chased. Placement of qualified monitors within strategic deterrence areas (i.e., the selected 20% fencing reduction zone) may gently encourage the target pair or individual to cease habitat utilization outside the fencing at a critical point in time when other approved deterrence techniques cannot be immediately utilized. Other limitations are outlined in the IAMP.

5.2.3 Chick Herding

BCYF is proposing that NHESP allows for a qualified monitor to perform chick herding in response to brood movements into deterrence zone(s). Furthermore, should broods stray into critical areas and/or beach events, approval for this deterrence would allow monitors to safely encourage broods to relocate back to retained, fenced areas. Herding activities consist of gentle corralling and encouragement through coordinated and controlled movements by trained

monitors. Only a s slow walking pace would be allowed, and no broods will be chased. Implementation of chick herding may reduce conflicts with approved beach use under the HCP while avoiding potential impacts to unfledged chicks in high use areas. This strategy would be subject to constraints and conditions to minimize impacts, as outlined in the IAMP. It should be noted that due to the Piping Plover pair coverage limit under the HCP, chick herding would only be performed for the brood of the two pairs impacted by reduced fencing and may not be performed on the additional pair(s) which would if it occurred constitute an unapproved Take.

5.3 Recreational Programing Associated with Piping Plover Nest Moving

The City through this HCP filing aims to increase flexibility and be able to utilize several approved piping plover management strategies to deal with a range of possible future conditions that may impact the operation of the Curley Community Center's summer activities. Nest moving approval is being included as an additional provision in very limited circumstances.

Unlike the reductions in symbolic fencing (Sections 5.1 and 5.2) which are intended to be implemented annually, nest moving represents a critical "last resort" provision to be considered under specific circumstances where reductions in fencing buffers would not suffice to alleviate a significant hardship to the center's beach operations. Nest moving would generally be avoided to the greatest extent feasible, and heavily conditioned, as outlined in the IAMP in Section 7.

Consideration for nest relocation would arise only in a situation where Piping Plover nesting occurs in a critical area that would heavily impact site access and business functionality. For example, a nest located within the 15-ft wide beach access along the building or immediately adjacent to the symbolic exclusion fencing could trigger a discussion on the feasibility of nest relocation in conjunction with consideration of alternatives, as described in the IAMP. With anticipated HCP coverage for a maximum of two Piping Plover Pairs per year, any implementation of nest moving could not result in exceeding pair impact limits. For instance, only one pair could be impacted by fencing reductions under HCP if a second pair was subject to nest moving and/or nest moving with reduced fencing buffers. It should be noted that areas where nest moving might be considered critical (e.g., beach and playground access points as shown on Figure Nos. 3 and 4) are areas where nesting has not historically occurred, further reducing the likelihood of its implementation.

Section 6

Impact Analysis: Take Exposures

The Covered Activities described in Section 5 of this document will potentially result in Take associated with up to two pairs of Piping Plover at the Curley Community Beach. These impacts can be both direct (i.e., nest failure or abandonment and chick mortality) and indirect (i.e., behavioral disruption to natural behaviors such as incubation). Specifically, reduced proactive symbolic fencing combined with reduced fencing buffers to nests will be associated with expanded use of the L beach for recreational program use. The additional deterrence measures described in Sections 5.2.1 to 5.2.3 will bolster the effectiveness of fencing reductions and may also have impacts on Piping Plover at the site.

6.1 Direct and Indirect Mechanisms for Take

The implementation of the Covered Activities listed in Section 5.0 may cause nesting adults to be disturbed or harassed, which could increase the likelihood that a nest will be abandoned and result in egg mortality. Inconsistent incubation may also lead to reduced hatch rates even if nest desertion doesn't happen.

Less direct Take impacts from increased recreational activity in areas of reduced symbolic fencing could also result in some increased disturbance, harassment, or harm of unfledged chicks after hatching, with fledge rates affected. Reduced nesting area could result in adult plovers nesting in poorer-quality habitat or face increased intraspecific competition, with deleterious effects to productivity. Pair relocation could result in nests located in areas more prone to over wash.

The proposed frequency of beach raking would increase, but it would still be done in compliance with approved processes and monitoring that reduce the risk of Take. Beach raking in conjunction with reduced symbolic fencing can be considered a single Take exposure under this HCP (DFW, 2016).

Nest relocation could potentially result in disturbance or harassment of nesting adults and carries a real risk of egg mortality through an increased risk of nest abandonment. Due to the potential of these impacts to occur, nest relocation is regarded as a last-resort tactic.

It is anticipated that the proposed Covered Activities will not raise adult mortality rates, especially as there are no ORV uses and the road is on the north side of the building.

6.2 Statewide Constraints on Take

Through the DFW's implementation of the statewide HCP across all sites, overall limitations on Take exposure and adaptive consideration to changing conditions will ensure direct, indirect, and

cumulative effects to Piping Plover are considered. The state further allocates approval for limited scenarios of reduced proactive symbolic fencing where no greater than 50% of Take exposures on all Piping Plover breeding territories can be attributable to this covered activity in any year (DFW, 2016). The 2016 HCP guidance document describes the Commonwealth's quantification of productivity impacts across all sites in the context of HCP implementation.

6.3 Site-Specific Productivity Impacts

Productivity impacts can be calculated based on historic fledging success however pair occupancy and productivity can be quite variable on a small and relatively narrow site such as K/L/M Beaches and therefore a lower and upper limit of productivity is typically used. The 5-year average fledging success rate at the site is 2.45 fledges per pair. Assuming a maximum of two Piping Plover pairs subject to Take under the HCP, an approximate conservative annual estimate assuming a 50% reduction in fledging success would indicate 2.45 fewer fledges would be produced from this site per year. A more realistic estimate of 25%, quoted in HCP guidance, would amount to 1.22 fewer fledges at the site per year.

K/L/M Street Beaches generally enjoys higher productivity than the state average. Applying an average productivity of 1.2 fledges/pairs (a benchmark value at which the state Piping Plover population replacement is met) yields an upper bound (50%) impact estimate of 1.8 fewer fledges per year and a more realistic (25%) estimate of 0.9 fewer fledges per year at the site (Melvin and Gibbs 2006).

The total nesting habitat affected will not be greater than ±0.34 acres (approximately 14% of the available nesting habitat on site) before May 24th each year, though acreage impact may be greater following that date through fencing buffer reductions under the HCP and other discretionary reductions undertaken in consultation with NHESP and CWP outside of the HCP that do not result in Take (as discerned by qualified monitoring staff).

Section 7

Impact Avoidance and Minimization Plan

7.1 Site Information and Background

This Impact Avoidance and Minimization Plan (IAMP) calls for a detailed site description, Piping Plover habitat characterization, site operations, and ownership details, and Beach OMP. This information is provided above in Sections 1 through 4. Figures 3 through 6 depict the Site and existing and proposed shorebird fencing management. A stand-alone IAMP document with this information can be prepared ahead of NHESP approval and ITP application, as needed.

7.2 Responsible Staffing

The City has contracted with the Massachusetts Audubon's CWP to provide staffing and support required for the IAMP implementation as well as for all monitoring and reporting for the site under the HCP. This will be in addition to the regular seasonal shorebird monitoring responsibilities similar to what Massachusetts Audubon's CWP staff provided in previous years. Additional IAMP support may be provided by CDM Smith Inc. if needed.

Staffing Roles are as follows:

Edward McGuire, BCYF Director of Operations. Mr. McGuire will be the main point of contact for BCYF. BCYF will communicate HCP implementation expectations and operational needs to CWP staff such that approved measures, such as reduced symbolic fencing, can be implemented on the beach in a manner consistent with BCYF's operational needs and a manner compliant with the requirements of this permit.

Lyra Brennan, Director of CWP for Mass Audubon. Ms. Brennan is the main contact for the CWP. CWP staff will implement the IAMP and other general monitoring requirements for the site, including reporting and coordination. Ms. Brennan will delegate field responsibilities to qualified seasonal staff at CWP, and additional experienced CWP staff may provide coordination and reporting for the HCP.

Magdalena Lofstedt, Environmental Scientist at CDM Smith Inc. Ms. Lofstedt is primary HCP preparer and IAMP preparer. CDM Smith will continue to work with NHESP, CWP, and BCYF following the submittal of this application as materials are finalized. While CDM Smith Inc. may continue to provide limited support to this site following approval, CWP will provide the primary implementation of required coverage associated with the ITP and IAMP.

Appendix C provides CWP staff qualifications for the Mass Audubon personnel. Under current anticipated monitoring efforts, site coverage will occur approximately 5 days a week. Seasonal staff tenure may vary but typically extends from early April through early September.

CWP will have sufficient staffing to implement the protocols of this HCP, including documenting any and all impacts to Piping Plover, fulfill monitoring objectives, and provide and reporting. Specific protocols are described in Appendix F which includes CWP's sample NestStory and HCP log forms.

CWP's provisional budget (Appendix F) estimates monitoring at a frequency of 5-7 days per week, with beach raking occurring 5 days per week and overall site supervision and monitoring available up to 7 days a week as needed. Thus, this HCP anticipates a greater frequency of daily monitoring, potentially multiple monitoring sessions per day (i.e., raking, productivity monitoring, and/or special events), with an average of 5 days per week where monitoring would occur. The budget for CWP shorebird monitors in 2024 is $49,418 versus an expense of $9,700 for the 2023 season representing an increase of more than 400%.

7.3 IAMP Provisions for Covered Activities

Section 5 details the range of Covered Activities proposed that could result in Take to Piping Plover. The IAMP provisions, herein, address the conditions and requirements of each component of Covered Activities to minimize impacts and promote compliant management of the site. Cumulate impacts from multiple Covered Activities shall not result in Take to greater than two pairs of Piping Plover.

7.3.1 Recreational Programming at Piping Plover Nests Associated with Reduced Symbolic Fencing Around Nests

The reduction of symbolic fencing currently shown on Figure 4 buffer distances to nests will be applied to up to two pairs of Piping Plover. K/L/M Beaches management will relay operational priorities to CWP staff, such that target nesting habitat can be identified for fencing reductions, resulting in reduced buffers to nests.

The following IAMP implementation and monitoring protocols shall be implemented by CWP for this covered activity:

- Fencing will be reduced only to the extent necessary to achieve specific recreational or beach operations objectives.
- CWP will track the amount of fenced habitat such that reductions would not surpass 20% of available nesting habitat (±0.47 acres) ahead of May 2024.
- Beginning on May 24th, fencing may be further reduced beyond a 20% reduction, assuming all implementation and monitoring protocols are followed.
- Symbolically fenced buffers to Piping Plover nests will typically not be reduced to less than 10 yards.
- According to 2016 DFW guidance, limited exemptions may be sought for buffers of less than 10 yards in critical areas based on "compelling need". This may be a preferable alternative to nest moving (Section 7.3.3).

- For all instances of reduced buffers, a larger initial fencing footprint would be implemented, particularly during egg laying and for the first 24 hours following clutch completion. The extent of this larger temporary buffer will be determined at the discretion of the qualified monitor.
- When fencing reductions are implemented, fencing distance from the nest will be gradually reduced, in increments of approximately 2 yards, no more than once daily.
- While fencing reductions resulting in potential impact to nesting Piping Plover may only be performed for the pair limits specified, additional discretionary reductions may be carefully performed by the monitor for pairs not covered by the ITP, assuming there are no resulting disruptions or other observed impacts to those additional pairs.
- With HCP implementation monitoring anticipated at five days per week, any novel HCP action or anticipated impact must be scheduled such that sufficient compliance and effectiveness monitoring can be conducted by CWP staff.
- Compliance monitoring will document all instances of implementation of this Covered Activity (dates, times, areas, staff, site conditions, # pairs). Additionally, CWP will document that all other regulatory guidelines are being followed.
- Effectiveness of reduced fencing buffers to nesting pairs will be assessed, including observations of incubation consistency, related nest failure, or other behavioral impacts.
- Monitoring must be conducted immediately following fencing reductions as well as during anticipated high recreational use (large events in proximity to fencing, weekend recreation following fence reduction, and implementation of novel deterrence measures under 7.3.2, below).
- Monitoring frequency may vary thereafter in accordance with what stage of season (i.e., monitoring duration and frequency may reduce following Piping Plover fledging).

7.3.2 Recreational Programming at Piping Plover Nests Associated with Reduced Proactive Symbolic Fencing and Deterrence

The reduction of proactive symbolic fencing within nesting habitat, with up to a 20% reduction, may be implemented at once on April 1 of each year, or selectively implemented. This Covered Activity may only impact up to two pairs of Piping Plover. BCYF management will relay operational priorities to CWP staff, such that a compliant preliminary fencing footprint can be established. This reduced proactive may vary year to year based on BCYF's operational and beach use objectives. For instance, the proposed proactive fencing maintains a 15-ft pedestrian corridor adjacent to the concrete walkway and pedestrian access to the water on L Street Beach however variations to this proposed plan may be applied.

To facilitate the reduction in fenced habitat, BCYF proposes five deterrence strategies to be implemented in areas where proactive fencing has been reduced or where fencing is planned on being reduced.

These five deterrence strategies are described in Section 5 and are:

- Frequent Beach Raking
- Deployment of Cover Materials
- Installation of Staked Deterrents
- Strategic Monitor Deterrence
- Chick Herding

IAMP implementation and monitoring protocols to be implemented by CWP for this Covered Activity partially overlap with protocols for Section 7.3.1, above, and are:

- At least 80% of nesting habitat at the site must remain fenced and unimpacted by Covered Activities before May 24. The greatest amount of proactive fencing feasible shall be maintained while achieving operational objectively in compliance with this plan.
- CWP will track the amount of fenced habitat such that reductions would not surpass 20% of available nesting habitat (±0.47 acres) ahead of May 24 for both proactive fencing reductions and fencing buffer reductions to nests.
- Proactive fencing reductions in April may inherently result in reduced buffers to subsequent nests, though protocols for reduced, progressive fencing reductions (as outlined in 7.3.1) will be followed to the greatest extent feasible. This includes increased monitoring during and immediately following egg laying.
- Fencing reductions resulting in potential impact to nesting Piping Plover may only be performed for the pair limits specified. Additional discretionary reductions may be carefully performed by the monitor for pairs not covered by the ITP, assuming there are no resulting disruptions or other observed impacts to those additional pairs.
- With HCP implementation monitoring anticipated at five days per week, any novel HCP action or anticipated impact must be scheduled such that sufficient compliance and effectiveness monitoring can be conducted by CWP staff.
- Deterrence measures, such as beach raking, must not occur over an area of beach greater than 20% of the nesting habitat. Deterrence measures may be permissible within symbolic fencing anticipated for reduction if that area limit is maintained and there are no impacts to pair numbers beyond those covered under the HCP.
- Deterrence measures can provide benefits of ensuring that pairs nest away from high recreational use zones and reduce the chance that pairs nest in unfenced areas.
- Beach raking shall be conducted multiple times a week and as frequently as every day. Beach raking frequency may only be limited by CWP staff availability. One CWP staff member must be on site for each active brood in the vicinity of the raking.

- Beach raking will be conducted in accordance with best management practices and the conditions of a 2023 Order of Conditions.
- The use of boards or other ground cover methods to deter nesting activity will be limited to very early in the breeding cycle, before active courtship, or at the latest at the onset of a pair engaging in territorial behavior and or scraping.
- Boards, pallets, plywood, or other sturdy sheet material used as cover deterrence must be sufficiently anchored so as to not be subject to movement in high wind.
- The precise specifications for staked deterrents will be established with NHESP ahead of the field season and implemented by CWP on site. Staked deterrents, such as mylar streamers, must not produce a zone of impact to shorebird nesting habitat larger than 20% of available habitat and is additive with other deterrence and Covered Activities.
- BCYF proposes the selective use of staked deterrents, where feasible, over the course of the nesting season. This will facilitate the retention of a deterrence zone for recreation in 20% of available habitat on site, including during periods of Piping Plover nesting and during brood rearing.
- Strategic monitor deterrence includes opportunistic gentle encouragement by qualified monitors on site. This may apply to adults, particularly territorial individuals or courting pairs utilizing areas within the zone of intended exclusion. Under no circumstances will unqualified persons conduct any activity that is designed to impact Piping Plover site utilization. This deterrence method will not be implemented for any pair that has begun nesting. No adults or chicks will be chased, and deterrence will be conducted at a slow walking pace, if needed.
- Chick herding will be selectively performed only by qualified CWP staff in limited circumstances where a brood is present in either areas critical to the Curley Center operations or an area designated for exclusion with an expressed immediate operational goal. Examples of situations where this may be employed include herding broods out of an area where a special event is being set up, herding chicks away from an area where beach sports are being played, or herding chicks away from a critical operational feature (e.g., beach access location).
- Chick herding shall not be conducted for broods of pairs that are not covered under the HCP. Chick herding can be implemented for up to two broods of Piping Plover who may have been subject to other Covered Activities. Additional discussion with NHESP is warranted ahead of the implementation of the HCP in regard to chick herding.
- Incorporation of alternate deterrence strategies may enable the reduction of beach raking frequency, for which BCYF and CWP anticipate a 2023 frequency of 5 times per week (though BCYF is requesting permission for daily raking under this HCP if required in future years).

- Any Piping Plover that nests outside the symbolic fencing despite deterrence strategies must be immediately protected with adequate symbolic fencing and deterrence ceased in the immediate vicinity of the nest.
- Compliance monitoring will document all instances of implementation of this Covered Activity (dates, times, areas, staff, site conditions, # pairs). This includes documentation of beach monitoring protocols and required reporting to the Boston Conservation Commission is conducted. Additionally, CWP will document that all other regulatory guidelines are being followed.
- Monitoring will also document any direct or indirect impacts of recreational beach use and events to Piping Plover pairs at the site (pairs that are either covered under the ITP or not).
- Compliance and effectiveness monitoring will document occurrences of chick herding and note both positive effects (e.g., decreased risk of mortality away from active recreational or event area, encouragement of site occupancy within fencing) as well as deleterious effects (e.g., disruption of foraging, temporary separation of chicks from adults).While the average number of monitoring sessions may be closer to five times per week for CWP staff over the course of the season, daily monitoring will likely be required upon initial installation of reduced fencing, particularly in mid-late April and May.
- While DFW guidelines indicate more rigorous monitoring shall be required if additional deterrence (such as boards) is implemented beyond initial fencing reductions, Efficacy Monitoring has the potential to collect valuable data on the safety and deterrence consistency of implemented measures. This may enable a reduction in monitoring in future years based on established successes in implementation.
- Effectiveness of reduced fencing buffers to nesting pairs resulting from reduced proactive fencing will be assessed, including observations of incubation consistency, related nest failure, or other behavioral impacts.
- Effectiveness of individual applied deterrence will be assessed and included in reporting.
- Monitoring must be conducted immediately following fencing reductions as well as during anticipated high recreational use (large events in proximity to fencing, weekend recreation following fence reduction, and implementation of novel deterrence measures under 8.3.2, below).
- Aside from the implementation of monitored deterrence measures, such as beach raking, monitoring frequency may vary thereafter in accordance with what stage of season (i.e., monitoring duration and frequency may reduce following Piping Plover fledging).

7.3.3 Recreational Programming at Piping Plover Nests with Nest Moving

Nest relocation represents a “last resort” measure to be sparingly considered and implemented. Other Covered Activities will be prioritized to respond to critical operational and site use needs. Nest moving must not result in combined impacts to more than the allotted number of Piping Plover pairs included under the Incidental Take Permit (ITP).

Implementation of nest moving by CWP staff or other approved entities must directly be overseen by DFW NHESP staff and adhere to the following conditions:

- Nests will not be moved until at least 48 hours after the clutch is completed.
- Nests will not be moved during inclement weather, in extreme heat, or during evening hours, including two hours prior to sunset.
- An appropriate relocation site will be chosen in suitable habitat that minimizes the movement distance.
- The DFW may approve a greater movement distance in order to minimize disturbance to the nest after relocation, or disruption of breeding by adjacent pairs.
- Nests will be moved using the "cylinder/plate/platform method" (Gordon and Kruse 1999). This method allows the intact nest cup, with eggs, to be moved intact in a large cylinder pressed into the substrate around the nest. The excavated nest is then placed on a platform with adequate drainage to allow for rapid repeated movement of the nest over small distances, if necessary.
- Any visual landmarks (i.e., rocks, sticks) are moved with the nest to serve as visual cues. If a nest is located in cobble, it will be moved by re-creating a new nest cup at the new location (on a platform if multiple moves are anticipated), as the cylinder method would not be feasible in that substrate (for details, see Gordon and Kruse 1999).
- DFW NHESP will directly oversee and participate in nest moving the first-time nest moving is attempted at a given site and anytime new personnel are approved by DFW NHESP to implement nest moving at a given site.
- DFW NHESP will train monitors in nest moving techniques and will only approve monitors to move nests who have at least one-year prior experience in shorebird monitoring.
- Nests will be moved gradually to reduce the risk of abandonment. The first move will generally be less than 15 feet; however, distances may vary site by site. If incubation is not resumed within 1.5 hours, the nest will be moved halfway back to the original nest location and monitored for signs of incubation. If incubation is observed at the relocated nest, the nest will be monitored for 90 minutes to ensure consistent incubation behavior before attempting to move the nest a second time. The nest may then be moved repeatedly, up to two times per day, in increments of inches following this monitoring procedure. The DFW may allow up to three movements per day once procedures for repeated nest-moving have been tested and proven. If inconsistent incubation or significant distress behavior is observed, nest movement will be halted and resumed the next day.
- If the first attempt to move the nest is unsuccessful, nest moving may be attempted again the following day. In cases where parent birds fail to accept the moved nest, the DFW NHESP will be consulted to determine the best course of action.

- The DFW NHESP may modify the recommended nest moving procedures as new information becomes available as part of the adaptive management plan for this HCP.
- The nests that are moved will be monitored from a distance to confirm acceptance and incubation per the procedures described above. Nests will continue to be monitored regularly until hatching in accordance with the Guidelines and statewide monitoring efforts.
- Compliance monitoring should include more intensive monitoring of the nest during and following relocation. Observations and outcomes of impact minimization should be documented and reported to inform best management practices for this uncommon procedure.
- There will be a detailed consideration of alternatives prior to any implementation of nest moving.
- Effectiveness monitoring will document any related nest failure or mortality associated with this Covered Activity.

7.4 Monitoring

Example monitoring logs will be provided to NHESP ahead of annual HCP authorization in the late winter/early spring. Both compliance and effectiveness monitoring will incorporate specific monitoring requirements outlined for each of the Covered Activities and deterrent measures in the IAMP (Section 7.3).

7.4.1 Compliance Monitoring

Compliance monitoring will be carried out by CWP staff in tandem with IAMP implementation and general site monitoring. The primary objectives will be:

- Ensuring site-specific Take exposure limits are not exceeded for Piping Plover.
- Documenting avoidance, minimization of impacts, and general adherence to shorebird management guidelines outside of Covered Activities.
- Documenting avoidance and minimization of impacts/Take associated with implementation of Covered Activities.

Detailed logs will be maintained and furnished to DFW of initiation date(s) for covered activities with the numbers of pairs, broods, nests, and chicks exposed, with a site-specific approach for the Curley Center's Covered Activities documented on a daily basis. Monitoring times, durations, and staffing will also be tracked along with documentation, timing, and frequency of activities such as installation of symbolic fencing, monitoring of plover activity, beach patrols, enforcement of ordinances such as leash rules, timely implementation of temporary prohibitions on non-essential vehicle use. CWP staff will maintain a log and invoices to document that the mitigation plan is carried out by qualified personnel in accordance with the DFW-approved site-specific IAMP and budget.

DFW will be notified at least 24 hours in advance of initiation of any covered activity and when covered activity ceases.

7.4.2 Effectiveness Monitoring

Effectiveness monitoring will be carried out by CWP with the main objective of ensuring that the effects of covered activities and associated minimization measures are consistent with achieving the biological goals and objectives.

Key monitoring elements included are:

1. Ensuring adequate monitoring of population size, nest, fledging success, and causes of nest failure and mortality.
2. Observations of Piping Plover disturbance and mortality associated with covered activities in annual reporting.
3. Recommendations to increase the effectiveness of impact minimization measures. Additional elements for inclusion in effectiveness monitoring are:
4. Monitor predation rates and species-specific predator activity (e.g., track counts) to inform management. Note that selective predator management is not proposed at the Curley Center. These metrics may be opportunistically tracked to improve future general shorebird management at the site.
5. Monitor educational program reach and effectiveness and enforcement effectiveness. Note that an increase in educational efforts or coordination with law enforcement is not a key component of K/L/M Beaches Take mitigation. These metrics may be opportunistically tracked to improve future general shorebird management at the site.
6. Monitor changes in vegetation and piping plover habitat use within the habitat improvement area. Note that vegetation management is not a key component of K/L/M Beaches Take mitigation, though optional habitat improvements/adjustments are considered in Section 8.1, below. Opportunistic observations assessing any evidence of shifts in habitat use elsewhere on-site in response to shifts in site conditions could inform future management.

7.5 Budget

The budget for compliance monitoring to be implemented by CWP staff in tandem with IAMP implementation and general site monitoring in 2024 is $49.418. A breakdown of the 2024 budget is provided in Appendix F.

Section 8

Conservation and Mitigation Actions

The HCP guidance sets parameters whereby selective predator management, habitat improvements, and increases in public outreach and educations, can offset the impacts from unavoidable Take arising from Covered Activities. The amount of required mitigation is scaled to the specific covered activities and the permitted number of exposures. BCYF is not at this time proposing predator management or substantive improvements to habitat quality proposed that meet mitigation requirements. Furthermore, BCYF is also not planning to use public outreach to meet the mitigation requirements however BCYF will conduct their own public outreach and will continue to support the public outreach efforts by CWP as part of the educational mission of the Curley Center.

Per the HCP guidance, the mitigation requirement for the covered activity recreation and beach operations is 2.5 pairs of plovers for every pair of plovers exposed to Take (i.e., 2.5:1) or a payment of $5,800 per take exposure which will fund off-site mitigation.

8.1 Annual Off-site Payments and Costs

BCYF's Take mitigation will rely on off-site mitigation payments deposited into an escrow account ahead of each field season. Funding assurance and escrow documentation will be provided to DFW ahead of Plan approval and implementation.

Based on correspondence with NHESP and HCP filing guidance, BCYF anticipates off-site mitigation payments to escrow for an anticipated Take of two pairs of Piping Plover. This will result in an annual escrow payment of $11,600, based on $5,800 per pair including a portion of said funds for other conservation actions such as law enforcement and education. BCYF anticipates that the off-site mitigation payment can fully mitigate the on-site Piping Plover impacts through benefits to off-site habitat and pairs.

BCYF also anticipates an annual budget of approximately $50,000 for the CWP's provisional annual NTE implementation, monitoring, and reporting as required by this HCP.

Section 9
Alternative to Take

The ESA requires that applicants for an ITP specify what alternative actions to the Take of federally listed species were considered and the reasons why those alternatives were not selected. BCYF considered 2 alternatives to the proposed/preferred scenario resulting in Take.

9.1 Reduced Take Alternative

BCYF considered scenarios with reduced Take, such as those whereby fewer than two pairs may be subject to Take. Other scenarios considered involved fewer Covered Activities, such as a scenario of a reduced buffer of symbolic fencing around nests without proactive symbolic fencing reduction. Another alternative scenario considered involved the removal of the nest moving from Covered Activities. The Curley Community Center is the only community center operated by the BCYF with direct coastal beach access. Scenarios of reduced Take are not viable alternatives given the relatively small size of the beach. A reduction in the proactive reduced fencing proposed on L Street beach would not allow for direct access to the water and would not allow the BDYF to run the waterfront recreation program. BCYF seeks authorization for impacts on up to two pairs of Piping Plover to allow for recreational programming on L Street beach vital to the operation of the community center during the summer months. BCYF has received encouragement from NHESP and CWP staff to seek relief under the Covered Activities proposed to achieve greater flexibility for the operation and management of the summer youth programs while remaining compliant with HCP and general beach management guidelines.

9.2 No-Take Alternative

A scenario without entry into the HCP and no resulting Take would not accomplish the specific management and operational goals set out by the BCYF and the City of Boston for operation of the recreational programming at the Curley Community Center. If the Curley Community Center is denied HCP plan entry, monitoring staff would not have approval to implement actions that create flexibility for K/L/M Street Beaches while still protecting the majority of nesting habitat on site. Entry into the HCP as proposed would allow qualified monitors to implement the HCP actions while minimizing impacts to the greatest extent feasible and complying with requirements of the IAMP and regulatory guidance.

Appendix A

NHESP Beach OMP Decision Letter – July 7, 2023

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

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July 7, 2023

Marta Rivera
Boston Centers for Youth and Families
1483 Tremont Street
Boston MA 02120

Boston Conservation Commission
Boston Environment Department
1 City Hall Plaza, Room 709
Boston MA 02201

RE: Applicant: Marta Rivera, Boston Centers for Youth and Families
Project Location: 1663 Columbia Road, Curley Community Center
Project Description: Beach Operations and Maintenance Plan
NHESP File No.: 23-8347

Dear Applicant & Commissioners:

On June 30, 2023, the Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent (NOI) and Beach Operations and Maintenance Plan for the Curly Community Center Beaches in compliance with the rare wildlife species of the Massachusetts Wetlands Protection Act Regulation (310 CMR 10.37). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the Massachusetts Endangered Species Act (MESA) (MGL c.131A) and its implementing regulations (321 CMR 10.00).

The Division has determined that the Beach Operations and Maintenance Plan (BOMP) for the Curly Community Center Beaches will occur **within** the actual habitat of the following species:

Scientific Name	Common Name	Taxonomic Group	State Status
Charadrius melodus	Piping Plover	Bird	Threatened*

State-listed species and their habitats are protected in accordance with the MESA and rare wetland wildlife habitat is protected pursuant to the rare species provisions of the WPA. *The Piping Plover is federally protected as "Threatened" pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11).

Piping Plovers nest on sparsely vegetated, sandy areas of coastal beaches and dunes. Their nests are comprised of shallow depressions in the sand that may be lined with shell fragments or pebbles. Nests for this species are particularly vulnerable to predators, unleashed pets, and human disturbance. Piping Plover chicks are not capable of flight for 25-30 days after hatching, and during this period they must feed themselves with parents in attendance, often ranging widely to forage during this period of rapid growth. Fact sheets for state-listed species can be found at www.mass.gov/nhesp.

In 1993, the Division published *Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns, and Their Habitats in Massachusetts* ("Guidelines"). The Guidelines contain recommended procedures for managing recreational activities to ensure compliance with the MESA and its implementing regulations. The U.S. Fish & Wildlife Service published similar guidelines in 1994 and issued an amendment in 2015 ("Federal Guidelines"). The Beach Operations and Maintenance Plan (BOMP) for the Curly Community Center Beaches incorporates the Guidelines associated with the operation and management for the Curly Community Center Beaches.

The purpose of the Division's review of the BOMP under the WPA regulations is to determine whether the project will have any adverse effects on the Resource Areas Habitats of state-listed species. The purpose of the Division's review under the MESA regulations is to determine whether a Take of state-listed species will result from the BOMP. Based on the information provided and the information contained in our database, the Division finds that the BOMP, as currently proposed **must be conditioned in order to avoid adverse effects** to the Resource Area Habitats of state-listed wildlife species (310 CMR 10.00) and **must be conditioned in order to avoid a prohibited Take** of state-listed species (321 CMR 10.18(2)(a)). **To avoid adverse effects and to avoid a prohibited Take of state-listed species, the conditions attached to this letter must be met.**

Provided the attached conditions are included in any approving Orders of Conditions issued by the Conservation Commission, and the applicant complies with all the above noted conditions, the project will not result in an adverse impact to the resource area habitats of state-listed wildlife species pursuant to the WPA and will not result in a prohibited Take pursuant to the MESA. A copy of the final Order of Conditions shall be sent to the NHESP simultaneously with the applicant as stated in the Procedures section of the WPA (310 CMR 10.05(6)(e)).

This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. This determination is valid for five years. We note that all work is subject to the anti-segmentation provisions (321 CMR 10.16) of the MESA. Any changes to the proposed project or any additional work beyond that described in the BOMP requires review and may require an additional filing with the Division pursuant to the MESA.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Amy Hoenig, Senior Endangered Species Review Biologist, at Amy.Hoenig@mass.gov.

Sincerely,

Everose Schlüter

Everose Schlüter, Ph.D.
Assistant Director

Cc: Robert O. Button, CDM Smith

Attachment: List of conditions

List of Conditions

Applicant:	Marta Rivera, Boston Centers for Youth and Families
Project Location:	1663 Columbia Road, Curley Community Center
Project Description:	Beach Operations and Maintenance Plan
NHESP File No.:	**23-8347**

Approved Plan: Beach Operations and Maintenance Plan (BOMP) – Curly Community Center, City of Boston, MA (dated 06/30/23)

To avoid adverse impacts to the Resource Area Habitat and to avoid a prohibited Take of state-listed species, the following condition(s) must be met:

1. **Beach Operations and Maintenance at Curly Community Center Beaches**: To protect state-listed species and their habitats during the shorebird nesting season, April 1 – August 31, beach management and operations located within state-listed species habitats must implement the protection measures detailed in the BOMP and the Guidelines, unless otherwise expressly approved in writing by the Division.

2. **State-listed Species Monitoring & Habitat Protection:** The Applicant has the responsibility of protecting breeding Piping Plovers that occur on the Curly Community Center Beaches. Regular monitoring for the presence of Piping Plovers must be conducted by a qualified shorebird monitor, as determined by the Division, during the period April 1 – August 31. Areas of Piping Plover habitat must be delineated with symbolic fencing and warning signs on or before April 1 each year. These areas shall remain fenced as long as viable eggs, unfledged chicks, or territorial or courting Piping Plovers are present. All fenced areas shall be managed in accordance with the Guidelines*.

   *Greater management flexibility for plovers (i.e., deviations from the Guidelines) can only be approved by the Division as part of a valid Certificate of Inclusion (COI) and MESA Conservation and Management Permit (CMP) associated with the Statewide Habitat Conservation Plan (HCP). If the Applicant does not have a valid COI & CMP or if they expire, then recreational use and beach management must be implemented with the protection measures specified in the BOMP and fully comply with the Guidelines.

3. **Beach Raking:** To protect state-listed species, any raking during April or May can only occur if a qualified monitor, as determined by the Division, first has determined the locations of all territorial birds and those territories have been fenced and are excluded from raking so as not to deter pre-nesting birds. If state-listed nesting birds are present during April 1 – August 31, then raking should occur as infrequently as possible, it must be conducted outside of fenced areas and in accordance with the Guidelines.

   a. If, due to imminent health or human safety concerns, mechanized cleaning must occur within 100 yards of unfledged chicks, vehicles must be guided by a qualified shorebird monitor who has first determined the locations of all unfledged chicks.

   b. For the benefit of beach-nesting birds, from April 1 through August 31, mechanical beach cleaning that reduces the amount of wrack (seaweed and other organic debris) at the tide line should be minimized. If wrack is present in typical volumes and does not contain much human trash or present a health risk, it should be left in place. Trash within the wrack line

must be removed by hand whenever feasible, leaving in place the majority of the wrack. If copious amounts of wrack present a health risk or are a public nuisance that necessitates removal, leave in place at least one-third of the fresh wrack from a normal tidal cycle to provide foraging and sheltering opportunities for shorebirds.

4. **Motorized Equipment**: All motorized equipment on the beach during April 1 – August 31 must comply with the ("Guidelines").
    a. All equipment, utility vehicles (non-emergency) and beach rakes shall avoid areas of symbolic fencing and shall not travel within 100 yards of unfledged Piping Plover chicks, unless the qualified monitor is able to locate and track all unfledged chicks.

5. Debris and Trash Management: Trash or debris within fenced areas occupied by beach-nesting birds should only be removed if it presents a hazard for birds or people. It must be removed by hand. Removal should be conducted by, or under the immediate supervision of, a qualified shorebird monitor who has first determined the locations of all nests and unfledged chicks.

6. Authorization Duration. This authorization is valid for 5 years from the date of issuance and limited to the project described herein.

7. Notice. Upon filing for renewal, extension, or amendment of the Orders of Conditions, the applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife. Any other Project or Activity not identified in the streamlined Notice of Intent application and located within Priority Habitat and Estimated Habitat as indicated in the Massachusetts Natural Heritage Atlas (14th Edition) must be submitted to the Division for review and written approval prior to implementation.

Appendix B

BCYF Aquatic Operations Manual

Boston Centers for Youth & Families Aquatic Operations Manual 2023

Boston Centers for Youth & Families
Michelle Wu, Mayor

Boston.gov/BCYF

@BCYFcenters

TABLE OF CONTENTS

Mission Statement

BCYF creates welcoming, inclusive, safe community spaces and meaningful services, in every neighborhood for all of Boston's residents to come together and thrive.

Key Programs

ADULT EDUCATION
We offer adult education classes at many of our community centers. They're great for people looking to improve their English skills or get ready for high school equivalency testing. The classes are focused on the students, and take place at times that are convenient for working adults.

AFTERSCHOOL PROGRAMS
Nearly all of our community centers offer after school programming for youth ages 6-12 that give youth a safe place to go and get help with homework and participate in enriching activities.

AQUATICS
Boston residents of all ages can learn to swim and enjoy activities and classes in our many pools. Each year hundreds of Boston youth join and compete in our swim league.

CAMP JOY
Our Camp Joy program has been around since 1946. It offers enriching and fun activities for children and young adults with special needs both in a 4-week summer program and in a Saturday program during the school year.

GIRLS INITIATIVE
We welcome girls of all ages and backgrounds to join us in becoming healthy, strong, confident, and successful women. The GIRLS Initiative (Growth, Intervention, Respect, Leadership, and Service for Girls) runs Girls Leadership Corps, Girls Nights, and helps our community centers develop and provide a welcoming environment and exciting programs for girls.

SENIOR PROGRAMS
Today's seniors want to be active, learn new things and keep up with technology. Our most popular programs reflect that. BCYF Senior Programs take place in all BCYF centers. We also have two stand-alone senior centers and five community centers with dedicated senior spaces.

SOAR PROGRAM
We work with youth, their families, and community members to help prevent youth violence. We've been mediating conflict and supporting Boston youth in need for more than 25 years. SOAR also connects youth and families with important resources.

SUMMER PROGRAMS
We offer many summer activities at our community centers across the City of Boston. These activities support healthy development and learning and encourage participants to build on their natural energy and creativity. Our programs include:

- summer camps and day programs,
- swimming,
- sports programs,
- neighborhood block parties,
- drop-in activities, and
- summer jobs.

TEEN PROGRAMS
Our teen centers and programs help youth prepare for school, work, and life. Our teen programs aim to foster self-worth, belonging and membership, responsibility, and autonomy, physical and mental health, civic and social ability, and intellectual ability.

Job Description: Lifeguard 1

Overview:
This is a provisional appointment.

Brief Job Description (essential functions of the job):
Under general supervision, assist in the maintenance of the entire pool facility, in compliance with local board of health regulations.

Responsibilities:
- Perform other pool related duties as requested.
- Perform a wide range of swimming instruction to community patrons.
- Comply with BCYF uniform regulations as required by local health code.
- Assist in the implementation of various pool programs and activities.
- Maintain accurate daily pool records as well as sustain sanitary conditions in and around the pool, locker rooms, shower and toilet areas.
- Ability to work flexible hours.
- Performs related work as required.

Minimum Entrance Qualifications:
- Qualified applicants must have current certification in ARC Lifeguard Training, certification in Standard First Aid, BLS-C.P.R. or comparable.
- Knowledge of pool health and safety standards preferred.
- Ability to work flexible hours.
- Applicants must be 18 years of age.
- Ability to exercise good judgment and focus on detail as required by the position.

C.O.R.I. check required. S.O.R.I. check required.

BOSTON RESIDENCY REQUIRED

Terms:

Union/Salary Plan/Grade:
SEIU/CC-6 Hours Per Week: 35

LIFEGUARDING

PREVENTION OF AQUATIC INJURIES

Communication with patrons

1. Inform patrons about the potential for injury - signs, depth markers, health department regulations, facility rules and regulation.
2. Educate patrons about the consequences of inappropriate behavior using the following example:
    a. Get patrons attention by alerting him/her of the hazard.
        i. "Excuse me, but what you are doing is dangerous."
    b. Explain what the hazard or danger is.
        i. "The water in this area is too shallow for diving."
    c. Explain how the camper might be injured.
        i. "Diving in shallow water can cause you to hit your head on the bottom and be injured."
    d. Say what to do to avoid being injured.
        i. "If you want to dive in the water, you may dive in the deep end when it is safe to do so."
3. Enforcing rules and regulations that prevent injury.

Patron Surveillance

Supervision ratios are 1 lifeguard: 20 swimmers or 12 campers or higher for camp groups.

Effective surveillance has four elements:

1. Recognizing how distressed swimmers and drowning persons behave.
2. Using appropriate scanning techniques to identify patrons in trouble in the water.
3. Proper stationing of lifeguards.
4. Knowing your area of responsibility.

Facility Surveillance

1. Safety checks of the facility.
    a. Opening safety check - done by opening supervisor or lifeguard.
    b. On-duty safety check - done by the head-lifeguard and supervisor.
    c. Closing safety check - done by the closing supervisor.
2. Tracking injuries using an accident/incident report
3. Weather as a potential hazard

RECREATIONAL SWIM

The swimming sessions typically consist of recreational swim. Lifeguards are stationed at specified areas to watch swimmers. At ALL times lifeguards on duty must **stay focused on the swimmers in the water** and look for dangerous situations. At the end of swim times, lifeguards must conduct swimmer counts and survey the swimming area to ensure all swimmers are out of the water.

State law requires a rope separating the shallow end from the deep end.

SWIMMER COUNT/SAFETY CHECK

Swimmer counts

Should be used with camps that use a BCYF Pool. During swimmer counts (Buddy Check Lines), all swimmers will line up with their designated counselor without talking. Lifeguards will count the number of swimmers and ask if anyone wants to get out of the water.
Camp counselors are responsible for assisting the guards with swimmer counts and accompanying the campers to and from the bathroom. Occasionally "lost swimmer drills" will be conducted.

Safety check

Shall be conducted during high-volume pool use every 45 minutes to ensure that everyone is safe. The designated Lifeguard will blow the whistle 2 times to have everyone sit at the edge of the pool. Lifeguards will check that everyone is out of the water and review a few rules to show that a controlled environment is to be maintained.

IN-SERVICE TRAINING

Lifeguards are required to complete in-service training on a monthly basis. Training may consist of: Emergency Action Plans, Lost Swimmer Search and Recovery Drills, CPR & First Aid, water rescues, chemical handling, bloodborne pathogen, etc.

These trainings shall be scheduled and monitored by the Aquatics Manager and/or the site's aquatic staff supervisor.

During the summer months, there will be weekly practice reviews and monthly in-services that will be supervised by the Pool Manager, Asst. Pool Manager, Program Supervisor, or the Administrative Coordinator.

Weekly Lifeguard Review Topics - Pool Sites - Summer 2023

Week of June 26	Checking a Responsive Person, Controlling External Bleeding, Secondary Assessment (using SAMPLE), Removing Disposable Gloves, Using a Resuscitation Mask, Moving a Victim, Primary Assessment - Pages: 335 – 338, 223 - 230
Week of July 3	Spinal Management: Face-up Victim, Face-down Victim, Submerged Victim, Spinal Back boarding Procedure and Extrication - Pages: 359-363, 366-369
Week of July 10	Entries: Stride jump, Compact Jump, Slide-in. Approach strokes, Simple Assist, Active victim front rescue, Active victim rear rescue, passive victim rear rescue, passive victim front rescue. – Pages: Pages: 169-170, 171, 173 - 178
Week of July 17	Multi-Victim Rescue, Passive Submerged Victim – Shallow Water, Passive Submerged Victim – Deep Water. - Pages: 179 - 184
Week of July 24	Extrication Using a Backboard, Quick removal for a small victim, Walking assists. - Pages: 185-188, 190-191
Week of July 31	Front Head-Hold Escape, Rear Head-Hold Escape, In-Water Ventilations - Pages: 198-199
Week of August 7	Giving Ventilations, Using a Bag-Valve-Mask Resuscitator, Choking, - Pages: 259-267
Week of August 14	CPR: Two-Rescuer CPR – Adult/Child, Two-rescuer CPR – Infant, Using an AED, CPR with airway obstruction. - Pages: 293 - 300
Week of August 21	Entries: Stride jump, Compact Jump, Slide-in. Approach strokes, Simple Assist, Active victim front rescue, Active victim rear rescue, passive victim rear rescue, passive victim front rescue. - Pages: Pages: 169-170, 171, 173 - 178
Week of August 28	(outdoor pools only) Ring Buoy, Shepherd Crook, Reaching Assist, Pool Checklist - Pages: 172

NOTE: This in-service is also for all new lifeguards, no matter when they begin employment

IN-SERVICE TRAINING FORM

This in-service should be done with all staff on DAY ONE of summer guard's employment. This should include all center staff.

Print Lifeguard Name:_____

Site:_____

Aquatic Training - Lifeguards June 2023

- ☐ **EMERGENCY ACTION PLAN – Review sites specific EAP and Calling 911 protocol See posted EAP and 911 calling protocol.**
- ☐ **Locate the AED in the facility**
- ☐ **Get all supervisors' cell phone numbers (in case of emergency)**

LIFEGUARD AND WATER SKILLS ASSESSMENT

- ☐ Activate EAP
- ☐ Appropriate Entry
- ☐ Appropriate Removal

Primary Assessment

- ☐ Tap the victim's shoulder "are you okay?"
- ☐ If no response, summon EMS personnel
- ☐ Open the airway
- ☐ Look, Listen and feel for breathing
- ☐ Feel for carotid pulse
- ☐ Quickly scan for severe bleeding
- ☐ Provide care as needed **there is breathing and pulse, Place victim in recovery position.

Print Lifeguard's name: _____

Lifeguard's Signature:_____

Date:_____

Manager's Signature:_____

Date:_____

BCYF GENERAL EMERGENCY ACTION PLANS

1 (ONE) LIFEGUARD ON DUTY

BCYF AQUATICS POLICY REQUIRES A MINIMUM OF TWO (2) LIFEGUARDS ON DUTY AT ALL TIMES TO HAVE A BCYF AQUATICS SITE OPEN.

2 (Two) LIFEGUARDS ON DUTY LIFEGUARD #1

INCIDENT
⇓
LIFEGUARD RECOGNITION OF VICTIM
⇓
BLOW 3 LONG WHISTLE BLASTS
⇓

LIFEGUARD #1	LIFEGUARD #2
⇓	⇓
CONTACT VICTIM	CALL EMS
⇓	⇓
MOVE VICTIM TO SAFETY	CLEAR POOL/CROWD CONTROL
⇓	⇓
ADMINISTER FIRST AID	ASSIST GUARD #1/WAIT FOR EMS
⇓	⇓

EMS ARRIVES AND TAKES OVER
⇓
NOTIFY SUPERVISOR
⇓
COMPLETE AND SIGN INCIDENT REPORT
⇓
RETURN TO DUTY

3 (Three) LIFEGUARDS ON DUTY LIFEGUARD #1

INCIDENT

⇓

LIFEGUARD RECOGNITION OF VICTIM

⇓

BLOW 3 LONG WHISTLE BLASTS

⇓

LIFEGUARD #1	LIFEGUARD #2	Lifeguard #3
CONTACT VICTIM	CALL EMS	Grab AED and BVM
⇓	⇓	⇓
MOVE VICTIM TO SAFETY	CLEAR POOL	CROWD CONTROL (Make sure EMS is shown location)
⇓	⇓	⇓
ADMINISTER FIRST AID	ASSIST GUARD #1	ASSIST GUARD #1&2
⇓	⇓	⇓

EMS ARRIVES AND TAKES OVER

⇓

NOTIFY SUPERVISOR

⇓

COMPLETE AND SIGN INCIDENT REPORT

⇓

RETURN TO DUTY

IN-SERVICE TRAINING FORM

<u>This in-service should be complete by July 21, 2023</u>

<u>This should include all center staff.</u>

Print Lifeguard Name:_____

Site:_____

Aquatic Training - Lifeguards July 2023

Scenario: Primary Lifeguard pulled an adult victim who is unconscious; the Secondary Lifeguard has gone to call 911. The victim is lying on the deck after being pulled out (the CPR manikin)

- ☐ **Received**: The Commonwealth of Massachusetts: Fecal, Vomit and Blood Incidents in Swimming Pools

CPR

- ☐ Check responsiveness
- ☐ Check to make sure 911 has been called
- ☐ Open airway
- ☐ Check Signs of Circulation (Breathing or Pulse for no more than 10 seconds) If none,
- ☐ Give 2 rescue breaths (drowning victim only)
- ☐ Begin CPR ratio of 30 compressions:2 breaths until advance help arrives or victim shows signs of life
- ☐ If signs of life, Place in recovery position (high arm in endangered spine)

CPR MASK AND POUCH

- ☐ Yes: HAD a CPR mask and pouch on person.
- ☐ No: Did NOT have a CPR mask and pouch on person.

GLOVES

- ☐ Yes: HAD gloves in the pouch.
- ☐ No: Did NOT have gloves in the pouch.

Print Lifeguard's name: _____

Lifeguard's Signature:_____

Date:_____

Manager's Signature:_____

Date:_____

The Commonwealth of Massachusetts:
Fecal, Vomit and Blood Incidents in Swimming Pools

The Commonwealth of Massachusetts
Executive Office of Health and Human Services Department of Public Health
Division of Community Sanitation
305 South Street, Jamaica Plain, MA 02130-3597
(617) 983-6761 (617) 983-6770 - Fax
FERGUSON, COMMISSIONER

1. FECAL INCIDENT PREVENTION IN SWIMMING POOLS

Although the actual health and safety risks associated with fecal accidents are considered to be minimal, provided that proper pool chemical levels are maintained, fecal incidents do pose a significant interruption in pool operations. As such, prevention of fecal incidents should be stressed. The following preventative measures shall be implemented at all pools:

a. Patrons must be directed to take a cleansing shower before entering the pool.
b. Do not permit diaper changing at the poolside. Do not allow young children to be "dipped" or rinsed off in the pool as part of the diaper-changing process.
c. Patrons who are ill or have suffered from diarrhea within the previous two (2) weeks should be denied admittance into the water. It has been shown that persons with cryptosporidiosis continue to shed crypto oocysts (the infectious form of the organism) in their stool for 2 weeks after their diarrhea has ended and can therefore infect others.
d. All persons wearing diapers, or who would be of diaper-wearing age (e.g. infants and toddlers), should wear swimsuit diapers or tight-fitting rubber or plastic pants which will contain fecal matter and prevent it from entering the pool.
e. Do not allow pets in the pool area. See 304 CMR 12.08.
f. Maintain the chemical feed equipment and chemicals at optimal levels. This includes maintaining the disinfectant levels (residual chlorine levels between 2.0 and 3.0 ppm); optimal pH (7.4-7.6); alkalinity (80-120 ppm); and calcium hardness (200-400 ppm). Note: Lack of proper pH can greatly affect disinfection effectiveness in chlorinated pools.

2. FECAL INCIDENT PROCEDURE IN SWIMMING POOLS

There is a concern regarding the potential transmission of cryptosporidium parvum (a parasite excreted in the feces of infected humans and other mammals) and escherichia coli O157:H7 (a harmful strain of coliform bacteria living in the digestive tracts of humans and other animals).

Most organisms found in properly chlorinated pool water, including E.coli 0157:H7, are killed very quickly. In fact, usually only a few seconds of disinfection are needed to kill 99.9% of these organisms. Those organisms that are more resistant to disinfection, such as cryptosporidium, are typically introduced into pool water via very watery diarrhea. This is seldom noticed or reported. Thus, solid stool is unlikely to contain cryptosporidium. This knowledge thus requires a two-pronged approach to managing a fecal incident.

(*The following information was adapted from "Responding to Fecal Accidents in Disinfected Swimming Venues." Morbidity and Mortality Weekly Report, May 25, 2001,Centers for Disease Control and Prevention* http://www.cdc.gov/mmwr/pdf/wk/mm5020.pdf)

a. Formed stool (solid, nonliquid)

i. Direct everyone to leave all pools into which water containing the feces is circulated. Do not allow anyone to enter the contaminated pool(s) until all decontamination procedures are completed.

ii. Remove as much of the fecal material as possible using a net or scoop and dispose of it in a sanitary manner. Clean and disinfect the net or scoop (e.g., after cleaning, leave the net or scoop immersed in the pool during disinfection). Vacuuming stool from the pool is not recommended*.
iii. Raise the free available chlorine concentration to 2 ppm (mg/L), pH 7.2–7.5, if it is <2.0 ppm (mg/L). Ensure this concentration is found throughout all co-circulating pools by sampling at least three widely spaced locations away from return water outlets. This free available chlorine concentration was selected to keep the pool closure time to approximately 30 minutes.
iv. Maintain the free available chlorine concentration at 2.0 ppm (mg/L), pH 7.2–7.5, for at least 25 minutes before reopening the pool. In the presence of chlorine stabilizers such as chlorinated isocyanurates, a level of 3.0 ppm (mg/L) of free available chlorine must be achieved. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine concentration during the disinfection process.
v. Establish a fecal accident log. Document each fecal accident by recording date and time of the event, formed stool or diarrhea, free available chlorine concentration at the time or observation of the event and before opening the pool, the pH, the procedures followed to respond to the fecal accident (including the process used to increase free chlorine residual if necessary), and the contact time.

b. Diarrhea (liquid stool)

i. See A1.
ii. See A2.
iii. Raise the free available chlorine concentration to 20 ppm (mg/L) ¶ and maintain the pH between
iv. 7.2 and 7.5. Ensure this concentration is found throughout all co-circulating pools by sampling at least three widely spaced locations away from return water outlets. This chlorine and pH level should be sufficient to inactivate Cryptosporidium and should be maintained for at least 8 hours (one turnover for a standard pool). If necessary, consult an aquatics professional to determine and identify the feasibility, practical methods, and safety considerations before attempting the hyperchlorination of any pool.
v. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine concentration during disinfection.
vi. Backwash the filter thoroughly. Be sure the effluent is discharged directly to waste and in accordance with state or local regulations. Do not return the backwash through the filter. Where appropriate, replace the filter media.
vii. Swimmers may be allowed into the pool after 8 hours and when the free available chlorine level has been returned to the normal operating range (1.0-3.0 ppm). Maintain the free available chlorine concentration and pH (7.2-7.8) at standard operating levels. If necessary, consult state or local regulatory authorities for recommendations on bringing the free available chlorine levels back to an acceptable operating range.
viii. See A5.

3. Vomit and Blood Incident Procedures in Swimming Pools

a. Vomit

Vomiting while swimming is frequently due to swallowing too much water and is probably not infectious. It is possible for Noroviruses, also known as Norwalk-like viruses, to be spread by vomit; therefore if the entire stomach contents are vomited, respond to the vomit incident as you would the “Formed Stool” procedure above. The procedure is:

i. Direct everyone to leave all pools into which water containing the vomit is circulated. Do not allow anyone to enter the contaminated pool(s) until all decontamination procedures are completed.
ii. Remove as much of the vomit material as possible using a net or scoop and dispose of it in a sanitary manner. Clean and disinfect the net or scoop (e.g., after cleaning, leave the net or scoop immersed in the pool during disinfection). Vacuuming stool from the pool is not recommended*.

iii. Raise the free available chlorine concentration to 2 ppm (mg/L), pH 7.2–7.5, if it is <2.0 ppm (mg/L). Ensure this concentration is found throughout all co-circulating pools by sampling at least three widely spaced locations away from return water outlets. This free available chlorine concentration was selected to keep the pool closure time to approximately 30 minutes.

iv. Maintain the free available chlorine concentration at 2.0 ppm (mg/L), pH 7.2–7.5, for at least 25 minutes before reopening the pool. In the presence of chlorine stabilizers such as chlorinated isocyanurates, a level of 3.0 ppm (mg/L) of free available chlorine must be achieved. Ensure that the filtration system is operating while the pool reaches and maintains the proper free available chlorine concentration during the disinfection process.

v. Establish a vomit accident log. Document each vomit accident by recording date and time of the event, free available chlorine concentration at the time or observation of the event and before opening the pool, the pH, the procedures followed to respond to the vomit accident (including the process used to increase free chlorine residual if necessary), and the contact time.

b. Blood

Disease-causing organisms found in blood (e.g., Hepatitis B virus or HIV) are spread only through activities that involve the exchange of infected bodily fluids, such as, in sexual contact and sharing needles with an infected individual. According to the CDC, that agency is not aware of any of these organisms being transmitted to swimmers from a blood spill in a pool; therefore, there is no recommended procedure to be followed after a blood spill in a swimming pool. As a matter of comfort, the pool operator may choose to close the pool temporarily to satisfy patrons.

* No uniform recommendations for disinfection of vacuum systems are available. However, if a vacuum system is accidentally used, the waste should be discharged directly to a sewer or other approved waste disposal system and not through the filtration system. The dilution effect of the pool water going through the hose may reduce the risk for high-level contamination of the vacuum system.

Many conventional test kits cannot measure free available chlorine levels this high. Use chlorine test strips that can measure free available chlorine in a range that includes 20 mg/L (such as those used in the food industry) or make dilutions for use in a standard DPD (N, N-diethyl- p phenylenediamine) test kit using chlorine-free water.

June 30, 2003

IN-SERVICE TRAINING FORM

This in-service should be complete by August 11, 2023

This should include all center staff.

Print Lifeguard Name:_____

Site:_____

Aquatic Training - Lifeguards August 2023

Scenario: Primary Lifeguard pulled an adult victim who is unconscious; the Secondary Lifeguard has gone to call 911. The victim is lying on the deck after being pulled out (the CPR manikin)

In-Line Stabilization – Shallow

- ☐ Head Splint – Face Up
- ☐ Head Splint – Face Down
- ☐ Submerged – (Head Splint – Face Down)

- ☐ **Spinal Injury - Backboard – Shallow Water –** see handout (pgs. 359-369 of Red Cross Lifeguarding Manual)Lifeguards shall practice backboard exercise until each lifeguard presents primary guard and secondary guard at least twice or until feeling comfortable with both roles.

Print Lifeguard's name:_____

Lifeguard's Signature:_____

Date:_____

Manager's Signature:_____

Date:_____

WHY DO LIFEGUARDS FAIL!

Most drownings at supervised swim areas happen when neither lifeguards nor other patrons notice that a victim has slipped below the surface. Except for passive drownings, drownings in areas where lifeguards were on duty resulted from one or more of three causes, summarized as the RID factor (Pia, 1984) – **R**ecognition, **I**ntrusion and **D**istraction:

R- The failure of the lifeguard to *recognize* the instinctive drowning response

I understand that knowing how to recognize that a swimmer is in distress or a person is drowning is one of the most important lifeguarding skills. Lifeguards must be able to distinguish such behavior from that of others who are swimming or playing safely in the water. Lifeguards must recognize when someone needs to be rescued. A lifeguard cannot expect the victim or others to call for help in an emergency. Even when a victim slips underwater without a struggle, with good surveillance and scanning techniques, a lifeguard can recognize someone lying motionless within seconds in clear water. BCYF policy states that the Lifeguard is allowed to position themselves in three possible stations: 1. sitting in the Lifeguard Chair. 2. Standing at the water's edge. 3. Roaming around the pool at the pool's edge. The Lifeguard is not allowed to sit on any other type of chair, viewing stands, behind walls or tables or in any other position that is not stated as allowed.

I - The *intrusion* of secondary duties on the lifeguard's primary responsibility of patron surveillance

Intrusion happens when secondary duties, such as maintenance tasks, intrude on a lifeguard's primary responsibility of patron surveillance. Lifeguards often have to sweep the deck, empty trash cans, pick up towels, check locker rooms and perform other maintenance duties. While these duties might be part of the job, they must not be performed while conducting patron surveillance. Another lifeguard must first take over surveillance for the assigned area of responsibility.

D - *Distraction* from surveillance duties

Distractions also will affect patron surveillance, for example, a lifeguard talking with other lifeguards or friends. A brief conversation might seem innocent, but during that time a 20- to 60-second struggle of a young child could be missed. The child could die because a lifeguard was distracted! Social conversations should not be held while on duty. **This includes reading, talking on a phone, or text messaging. No visitor(s) should be allowed to come into the pool area. All electronic devices are banned from the pool area.**

***Information is taken from American Red Cross LIFEGUARDING Manual*

Boston Centers for Youth & Families
Pool Rules and Regulations

- All swimmers must take a cleansing shower before entering the pool area.
- No bather shall wear a bathing suit that is unclean. Cut-offs, shorts, t-shirts, etc. will not be permitted in the pool.
- Any person having an infectious or communicable disease is prohibited from using the pool. Fever, cough, cold, inflammation of the eyes, nasal or ear discharges are examples.
- No person with sores or other evidence of skin disease, or who is wearing a bandage or medical covering of any kind, shall be allowed the use of the pool.
- No person shall spit in or in any other way contaminate the pool, or its floors, walkways, aisles or dressing rooms.
- No glass shall be permitted in the pool or on walkways within eight feet of the pool.
- No person shall bring or throw into the pool any object that may in any way carry contamination or endanger the safety of bathers.
- No running, horse play or excessive noise allowed in the pool area, showers or dressing rooms.
- No food or drinks (except water) are allowed in the dressing room, showers or pool area.
- No dogs (except service animals) or other animals are allowed in the dressing room, showers or pool area.
- All children under age 8 must be accompanied in the water or supervised by a parent or responsible adult at all times.
- No diving backwards or flips are permitted.
- Boston Centers for Youth & Families is not responsible for personal belongings.
- A 20 to 1 maximum swimmer to lifeguard ratio will be enforced. (Except during heat emergencies where the state code of 25 to 1 ratio will be enforced).
- All pool users must be registered members of the organization.
- Any videotaping or photography needs to be approved by the management.
- The management reserves the right to enforce the above rules and regulations. Any person who does not comply with these rules and regulations will lose the privilege of using the swimming pool facility.

Remember, safety first, and enjoy your swim!

BCYF Swimming Pool
PATRON TO STAFF RATIOS

LIFEGUARD ON DECK POLICY

BCYF policy states that there should be a Lifeguard, in full uniform, actively scanning during all activities, this includes but not limited to all open/recreation/lap swims, swim lessons, swim team and water exercise classes

ACCEPTABLE LIFEGUARD STATIONS/POSITIONING

BCYF policy states that Lifeguard is allowed to position themselves in three possible stations:

1. Sitting in the Lifeguard Chair.
2. Standing at the water's edge.
3. Roaming around the pool at the pool's edge.

The Lifeguard is not allowed to sit on any other type of chair, viewing stands, behind walls or tables, or in any other position that is not stated as allowed.

LIFEGUARD TO SWIMMER RATIO

Minimum of two lifeguards are required for the BCYF swimming facility to open.

BCYF Lifeguard to swimmer ratio is 1 lifeguard for every 20 swimmers.

Outdoor temperature of 90 degrees or higher, BCYF will increase the ratio to 1:25.

State of Massachusetts regulations require a ratio of 1 lifeguard for every 25 swimmers at all times..

SWIM CLASS/PROGRAM RATIOS

Instructor to Student Ratio	Parent & Child	1 to 10 (Pairs)
	Preschool	1 to 5
	Learn to swim levels 1-3	1 to 5
	Learn to swim levels 4-6	1 to 10
	Adults (beginners)	1 to 5
	Adults (intermediate/advanced)	1 to 10

During Swim Team and Masters Programs, there should be one Lifeguard on deck, in full uniform, actively scanning. Any coaches should be factored into the ratio.
Example: one lifeguard, two coaches; with up to 60 swimmers, would still be within ratio.

Facilities can always have lower ratios if they desire.

Any questions or concerns about these policies should be brought to the attention of the Aquatic Managers

Procedure for ISD Licensed Camps

ISD Licensed Camps are subject to 105 CMR 430.000 regulations of the Massachusetts State Board of Health, enforced locally by the City of Boston's Inspectional Services Department - Health Division. The following procedures have been drafted to align with 105 CMR 430.103 - Swimming and Other Aquatic Activities; and 105 CMR 430.430 Swimming Pools - Compliance with 105 CMR 435.000.

- All Camp Groups will be provided a copy of the BCYF Pool Rules prior to the start of the first Camp Swim Session. Group Leaders must review rules with all participants prior to arriving at the pool.
- Prior to entering the Pool Area, a Buddy System shall be implemented among campers by Camp Staff and Lifeguards to prepare for a Buddy check half way through the swim session.
- Only those campers and staff swimming should enter the locker rooms and pool area. All non- swimming group members must be taken to a different part of the building with the appropriate camp staff to participate in alternative activities and for supervision. No shoes should be worn on the Pool Deck.
- At the first swim session, a swim evaluation must be made to determine the swim level and competency of every camper This swim evaluation will be made by the BCYF Lifeguards/Aquatic Staff and will be documented and shared with the Camp Operator. **(105 CMR 430.430B)**
    - The BCYF Aquatic Staff will reference the American Red Cross Swim Levels to determine a Swimmer's ability. The Swim evaluation will begin in the shallow end of the pool and the BCYF Lifeguards/Aquatic Staff shall maintain a 1:1 ratio of swimmers to guards during the swim evaluation.
    - The BCYF Deep End Test can be administered at this time if the camper has demonstrated competency in the initial swim evaluation. Campers passing this test will be added to the Deep End Log maintained by the BCYF Aquatic Staff.
    - No camper will be allowed to participate in any swim related activities without having completed a documented swim evaluation. Camp groups must coordinate with the BCYF Aquatic Staff about scheduling additional swim evaluations after the initial swim session.
- Camp Staff are required to accompany their campers in the water for all swimming activities. Swimming activities shall be supervised by Camp Staff in the water at a minimum ratio of 10:1 (10 Campers per one Staff Member)* **(105 CMR 430.103A)**
    - *** This ratio may change based on the recommendation of the BCYF Aquatic Staff and in consultation with the Camp Operator. Alternative Ratios that reduce the number of swimmers per staff member may be determined necessary by taking into consideration:** (A) The depth of the pool; (B) The swimming level of participants; (C) Age of participants; and (D) The swimming level of Camp Staff. ***At no time will this ratio be expanded to accompany more than 10 swimmers per one accompanying staff member.***
    - **BCYF Pool Ratios of Swimmers in the Pool area are: 20:1 (participant to guard)**
        - **Staff Members accompanying campers into the water shall be included in the ratio.**
        - Please see the BCYF Manual for exceptions to the established BCYF swimmer to guard ratio.
- Camp Staff are required to accompany their campers to the Bathroom and Locker Rooms; and are responsible for managing the behavior of their campers at all times. The BCYF Lifeguards/Aquatic Staff have the authority to restrict swimming privileges of campers/staff if there are behavioral concerns.
    - Any behavioral concerns will be communicated to the Camp Operator, and continued behavioral concerns can result in the termination of camp swim sessions for the entire group.
- There will be a Buddy Check conducted half way through the group's assigned swim session, each session. The BCYF Lifeguards/ Aquatic Staff are required to enforce all BCYF Pool Rules and Regulations and have the authority to regulate swim activities to ensure compliance with these rules as well as to ensure those swim activities are in compliance with 105 CMR 435.000 inclusive.
- Questions or concerns related to BCYF Pool Rules and Regulations should be directed to the BCYF Aquatic Managers Jeffrey Mackey and Antonio Rosario at 617-635-4920.

PROCEDURE FOR
OUTSIDE GROUPS/SPECIAL GROUPS

1. All Groups will be sent a copy of the pool rules ahead of time. Group Leaders must review rules with all participants prior to arriving at the pool.
2. On the first day of each swim group, each week, Lifeguards must meet a Group outside the pool area to review rules and procedures. Have participants find a buddy, and request that they stay with their buddy at all times. If buddy pairs are both either taking the deep end test or not taking the test should be discussed. Let participants know where in the pool area they should meet once they are changed into appropriate bathing attire.
    a. Only those participants swimming should enter the locker rooms. No shoes on the Pool Deck.
    b. All non-swimming group members must be taken to a different part of the building with a staff member to supervise. They can be given handouts from the Swim for Safety material to work on.
    c. Group staff are required to swim with their participants, they should be actively involved. Group staff are responsible for the participants and their behavior. Lifeguards should determine Group staff to participant ratio beforehand. And let staff know how many staff will need to be in the water. This is determined by the age of the participants. Age 6 and under – 1:1 ratio, Age 7, 8 and 9 – 3:1 ratio, Age 10 and above – 6:1 ratio. These are suggested ratios; it will all be determined by 1. The depth of the pool, 2. The swimming ability of the participants, 3. Group staff's swimming ability.
    d. Group staff should monitor bathrooms and participants using bathrooms.
3. Lifeguards will meet in a designated area. At this time Lifeguards will ask if anyone would like to take the deep end test.
    a. Participants will do the deep end test; keep a one to one ratio of swimmers to Lifeguards during this test.
    b. Any participant that passes should be directed to another Lifeguard that is recording the participants name in the Deep End Log.
    c. Participants that pass the deep end test should be marked in some way to distinguish them from other swimmers. Colored bathing cap, wrist band, grease pencil mark on shoulder, etc.
4. Once all participants have taken the deep end test, a short swim skill session must be presented each day to help participants improve their swimming skills and their water safety knowledge.
5. After the swim skill session, recreation swim may commence.
6. There should be a Buddy Check half way through the group's assigned time.
7. Groups should be dismissed in a timely fashion, not to disrupt other groups coming into the pool.

Revised Interim Guidance Regarding Christian's Law

Massachusetts Department of Public Health
April 22, 2016

Overview

Massachusetts General Law c. 111, §127A½, commonly referred to as "Christian's Law", was enacted on July 12, 2012. The Massachusetts Department of Public Health (Department) is preparing to promulgate regulations to implement requirements in the law for municipal and recreational programs and camps to have a system in place for ensuring that Coast Guard approved personal flotation devices (PFDs) are made available to non-swimmers and at-risk swimmers at programs or camps that conduct swimming activities at marine or freshwater beaches. In the meantime, the Department is issuing this guidance document as a reminder that the law is currently in effect, and to assist in compliance with several important aspects of Christian's Law.

- Municipal and recreational programs and licensed camps must: 1) determine each minor's swimming ability prior to allowing participation in swimming activities; and 2) accept a PFD from a parent or guardian of a minor for the minor to use while in attendance at the program or camp.

Swim Ability Determination

- Christian's Law, in part, requires that municipal and recreational programs and licensed camps make a determination of each participating minor's swimming ability at the first swimming session, in order to identify and classify non-swimmers and at-risk swimmers. All participants, including non-swimmers and at-risk swimmers, as well as minors whose parents or guardians have provided a PFD for their child, must then be confined to swimming areas consistent with the limits of their swimming skills or to swimming areas requiring lesser skills than those for which they have been classified.

- Based on input from water safety professionals, the Department recommends that an individual who at testing does not meet criteria for a Red Cross Level 3 swim rating or a YMCA Minnow, be classified as a "non-swimmer," and that an individual who at testing may or may not have met the criteria for a Red Cross Level 3 swim rating or the YMCA Minnow, but has been determined to have a physical, psychological, medical, or cognitive disability that could negatively impact his/her swimming ability, be classified as an "at-risk swimmer." Christian's Law requires swim testing at the first swimming session prior to any swimming activities in order to classify each minor's swimming ability. The Department recommends that this swim test be conducted or overseen by trained staff that hold appropriate certifications from a nationally recognized swim instructor program, such as the American Red Cross (ARC) or the YMCA. The Department, in consultation with representatives for the ARC and the YMCA, recommends professional oversight of swim test determinations by individuals that hold either current ARC Water Safety Instructor (WSI r.09) or YMCA AQ711B - Lifeguard 2011 training certifications. The Department recommends individuals assessing swimming ability meet the following: Hold a current Red Cross Lifeguard Training Certificate, or Royal Bronze Medallion, or Boy Scouts of America Lifeguard Certificate or National

- Y.M.C.A. Lifeguard Certificate or an equivalent certification, as determined by the Department; and, **:** Hold a current American Red Cross CPR Certificate for the Professional Rescuer or American Heart Association CPR Certificate for the Health Care Provider, or National Safety Council CPR Training, or an equivalent certification, as determined by the Department's Office of Emergency Medical Services; and,

- Hold a Red Cross Standard First Aid Certificate, or a Red Cross Community First Aid and Safety Certificate (which certification may be evidenced by a notation on the back of any Red Cross Lifeguard Training Certificate), or National Safety Council First Aid Training, Level 2, or an equivalent certification, as determined by the Department; and, have, at a minimum, observed and/or participated in one annual swim

test training conducted by a qualified Certified Swim Instructor.

- The Department, in consultation with water safety professionals, recommends that swimming ability determinations be conducted once per summer, at a minimum. Additionally, the Department recommends that swimming ability determinations be conducted at the same or comparable location to where the swimming activities will occur.

Personal Flotation Devices

- Christian's Law requires that municipal and recreational programs and licensed camps have a system in place to make PFDs available to non-swimmers and at-risk swimmers, and requires programs and camps to accept a PFD from a parent or legal guardian for their child to use when these programs or licensed camps conduct swimming or waterfront activities at fresh or saltwater beaches. Consistent with the intent of this law, the Department strongly recommends that all municipal and recreational programs and licensed camps provide all classified non-swimmers and at-risk swimmers with a PFD that meets United States Coast Guard (USCG) guidelines in accordance with the following:

- PFDs shall be USCG certified according to type (I, II, III) for size and buoyancy.

- All PFDs must always be in a serviceable condition prior to use and properly fitted to each individual.

- Information on the types of PFDs, size selection, and tips for determining & maintaining a PFD in serviceable condition is available directly from the USCG website at:
  http://www.uscgboating.org/safety/life_jacket_wear_wearing_your_life_jacket.aspx
  [All spaces represent an underscore character "_" in the website address]

- Non-swimmers, at-risk swimmers, and participants whose parents or legal guardians have provided a PFD for their child do not need to wear a PFD during a swim test, closely supervised swimming or diving lessons, and other closely supervised beach waterfront activities, however a PFD should be worn for all other swimming or boating activities, and whenever on a dock.

- The Department recommends that in every case in which a PFD is used by a minor, either when one is provided by a program/camp or when one is dropped off by a parent or legal guardian, staff at municipal and recreational programs and licensed camps conduct an initial fit test to determine that the PFD is the correct size, and check each minor's PFD prior to every water entry to ensure that the PFD fits properly and is securely fastened.

- The Department recommends that all staff be trained for PFD fit testing by reviewing the short guidance video provided by the Department with assistance from the U.S. Coast Guard Auxiliary and Mass Parks/Department of Conservation & Recreations. A link to the video can be found at the website below:
  http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/comm-sanitation/christians-law.html

1) *For more information please visit the MDPH – Community Sanitation Program website www.mass.gov/dph/dcs or contact the Massachusetts Department of Public Health, Bureau of Environmental Health at 617-624-5757.*

Deep End Test

The Lifeguard testing the swimmer looks for the swimmer to be able to swim without stopping using the crawl stroke (freestyle) for 25 yards. The lifeguard looks for the swimmer to be able to reach the surface after jumping into the deep water and watches that the swimmer is able to keep the head above the water level while treading for 30 seconds.

DEEP END TEST LOG

NAME	AGE	DATE & TIME

BEING PREPARED FOR EMERGENCIES

Drowning often happens under three circumstances; it is important to avoid these scenarios.

1. Lifeguards fail to recognize that someone is in trouble in the water.
2. Lifeguards are removed from patron surveillance and assigned to perform other duties, leaving the pool without proper supervision.
3. Lifeguards are distracted from their surveillance duties.

A lifeguard has four basic responsibilities in the event of an emergency:

1. To keep all patrons safe by ensuring all zones stay covered at all times.
2. To rescue and give first aid, including CPR, to a victim, or help another lifeguard doing so.
3. To make sure EMS personnel are called when needed for the victim's condition.
4. To ensure the victim gets the best possible care until EMS personnel arrive. Then help EMS personnel as needed.

BE PREPARED, CARRY YOUR TUBE

WHEN PERFORMING PATRON SURVEILLANCE,
A LIFEGUARD SHOULD ALWAYS KEEP A RESCUE TUBE READY FOR USE.

- Keep the strap of the rescue tube over the shoulder and neck.
- Hold the rescue tube across the thighs when sitting in a lifeguard chair or across the stomach when standing.
- Hold the excess line to keep it from getting caught in the chair or other equipment when starting the rescue.

RESPONSIBILITIES OF A PROFESSIONAL LIFEGUARD

The **primary responsibility** of a lifeguard is to ensure patron safety and protect lives – including his or her own.

This can be done in several ways, such as:

- Preventing injuries by minimizing or eliminating hazardous situations or behaviors.
- Enforcing facility rules and regulations and educating patrons about them.
- Recognizing and responding quickly and effectively to all emergencies.
- Administering first aid and cardiopulmonary resuscitation (CPR) or using an automated external defibrillator (AED) in an emergency.
- Informing other lifeguards, facility staff and management when more help or equipment is needed.

Other tasks for which a lifeguard is responsible are called **secondary responsibilities**. Secondary responsibilities must never prevent the lifeguard from meeting his or her primary responsibility.

Secondary responsibilities can include:

- Filling out required records and reports on schedule and submitting them to the proper person or office.
- Performing maintenance or other tasks assigned by his or her supervisor.
- Inspecting the facility daily and reporting any unsafe conditions or equipment to a supervisor.

***Information taken from American Red Cross LIFEGUARDING Manual*

WHAT IS A LIFEGUARD'S UNIFORM?

LIFEGUARD SHIRT (issued)	
LIFEGUARD SHORTS (issued)	
RESCUE TUBE (at sites)	
WHISTLE (issued)	
RESCUE PACK WITH GLOVES AND CPR MASK (issued)	 
LIFEGUARD HAT (issued – outdoor sites only)	

A lifeguard may also wear any type of water appropriate sandals or footwear – no sneakers, boots or athletic shoes.

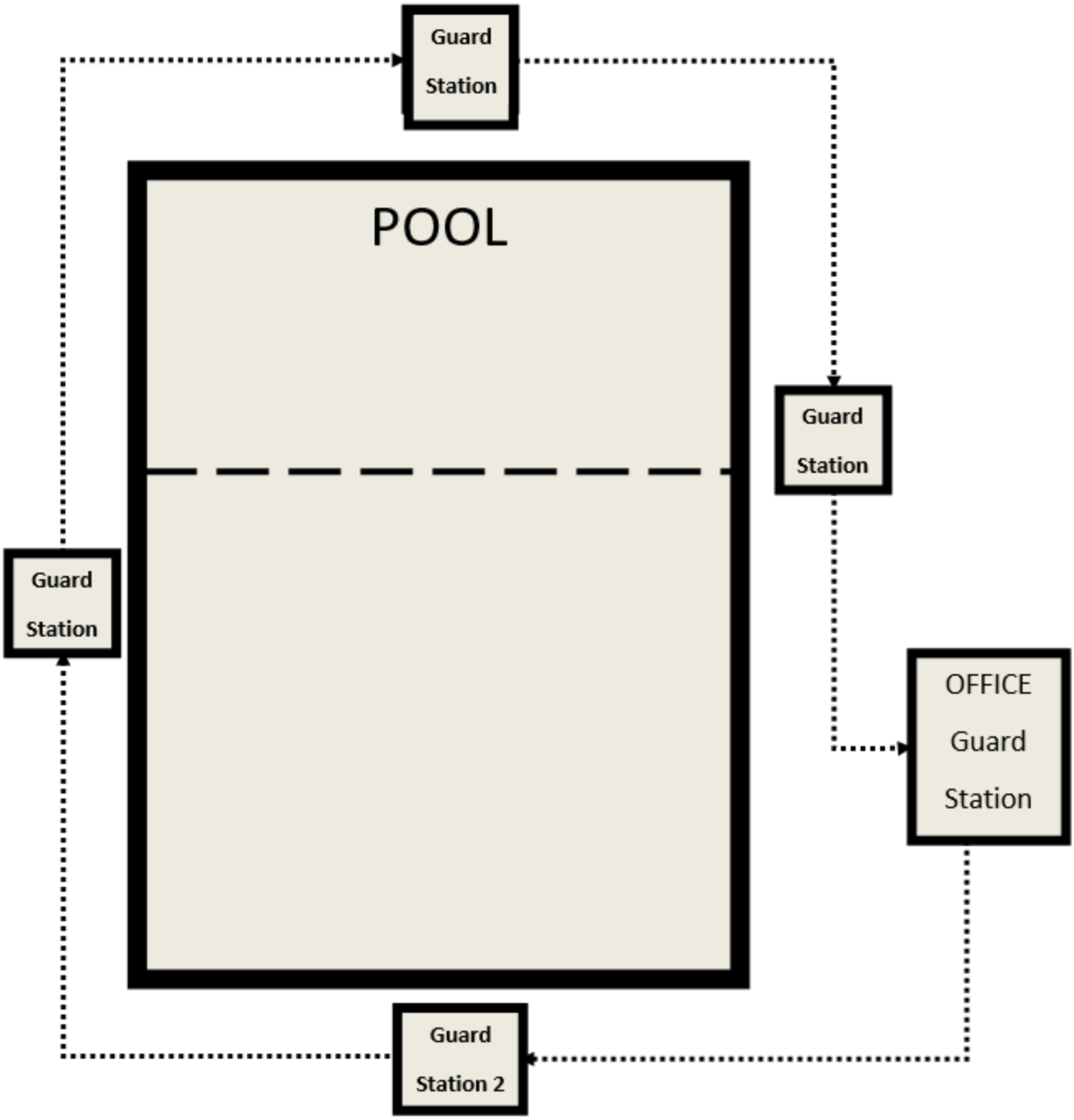
BCYF Lifeguards should be in complete uniform and rescue ready whenever there are patrons in the water.

Being rescue ready means:
Rescue tube in hand with the strap over the head and shoulder.

Please note: The Lifeguard Uniform shall not be altered/modified at any time. i.e. cutting sleeves off.

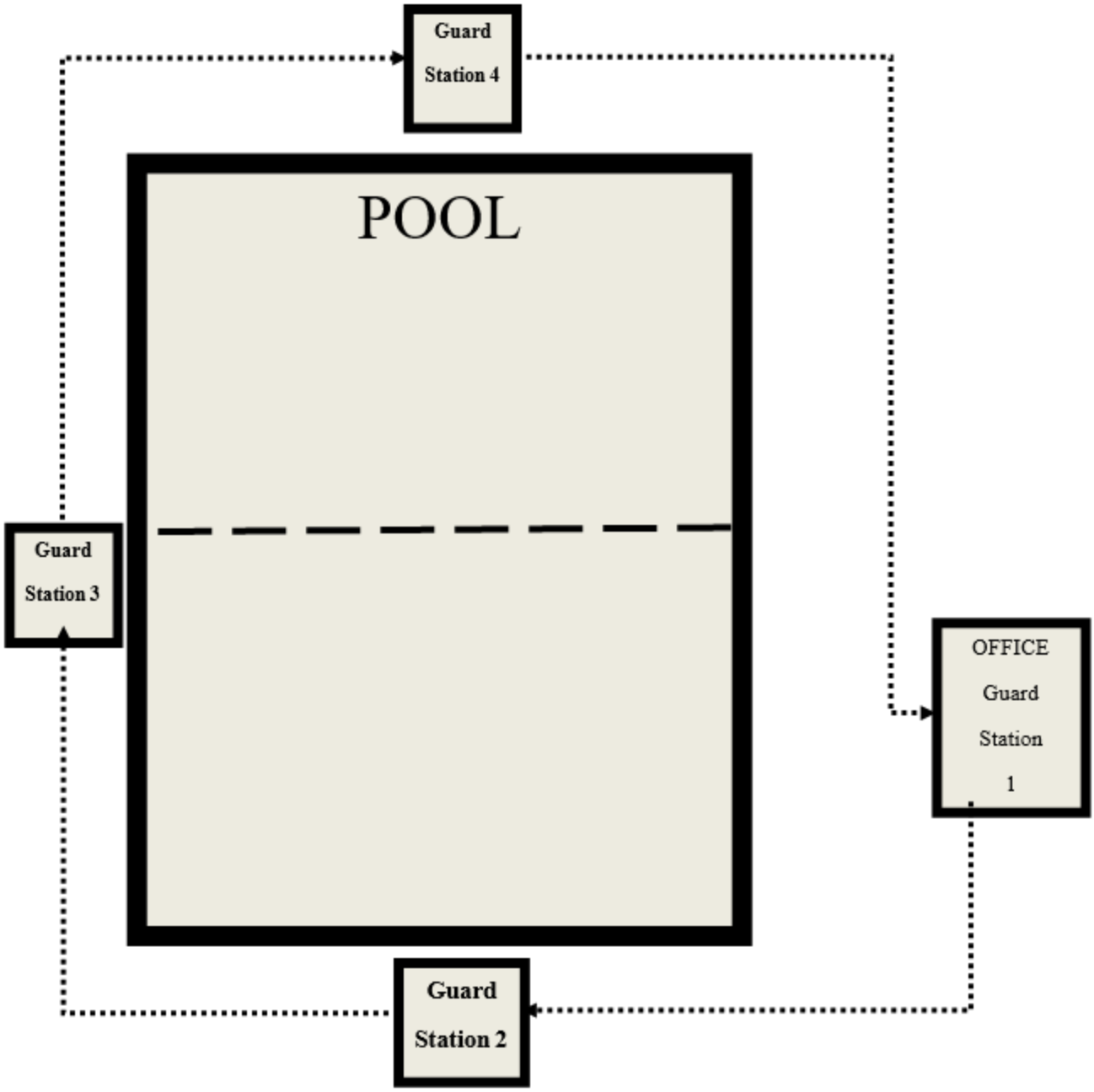
RECOMMENDED GUARD ROTATION
5 STATIONS—15 MINUTE ROTATIONS

GUARD ROTATIONS WILL VARY DEPENDING ON THE NUMBER OF GUARDS AVAILABLE AND THE NUMBER OF USERS IN THE POOL AND POOL AREA.



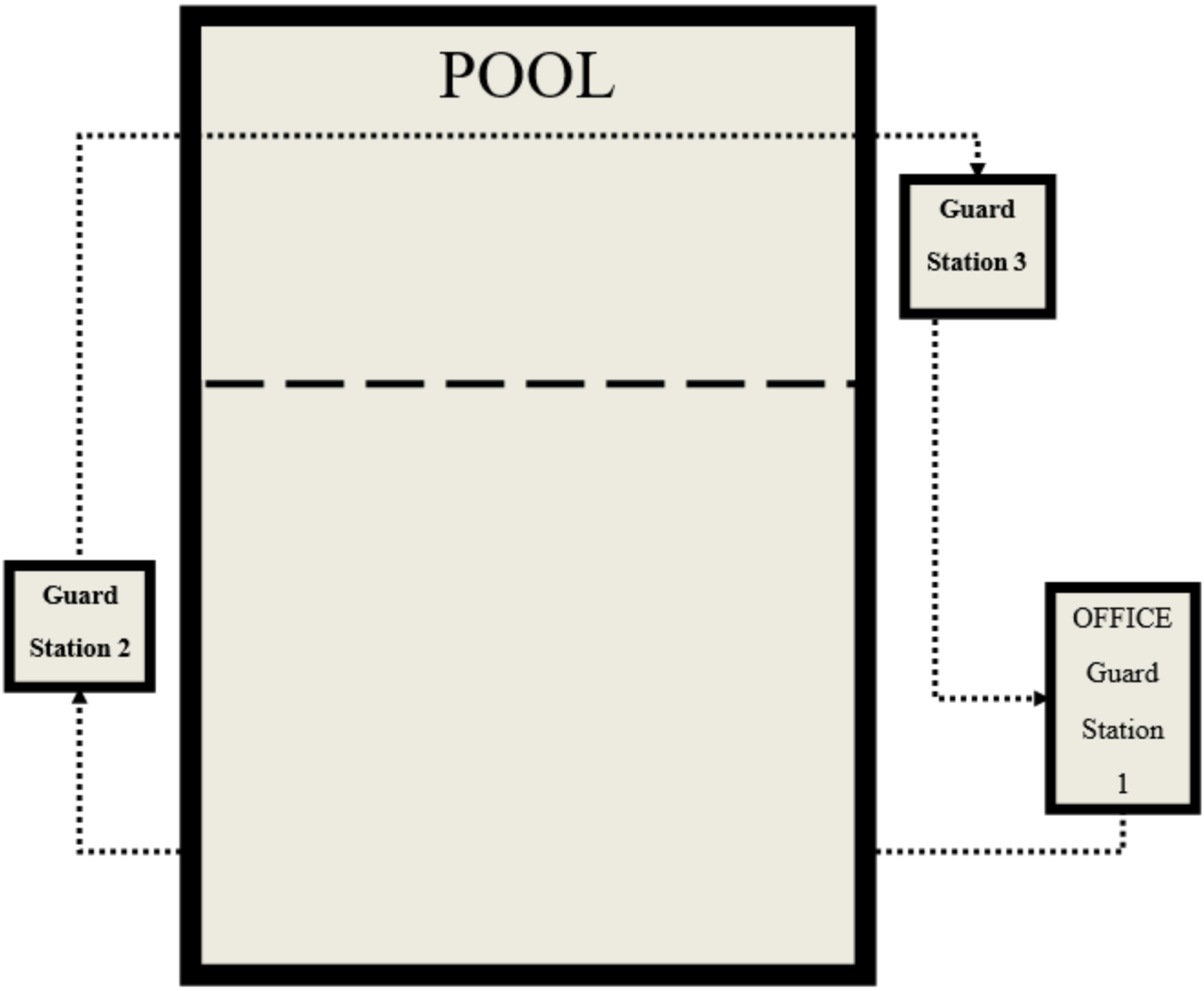
RECOMMENDED GUARD ROTATION
4 STATIONS—20 MINUTE ROTATIONS

GUARD ROTATIONS WILL VARY DEPENDING ON THE NUMBER OF GUARDS AVAILABLE AND THE NUMBER OF USERS IN THE POOL AND POOL AREA.



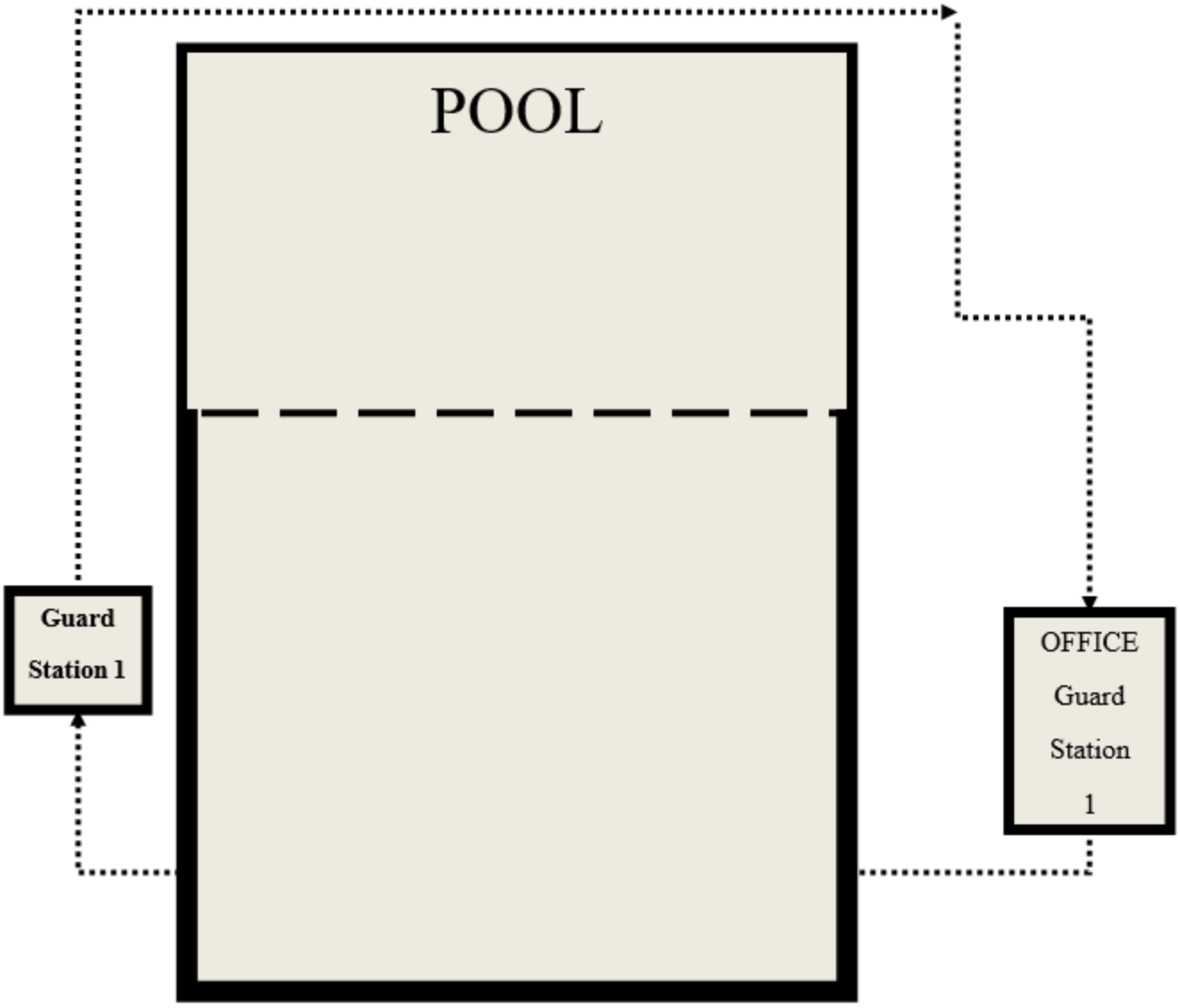
RECOMMENDED GUARD ROTATION
3 STATIONS—20 MINUTE ROTATIONS

GUARD ROTATIONS WILL VARY DEPENDING ON THE NUMBER OF GUARDS AVAILABLE AND THE NUMBER OF USERS IN THE POOL AND POOL AREA.



RECOMMENDED GUARD ROTATION
2 STATIONS—20 MINUTE ROTATIONS

GUARD ROTATIONS WILL VARY DEPENDING ON THE NUMBER OF GUARDS AVAILABLE AND THE NUMBER OF USERS IN THE POOL AND POOL AREA.



GENERAL RESCUE PROCEDURES

1. Activate the emergency action plan by blowing the whistle 3 times.
2. Enter the water.
3. Approach the victim.
4. Perform an appropriate rescue.
5. Move the victim to safety.
6. Remove the victim from the water.
7. Provide emergency care as needed.

BCYF POOL EMERGENCY ACTION PLAN

CALLING 911

In an event of an emergency, please follow these directions:

1. Call 911 (dial 9-9-1-1 on pool phone or 911 on cell phone)
2. Tell them WHO you are, WHERE you are, and WHAT the emergency is.
    - SITE - COMMUNITY CENTER NAME
    - STREET ADDRESS
    - CITY, STATE, ZIP CODE
    - PHONE NUMBER
3. Tell the operator what is being done to treat the victim.
4. Do not hang up the phone until instructed by the operator.
5. Operator may need additional information from you.
6. Stay with the victim and administer first aid as necessary until EMS arrives.
7. Send someone to the entrance to direct EMS to the emergency.

FACILITY EMERGENCY PROCEDURES

FIRE DRILL

1. Upon hearing the alarm, the lifeguard will clear the pool.
2. All patrons are sent to the nearest emergency exit.
3. Lock all pool doors.
4. Check locker rooms.

POWER FAILURE

1. Clear pool using three whistle blasts.
2. Scan the entire pool area.
3. Direct people to the lobby area.
4. Wait for additional staff members to scan the pool before closing doors.
5. Lock all pool doors.
6. Check locker rooms.

NATURAL DISASTERS

In the event of a major disaster threat, BCYF personnel will be alerted.

INDOOR/OUTDOOR SWIMMING POOL/BEACH LIGHTNING SAFETY

Lightning's behavior is random and unpredictable. We recommend a very conservative attitude towards it. Preparedness and quick responses are the best defenses towards the lightning hazard.

Swimming pools are connected to a much larger surface area via underground water pipes, gas lines, electric and telephone wiring, etc. Lightning strikes to the ground anywhere on this metallic network may induce shocks elsewhere.

The National Lightning Safety Institute recommends the following swimming pool safety procedures:

1. Designate a responsible person as the weather safety lookout. That person should keep an eye on the weather. Use a "weather radio" or the Weather Channel or other TV program to obtain good localized advanced weather information.
2. When thunder and/or lightning are first noticed, use the Flash-To-Bang (F-B) method to determine its rough distance and speed. This technique measures the time from seeing lightning to hearing associated thunder. For each five seconds from F-B, lightning is one mile away. Thus, an F-B of 10 = 2 miles; 15 = 3 miles; 20 = 4 miles; etc. At an F-B count of thirty, the pool should be evacuated. People should be directed to safe shelters nearby.
3. Pool activities should remain suspended until thirty minutes after the last thunder is heard. The distance from Strike A to Strike B to Strike C can be some 5-8 miles away. And it can strike much farther away. Why take a chance with lightning?

Teach this safety slogan:
"If you can see it, flee it; if you can hear it, clear it.

TORNADO/HURRICANE

In the event of a tornado/hurricane, BCYF will follow advice of local emergency services. If necessary, all members and staff will be evacuated to the nearest appropriate location.

LOSS OF COMMUNICATION

In the event of a loss of communication and EMS is needed:

1. Try a cell phone
2. If cell phone does not work - Send a staff member to the nearest EMS station.

DEATH

In the event of a possible death:

1. Call EMS
2. Evacuate immediate area
3. Continue resuscitation attempts until EMS arrives

SUSPECTED SPINAL INJURY OUTSIDE POOL

- Call EMS
- Have the victim hold still in whatever position found in and wait for EMS
- Evacuate area

DEALING WITH EMOTIONAL STRESS

Stress needs to be recognized and dealt with in a positive way. Here are some ways to cope with stress.

- Physical exercise
- Keeping busy
- Not withdrawing from contact with others
- Not suppressing or hiding feelings.
- Watch your diet; avoid fats, caffeine, alcohol, drugs
- Keep your life as normal as possible

Daily Pool Safety Checklist

Equipment

Verify that all equipment is in good working order and a sufficient amount of it is available in the proper location.

RESCUE EQUIPMENT

- ☐ Rescue tubes
- ☐ Reaching Pole
- ☐ Ring Buoy

FIRST AID EQUIPMENT

- ☐ Hip packs
  - ☐ Resuscitation Masks
  - ☐ Disposable Gloves
  - ☐ First aid supplies
- ☐ Backboard with head immobilizer and straps
- ☐ First Aid kit
- ☐ AED

SAFETY EQUIPMENT

- ☐ Lifeguard stands/stations
- ☐ Communication devices – whistles, bull horn
- ☐ Telephone – directions for emergency calls posted
- ☐ PPE – extra gloves, gowns, face shields, blood spill kit
- ☐ Lifejackets
- ☐ Umbrellas
- ☐ Sunscreen

Operational Conditions

- ☐ Bottom free of hazards
- ☐ Water clarity
- ☐ Water Level
- ☐ Water temperature
- ☐ Weather conditions – safe?
- ☐ Lighting
- ☐ Water Chemical range – within specified range
- ☐ Drain Covers undamaged and secure
- ☐ Circulation system – within range and proper operational condition
  - ☐ Flow rates
  - ☐ Filter differential
  - ☐ Hair/lint strainer

Risk Management

- ☐ AED battery lights if green, AED is in place, visible, secure, clean, ready to use
- ☐ Depth markings clearly visible
- ☐ Swim sections are set up with ropes and/or buoys
- ☐ Signage in line of sight for patrons
- ☐ Fences and barriers, gates and doors secure
- ☐ Walkways/decks clear, accessible, nonslip and free of hazards
- ☐ Handrails or guardrails secure
- ☐ Ladder rungs or steps secure
- ☐ ADA accessibility equipment secure and ready for use
- ☐ Diving boards – secure and non slip
- ☐ Starting blocks – secure and non slip
- ☐ Fire extinguishers – charged and ready for use
- ☐ Emergency exits – clear, accessible with working lights and alarms.

Facility Sanitation

- ☐ Clean, nonslip, free of debris and ready for use
- ☐ Pool shell – free of algae, free of scum line
- ☐ Restrooms/Locker rooms
  - ☐ Warm, running water
  - ☐ Soap
  - ☐ Paper products adequately stocked
- ☐ First aid station – adequately stocked
- ☐ Trash receptacles

Administration

- ☐ Zones of surveillance diagrams posted
- ☐ Lifeguard rotation plans posted
- ☐ EAPs posted
- ☐ Safety Data Sheets available
- ☐ Staff Certifications posted
- ☐ Water quality test results
  - ☐ Daily results logged
  - ☐ Records on file
- ☐ Incident/accident reports on file

REQUIRED EQUIPMENT

The pool must be equipped with the following supplies in good repair whenever a swimming program is in session:

1. Telephone
2. Rescue tubes
3. Backboard with head support and straps
4. First Aid Kit
5. 2 pair diving masks for Deep Water Searches (L St. Beach)

The pool must be under effective and routine maintenance in order to be ready for use. Any facility issues shall be reported to the Aquatics Manager and/or the Facilities Manager.

Chemicals are to be ordered monthly as you see that the inventory is getting low. Orders are to be placed in writing using the Chemical Order Form or by email.

Minimum Sanitation must be maintained according to the State Sanitary Code for Swimming Pools.
http://www.mahb.org/stateregs/swimmingpools.htm

Required Swimming Pool First Aid Kit

Minimum state code requirements:

35	1" band-aids	1	Scissors
10	3" X 3" sterile gauze pads	1	Tweezers
2	5" X 5" surgipads	1	Rescue blanket
2	2" surgipads	12	antiseptic wipe
1	8" X 10" surgipad	2	Disposable ice packs
2	2" soft roller bandages	1	Sterile isotonic buffered eye wash
2	3" soft roller bandages	12	pairs of one-size fits all non-latex gloves
1	1/2" roll of hypoallergenic tape	1	micro shield or pocket mask with a one-way valve
1	Triangular bandage		

BASIC FIRST AID & RESCUES DOCUMENTATION

It is understood that lifeguards, trained in first aid and CPR, will administer basic first aid and make “rescues” of struggling swimmers from time to time. It is important that the Incident & Accident Report be completed to document incidents (including rescues) and administered first aid.

Bloodborne Pathogen Standards

Universal Precautions

Universal Precautions for those occupationally exposed to blood and other potentially infectious materials…

Be Aware: Treat all blood and body fluids as if they were infected with:
1. **HIV**(Human Immunodeficiency Virus) which leads to AIDS
2. **HBV**(Hepatitis B Virus)
3. Other blood borne pathogens in human blood, which can cause disease

Use: Appropriate Personal Protective Equipment Gloves, Splash Goggles, Face Shields, Protective

Always: Wash Hands

Never: Recap, Bend, or Break needles.

Always: Dispose of needles in the proper container.

Dispose: of Personal Protective Equipment and contaminated first aid supplies in Biohazard Bags.

Clean: Worksite or injury site with bleach solution located in each Biohazard Station

Steps you must follow when dealing with injury and/or body fluids…

1. Wear protective clothing such as goggles, latex gloves, or a plastic gown when providing first aid for open wounds.
2. Dispose of medical waste in leak proof plastic storage bags marked Biohazard. (Located in all first aid kits)
3. Decontaminate exposed areas using a chlorine solution which is located in the equipment storage area.
4. Deposit all medical waste and decontamination materials in a Biohazard container located in the pool office.
5. Wash hands thoroughly with soap.
6. Fill out an incident report.

If you come in contact with blood, wash the affected area immediately with soap and water.
Then contact the supervisor.

Bio-Hazard Kits

Each Pool site is equipped with a Biohazard Kit. Please notify the Aquatic Managers if one is used or missing.

They should include:
- Goggles,
- Protective gown,
- Latex Gloves,
- Bleach Solution,
- Biohazard Storage Bags,
- Biohazard Storage Container

Pool Maintenance

A. Water Testing Procedures

Lifeguards/Head Lifeguards/Pool Asst. Managers/Pool Managers should be testing and logging the water four times a day. Opening, twice mid-day (one time during heavy bather use) and closing. It is a state law that we test our pool 4 times a day. Please be conscientious about testing so we can keep our pool safe. You will be testing the water for 5 values as follows:

Test	Frequency	Ideal Range
FREE CHLORINE	4 times a day	1.0-3.0ppm
COMBINED CHLORINE	4 times a day	0.0-0.2
pH	4 times a day	7.2-7.6ppm
CALCIUM HARDNESS	1 time a week	200-400ppm
ALKALINITY	1 time a week	80-120ppm

a. Free Chlorine
   i. Rinse the dip cell thoroughly.
   ii. Fill the thin dip cell with water up to the line.
   iii. Add 5 drops of reagent 0001.
   iv. Add 5 drops of reagent 0002 mix, then compare to the color chart.
   v. Record value for free chlorine.

b. Combined Chlorine
   i. Add 5 drops of reagent 0003 to SAME thin sample cell, mix, then compare.
   ii. Subtract the Free Chlorine from the Total Chlorine to get the Combined level and record value under combined chlorine (Might be a little darker).

c. pH
   i. Rinse and fill large dip cell to line with pool water
   ii. Add 5 drops of 0004 Phenol Red, mix, compare to color chart.

d. Total Alkalinity
   i. Fill the large tube to 25 ml of water.
   ii. Add 2 drops of 0007 (Thiosulphate) Swirl to mix.
   iii. Add 5 drops of 0008 (Green dye) Swirl to mix
   iv. Add 0009 (Sulphuric Acid) drop wise until color changes from green to red. Swirl after each drop. Multiply drops by 10.
   v. Record value under Alkalinity.

e. Calcium Hardness
   i. Fill the large tube to 25 ml of water.
   ii. Add 20 drops of 0010 (Calcium buffer) Swirl to mix.
   iii. Add 5 drops of 0011 (Blue dye) Swirl to mix.
   iv. Add 0012 (Hardness reagent) drop wise until color changes from red to blue Swirl after each drop. Multiply drops by 10.

Testing Tips

1. View color comparisons against white walls or white paper. Never hold up to light.
2. Rinse comparator tube before and after each use.
3. Take sample elbow depth.
4. Keep the test kit in the office after use.
5. Add reagents drop wise with bottles vertical to ensure consistent drop size.
6. Never allow reagent caps or spouts to touch anything.
7. Never use fingers to mix reagents.
8. Dispose into deck drain, sink or trash. Never dispose of it in the pool.
9. **NEVER LEAVE A CHEMICAL TEST SITTING IN THE SAMPLE CELL!**

B. Common Water Problems

Problem??	What to look For??	Action to be Taken??
Cloudy Water	Is Chlorine level below 1.0ppm???	Check for Blinking Light Reset system and contact Aquatic Manager
	Are filter pumps working??? Check-see if water is coming out of return jets.	If not, contact an Aquatic Manager
	Can't see the bottom of the deep end???	Close Pool, contact Aquatic Manager
Low Chlorine Reading	Check chemical controller for blinking light	Reset system and contact Aquatic Manager
	If the light is not blinking,	Contact Aquatic Manager
High Chlorine Reading	If chlorine is above 5ppm, after testing water in 4 areas of pool,	Close Pool, contact Aquatic Manager
Low/High pH	If below 7.2 or above 7.6.	Check the chemical controller, if light is blinking, reset. Check CO2 tanks, if empty contact Aquatic Manager

Think Safety First.

If there are any other problems with the pool, don't hesitate to call the Aquatic Manager.

C. Deck

Deck Cleanliness is very important for BCYF standards for several reasons.

Board of Health Standards and member satisfaction require us to keep a clean, safe, and hazard free deck.

We need the help of all Aquatic Staff.

What can you do when not on active duty?

- Use a glove to pick up trash and other debris.
- Squeegee deck where water collects.
- Clean drains.
- Use scrub brush in areas that are soiled Keep equipment neatly stored
- Test pool Water
- Check bathroom toilets, showers, sinks and clean if necessary Restock toilet paper and hand soap

Accident/Incident Report (example)

The report must be sent to the Facilities Manager AND the appropriate Regional Operations Manager (ROM) at Boston Centers for Youth & Families' Central Office via fax or email **no later than 48 hours** after the occurrence. If additional space is needed please use a separate sheet and attach it to the report.

Important: If the Accident/Incident is of a serious nature, such as the need to call 911 or medical or police assistance, the appropriate ROM should be called immediately following the event.

Name of Injured Person: _____

Address/Neighborhood:_____Phone:_____

Sex: M F Date of Birth:_____Date/Time of Occurrence: _____

Location of Occurrence: Gym_____Pool_____Hall_____Other (specify): _____

Nature of Injury: _____

_____

_____

State in detail how the accident/incident occurred:_____

_____

_____

Name & phone # of physician, police officer or any other person who gave assistance:

_____

What was done to aid the injured person? _____

Did a staff person witness the occurrence? Y N If so, who?_____

If not, where was the staff member at the time of the occurrence? _____

Reason for, or remarks on the accident:_____

Was the injured person treated at a hospital? Y N If yes, which one?_____

If the injured person is a minor, was the parent/guardian notified? Y N

When & by whom?_____

BCYF Community Center:_____

Approving Supervisor:_____Date:_____

Staff member's signature:_____Date:_____

(*If applicable*) Parent signature:_____Date: _____

LOST SWIMMER SEARCH AND RECOVERY

THREE whistle blasts indicate that all swimmers must get out of the water and that the staff must conduct the Lost Swimmer Search and recovery.

1. Any employee initiates search once a child is reported missing or if swimmer count is inconsistent, by requesting that the lifeguard activate the Emergency Action Plan. THREE LOUD WHISTLE BLOWS.
2. Immediately remove all swimmers from water. Do not leave your station until the water is cleared of swimmers.
3. Move all patrons away from the water.
4. The on duty supervisor will take command. The supervisor will immediately assign staff to begin the water rescue and the land search.
5. The supervisor will also assign personnel to check nearby areas. Areas to search include, but are not limited to: bathrooms and nearby parking areas.
6. The supervisor will keep control on land or appoint someone to be the land coordinator.
7. A lost or injured swimmer in the water will be rescued according to the lifeguards' training, and including contacting and utilizing EMS. An underwater search procedure, in case of water that is unclear, is described in this packet. The land coordinator will suspend the search after the lost child has been identified. If this has not occurred after 5 minutes, professional emergency assistance will be sought (911).
8. The water remains closed until the search and rescue is concluded, and the lifeguards are back in place. This will often require a "recuperation" period after the search has been concluded.
9. The supervisor will fill out an accident/incident report and submit to proper personnel.

Sightings and Cross Bearings

When a drowning victim submerges at a waterfront, you must swim or paddle to his or her last-seen position. Take a *sighting* or a *cross bearing* to keep track of where the victim went underwater.

To take a sighting:

1. Note where the victim went underwater.
2. Line up this place with an object on the far shore, such as a piling, marker buoy, tree, building or anything that is identifiable. Ideally, the first object should be lined up with a second object on the shore (Figure 6-13). This will help you to maintain
3. a consistent direction when swimming, especially if there is a current.
4. Note the victim's distance from the shore along that line. With two lifeguards, a cross bearing can be used

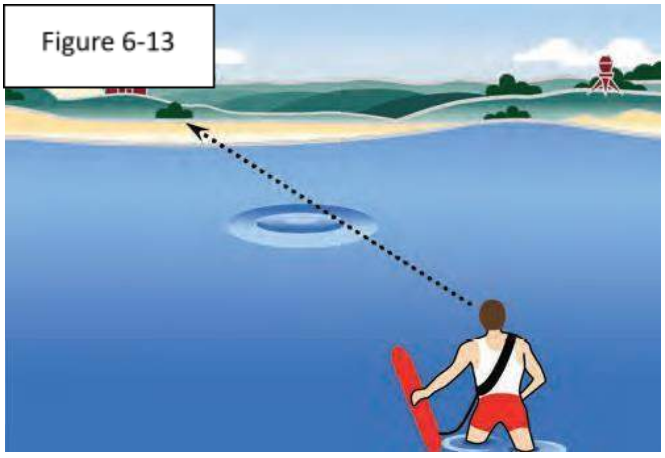


Figure 6-13

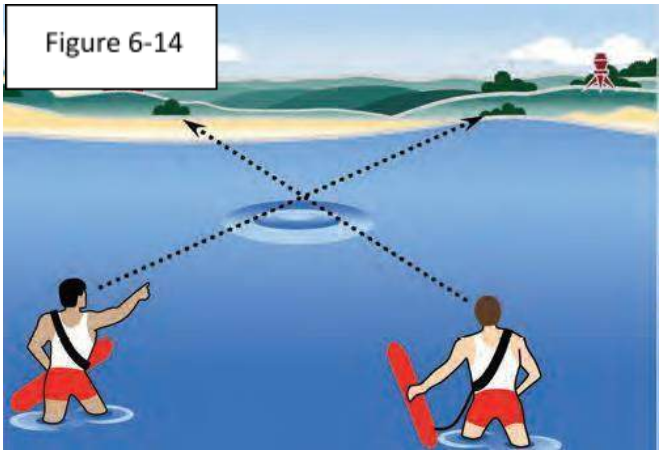


Figure 6-14

To take a cross bearing:

1. Have each lifeguard take a sighting on the spot where the victim was last seen from a different angle (Figure 6-14).
2. Ask other people to help out as spotters from shore.
3. Have both lifeguards swim toward the victim along their sight lines.
4. Have both lifeguards check spotters on shore for directions. Spotters communicate with megaphones, whistles or hand signals.
5. Identify the point where the two sight lines cross. This is the approximate location where the victim went underwater.

If a person is reported as missing in or near the water, or you have attempted and are unable to locate a victim after submersion, a search is necessary.

Searching Shallow-Water Areas

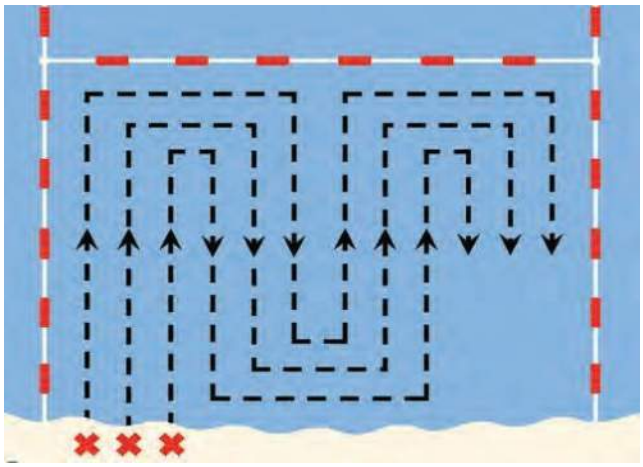
To search shallow-water areas where the bottom cannot be seen:

1. Have a lifeguard oversee the search.
2. Ask adult volunteers and staff to link their arms and hold hands to form a line in the water. The shortest person should be in the shallowest water, and the tallest person should be in water no more than chest deep (Figure 6-15).
3. Have the whole line slowly move together across the area, starting where the missing person was last seen.
4. As the line moves forward, have searchers sweep
5. their feet across the bottom with each step. If there is a current, walk downstream with the current. A typical search pattern is shown in Figure 6-16.
6. Have only trained lifeguards search deeper areas.

Figure 6-15

Lifeguards performing a shallow-water line

Figure 6-16



Searching Deep-Water Areas

Surface Dives

Feet-first and head-first surface dives enable lifeguards to submerge to moderate depths to search for a submerged victim.

Deep-Water Line Searches

The deep-water line search is used in water greater than chest deep when the bottom cannot be seen from the surface. The search should start at the point where the victim was last seen in the water. This point should be marked on the shoreline.

1. Wearing masks and fins, several lifeguards form a straight line an arm's length from each other (Figure 6-17).
2. One lifeguard should serve as the safety lookout above the water level on a pier, raft or watercraft with rescue equipment in case a searcher gets in trouble or the missing person is found.
3. On command from the lead lifeguard, all lifeguards perform the same type of surface dive (feet-first or head- first) to the bottom and swim forward a predetermined number of strokes— usually three. If the water is murky, searchers check the bottom by sweeping their hands back and forth in front of them, making sure to cover the entire area. To keep the water from becoming cloudier, try to avoid disturbing silt and dirt on the bottom. Be sure not to miss any

Figure 6-17

Lifeguards performing a deep-water line search

areas on the bottom when diving and resurfacing.

4. Lifeguards should return to the surface as straight up as possible.

5. The lead lifeguard accounts for all searchers, re-forms the line at the position of the person farthest back and backs up the line one body length. On command, the team dives again.

6. Lifeguards repeat this procedure until the victim is found or the entire area has been searched. Figure 6-18 shows one example of a search pattern: lifeguards move the line in one direction to the boundary of the search area, then turn at a 90-degree angle to the first line and repeat the sequence as necessary.

7. If the missing person is not found, lifeguards expand the search to nearby areas.

Figure 6-18

Deep-water search pattern

Consider whether currents may have moved the victim.

8. Lifeguards continue to search until the person is found, emergency personnel take over or the search has been called off by officials.

9. If a lifeguard finds the victim, the lifeguard should bring the victim up by grasping the victim under the armpit and returning to the surface. Swim the victim to safety, keeping the victim on his or her back, with his or her face out of the water. A lifeguard with equipment should take over to maintain an open airway while moving the victim to safety. Remove the victim from the water, assess the victim's condition and provide appropriate care.

Emergency Contacts

Contacting the Police & Fire Department

When calling emergency services are prepared to provide the following information: 'Emergency Procedures' must be posted in a conspicuous area by a telephone.

1. Your location – specific
2. Your telephone number (see below)
3. Your name
4. What happened
5. How many people involved
6. Condition of victims
7. First Aid being given (if any)

BCYF Administrative Contacts

After the initial call to emergency services, BCYF administration must be contacted. Notify on- site supervisors, and call the following numbers in the listed order until contact with a person has been made.

1. Site Administrative Coordinator – Get # from assigned site _____
2. Program Director – Get # from assigned site _____
3. Regional Operations Managers:
    - Operations Director, Edward Mcguire -
    - East Region, Vacant
    - West Region, Jack Duggan - 617-549-0418
    - North Region, Dan Monahan – 617-438-3747
    - Central Region, Shawn Webb - 617-592-0133
4. Aquatics Managers:
    - Antonio Rosario – 617-438-4983
    - Jeff Mackey – 617-438-4898

Emergency Phone Numbers

Emergency	**9-911**
Boston Fire Department (non-emergency)	617-343-3550
Boston Police (non-emergency)	617-343-4200
Poison Control Center	800-222-1222

NOTES

Appendix C

Resumes and Qualifications of Shorebird Monitors

Lyra D. Brennan, M.S. Natural Resources
lbrennan@massaudubon.org; 508-548-0663

Relevant Experience:

Director, Mass Audubon Coastal Waterbird Program, Cape Cod, MA January 2022-present

- Oversee listed species monitoring, management, protection, and research at 185 coastal sites, covering 133 miles of coastline.
- Foster productive and innovative partnerships with state and federal agencies, NGOs, and landowners that champion coastal protection.
- Pursue research opportunities and projects with a strong focus on coastal resiliency, climate change, and wildlife disturbance.
- Support green, climate smart coastal restoration projects as well as comprehensive monitoring and assessment of these projects.
- Collaborate and coordinate with organizations and campaigns across the Atlantic Flyway.
- Serve on a national DEIJA steering committee seeking to support Diversity and Inclusion in the shorebird world.
- Manage shorebird training program for over fifty Mass Audubon full-time and seasonal staff and over seventy partners.
- Engage in advocacy opportunities for better coastal management and conservation across the state

Assistant Director, Mass Audubon Coastal Waterbird Program, Cape Cod, MA January 2018-December 2021

- From 2018-2021, CWP-monitored sites saw a 29% increase in Piping Plover pairs, a testament to successful management and protection. 2019 was a record year in terms of fledging success.
- Supported a seasonal staff retention rate of 40% or higher after each field season, demonstrating successful mentorship and staff management.
- Personally awarded the 2020-2021 AmeriCorps Cape Cod Partner of the year award for work with AmeriCorps teams and shorebird fencing.
- Overhauled data systems to digital collection method for the program; worked closely with web developer and successfully launched NestStory to every region by 2021. The program increases data accuracy for ease of analysis and statewide reporting.
- Invited to serve on innovative USFWS steering committee that provides support and education to scientists new to shorebird nesting management.
- Served as CWP spokesperson at national and international working groups, including the Roseate Tern Recovery Group, National Piping Plover and Least Tern workshop, American Oystercatcher Working Group and International Life of the Edge Project.
- Planned/supervised all field activity as part of a coastal restoration project on a barrier island expected to increase threatened shorebird nesting habitat by 200%.
- Maintained and managed use of three skiffs for the program over four field seasons with no

safety issues.

- Provided hands-on guidance and support for the biological monitoring and protection of threatened and endangered shorebird species across all Mass Audubon regions including Allen's Pond and Wellfleet Bay.
- Responsible for the hiring, training, and supervision of up to twenty-five seasonal field biologists; met all program objectives despite two field seasons impacted by the COVID-19 pandemic.
- Assisted in the design, data collection, and management of multiple research projects, including research examining vegetative changes resulting from rising sea level.
- Fostered positive relationships with over thirty partners, including private landowners, townships, and the Department of Conservation and Recreation. 95% of landowners at new nesting locations that I worked with on an individual basis permitted fencing on their property, resulting in the development of many new positive partnerships.

Conservation Biologist, Vermont Center for Ecostudies, Norwich, VT 2017

- Surveyed over fifteen watersheds in Vermont for listed freshwater mussel species and habitat.
- Collaborated with state zoologists from the Vermont Natural Heritage Program to develop survey techniques and cultivate state-specific endangered freshwater mussel knowledge.
- Managed community outreach to engage citizens and local organizations in freshwater mussel conservation and served as the contact point for the public and media outlets.
- Assisted in the development and launch of a new citizen science initiative: The Vermont Freshwater Mussel Survey.
- Organized and hosted a citizen science workshop that taught participants about freshwater mussel identification, ecosystem roles, and survey protocol and attracted local residents and media outlets.

Conservation Ecologist, Agricultural and Natural Areas Committee of Monkton, Monkton, VT 2016-2017

- Surveyed privately-owned, state-owned, and town-owned land within a 19,000-acre watershed to determine important ecological features and natural resources. Assessed land included a 500-acre wetland and other riparian areas crucial to wildlife.
- Used GIS and spatial data to designate priority areas and to create updated maps of nearly 4,000 acres of land.
- Located ten rare species previously unrecorded in these areas; utilized natural community mapping and other analysis to prioritize fragile/threatened habitat types.
- Worked closely with over forty private landowners to gain access to property; partnered with the town to provide recommendations for the restoration and management of significant ecological areas.
- Collaborated with the Vermont Land Trust and the Vermont Natural Heritage Program on areas of special concern, including a northern white cedar wetland complex adjacent to farmland.

Lab Coordinator and Graduate Teaching Assistant, Rubenstein School of Environment and Natural Resources, University of Vermont. 2015-2017

- Revised and taught natural resource labs to both graduate and undergraduate teaching assistants, and coordinated the labs for 180 undergraduate students.
- Awarded the annual Outstanding Graduate Teaching Assistant award for exemplary teaching in the fields of Natural Resources, Nature and Culture, and Environmental Studies. The faculty and students who nominated me for the award commended my support of women pursuing work in STEM fields along with my engaging teaching style.

Conservation Fellowship, Mass Audubon Coastal Waterbird Program, Barnstable, MA 2014-2015

- Regional crew leader of the Coastal Waterbird Program in Boston during the 2015 field season, during which record numbers of Piping Plover nested on Revere and Winthrop beaches.
- Worked alongside the Massachusetts Department of Conservation and Recreation and United States Fish and Wildlife Service to strategically manage previously undesignated critical habitat areas.
- Collected specialized data to optimize policy and management decisions made at controversial and highly-trafficked sites, including that used to launch new monitoring protocol for beach-raking practices.
- Developed and piloted a volunteer shorebird stewardship program that recruited three new independent volunteers and fostered a new partnership with the New England Aquarium, which brought aquarium staff to assist in monitoring nesting sites.
- Formalized updated curriculum and communication modules for statewide CWP staff in order to standardize outreach methods and maintain training continuity.
- Collected data for multiple research projects, including those related to public interactions and Piping Plover brood range and behavior.

Field Biologist, Mass Audubon Coastal Waterbird Program, Barnstable, MA 2014

- Monitored and protected Piping Plovers and Least Terns at Revere and Winthrop beaches in Boston. 2014 was the most successful year in recent Piping Plover nesting history, largely due to the almost complete fledging success of pairs at these sites.
- Implemented all federal guidelines relating to habitat and symbolic fencing for birds in addition to educating and interacting with thousands of beachgoers regarding the birds' biology and their presence on urban beaches.
- Recorded and organized the captured data for Mass Audubon and the Massachusetts Piping Plover Census and completed the endangered species census forms for all Boston sites.
- Researched the effects of adjacent construction on nesting habitat and the changing feeding patterns of Least Terns, which revealed a correlation between beach restoration activity and reduced Least Tern prey availability.
- Coordinated beach management and public interactions with the Department of Conservation and Recreation to create an environment where endangered birds and large human populations can coexist

successfully.

Research Assistant, Independent Master's Project Woods Hole, MA 2013

- Assisted a Boston University M.S. student in a sensory biology study that explored smooth dogfish sharks' sensory capabilities in relationship to ocean acidification and bait dilutions.
- Observed and recorded behavioral data using motion-tracking software to follow specimen movement within indoor tanks in response to underwater bait plumes.

Education and Teaching:

Adjunct Faculty, Cape Cod Community College (2020-present)

M.S. Natural Resources, Field Naturalist and Ecological Planning Program Rubenstein School of Environment and Natural Resources, University of Vermont. 2017

Post-baccalaureate coursework, Biology Baruch College, City University of New York. 2013

B.F.A Theater, B.A. Anthropology Tisch School of the Arts, New York University, Honors Scholar. 2009

Jamie Infanti

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(609)-742-7352
67 Alfred Metcalf Drive
South Dennis, MA 02660

Education

2015-May 2019: University of Connecticut, Bachelor of Science: Natural Resources Fisheries and Wildlife Conservation

Relevant Experience

Program Manager Mass Audubon Coastal Waterbird Program Oct 2023 – present

- Assist Coastal Waterbird Program Director in maintaining a program to protect coastal waterbirds and their habitats at public and private beach properties in Massachusetts, in cooperation with other Mass Audubon staff, researchers, government agencies, private interest groups, property owners, and the public
- Oversee day-to-day operations of seasonal staff in selected locations and coordinate logistics.
- Address partnership and site concerns proactively through communications; oversee weekly reporting to over 100 partners.
- Respond to incidents and work directly with law enforcement.
- Oversee data collection and compilation and ensure timely reporting of data to state and federal regulatory agencies.
- Promote a high level of clear and consistent internal communication among Coastal Waterbird Program staff and volunteers and among sanctuaries and departments

Field Coordinator Mass Audubon Coastal Waterbird Program March 2021 - Oct 2023

- Oversaw shorebird monitoring efforts of 30+ field crew members across coastal Massachusetts
- Continually trained and led staff members on best monitoring practices, crew scheduling, safety protocols and crew member relations throughout the field season
- Organized and presented bi-weekly trainings to 40+ staff members, including organization of presentations and technical set-up
- Organized materials, scheduling and training for special research projects; including invertebrate surveys, tern foraging studies and vegetation transects
- Led weekly partner reporting efforts for 29 different reports to 85+ recipients; including review of all reports and organization of their distribution

- Assisted with hiring of seasonal staff, including applicant review, interviews and communications with applicants
- Contributed to maintenance and organization of nesting data, nesting site mapping and end of season data submission
- Ran educational programs to school groups and general public
- Coordinated and communicated with landowner and regulatory partners across Cape and North Shore regions
- Completed incident reports for necessary events, including compiling all relevant data + evidence, mapping and composing recommendations for regulatory agencies
- Participated in meetings with partnering organizations and groups in the off season
- Communicated with partners, landowners and regulatory agencies both in the field and by phone or email on coordinated management and protection efforts at field sites
- Oversaw distribution of symbolic fencing permission letters to relevant landowners in conjunction with CWP Administrative Assistant
- Operated and managed field boats, including trailering, mooring, emergency removal for weather, battery repairs and some field staff training
- Analyzed and organized 5 years of vegetation transect data to compile into a poster and presentation. Poster was presented at the 2023 Atlantic Coast Piping Plover and Least Tern Workshop. Project was presented at 2023 Cape Cod Natural History Conference and 2023 Northeast Coastal Waterbird Cooperators Meeting

Crew Leader Mass Audubon Coastal Waterbird Program April 2020-Aug 2020

- Led a team to achieve shorebird monitoring and public outreach goals
- Managed and monitored shorebird nesting sites on Cape Cod for best success of nesting Piping Plover and Least Tern
- Educated beachgoers and boaters on shorebird biology, nesting and conservation
- Trained incoming staff on proper field procedures and protocol
- Crafted weekly schedule for team and communicated daily site assignments for each crew member
- Oversaw data set of shorebird nesting activity with an emphasis on mapping and productivity data

Beach Steward Wetlands Institute August 2019-September 2019

- Educate public about beach nesting birds and coastal bird conservation
- Monitor conservation area and enforce boundaries and ordinances
- Collect data on human usage near conservation area and disturbances

Coastal Conservation Lead Research Intern Wetlands Institute May 2019-Aug 2019

- Designed independent research project on behavior and nesting success of a Common Tern colony
- Managed and monitored an elevated shorebird nesting habitat for nesting success, vegetation growth and predation impacts
- Outfitted Diamondback Terrapins with transmitters and tracked individuals with telemetry equipment
- Conducted point count and flight line surveys of coastal bird populations, including Great Egrets, Glossy Ibis, Snowy Egrets, Double Crested Cormorants
- Assisted with ongoing Saltmarsh Sparrow and Seaside Sparrow nest and population monitoring
- Trained incoming intern staff and led group research efforts
- Contributed to and organized mark-recapture database for Diamondback Terrapin population tracking

Army Ant Guest Collection University of Connecticut January 2019- May 2019

- Mounted, labeled and identified preserved insect specimens
- Contributed to cataloging of over 10,000 vials of preserved voucher specimens in to online databases
- Worked alongside natural history collections staff to prepare and organize specimens for research uses

Coastal Conservation Research Intern Wetlands Institute May 2018-August 2018

- Contributed to new telemetry movement study of juvenile Diamondback terrapins
- Participated in mark and recapture study of Diamondback Terrapin population in Stone Harbor, NJ using PIT tagging methods
- Constructed and completed independent research project on behavior of nesting coastal birds
- Assisted NJ Division of Fish and Wildlife with banding study of juvenile Black Skimmer
- Monitored status of shorebird nesting sites and conducted point count surveys of sensitive species

AmeriCorps Member, Jumpstart University of Connecticut Sept. 2016-May 2017

- Jumpstart is a national early education organization that recruits and trains college students and community Corps members to serve preschool children in under-resourced neighborhoods.
- Managed an educational afterschool program with children ages 1-10
- Prepared and led weekly themed activities

Student Coordinator, Green Schools Alliance Shepherdstown, WV April -June 2016

- Was one of four undergraduate students selected to coordinate the Student Climate and Conservation Congress at the National Conservation Training Center

- Created a 1 week curriculum centered around environmental topics to educate and engage over 100 high school students
- Led workshops on environmental topics and leadership for other staff and students
- Worked with US Fish and Wildlife employees to create biology workshops for students

Presentations

Infanti, J. Using Standardized Vegetation Transects to Assess Effects of Sea Level Rise on Shorebird Habitat. Northeast Coastal Waterbird Cooperators Meeting, August 2023, Barnstable, MA.

Infanti, J. Using Standardized Vegetation Transects to Assess Effects of Sea Level Rise on Shorebird Habitat. 26th Annual Cape Cod Natural History Conference, March 2023, Barnstable, MA.

Infanti, J. Impacts of Nest Site Selection in a Mixed Species Colony of Black Skimmer (*Rynchops niger*) and Common Tern (*Sterna hirundo*). The Wetlands Institute Intern Symposium, August 2019, Stone Harbor, NJ.

Ferguson, L.M.*, K. Grab, J. Infanti, S.J. Kerr, A. Lillie, S.M. Luell, A. Lyons, B. Morey, D. Stoner, and B. Williamson. *Presenter. Updates on the Diamondback Terrapin Conservation Program from the 2018 Season. Mid-Atlantic Diamondback Terrapin Working Group Meeting, August 2018, Tuckerton, NJ.

Infanti, J. Behavior and Nest Site Selection in a Mixed Species Colony of Black Skimmer (*Rynchops niger*) and Common Tern (*Sterna hirundo*). The Wetlands Institute Intern Symposium, August 2018, Stone Harbor, NJ.

Appendix D

Statement of Owner Authorization and Copies of Application Fee Payments

I, **Ryan Woods – Commissioner Boston Parks and Recreation Department**, the record Owner of the Curley Community Center property at William J. Day Boulevard (identified as Parcel ID: 0702442000) in Boston, MA, hereby grant permission for CDM Smith Inc. to file a MESA Checklist and application for a Conservation Management Permit for coverage under a Certificate of Inclusion (COI) for a Piping Plover Habitat Conservation Plan. This (COI) includes an annual payment for off-site mitigation as well as additional monitoring and reporting costs to be covered by the City of Boston – through the Boston Centers for Youth & Families.

Signature

2/2/24

Date

CDM Smith
75 State Street, Suite 701
Boston, Massachusetts 02109

No. 1868463

Check Date : 02/08/2024

COMM. OF MASSACHUSETTS - NHESP, NAT HERITAGE & ENDANGERED SPEC PROG, WESTBOROUGH, MA 0158 **Vendor No. 97907**

Invoice	Description	Date	Gross Amount	Discount	Net Amount Paid
CHKRQ 020624-1	FILING FEE FOR HABITAT CONSERV	02/06/2024	$300.00	$0.00	$300.00
Detach at Perforation Before Depositing Check		Grand Totals	$300.00	$0.00	$300.00

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER, A VOID PANTOGRAPH AND MICROPRINTING. THE BACK OF THIS DOCUMENT HAS AN ARTIFICIAL WATERMARK – HOLD AT AN ANGLE TO VIEW.

CDM Smith
75 State Street, Suite 701
Boston, Massachusetts 02109

Bank of America
51-44/119

Check No. 1868463

Check Date
02/08/2024

Check Amount
$ ********300.00

PAY *Three Hundred AND 0/100*

TO THE ORDER OF

COMM. OF MASSACHUSETTS - NHESP
NAT HERITAGE & ENDANGERED SPEC PROG
MA DIV OF FISHERIES AND WILDLIFE
1 RABBIT HILL ROAD
WESTBOROUGH , MA 01581 United States

97907

⑈0186846 3⑈ ⑆011900445⑆ 0000000 19466⑈

Warning: DO NOT CASH THIS CHECK WITHOUT NOTING THE SECURITY FEATURES LISTED BELOW.

ENDORSE HERE

MP

MP

MP

NOTE: THE ABOVE LINES ARE COMPOSED OF MICRO TYPE CONTAINING THE WORD "SECURE". CHECK WITH MAGNIFIER.

THE FOLLOWING SECURITY FEATURES MUST BE PRESENT IN THIS DOCUMENT:

Microprint Border	Small Type That Appears as a Solid Line when Photocopied.
Original Screen on Back	The Word Original Reversed Out of a Grey Screen on Back.
Blue Void Pantograph	Blue with Coven Void Pantograph Design.
Artificial Watermark	Watermark Visible on Back.
Thermochromic Ink	Rose Padlock Logo Printed with Ink that Responds to Warmth - Hold Between Thumb and Forefinger or Breathe on it - The Logo will Fade and Reappear.

DO NOT ACCEPT IF THESE FEATURES ARE NOT PRESENT.

CDM Smith
75 State Street, Suite 701
Boston, Massachusetts 02109

No. 1868464

Check Date : 02/08/2024

COMM. OF MASSACHUSETTS - NHESP, NAT HERITAGE & ENDANGERED SPEC PROG, WESTBOROUGH, MA 0158 **Vendor No. 97907**

Invoice	Description	Date	Gross Amount	Discount	Net Amount Paid
CHKRQ 020624	FILING FEE FOR HABITAT CONSERV	02/06/2024	$600.00	$0.00	$600.00
Detach at Perforation Before Depositing Check		Grand Totals	$600.00	$0.00	$600.00

CDM Smith
75 State Street, Suite 701
Boston, Massachusetts 02109

Bank of America
51-44/119

Check No. 1868464

Check Date
02/08/2024

Check Amount
$ ********600.00

PAY *Six Hundred AND 0/100*

TO THE ORDER OF

COMM. OF MASSACHUSETTS - NHESP
NAT HERITAGE & ENDANGERED SPEC PROG
MA DIV OF FISHERIES AND WILDLIFE
97907
1 RABBIT HILL ROAD
WESTBOROUGH , MA 01581 United States

⑈0186846⑆ ⑆011900445⑆ 0000000194666⑈

Warning: DO NOT CASH THIS CHECK WITHOUT NOTING THE SECURITY FEATURES LISTED BELOW.

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DO NOT ACCEPT IF THESE FEATURES ARE NOT PRESENT.

Appendix E

BCYF Correspondence with Boston Police Department District C-6 Commander

Button, Robert

From: Joseph Boyle <joseph.boyle@pd.boston.gov>
Sent: Tuesday, March 5, 2024 4:10 PM
To: Edward McGuire
Cc: Button, Robert; Hannah Wagner
Subject: Re: HCP Permit notification at the Curley Community Center.

Hi Ed,

Thanks for the information. Please reach out if you need any assistance from us.

On Tue, Mar 5, 2024 at 2:47 PM Edward McGuire <edward.mcguire@boston.gov> wrote:

Hello Captain Boyle,

I hope all is well. I am writing to inform you that BCYF/ city of Boston is seeking permits for Inclusion in Piping Plover Habitat Conservation Plan which are federal permits that are regulated by the State.

This is extensive permitting process that may allow the City to open sections of the L street Beach to the public at the Curley community center.

I am writing this email to make you are aware that we are seeking these permits and to let you know that compliance with the parameters of these permits is essential to allow us to continue to operate the facility to it fullest potential. This email/notification to you is required part of the process.

We do not anticipate any issues from the public that would involve your team response but as we have worked together past we want to you know. We will be employing Bird monitors from Mass Audobon who will ensure compliance. The safety of the endangered species is serious task.

If you have any questions or concerns please do not hesitate to contact me. I've cc'd our consultant Bob Burton as well as my colleague Hannah from Environment department.

Best,
Ed

--

Edward M McGuire III
(*pronouns He/Him)*
Director of Operations
Boston Centers for Youth & Families
617-635-4920 ext.2223
Edward.McGuire@boston.gov
Boston.gov/BCYF
Every Neighborhood, One Mission.

617.635.2223(w)

--
Captain Joseph Boyle
Boston Police Department
District 6
101 West Broadway
South Boston

Appendix F

2024 Curley Community Center Coastal Waterbird Program Monitoring and Reporting Budget

Coastal Waterbird Program Staff	Hours April 1-November 1	Base rate	Rate with Fringe (10% seasonal, 29% year-round	Cost	Notes
Curley Field Technician (seasonal)	400	17.55	$19.31	$7,724.00	5-7 days/week of monitoring, 5 days of deterrent raking and HCP implementation, daily reporting and communications. Fencing.
Curley Crew Technician Leader (seasonal)	450	20.55	$22.60	$10,170.00	Site supervision, HCP implementation supervision, 5-7 days of monitoring/week from April through September; start/stop notifications to NHESP, deterrence and other implementation approval. Weekly reporting and daily communications with site operations team
Program Director	150	na	$52.29	$7,843.50	Oversight of HCP and monitoring commitments and requirements, 7 day availability. Final HCP reporting. Administrative needs.
Program Manager	225	na	$36.74	$8,266.50	Staff supervision and training, outreach and educational strategies, materials, and equipment. Adjacent site communications (DCR)
Field Coordinator (Site compliance officer)	200	na	$35.48	$7,096.00	Site compliance officer (required by the HCP); ensuring compliance with BMP, state and federal guidelines, and complete approve HCP COI. 5 days/week availability. Data QC for active nesting season, completion of HCP report by state deadline of October 15. Report revisions through November.
			subtotal	$41,100.00	
			18% Mass Audubon overhead	$7,398.00	
			total:	$48,498.00	
	unit price	**quantity**	**cost**		
Equipment					
Fencing (fiberglass posts)	$5.00	40		$200.00	
Signage (regulatory/basic)	$3.50	20		$70.00	
Outreach Materials and educational signs				$150.00	
field gear (tablets for data collection, notebooks)				$500.00	
			equipment total	$920.00	
				$49,418.00	

CDM Smith

cdmsmith.com