



The upper Neponset is a low velocity river with emergent marshes and seasonally flooded forests. (See Appendix K for photo information.)

SECTION 5. NEPONSET RIVER RESERVATION

5.1. INTRODUCTION

In 1893, the Metropolitan Park Commission (MPC), a predecessor to both the MDC and DCR, was established and given “the power to acquire, maintain and make available...open space for exercise and recreation.” (Chapter 407 of the Acts of 1893) The Commission’s initial efforts focused on establishing three types of reservations; beach, woodland, and river. Among the latter was the Neponset River Reservation.

Initial efforts to establish a Neponset River Reservation focused on the area between Milton Lower Falls and Boston Harbor. In 1899, protection efforts moved upriver with the MPC acquiring “a wide spreading tract of lowland known as the Fowl Meadows” between Paul’s Bridge, Milton and Green Lodge Street, Canton (MPC 1900). It took nearly a century before land protection efforts focused on riverfront lands upstream of Fowl Meadow.

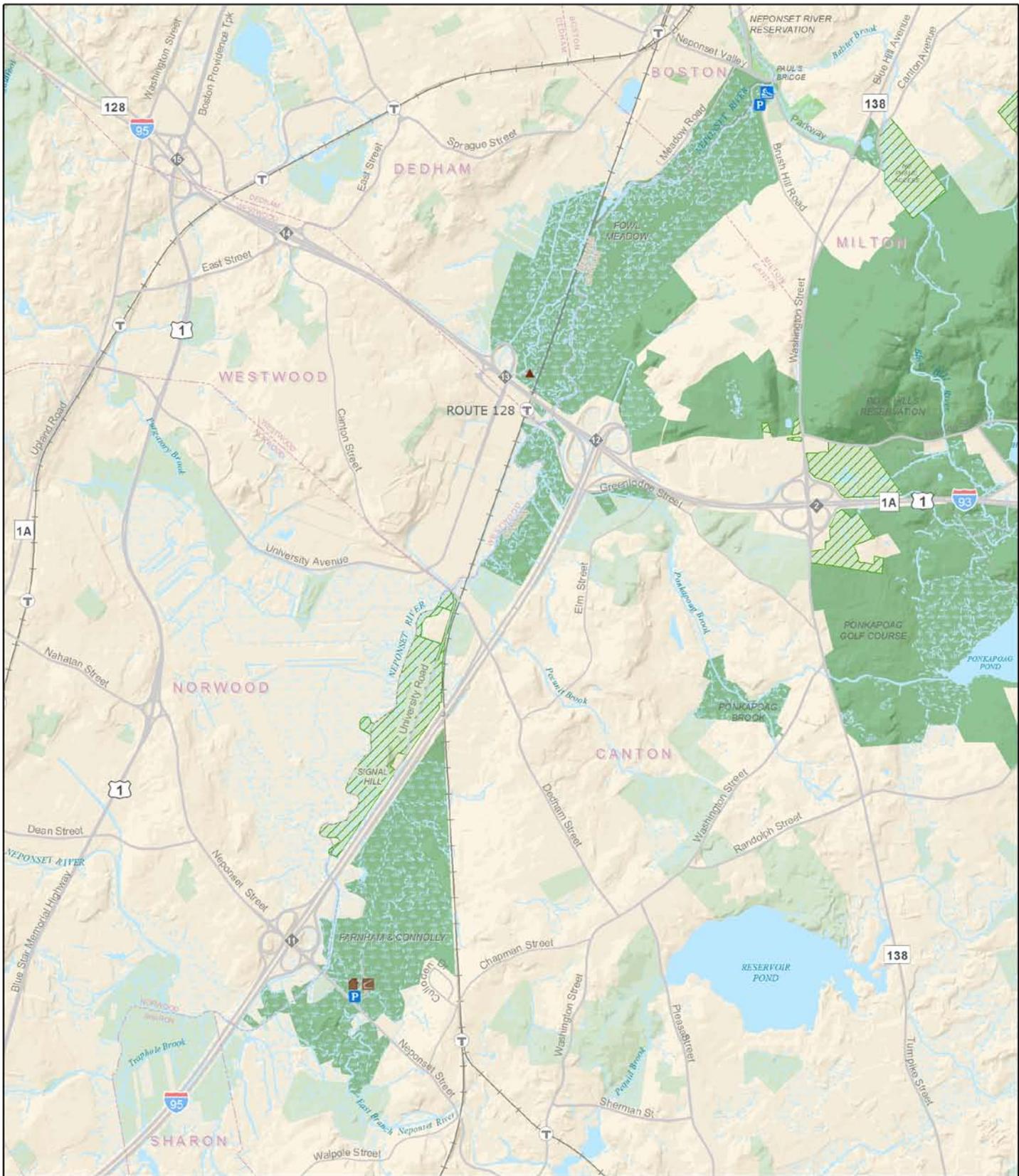
In 1996 the MDC acquired the former Canton Airport; nearly 20 years of cleanup and restoration followed. In 2014, the property opened as the Lt Arthur E. Farnham, Jr. and TSgt Thomas M. Connolly, Jr. Memorial Park (Farnham & Connolly). It was named in honor of two friends who worked at

the Canton Airport in the 1930s, were shot down over Serbia in WWII, and were later airlifted to safety (Turner 2014).

Recent land protection efforts have focused on the river corridor between Fowl Meadow and Farnham & Connolly. Protection has been achieved through land purchases and the acquisition of a conservation restriction.

How you perceive the Reservation depends on your vantage point. From the land, there is limited recreation infrastructure and the properties are separated by major roads. However, from the water, the Reservation is a continuous recreation corridor through a largely undeveloped stretch of the Neponset.

The terms *Neponset River Reservation* and *Reservation* are used to collectively refer to Fowl Meadow, Farnham & Connolly, unnamed parcels between the two, and parcels south of Farnham & Connolly. (Figure 5.1.1) The portion of the Neponset River Reservation downstream of Paul’s Bridge is not covered in this RMP as it is not within the Blue Hills Complex. Parks north of Paul’s Bridge will be addressed in a future, separate RMP.



- Neponset River Reservation
- Blue Hills Complex Land
- Other DCR Land
- Other Protected Open Space
- DCR Legal Interest
- Boat Launch
- Portable Toilet
- Public Parking
- Pumphouse
- Shade Shelter

Neponset River Reservation

Figure 5.1.1

1,000
Feet



Geographic information provided by MassGIS and DCR GIS, 2016

The Reservation’s physical, political, and regulatory attributes are summarized in Table 5.1.1.

Table 5.1.1. Physical, political, and regulatory settings of Neponset River Reservation.

Setting	Name or Metric
Location:	Boston, Canton, Dedham, Norwood, Westwood
Area (acres)^a:	1,297.56
Perimeter (miles)^a:	18.10
Landscape Designation(s)^b:	Parkland
Legislative Districts:	
House	6 th Norfolk 7 th Norfolk 11 th Norfolk 14 th Suffolk
Senate	Norfolk and Suffolk Norfolk, Bristol, and Plymouth
Regulatory Designations:	Priority Habitat Fowl Meadow and Ponkapoag Bog ACEC

a. Calculated using a Geographic Information System (GIS).
 b. For a summary of DCR’s landscape designations, see <http://www.mass.gov/eea/docs/dcr/ld/ld-factsheet-final.pdf>.

Associated Properties. There are no associated properties. All properties addressed in this Section are part of the Neponset River Reservation.

5.2. NATURAL RESOURCES

Physical Features

Within the Reservation, the Neponset River lies in a relatively flat, north-south oriented river valley. Elevations range from approximately 45 feet at the river, to 98 feet at hilltops. Higher elevations are realized along the southeast borders of both Fowl Meadow and Farnham & Connolly.

Much of the river valley, and the flow of the river itself, has been modified through the construction of transportation corridors (e.g., roads, railroad line) and commercial and residential development. The construction of I-95 in the early 1960s included the physical relocation of portions of the river channel. Within the Reservation, areas have been affected by these modifications and by other changes to the land. Drainage ditches were cut throughout Fowl Meadow, and Farnham & Connolly was ditched and filled for its historic use as an airport. These ditches

and historic runways are visible in aerial images and remain prominent landscape features. All portions of the Reservation were affected by the historic damming and industrialization of the river.

Water Resources

The Reservation has abundant surface and ground water resources. They provide wildlife habitat, recreational opportunities, and drinking water. These resources are summarized in Table 5.2.1.

Table 5.2.1. Water resources of Neponset River Reservation.

Water Resource	Name or Metric
Watershed:	Boston Harbor; Neponset
Aquifer:	
High Yield (acres)	254.36
Medium Yield (acres)	679.11
Rivers and Streams (miles)	4.73
Vernal Pools	
Certified (#)	4
Potential (#)	47
Wetlands (acres)	998.18
Lakes and Ponds (acres)^a	28.32

a. This category also includes open areas of major rivers, as identified in MassDEP Wetlands (1:12,000; MassGIS 2009).

The river segment between East Branch in Canton and Mother Brook in Boston has impaired water quality (DEP 2013). The entire portion of the Reservation, within the Blue Hills Complex, is located in this segment. Sources of impairment include:

- debris/floatables/trash
- DDT
- *E. coli*
- fecal coliform
- foam/flocculants/scum/oil slicks
- oxygen (dissolved)
- PCB in fish tissues
- turbidity

Impairments documented within the Reservation include *E. coli*, Total Phosphorous, Total Nitrogen, and Dissolved Oxygen (NEPRWA 2014). Due to the presence of PCBs and DDT in this stretch of the River, a public health fish consumption advisory has been issued (HHS 2015). The Canton Board of Health has posted Public Health Fish Consumption

Advisory signs at major access points along the river, including the Fowl Meadow parking area.

Certified Vernal Pools are located in Fowl Meadow, as are most of the Reservation’s Potential Vernal Pools (PVPs). The remaining PVPs are located in unnamed portions of the Reservation.

Because the Reservation largely occurs within the flood plain of the Neponset River, much of the property is subject to flooding. (Table 5.2.2) This includes most of the trails at Fowl Meadow and the entire developed area at Farnham & Connolly. Due to its elevation (i.e. 49 feet above sea level at Paul’s Bridge) and the presence of downstream dams, the Reservation is not susceptible to storm-related inundation.

Table 5.2.2. Potential impacts of flooding to Neponset River Reservation.

Type of Impact	Acres	%
Flooding:		
100-year Storm	814.12	62.74
500-year Storm ^a	855.76	65.95

a. Cumulative value; includes 100-year storm impacts.

Aquifers beneath the Reservation are an important source of drinking water for local communities. The Dedham-Westwood Water District has one groundwater well (White Lodge Well #5) in, and four additional wells (White Lodge Wells #1, 2, 3A, and 4A) near, Fowl Meadow. The Zone II wellhead protection area for these wells includes most of Fowl Meadow and several unnamed parcels of the Reservation. The Town of Canton has four wells located just off the Reservation, to the south of Neponset Street. The Zone II for these wells includes those portions of the Reservation south of Neponset Street and most of Farnham & Connolly.

Rare Species

State-listed Species

Six state-listed species are known from the Reservation. (Table 5.2.3) All require wetlands or floodplains for all or part of their life cycle. The least bittern had been previously documented in the Reservation (NHESP 2007). However, there has been no documented nesting since 1990 and NHESP now considers its occurrence on the Reservation historic (French and Conlee 2016).

Table 5.2.3. State-listed species of Neponset River Reservation, as identified by the NHESP.^{a,b}

Species ^{a, b}	Type ^c	MESA ^d
Blanding’s turtle	R	T
Blue-spotted salamander	A	SC
Britton’s violet	P	T
Data-sensitive animal ^e	-	T
Long’s bulrush	P	T
Pale green orchis	P	T

a. Presented alphabetically, by common name.

b. Fact sheets are available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/ mesa-list/list-of-rare-species-in-massachusetts.html>.

c. Types of state-listed species include: A = Amphibian; B = Bird; I = Insect; P = Plant; and R = Reptile.

d. Status of species listed under the Massachusetts Endangered Species Act (MESA): E = Endangered, SC = Special Concern; and T = Threatened.

e. In accordance with NHESP policy, organisms subject to collection are not identified in site-specific documents.

Priority Habitat

Much of the Reservation (803.02 acres; 61.89%) has been designated Priority Habitat under MESA. Exceptions include Farnham & Connolly and portions of the Reservation south of Neponset Street, Canton.

Vegetation

There is no comprehensive inventory of the Reservation’s plant life. However, general descriptions exist for the Fowl Meadow and Farnham & Connolly portions of the Reservation.

Fowl Meadow’s common plants include: red maple and swamp white oak in the canopy; highbush blueberry, buttonbush, and silky dogwood in areas with shrub cover; and royal fern, sensitive fern, Canada bluejoint, common bulrush, tussock sedge, jewelweed, and Joe Pye weed in the herb layer (NHESP 2007).

Common vegetation on Farnham & Connolly includes little bluestem and pitch pine in areas believed to have been disturbed due to highway and railroad construction, and a variable mix of oaks, quaking aspen, white pine, and gray birch in other upland areas (BSC Group 2009). Common wetland vegetation includes red maple, glossy buckthorn, silky dogwood, highbush blueberry, northern

arrowwood, speckled alder, willows, sensitive fern, skunk cabbage, and a variety of sedges and rushes. Additional information on these plants is provided in BSC Group (2009).

Extensive plantings were made at Farnham & Connolly as part of park restoration efforts. A variety of trees, shrubs, ferns, turf grasses, and other groundcovers were planted. For details see GEI Consultants et al. (2010).

Invasive Species

Six species of invasive plants have been observed. (Table 5.2.4) One is wetland-dependent (i.e., purple loosestrife); three others prosper in wet soils and floodplains (i.e., glossy buckthorn, common reed, and reed canary grass); and the other two may be found in both uplands and wetland edges.

Table 5.2.4. Known invasive plants of Neponset River Reservation.

Species ^a	Status ^b	Source ^c
Common reed	I	1
Glossy buckthorn	I	1, 2
Japanese knotweed	I	1
Mile-a-minute	I	3
Purple loosestrife	I	1, 2
Reed canary grass	L	1

- a. Presented alphabetically, by common name.
- b. Plants are classified as being either Invasive (I) or Likely Invasive (L) according to MIPAG (2005).
- c. Information contained in this table was obtained from the following sources:
 1. BSC (2009).
 2. NHESP (2007)
 3. Echandi (2009d).

Invasive plants have been identified as a threat to the persistence of populations of all three state-listed plants in Fowl Meadow (NHESP 2007).

Natural Communities

Only the Farnham and Connolly portion of the Reservation has been surveyed for natural communities. BSC (2009) identified five community types; three Palustrine and two Terrestrial. (Table 5.2.5) Only one, Alluvial Red Maple Swamp, is considered a priority natural community.

Table 5.2.5. Known natural communities of Neponset River Reservation.

Community Type ^a	System ^b	State Rank ^c	Source ^d
Alluvial Red Maple Swamp	P	S3	1
Cultural Grassland	T	N/A	1
Mixed Oak Forest	T	S5	1
Shallow Emergent Marsh	P	S4	1
Shrub Swamp	P	S5	1

- a. Classified according to Swain and Kearsley (2011).
- b. E = Estuarine, P = Palustrine, T = Terrestrial.
- c. The NHESP ranks communities from most rare (S1) to the most common (S5).
- d. Information contained in this table was obtained from the following sources:
 1. BSC (2009).

NHESP identified six natural communities that potentially occur in Fowl Meadow (NHESP 2007:18). The occurrence of these community types has not yet been confirmed.

Forests

Only 246.20 acres (18.97%) is upland forest. Patches of these forests tend to occur in those portions of the Reservation farthest from the Neponset River, such as along the eastern boundaries of Fowl Meadow and Farnham & Connolly. Forested wetlands are present along the margins of the Neponset River. Non-forested areas include emergent marshes, cultural grasslands, and parking lots.

Wildlife

Fowl Meadow is a birding “hotspot.” As of July, 2016, 160 species have been identified (eBird 2012). This includes waterfowl, marsh birds, common forest residents, and a variety of spring and fall migrants (e.g., Nashville warbler, orange-crowned warbler). There have been no systematic surveys of other wildlife taxa. A list of wildlife species likely to occur at Farnham & Connolly was included in BSC Group (2009). As of August, 2016, 86 species of birds had been confirmed at Farnham & Connolly (eBird 2012).

5.3. CULTURAL RESOURCES

This section describes the known and potential cultural resource areas, including pre-Contact and

post-Contact archaeological resources, and historic landscapes, buildings, structures, and objects. An overview of significant events in the history of the portion of the Neponset River Reservation upstream of Paul's Bridge is presented in Table 5.3.1. Cultural Resources are identified in Table 5.3.2.

Nine archaeological resources are listed by the MHC; one is also listed in the National Register. Because the MHC does not make information on archaeological resources available to the general public, most resources are not included in Table 5.3.2. Only the resource listed in the National Register is identified.

ARCHAEOLOGICAL RESOURCES

Pre-Contact Resources

The Neponset River, with its many tributaries and estuary, situated on a well-watered coastal plain, provided year-round natural resources for procurement. (See Section 1.5 *Cultural Resources* for additional information on the relationship between the region's rivers and its cultural history.) There are currently over one hundred recorded sites on the lower Neponset River and around the margins of Fowl Meadow. These sites date from the Archaic Period through the Contact Period. The Neponset River Reservation has a high archaeological potential for pre-Contact sites. Any proposed below ground impacts must be reviewed by the DCR Archaeologist.

Post-Contact Resources

No historic archaeological resources are recorded on the MHC inventory for the Neponset River Reservation. Background research will determine if the reservation is sensitive for locating historic period archaeological sites.

HISTORIC RESOURCES

Historic resources are nearly absent; occurring only at Farnham & Connolly. Familiar resources such as the Neponset Valley Parkway and Paul's Bridge abut, but are not part of, the Blue Hills Complex.

Historic Landscapes

Canton Airport. The Massachusetts Air Terminal and Arena (i.e., Canton Airport) was established in 1930. Much of it was situated within the floodplain

of the Neponset River. In January of 1931, four runways were created by using a steam shovel to compact gravel on top of organic wetland soils (Canton Historical Society 2010, DCR 2010b). This gravel created a solid runway surface and largely elevated the runways above the average flood level. "Mosquito ditches were dug throughout the wetlands on site, most likely during the Great Depression" (DCR 2010b). The airport's buildings were constructed on higher and drier ground along Neponset Street. The airport closed in 1954, and the buildings used for industrial purposes. In 1990, PCBs and petroleum hydrocarbons were discovered in soils samples and the site was placed on the Mass DEP list of oil and hazardous material sites. During the cleanup process the airport's buildings were demolished and removed. Only remnants of the gravel runways, their presence indicated by differences in vegetation, and mosquito ditches remain.



The former Canton Airport's runways are visible in the center of this aerial image; mosquito ditches are visible to the left of the runways. (See Appendix K for photo information.)

Buildings

There are no historic buildings.

Structures

There are no historic structures.

Objects

There are no historic objects.

Table 5.3.1. Significant events in the history of Neponset River Reservation.

Year(s)	Events
1899	The MPC acquires the “Fowl Meadows” through land donation and purchases.
1990	Former Canton Airport is placed on the DEP sites list due to concentrations of PCBs in the soil.
1992	Fowl Meadow and Ponkapoag Bog Area of Critical Environmental Concern (ACEC) is designated; both Fowl Meadow and the former Canton Airport are included in this ACEC.
1995–1996	Environmental Site Assessment of the Canton Airport identifies petroleum hydrocarbon and PCB contamination in groundwater and soil samples taken near the former hangars. (Lord Associates 1996)
1996	MDC acquires the former Canton Airport.
2001	MDC and DEP enter into an Administrative Consent Order for the investigation and cleanup of the former Canton Airport.
2003	The MDC acquires a Conservation Restriction on the 126 acre Bates property in Canton and Norwood, now The Trustees of Reservations’ Signal Hill Preserve.
2005–2006	Buildings demolished and debris removed from the former Canton Airport.
2011	Two underground storage tanks are discovered and removed from the former Canton Airport.
2013	6.75 acres added to the former Canton Airport.
2014	Lt Arthur E. Farnham, Jr. and TSgt Thomas M. Connolly, Jr. Memorial Park opens at the former Canton Airport.

Table 5.3.2. Cultural resources of Neponset River Reservation.

Location and Resource	Type ^a	Date ^b	Condition ^c	Integrity ^d	In Use ^e	Utilities ^f	MHC # ^g	Guidance ^h
Fowl Meadow								
Green Hill Site (National Register)	AR	-	-	H	-	-	19.NF.43	1
Farnham & Connolly								
Canton Airport Landscape	LA	1931	-	L	-	-	-	2, 3
Runways	ST	1931	-	L	-	-	-	2, 3
Mosquito ditches	ST	1931	-	L	-	-	-	2, 3

- a. Resource types include the following: AR = Archaeological; BU = Building; CM = Cemetery; LA = Landscape; LHD = Local Historic District; NRHD = National Register Historic District; OB = Object; and ST = Structure.
- b. Date of construction provided, when known.
- c. Preliminary condition assessment using the building system and equipment condition codes as used in the Massachusetts Capital Asset management Information System (CAMIS). The following codes are used: 1 = Excellent-easily restorable to like new condition; 2 = Good-routine maintenance required; 3 = Adequate-some corrective and preventative maintenance required; 4 = Fair-excessive corrective maintenance and repair required; 5 = Poor-renovation needed; and 6 = Fail.
- d. Integrity is a relative assessment of the condition of a resource’s retention of its historic character-defining features; H = High; L = Low; M = Medium; and U = Unknown.
- e. Use categories include N = No, building is not in use; S = Building is used on a seasonal basis; and Y = Yes, building is in use year-round.
- f. The following codes are used to identify utilities associated with buildings: E = Electric, H = Heat; I = Internet; S = Septic system; T = Telephone; W = Water; and W(S) = Water is available on a seasonal basis. This information is included for all buildings.
- g. Massachusetts Historical Commission inventory number; does not include Historic Archaeological numbers.
- h. The following guidance is offered for the ongoing maintenance of these cultural resources:
 1. Refer to Archaeological Features BMP (DCR n.d.k).
 2. Refer to Vegetation in Historic Landscapes BMP (DCR n.d.e).
 3. Refer to Historic Landscapes - Built Features BMP (DCR n.d.d).

5.4. RECREATION RESOURCES

The following recreation activities take place in the Neponset River Reservation:

- Bicycling, mountain
- Canoeing/Kayaking
- Dog walking, on leash
- Fishing
- Geocaching (2 caches as of July 2016)
- Hiking
- Nature study/Photography
- Picnicking
- Running/Jogging
- Skiing, cross-country

The most popular activities are trail-based, and associated with upland areas adjacent to the river. Typical trail activities, such as hiking and mountain biking, take place at Fowl Meadow. Trails on this property are an extension of those in the Blue Hills Reservation, and recreationists commonly travel between properties.

The Reservation's only formal recreation facility is located at Farnham & Connolly. This facility, which opened in 2014, includes an accessible loop trail, two scenic overlooks, and a shade structure. There are no picnic tables. Use levels are unknown.



Part of the developed recreation facility at Farnham & Connolly. (See Appendix K for photo information.)

Additional recreation, including fishing, canoeing, and kayaking takes place on and along the river. The Fowl Meadow parking lot near Paul's Bridge provides access for these activities. River access for cartop boats is also available from Green Lodge

Street, Canton. A formal canoe launch is located off the Reservation, at The Trustees of Reservations' Signal Hill property on University Road, Canton; canoe rentals are seasonally available at this location.

In addition to recreational dog walking, there is also a high level of commercial dog walking, especially in the area of Paul's Bridge and Burma Road. Multiple companies, each with several dogs, often use the park at the same time.

5.5. INFRASTRUCTURE

Property Boundary

The Reservation stretches from the Neponset Valley Parkway in the north, to wetlands near Neponset Street, Canton, to the south. Its parcels are typically located along one or both banks of the Neponset River, but a few are not. The park's boundaries are not posted. In some areas, recognizable features such as the Neponset River and roads form part of the boundary, but in most areas boundaries are indistinguishable on the ground. Questions exist about the accuracy of some mapped boundaries; this is especially true along the Canton-Norwood line.

Likely encroachments were noted at Farnham & Connolly, along its border with residences on Culloden Drive, Canton. An unnamed dirt road leads from Culloden Drive to MBTA commuter rail tracks; it is unclear if the MBTA has an easement or deeded right to access their property through the park. There is no gate to regulate vehicle access.

Easements. Pipes associated with the New Neponset Valley Relief Sewer run the entire length of both Fowl Meadow and Farnham & Connolly. They also pass through the portion of the Reservation near Green Lodge Street, Canton. The MWRA, which manages the sewer system and its associated Rights of Way, holds permanent easements on these pipelines in Fowl Meadow and at Green Lodge Street. (Chapter 422 of the Acts of 1994)

There are four sewer easements at Farnham & Connolly. Two for the MWRA's New Neponset Valley Relief Sewer; one for the Town of Canton; and one for Draper Industries (Crosby-Schlessinger-Smallridge et al. 2010).

The Dedham-Westwood Water District holds a permanent easement on the portion of Fowl

Meadow, Dedham, in which White Lodge Well Number 5 is located. (Chapter 526 of the Acts of 1992)

Buildings and Structures

Non-historic buildings and structures are associated with the Farnham & Connolly formal recreation facility, MWRA sewer lines, or trails at Fowl Meadow. (Table 5.5.1)



Shade shelter at Farnham & Connolly. (See Appendix K for photo information.)



Portable toilet enclosure at Farnham & Connolly. (See Appendix K for photo information.)

Table 5.5.1. Non-historic buildings and structures of Neponset River Reservation.

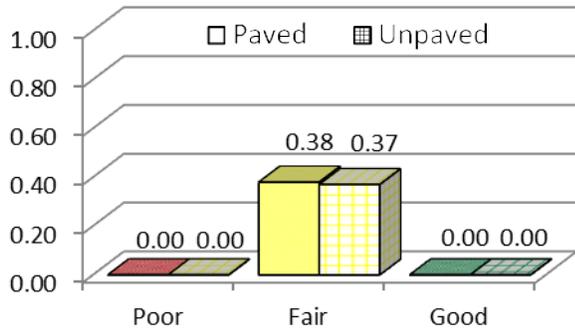
Location and Infrastructure	Date ^a	Condition ^b	In Use ^c	Utilities ^d
Fowl Meadow				
Boardwalk (1) ^e	-	3	-	-
Farnham & Connolly				
Shade structure	2014	1	-	-
Portable toilet enclosure	2015	1	-	-
Wetland deck and overlook (2)	2014	1	-	-
Bridge	2014	1	-	-
MWRA concrete vaults (3) ^f	1990s	2	-	E, S
MWRA manhole access (multiple) ^f	-	-	-	S
MWRA bridge (for pipeline) ^f	-	-	-	-
Unnamed parcels south of Green Lodge Street, Canton				
MWRA manhole access (3) ^f	2011	1	-	S

- a. Date of construction provided, when known.
- b. Preliminary condition assessment using the building system and equipment condition codes as used in the Massachusetts Capital Asset Management Information System (CAMIS). The following codes are used: 1 = Excellent-easily restorable to like new condition; 2 = Good-routine maintenance required; 3 = Adequate-some corrective and preventative maintenance required; 4 = Fair-excessive corrective maintenance and repair required; 5 = Poor-renovation needed; and 6 = Fail.
- c. Use categories include N = No, building is not in use; S = Building is used on a seasonal basis; and Y = Yes, building is in use year-round.
- d. The following codes are used to identify utilities associated with buildings: E = Electric, H = Heat; I = Internet; S = Septic system; T = Telephone; W = Water; and W(S) = Water is available on a seasonal basis. This information is included for all buildings.
- e. Based on preliminary 2015 data.
- f. Infrastructure located on DCR property, but not owned or controlled by the DCR. Its condition is not assessed.

Roads

There are approximately 0.75 miles of roads. The conditions of these roads are summarized, by surface type, in Figure 5.5.1. Forest roads used primarily as trails are not included in this table, but are included in trails data.

Figure 5.5.1. Condition and length of roads at Neponset River Reservation.



Paved roads are solely associated with the “stub”, an incomplete northward extension of I-95 into Fowl Meadow. Meadow Road, a paved municipal road that passes through Fowl Meadow is not included in Figure 5.5.1.

Also excluded from the roads metrics is the Dedham-Westwood Water District’s 0.10-mile-long access road from University Avenue, Westwood to their water supply well in Fowl Meadow. This road was not constructed by, nor is it maintained by, the DCR. In addition, it is not used for park purposes.

Parking

Public parking is available at the north end of Fowl Meadow and the South End of Farnham & Connolly. (Table 5.5.2)

Table 5.5.2. Number of public parking spaces, by location and type, at Neponset River Reservation.

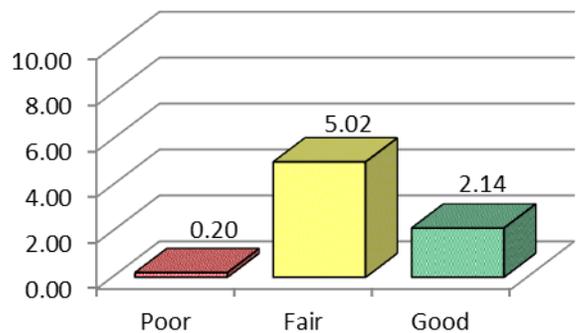
Location	HP	Restricted	Other	Total
Fowl Meadow				
Brush Hill Road, Milton	0	0	7	7
Farnham and Connolly				
	2	0	27	29
Total	2	0	34	36

Trails

The Reservation’s parcels are isolated from each other by both the Neponset River and public roads. As a result, there is no Reservation-wide trail system. However, the Fowl Meadow and Farnham & Connolly parcels each have their own trail systems. Fowl Meadow’s trails are located east of the river, and are contiguous with the Blue Hills Reservation’s trails network.

There are 7.36 miles of official trails in the Reservation. (Figure 5.5.2) This includes trails created for recreation purposes, trails atop sewer line easements, and forest roads. A 0.20 mile paved, accessible interpretive loop trail was opened in 2015 at Farnham & Connolly. Along this trail are ornate landscape plantings, a pavilion, wetland observation decks, and a series of interpretive panels. In addition to the official trails, there is an additional 0.84 miles of unauthorized user-created trails.

Figure 5.5.2. Condition and length of official trails at Neponset River Reservation.





Beneath Burma Road, the main trail through Fowl Meadow, is an MWRA sewer line. Similar sewer lines and trails pass through Farnham & Connolly and the unnamed parcels along Green Street. (See Appendix K for photo information.)

Two long-distance trails, the Bay Circuit Trail (<http://baycircuit.org/wordpress/>) and the Warner Trail (<http://warnertrail.org/>), are located approximately 3.25 miles south of the Reservation. Wetlands, the east branch of the Neponset River, and a high degree of residential development make potential connections to these trails difficult.

Kiosks and Signs

A kiosk is located adjacent to the Fowl Meadow parking lot. There is no kiosk at Farnham & Connolly.

Iron Ranger

There is no iron ranger.

Memorials and Markers

A granite marker, bearing the carved inscription “Fowl Meadow” is located at the trail head adjacent to the parking lot. There are no known memorials at any of the properties.

5.6. INTERPRETATION

There are no ongoing interpretive programs.

Eleven interpretive panels have been incorporated into the design of Farnham & Connolly; five along the main path, five at the shade shelter, and one along the road to the north of the shade shelter. The subjects of these panels are:

- Farnham and Connolly Memorial Park (2 panels)

- Ghost walls
- Red maple: Red maple swamp
- Plants: Native plants
- Watershed: Fowl Meadow
- Wetlands: Vital wetlands
- Aviation: A golden age
- Airfield: An airfield for Canton
- Community: A sense of place
- Heliplane: A plane in every garage
- Airport: Time and again
- Diversity: Beautiful mosaic



Example of interpretive panel at Farnham & Connolly. (See Appendix K for photo information.)

5.7. MANAGEMENT RESOURCES

Staffing

DCR Personnel

The Neponset River Reservation, within the Blue Hills Complex, is managed by field operations team members based at the Blue Hills Reservation. There are no employees on-site.

Partnerships and Volunteers

The Friends of the Blue Hills’ area of interest includes the Fowl Meadow portion of the Neponset River Reservation.

The New England Wildflower Society periodically monitors populations of Britton’s violet at Fowl Meadow.

The Neponset River Watershed Association and DCR jointly conducted a multi-year project to

control purple loosestrife at Fowl Meadow and other locations in the Complex.

Public Safety

The Massachusetts State Police, based at Station H-7 in the Blue Hills Reservation, have primary law enforcement authority over Fowl Meadow. Massachusetts State Police based at Station H-3, Foxborough, have primary law enforcement authority over the other sections of the Reservation. Massachusetts Environmental Police (Regions C-7 and M-2) and local police provide additional enforcement. Fire departments from Boston, Canton, Dedham, Milton, and Westwood provide fire suppression and emergency response. Personnel from DCR’s Fire Control District 4, based at F. G. Hills, provide assistance in fighting fires in the Reservation.

Funding

Conservation Trust Fund

There are no Reservation-specific funds.

Retained Revenue

There are no parking or admission fees. The Reservation does not generate retained revenues.

5.8. MANAGEMENT PRACTICES

Management of DCR properties is guided by a variety of regulations, policies, BMPs (e.g., Table 5.3.2), legal agreements, and institutional knowledge. This section describes those practices unique to the management of the Neponset River Reservation within the Blue Hills Complex. Legal agreements unique to the reservation are listed in Table 5.8.1.

Table 5.8.1. Key legal agreements for Neponset River Reservation.

Party and Subject of Agreement	Type^a	Expiration Date^b
Dedham-Westwood Water District Easement. <i>Authorized by Chapter 526 of the Acts of 1992.</i>	E	N/A
Massachusetts Water Resources Authority Easement <i>Authorized by Chapter 422 of the Acts of 1994.</i>	E	N/A

- a. Agreement types include: L = Lease; P = Permit; S = Special Use Permit; U=Memorandum of Understanding.
- b. Year agreement expires. The expiration date for permanent agreements is identified as N/A (Not Applicable).

Key management and guidance documents are identified in Table 5.8.2.

Table 5.8.2. Key management and guidance documents for Neponset River Reservation.

Author and Document	Year
ENSR International Fowl Meadow and Ponkapoag Bog ACEC: Area of Critical Environmental Concern resource management plan.	2002
Natural Heritage and Endangered Species Program Biodiversity of Blue Hills Reservation.	2007
Echandi, A. Rare and endangered species Habitat Management Plan; Neponset River Wetland and Fowl Meadow Management Unit; Blue Hills Reservation (Cumberland Farms to I-95; I-95 to Paul’s Bridge).	2009d

Annual Maintenance

Ongoing management practices typically follow a regular schedule. Common activities, and the desired frequency with which they occur, are identified in Table 5.8.3.

Table 5.8.3. Annual cycle of management activities at Neponset River Reservation.

Activity	Spring ^a	Summer ^a	Fall ^a	Winter ^a
Litter removal - Trails	AN	AN	AN	N/A
Maintenance - Picnic sites, fences, etc.	AN	AN	AN	N/A
Mowing and trimming	AN	E7	AN	N/A
Pruning - Trees and shrubs	AN	AN	AN	AN
Sweeping - Walkways	AN	AN	AN	AN
Weeding - Flower beds and grassy areas	N/A	AN	N/A	N/A
Weeding - Paved areas	N/A	N/A	N/A	N/A

a. Frequency codes are: A = Annually; AN = As needed; D = Daily, # times; E = Every # days; N/A = Not applicable.

Blue Hills Complex field operations personnel are responsible for performing all of the activities listed above within the portion of the Reservation in their complex. The Neponset Valley Parkway is managed by personnel from the Stony Brook Complex. Field operations personnel from the Castle Island Complex are responsible for managing the Neponset River Reservation downstream of the Blue Hills Parkway.

Natural Resources

Water Resources

The MWRA is responsible for the maintenance and operation of the New Neponset Valley Relief Sewer.

The Dedham-Westwood Water District is responsible for the operation of their well in Fowl Meadow.

Rare Species

In 2007 the NHESP assessed the biodiversity of the Blue Hills Reservation and Fowl Meadow, and offered specific management recommendations to protect state-listed species (NHESP 2007). Recommendations for the “Neponset River Wetland and Fowl River Management Unit” include:

- Develop rare species survey and monitoring program
- Conduct active habitat management for rare plants

- Develop exotic invasive plant monitoring and control program.

Shortly after the biodiversity assessment was completed, a rare and endangered species Habitat Management Plan (HMP) was developed for Fowl Meadow and the portion of the Reservation located between Dedham Street, Canton and Route 128. This HMP specifies active habitat management practices along the MWRA sewer easement in order to protect rare species, enhance rare species habitat, and maintain vegetation along the easement. This HMP was approved by the NHESP in 2009 (French 2009c). It remains the guidance document for rare species management at Fowl Meadow and is to be “reviewed on an annual basis during the fall season.”

Volunteers and staff from the New England Wildflower Society have traditionally surveyed for populations of Britton’s Violet at Fowl Meadow.

Invasive Species

Between 2008 and 2012, *Galerucella* beetles were annually released in the northern section of Fowl Meadow in an effort to control purple loosestrife. This project was a joint effort of DCR, NEPRWA, and the Wetlands Restoration Program of the Massachusetts Office of Coastal Zone Management. Because these beetles reproduce in the wild, it is likely that the species is still present in Fowl Meadow.

Management of mile-a-minute vine has included the application of herbicide to populations along Burma Road (Echandi 2009d); the hand pulling of plants along Green Lodge Street, Canton; and the release of mile-a-minute weevils along Green Lodge Street in 2009.

Vegetation

DCR rangers and Blue Hills field operations staff remove hazard and downed (i.e., fallen) trees from trails at Fowl Meadow. They also remove downed trees and limbs preventing the passage of canoes and kayaks along the Neponset River within Fowl Meadow. Volunteers may help prune vegetation along trails. Field operations team personnel mow Burma Road, within Fowl Meadow, annually in October.

The MWRA and the Dedham-Westwood Water District are responsible for managing vegetation within their respective easements.

Wildlife

There are no activities unique to this park.

Cultural Resources

There are no activities unique to this park.

Recreation Resources

DCR's Parks and Recreation Rules prohibit hunting and trapping throughout most of the Reservation, unless authorized by the Commissioner or specifically authorized by law (302 CMR 12.11(3) ii). Under these rules, hunting is not prohibited in the Norwood portion of the Reservation.

The use of watercraft in the Reservation is specifically regulated by DCR's Parks and Recreation Rules (302 CMR 12:00). Only cartop boats may be launched from Green Lodge Street, Canton, and from the Paul's Bridge area adjacent to the Fowl Meadow parking lot.

Infrastructure

Buildings

There are no activities unique to this park.

Roads

The MWRA is responsible for maintaining the roads on its easements.

The Dedham-Westwood Water District is responsible for maintaining its access road in Fowl Meadow.

The Massachusetts Department of Transportation (MassDOT) is improving the interchange at I-95, I-93, and University Avenue. As part of this project, the current I-93/I-95 southbound ramp will be relocated, the paved road segment extending into Fowl Meadow (i.e., "the stub") will be removed, the current MassDOT salt shed will be removed, wetlands will be replicated, and new trails will be created. It is anticipated that over 0.5 miles of paved roads will be removed from Fowl Meadow by this project. Road designs are completed; trail designs are being finalized.

Parking Areas

There are no activities unique to this park.

Trails

Route I-95/I-93 improvements will result in changes to the mileage and locations of trails in Fowl Meadow, and the addition of two scenic overlooks. A connection is planned between the Route 128 train station and existing Fowl Meadow trails. This requires a pedestrian path under I-95 and a bridge over the Neponset River.

Kiosks and Signs

Park rangers based at the Blue Hills Reservation are responsible for updating the content of the kiosk at the Fowl Meadow parking lot.

5.9. RECOMMENDATIONS

Introduction

This section provides recommendations for the near- and long-term management of the Neponset River Reservation. Applied Land Stewardship Zoning recommendations provide general guidance for managing the Reservation. Future activities and projects should be checked against the zoning map (Figure 5.9.1) for consistency. Management recommendations are all high-priority, and should be addressed as soon as resources become available.

Applied Land Stewardship Zoning (Figure 5.9.1)

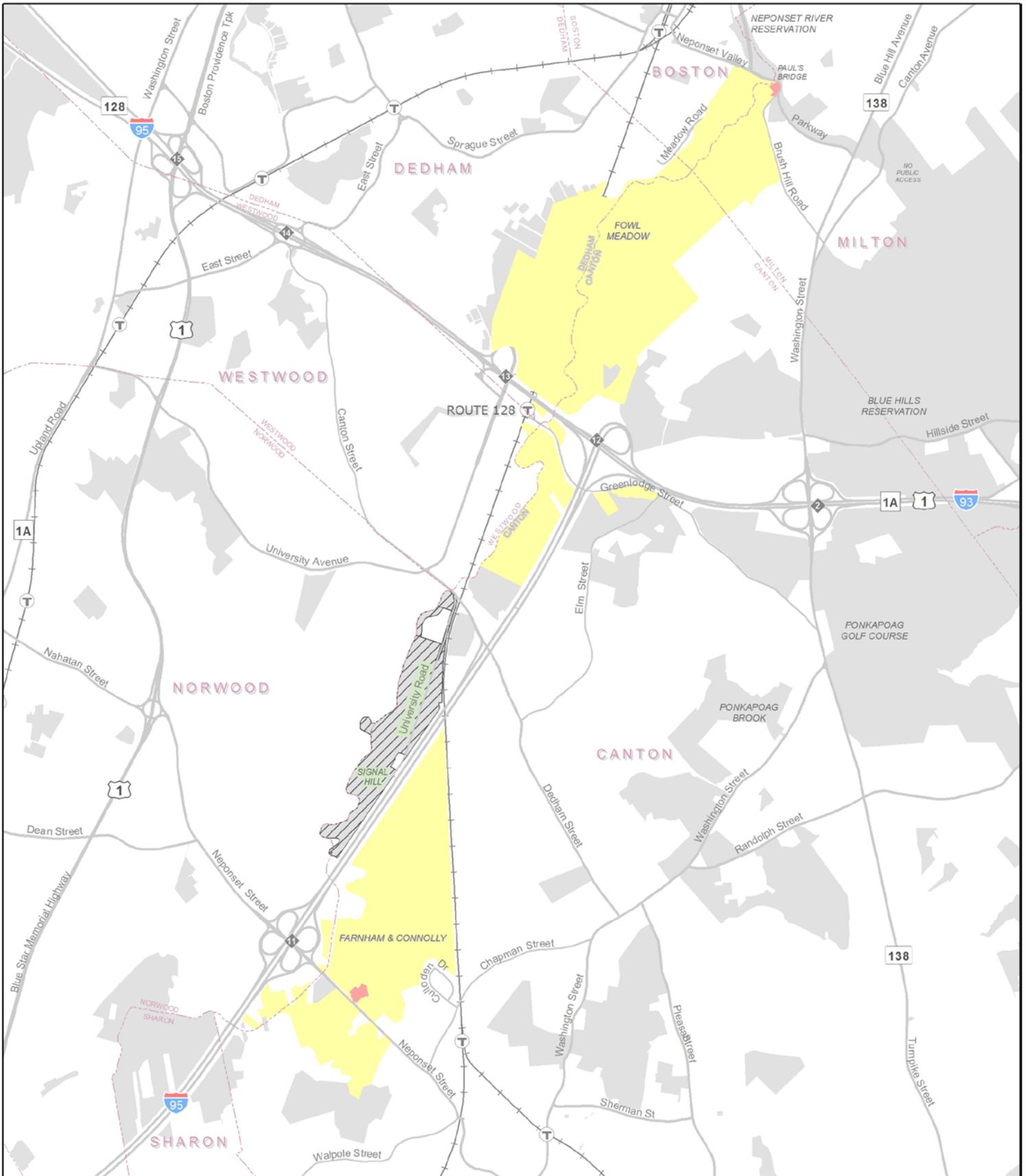
The following Land Stewardship Zoning is recommended.

Zone 1

- There are no Zone 1 areas in the portion of the Neponset River Reservation within the Blue Hills Complex.

Zone 2

- All areas not specifically designated as Zone 3.



- | | |
|----------------------------|--------------------------------|
| Neponset River Reservation | Land Stewardship Zoning Zone 1 |
| Other Legal Interest - DCR | Land Stewardship Zoning Zone 2 |
| Other Protected Open Space | Land Stewardship Zoning Zone 3 |

Neponset River Reservation

Figure 5.9.1

Recommended Land Stewardship Zoning

Geographic information provided by MassGIS and DCR GIS, 2016

1,000 Feet



Zone 3

The following portions of Neponset River Reservation are currently developed, appropriate for potential future development, or intensively used for recreation. They have been designated Zone 3.

- The parking area and associated managed turf at the intersection of Brush Hill Road and the Neponset Valley Parkway, Milton.
- An approximately 3.4 acre portion of Farnham & Connolly along Neponset Street, Canton. This area includes all structures, the parking lot, walkways and other developed features associated with the 2012–2014 redevelopment of the property. It does not include adjacent reconstructed wetlands.

Significant Feature Overlay

There are no Significant Feature Overlays.

Management Recommendations

Seven priority management recommendations were developed for the Neponset River Reservation. (Table 5.9.1) For a recommendation to be considered priority it must address one or more of the following criteria:

- Regulatory compliance or compliance with legal agreements.
- Threats to the health and safety of park visitors and employees.
- The imminent loss of a natural, cultural, or recreation resource.

Additional maintenance and management needs observed during the preparation of this RMP, but not meeting one or more of the above criteria, are not included in this plan.

All recommendations are of equal priority.

Table 5.9.1. Priority recommendations for Neponset River Reservation.

Recommendation	Implementation^a
Conduct annual reviews of the Rare and Endangered Species Habitat Management Plan for Fowl Meadow; update as needed and implement.	P, R
Conduct active habitat management for rare plants at Fowl Meadow, as recommended in NHESP (2007).	P, R
Work with commercial pet walkers to obtain the required permit for their commercial activity at Fowl Meadow.	B, L, R
GPS official trails and update maps.	B, P
Survey boundary of Farnham & Connolly along Culloden Drive, Canton to determine if encroachments have occurred; resolve any encroachments with abutters.	F, L
Determine if the MBTA has a legal right to cross Farnham & Connolly to access their property from Culloden Drive.	L, P
Work with MBTA to gate northern spur of Culloden Drive, Canton, to stop illegal vehicle entry into park.	R

a. The following codes identify the party or parties responsible for implementing the recommendations: B = Bureau of Ranger Services; C = Contractor; D = Office of Dam Safety; E = Division of Engineering; F = Bureau of Forest Fire Control and Forestry; L = Legal Services; O = Other; P = Bureau of Planning, Design & Resource Protection; R = Regional and district staff; S = Park Support Operations; U = Universal Access Program; V = Volunteer or partner; and X = Office of External Affairs and Partnerships.