### **Appendix**

Appendix A: ADA Self-Evaluation and Transition Plan (Prepared by IHCD)

Appendix B: Maps

Appendix C: Meeting Agendas, Virtual Forum Presentations, and Public Feedback

Appendix D: OSRP Community Survey

Appendix E: Comments on Draft Plan

Appendix F: Activity and Use Limitation (AUL) Inventory

Appendix G: BioMap2 Report

Appendix H: USGS Soils Map and Report

# Appendix A: ADA Self-Evaluation and Transition Plan

### **Administrative Requirements**

### A. Designated ADA Coordinator

Greg Federspiel, Town Manager and ADA Coordinator Manchester-by-the-Sea Town Hall 10 Central Street Manchester-by-the-Sea, MA 01944 (978) 526-2000

### B. Municipal Grievance Procedure

This Grievance Procedure is established to meet the requirements of the Americans with Disabilities Act. It may be used by anyone who wishes to file a complaint alleging discrimination the basis of disability in employment practices and policies or the provision of services, activities, programs, or benefits by the Town of Manchester-by-the-Sea.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of complainant and location, date, and description of the problem. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities upon request.

The complaint should be submitted by the grievant and/or a designee as soon as possible but no later than 60 calendar days after the alleged violation to:

Greg Federspiel, Town Manager and ADA Coordinator Manchester-by-the-Sea Town Hall 10 Central Street Manchester-by-the-Sea, MA 01944 (978) 526-2000

Within 15 calendar days after the receipt of the complaint, ADA Coordinator Federspiel will meet with the complainant to discuss the complaint and possible resolutions. Within 15 calendar days after the meeting, he will respond in writing, and where appropriate, in a format accessible to the complainant, such as large print or audio tape. The response will explain the position of the town of Manchester-by-the-Sea and offer options for substantive resolution of the complaint.

If the response by Town Manager and ADA Coordinator Federspiel does not satisfactorily resolve the issue, the complainant and/or a designee may appeal the decision of the ADA Coordinator within 15 calendar days after the receipt of the response to the Board of Selectmen or their designee. Within 15 calendar days after the receipt of the appeal, the Selectmen or their designee will meet with the complainant to discuss the complaint and possible resolution. Within 15 calendar days after the meeting the Selectmen or their designee will respond in writing and where appropriate, in a format accessible to the complainant, with a final resolution of the complaint.

All written complaints received by ADA Coordinator Greg Federspiel, appeals to the Selectman or their designee, and responses form the ADA Coordinator and Selectmen or their designee will be kept by the Town of Manchester-by-the-sea for at least three years.

#### C. **Public Notification Requirements and Employment Practices**



### MANCHESTER-BY-THE-SEA PUBLIC NOTICE

Manchester-by-the-Sea, Massachusetts 01944-1399 Telephone (978) 526-4397 FAX (978) 526-2001

The Town of Manchester-by-the-Sea does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services or activities. The Town of Manchester-by-the-Sea does not discriminate on the basis of disability in its hiring or employment practices. This includes practices involving recruitment, personnel actions, leave administration, training, tests, medical exams/questionnaires, social and recreational programs, fringe benefits. collective bargaining agreements and wage and salary administration.

This notice is provided as required by Title II of the Americans with Disabilities Act of 1990.

Questions, concerns, complaints or requests for additional information regarding the ADA may be forwarded to Manchester-by-the-Sea's designated ADA Compliance Coordinator.

Name: Title:

Greg Federspiel

Town Manager

Office Address: Town Hall, Manchester-by-the-Sea

Phone Number: 978-526-2000

Days/Hours Available: Mon – Wed, 8:30 am – 5:00 pm

Thurs, 8:30 am - 8:00 pm

Individuals who need auxiliary aids for effective communication in programs and services of the Town of Manchester-by-the-Sea are invited to make their needs and preferences known to the ADA Compliance Coordinator. This notice is available in large print or on audio tape from the ADA Compliance Coordinator.

Sugal February

### Participation of Individuals with Disabilities or OrganizationsRepresenting the Disabled Community

Manchester has an active five-member ADA Advisory Committee. Committee members are: Elizabeth Heisey, Lisa Bonneville, Gretchen Wood, Laurie Werle, Joan Snow, and ex-officio member, Greg Federspiel who is the Town Administrator and also the designated ADA Coordinator. The ADA Committee meets on a regular basis to represent the disabled community with the stated mission of achieving "equal access for all citizens in the Town of Manchester-by-the-Sea."

### **Program Accessibility**

In 2020 the Town of Manchester-by-the-Sea updated its ADA Self-Evaluation and ADA Transition Plan. The plan was prepared by the Institute for Human Centered Design (IHCD). IHCD teams surveyed the Town's portfolio of facilities and properties including seven (7) public buildings and nine (9) parks/outdoor areas. The accessibility survey of those outdoor facilities and spaces encompassed elements such as accessible routes, walking surfaces, slopes, picnic tables, play areas and recreational areas. In addition, the parking lots associated with those facilities were also surveyed. The accessibility survey of those areas includes elements such as accessible routes and accessible parking spaces.

IHCD submitted separate reports for each facility that was surveyed. To assist in prioritizing accessibility improvements to ensure compliance with the ADA Title II, each of the building and outdoor area reports include an overview that identifies the most substantial accessibility issues and order of magnitude cost estimates for corrective action. Additionally, a detailed catalog that supplements the ADA Self-Evaluation narrative overview is also included. The catalog provides element-by-element photos of compliance issues, location and measurements - when applicable - at each assessed facility accompanied by recommendations and cost estimation for each accessibility issue.

The completed reports are included in the following section.

### A. Facility Inventories

The program accessibility obligation does not typically require that every outdoor area be made accessible. As noted before, "when viewed in its entirety" applies to programs for which there are multiple locations for comparable programs. Usually, a public entity determines which method it will use for meeting its program accessibility obligations. When structural changes are made to existing facilities, the changes must comply with the 2010 ADA Standards for Accessible Design. When choosing to purchase equipment or to make structural changes, the public entity should factor in the financial resources required to maintain program accessibility.

Over time, the Town will need to reassess its compliance with program accessibility, and it may become necessary to acquire new accessible equipment or make structural modifications

To determine which outdoor areas must be made accessible, the Town should consider:

- How to provide the program in the most integrated setting appropriate;
- Locations where the activities are offered;
- Which outdoor areas are accessible and to what extent;
- Level of dispersion of the accessible outdoor areas (playgrounds, baseball fields, soccer fields, beaches, etc.,) and convenience to reach them (accessible by car or pedestrian routes).

It is important to note that those elements in existing facilities that are subject to supplemental requirements of the 2010 ADA Standards (e.g. elements for which there are neither technical nor scoping specifications in the 1991 Standards) such as (C) Recreational boating facilities; (D) Exercise machines and equipment; (E) Fishing piers and platforms; (H) Play areas; (J) Swimming pools, wading pools, and spas; and (L) Miscellaneous - (1) Team or player seating and Accessible route in court sports facilities, need to be brought into compliance.

### Facility Inventories (Conducted by IHCD & OSRPC)

Evaluations in this document are for properties owned by the Town of Manchester-by-the-Sea, managed by the Board of Selectman or the Conservation Commission. All sites were outdoors (with the exception of bathrooms), and had no entrances, doors, swimming pools, or public phones. Properties that lack any facilities are identified on the ADA Inventory, but are absent from this document, as there are no facilities to evaluate.

Location	Parking	Pathway	Stairs	Toilet Facility	Shower	Ramp	Picnic Area	Water Fountain
1661 Cemetery*	Х	✓	✓	Х	X	Х	Х	Х
Agassiz Rock	х	x	X	X	х	х	Х	Х
Ancient Burial Place	Х	х	Х	х	х	Х	Х	Х
Black Beach	Х	✓	Х	Х	Х	Х	Х	Х
Black Cove (West Manchester Beach)	х	х	Х	Х	Х	Х	Х	Х
Brickyard Pond	Х	х	Х	Х	Х	Х	Х	Х
Brook St Plgd (Coach Field Plgd)	✓	✓	Х	Х	Х	Х	Х	✓
Central Pond <sup>1</sup>	Х	х	Х	Х	Х	Х	Х	Х
Dexter Pond Conservation Area*	✓	✓	Х	х	х	Х	Х	Х
Forest Street Triangle	Х	х	Х	х	х	Х	Х	Х
Gloucester Border	Х	Х	Х	Х	Х	Х	Х	Х
Gray's Beach Landing*	✓	х	Х	Х	Х	Х	✓	Х
Jack's Hill Conservation Area	Х	х	Х	Х	Х	Х	Х	Х
Kettle Cove Marsh	х	Х	Х	Х	Х	х	Х	Х

Location	Parking	Pathway	Stairs	Toilet Facility	Shower	Ramp	Picnic Area	Water Fountain
Little Crow Island	Х	Х	Х	Х	Х	X	Х	X
Lobster Cove Beach	Х	Х	X	Х	х	х	Х	Х
Long Hill*	✓	✓	Х	Х	х	х	Х	Х
Magnolia Ave and Overledge Rd	Х	Х	Х	Х	х	х	Х	Х
Magnolia Park (Surf Park)*	✓	<b>√</b>	Х	Х	Х	х	Х	Х
Masconomo Park	✓	✓	Х	Х	х	✓	✓	
Moses Hill Conservation Area	Х	Х	Х	х	Х	Х	Х	Х
Pleasant Grove Cemetery	✓	✓	Х	Х	Х	х	Х	
Powder House Hill Reservation*	✓	✓	Х	Х	Х	Х	Х	Х
Reed Park	✓	✓	Х	х	Х	Х	Х	Х
Rosedale Cemetery/ Crowell Chapel	✓	✓	Х	✓	Х	Х	Х	Х
Round/Gravelly Pond Watershed	Х	Х	Х	Х	Х	х	Х	Х
Route 128 Buffer	Х	Х	Х	х	Х	Х	Х	Х
Singing Beach	✓	✓	✓	✓	✓	✓	✓	Х
Sweeney Park	✓	✓	✓	х	Х	Х	✓	✓
Tucks Point	✓	✓	Х	✓	Х	Х	✓	✓
Union Cemetery	Х	Х	Х	х	Х	Х	Х	Х
Weems Conservation Area	Х	х	Х	Х	х	Х	Х	Х

Western Woods*  Brookwood Conservation Area Cathedral Pines Christian Hill Great Hill Conservation Area Hatch Property Wyman Hill Conservation Area	<b>√</b>	<b>√</b>	Х	Х	Х	Х	х	х
White Beach	✓	Х	Х	Х	Х	Х	Х	Х
Wilderness Conservation Area* Cedar Swamp Conservation Area Cheever Commons Conservation Area Millstone Hill Conservation Area	<b>√</b>	<b>√</b>	х	х	Х	Х	Х	х
Winthrop Field	Х	Х	Х	Х	Х	Х	Х	Х

<sup>\*</sup>These sites were assessed by several members of the Open Space and Recreation Plan Committee for ADA accessibility using the "Facility Inventory" Surveys.

1 This site was under construction at the time of the site visit

#### 1661 CEMETERY

Facility	Evaluation						
Parking	<ul> <li>No designated ADA parking; on street parking on Washington Street.</li> </ul>						
Pathway	<ul> <li>No accessible pathway into the site; stairs from street</li> <li>Asphalt path located on the western portion of the site</li> </ul>						
Other	Located on the corner of Summer and Washington Street, 1661 Cemetery is Manchester's oldest Cemetery.						

#### Recommendations:

For the most part, no improvements are needed. The Town may want to consider adding an accessible entrance at the corner of Summer and Washington Street.

#### **GRAY'S BEACH LANDING**

Facility	Evaluation
Parking	Unmarked parking spaces in small resident only lot; no designated accessible spaces with signs
Pathway	No accessible path of travel from the parking area
Other	Sandy beach with boat landing area, small grassy area with bench, and picnic table.

### Recommendations:

Provide an accessible path of travel from the parking lot to picnic area.

### **ROSEDALE CEMETERY/ CROWELL CHAPEL**

Facility	Evaluation						
Parking	On street parking available on the north side of Rosedale Avenue; no designated ADA accessible parking spaces						
Pathway	No accessible route to the cemetery or sanctuary.						
Other	The chapel is available for rent for events such as weddings all year long for Manchester by-the-Sea residents; it is also available for nonprofit groups during business hours. The Chapel can accommodate up to 150 people.						
Recommendations:							

Provide an accessible path of travel through the site.

WESTERN WOODS (Includes: Brookwood Conservation Area, Christian Hill, Great Hill Conservation Area, Hatch Property, and Wyman Hill Conservation Area)

Facility	Evaluation						
Parking	No ADA designated parking						
Pathway	<ul> <li>No accessible pathway from limited parking area</li> <li>Various hard-packed trails and a gravel road ranging from 4 to 8 feet create a trail network of over six miles that provide for hiking, biking, bird and wildlife viewing in the area</li> </ul>						
Other	No marked parking spaces, only a small parking area on Crooked Lane						
Recommendations:							

No improvements are needed at this time.

### **WILDERNESS CONSERVATION AREA** (Includes: Cathedral Pines, Cedar Swamp Conservation Area, Cheever Commons Conservation Area, and Millstone Hill Conservation Area)

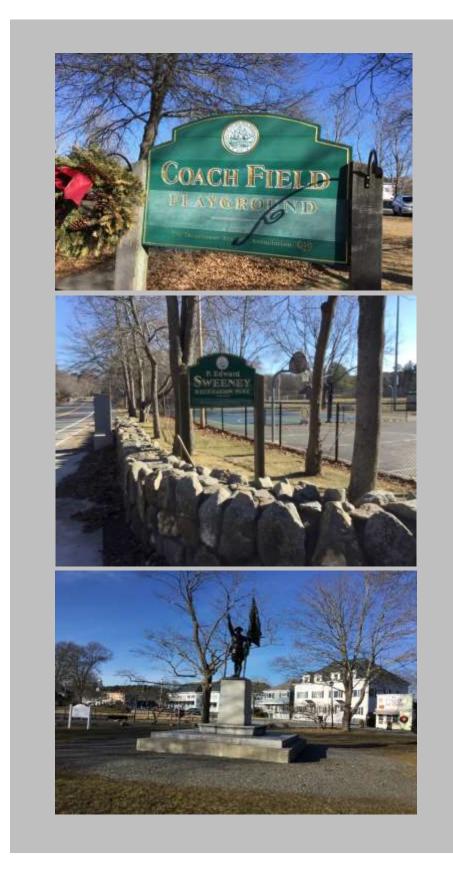
Facility	Evaluation						
Parking	Gravel parking lot located on Southern Avenue.						
Pathway	<ul> <li>Hard-packed accessible path of travel from passenger disembarking area and parking area; mostly even surface (gravel)</li> </ul>						
Other	Hard-packed trails ranging from 2 to 3 feet run throughout the site						

### Recommendations:

The Town should mark ADA accessible parking spaces at this site.



### Manchester-by-the-Sea, Massachusetts



### **Outdoor Areas**

Prepared by the



Institute for Human Centered Design

### **Black Beach**



# Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Black Beach is located along Ocean Street at Kettle Cove, with one end of the beach starting approximately 250 feet northeast of White Beach. For environmental reasons related to preserving the dunes, there is just one beach access point. It is located at the northwest end of Black Beach.

There is no parking at Black Beach as indicated by a sign along Ocean Street reading, "No Parking No Lifeguard On Duty Swim at your Own Risk." Parking is available at White Beach, which is located at 19 Ocean Street. A walkway runs along Ocean Street spanning a portion of Black Beach, but it does not cover the full distance from the west end of the beach to the east end of the beach where the beach access point is located.

### **Key Accessibility Issues**

• Lack of an accessible route that extends to the high tide level.

### **Order of Magnitude Cost Estimates**

• Provide an accessible route that extends to the high tide level of the beach (beach mat): \$4,401

Total: \$4,401

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- o Recommend providing benches along Ocean Street.
- Recommend providing a sign with the beach name at both ends of Black Beach, and a sign with a directional arrow and text such as, "Beach Access Point" at the west end of Black Beach.

- Recommend providing a sign with a directional arrow indicating that parking is available at White Beach.
- Recommend extending the walkway along Ocean Street so it spans the full length of Black Beach from the beach access point at the east end to the west end of Black Beach where it is closest to White Beach.

## Town of Manchester by the Sea Black Beach

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
A	Approach and E	Entrance										
	Beach Access Routes											
1	Beach Access Point at West End of Beach	Ext.		Beach Access Routes	Removable	Bea	ach route not provided	33'	Provide an accessible route that is firm and stable.  (Cost based on 78" wide x 33' long beach mat extending from the start of the beach access route to the top of the dune.)	1	1909	\$1909
2	Route to Ocean by Beach Access Point at West End of Beach	Ext.		Beach Access Routes	Removable	Bea	ach route not provided	50'	Provide an accessible route that is firm and stable. Ensure the accessible route extends from a beach mat at the top of the dune to the high tide level.  (Cost based on 78" wide x 50' long beach mat.)	1	2492	\$2492

### **Coach Field Playground**



# Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Coach Field Playground is located at the corner of Brook Street and Norwood Avenue at 38 Norwood Avenue. Amenities include Brook Street Field, two tennis courts, a water fountain and benches. Brook Street Field is used for multiple activities including football, field hockey, soccer and lacrosse. Manchester Memorial Elementary School is located near the northeast side of Brook Field, and an unpaved parking lot is located near the southwest side of Brook Field.

**Note**: Construction equipment blocked access to the tennis courts on the day of the survey. As a result, the tennis courts and the route to the tennis courts were not surveyed. IHCD also did not survey access to the Field from Manchester Memorial High School. IHCD team was told that portable toilets are provided at Coach Field Playground in the non-winter months. No portable toilets were observed on the day of the IHCD survey, but if portable toilets are provided, at least one (1) accessible portable toilet located on an accessible route must also be provided.

### **Key Accessibility Issues**

#### **Exterior Routes**

Accessibility issues include lack of a stable, firm and slip resistant accessible route from the parking area to the gate entrance on the southwest side of Brook Field.

#### Parking

Accessibility issues include lack of a compliant van accessible parking space with access aisle and sign that includes the designation "Van Accessible".

### **Drinking** Fountain

Accessibility issues include lack of a hi-lo drinking fountain with 30" by 48" clear floor space positioned for a forward approach and 27" min. knee clearance under both fountains.

### **Additional Accessibility Issues**

• Lack of stable, firm and slip resistant clear floor space for at least one (1) bench in the area with benches and water fountains.

### **Order of Magnitude Cost Estimates**

- Provide an accessible route to the entrance at Brook Field: \$2,880
- Provide a compliant van accessible parking space: \$1,100
- Provide a compliant Hi-Lo drinking fountain: \$4,216
- Miscellaneous corrective actions (Clear floor space at bench, etc.): \$90

Total: \$8,286

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

Recommend providing 48" min. wide path from the water fountain and benches to the parking area to prevent visitors from parking in such a way as to block the accessible route to the parking area.

# Town of Manchester by the Sea Coach Field Playground

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
А	pproach and E	Entrance	•									
	Exterior Acce	ss Rout	е									
1	Path to Field Entrance Near East End Parking Lot and Norwood Avenue	Ext.		Exterior Access Route	Exterior	A	ccessible route not provided	-	Ensure an accessible route is provided to the field entrance (gate opening in fence at east end of field). Note: The route from this corner of the parking lot had the least steep running slopes.  (Cost based on a 48" wide min. x 90' long stone dust path from parking lot to gate in fence.)	1	2880	\$2880
	Off-Street Par	king Lot	t or Garaç	ge								
2		Ext.		Off-Street Parking Lot or Garage	N/A	To Ve	otal # of parking otal # of designated accessible parking spaces otal # of designated van accessible spaces chicle space < 132" wide at van space ccess aisle < 60" wide at car/van space ign does not have the designation "Van Accessible"	25 1 - 89" 55"	Provide a van accessible space that is at least 96" wide. Provide a marked access aisle that is at least 96" wide. Add the designation "Van Accessible" to the sign located at the van accessible space. Position sign 60" min. and 96" max. above the ground. (Cost based on re-striping space and aisle and a sign with "Van Accessible".)	1	1100	\$1100
А	ccess to Good	ds and S	ervices									
	Operable Par	ts										
3	By East End Parking Lot	Ext.		Operable Parts	N/A	E	ement not on an accessible route	6"	Ensure dog waste bag dispenser is located on an accessible route. (Relocate dispenser or relocate cement blocking route.)	1	Labor	\$0
	Benches											
4	Near East End Parking Lot	Ext.		Benches	N/A	Se	eating spaces < 36" x 48" (single space)		Provide a 36" by 48" clear floor space that is stable, firm and slip resistant at end of 5% (at least one) bench. Position clear floor space to allow for shoulder alignment with someone seated at the end of the bench for wheeled mobility device users.  (Cost based on s 36"x48" asphalt space.)	1	90	\$90
А	dditional Acce	ess										

# Town of Manchester by the Sea Coach Field Playground

ID	Location	Floor	Room Elem	ent Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Drinking Fou	ntains									
5	Near East End Parking Lot  Best Practice	Ext.	Drinkin Founta		Cle	ear floor space not provided	-	Provide a 30" by 48" clear floor space positioned for a forward approach. Ensure there is 27" min. knee clearance under both fountains.  (Cost based on a new Hi-Lo drinking fountain.)	1	4216	\$4216
	Striping										
6	Path From Water Fountain and Benches to East End Parking Lot	Ext.	3triping	N/A				Recommend providing 48" min. wide striping at end of path from water fountain and benches to parking area to prevent visitors from parking in such a way as to block the accessible route.	1	-	\$0

### **Masconomo Park**



# Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Masconomo Park is located at 60 Beach Street next to Reed Park and Docks. Amenities include a community bandstand where a summer concert series takes place, a Little League baseball field, benches, picnic tables, a playground, a bike rack and a World War 1 Memorial commemorating U.S. troops meeting General Lafayette in France. Parking is available at a parking lot shared with Reed Park and Docks and on-street along Beach Street. IHCD team did not observe any portable toilets. However, on-line sources indicate that a portable toilet is placed in the park from April through October.

### **Key Accessibility Issues**

#### Exterior Accessible Routes

Accessibility issues include the lack of an accessible route that connects all the amenities in the park (benches, bike racks, picnic tables, player seating, etc.).

#### Playground

Accessibility issues include lack of a compliant accessible route around the playground and to and around all play components in the playground.

**Note:** The Massachusetts Architectural Access Board (MAAB) does not consider engineered wood fiber (EWF) to comply with its regulation requiring an accessible route to each play component and around the playground.

### **Additional Accessibility Issues**

- Lack of an accessible picnic table.
- Lack of a sign with the words "Van Accessible" at one (1) van accessible parking space, and lack of an access aisle at one car accessible parking space.

### **Order of Magnitude Cost Estimates**

- Provide an accessible route to all the amenities in the park (including around the exterior of the playground): \$6,100
- Provide a compliant impact-attenuating surface under and around the play components in the playground (poured-in-place rubber): \$5,760
- Miscellaneous corrective actions (renovate parking, accessible picnic table, etc.): \$2,200

Total: \$14,060

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing a 36" x 48" stable, firm and slip resistant surface at the end of at least one (1) bench positioned to allow shoulder alignment with a person on the bench for someone using a wheeled mobility device.
- Recommend providing a 48" wide stable, firm and slip resistant surface around the exterior of an accessible picnic table that is located on an accessible route.
- o IHCD strongly recommends exploring the possibility of an alternative surface to engineered wood fiber (EWF). Overtime, EWF requires continuous maintenance to ensure that the surface is maintained in operable working condition (stable, firm and slip resistant). In addition, when used in combination with other surfaces required for accessible routes to play components in Massachusetts, it will present a challenge to prevent level changes at the transition points between EWF and other surfaces, and to keep the accessible routes clear of EWF.

## Town of Manchester-by-the-Sea Masconomo Park

ID	Location	Floor	Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations Quar	nntity Pri	ice	Cost Estimation
1	Approach and I	Entrance	,									
	Exterior Acce	ess Rout	е									
1	Community Bandstand	Ext.		Exterior Access Route	Walkway	Level	el changes > 1/4"		Alter change in level to be 1/4" high max. (Maintain stone dust path at base of ramp to bandstand.)  (Cost based on 20 square feet of stone dust.)	1 10	60	\$160
2	Book Share Near WWI Memorial	Ext.		Exterior Access Route		Acce	essible route not provided		Ensure an accessible route is provided.  (Cost base on 6'x48" of stone dust connecting book exchange to stable, firm and slip resistant surface at monument.)	1 19	92	\$192
	Off-Street Par	rking Lot	t or Gar	age								
3	Parking for Masconomo Park and Reed Park and Docks	Ext.		Off-Street Parking Lot or Garage		Total Total	al # of parking al # of designated accessible parking spaces al # of designated van accessible spaces n does not have the designation "Van Accessible"		Add the designation "Van Accessible" to the sign located at the van accessible space.	1 50	00	\$500
4	Parking for Masconomo Park and Reed Park and Docks	Ext.		Off-Street Parking Lot or Garage	t	Acce	ess aisle not provided		Provide a marked access aisle that is at least 60" wide.	1 30	00	\$300
1	Access to Good	ds and S	ervices	;								

## Town of Manchester-by-the-Sea Masconomo Park

ID	Location	Floor	Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Picnic Tables											
5	Near Playground	Ext.		Picnic Tables	N/A		Toe or knee clearance at table not provided Picnic table not on an accessible route	-	Provide at least one picnic table in this area with toe and knee clearance. Locate picnic table on an accessible route.  (Cost based on an accessible picnic table and a 48" min. wide x 10' long stone dust path to picnic table.)	1	1784	\$1784
	Benches		,				a.					
6	Near Playground	Ext.		Benches	N/A		No accessible route to one bench in this area		Provide an accessible route to at least one bench in this area.  (Cost based on 18'x48" stone dust path to bench.)	1	576	\$576
	Bike Racks											
7	Bike Rack	Ext.		Bike Racks	N/A		Not connected to an accessible route		Ensure bike rack is connected to an accessible route.  (Cost based on a 12'x48" stone dust path to bike rack.)	1	384	\$384
Р	lay and Sport	Areas										
	Play Areas											
8	Playground	Ext.		Play Areas	N/A		Accessible route not provided at play components . Surface not stable, firm, and slip-resistant	-	Provide a compliant impact-attenuating surface under and around the play components and a stable, firm and slip resistant route around the playground.  (Cost estimate for 150 sq. ft. of poured in place rubber surface and 180' x 48" min. of stone dust completing a path around the playground.)	1	7860	\$7860

## Town of Manchester-by-the-Sea Masconomo Park

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Field										
9	Baseball Field First Base Side	Ext.	Field	Baseball		lot connected to an accessible-route		Ensure player seating is connected to an accessible route.  (Cost based on a 48" wide min. x 12' stone dust path to team seating on first base side of baseball field.)		384	\$0
10	Baseball Field Third Base Side	Ext.	Field	Baseball	N	lot connected to an accessible-route		Ensure player seating is connected to an accessible route.  (Cost based on a 48" wide min. x 60' stone dust path to team seating on third base side of baseball field.)	1	1920	\$1920
	Best Practice										
	Bench										
11	Near Entry	Ext.	Bench	N/A				Recommend providing a 36"x48" stable, firm and slip resistant surface at end of bench positioned to allow shoulder alignment with a person on the bench for someone using a wheeled mobility device.	1	-	\$0

### **Pleasant Grove Cemetery**



# Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Pleasant Grove Cemetery is located at the corner of Pleasant and Pine Streets at 128 Pine Street. It is one of five (5) cemeteries in Manchester-by-the-Sea and contains approximately 1,162 memorials. New plots are only available for purchase by residents of the town. Vehicles can enter the cemetery grounds, and on-street parking is available bordering the cemetery.

### **Accessibility Issues**

Minor accessibility issues include a lack of water spigots that are on an accessible route and that have water control hardware that does not require tight grasping, pinching, or twisting of the wrist.

### **Order of Magnitude Cost Estimates**

 Miscellaneous corrective actions (accessible route to water spigots, spigot hardware, etc.): \$884

**Total: \$884** 

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

 Recommend providing benches at several locations in the cemetery grounds, placing benches on an accessible route, and including some benches with and some benches without armrests.

# Town of Manchester by the Sea Pleasant Grove Cemetery

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
A	ccess to Good	ds and Se	ervices									
	Operable Par	ts										
1	Cemetery Grounds	Ext.		Operable Parts	N/A		ement not on an accessible route ot operable with a closed fist	-	Ensure 5% of the water spigots are located on an accessible route.  Provide hardware that can be operable with one hand and does not require tight grasping, pinching, or twisting of the wrist.  (Cost based on a 48" wide min. x 6' long stone dust path to a water spigot and accessible spigot hardware that can be used with a closed fist.)	2	442	\$884
В	est Practice											
	Benches											
2	Cemetery Grounds	Ext.	31	enches	N/A				Recommend providing benches at several locations in the cemetery grounds, placing benches on an accessible route, and including some benches both with and without armrests.	1	-	\$0

### **Reed Park and Docks**



# Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Reed Park is a small park located at Beach Street next to Masconomo Park. Amenities include a pier and benches. Parking is available at the parking lot located near Masconomo Park and on-street parking on Beach Street.

**Note:** The dock area was closed the day of the visit and was not surveyed.

### **Key Accessibility Issues**

#### Accessible Routes

The major accessibility issue is the lack of an accessible route that connects all the amenities in the park (benches and bike racks).

### **Order of Magnitude Cost Estimates**

Provide an accessible route to all the amenities in the park: \$2,880

Total: \$2,880\*

\*Note: The dock was closed the day of the visit and was not surveyed.

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing an accessible parking space near the entrance to the park (Beach Street).
- o Recommend providing a sign with the park name.

## Town of Manchester-by-the-Sea Reed Park and Docks

Location	Floor	Room Eleme	nt Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Approach and I	Entrance									
Exterior Acce	ess Route	e								
Beach Street - South Side	Ext.							1	-	\$0
Access to Good	ds and Se	ervices								
Beach Street - South Side	Ext.			Not conn	ected to an accessible route	Locati	e information on an accessible route.	1	Labor	\$0
Benches										
Beach Street - East Side	Ext.	Benches	N/A	No access	sible route to one bench in this area	bench (Cost	n in this area. based on 60 ft. long by 48 inches wide	1	1920	\$1920
Bike Racks										
Beach Street - West Side	Ext.	Bike Ra	cks N/A	Not conn	ected to an accessible route	acces (Cost	based on 30 ft. long by 48 inches wide	1	960	\$960
	Beach Street - South Side  Beach Street - East Side	Approach and Entrance  Exterior Access Route  Beach Street - South Side  Beach Street - South Side  Ext.  Beach Street - South Side  Ext.  Beach Street - Ext.  Beach Street - Ext.  Beach Street - Ext East Side	Approach and Entrance  Exterior Access Route  Beach Street - South Side  Access to Goods and Services  Beach Street - South Side  Beach Street - South Side  Beach Street - Ext. Benches  Beach Street - Ext. Benches	Approach and Entrance  Exterior Access Route  Beach Street - South Side   Ext.   Exterior Access Route    Access to Goods and Services  Beach Street - South Side   Ext.   Benches   N/A    Benches   Beach Street - Ext.   Benches   N/A    Bike Racks   Beach Street   Ext.   Bike Racks   N/A	Approach and Entrance  Exterior Access Route  Beach Street - South Side	Approach and Entrance  Exterior Access Route  Beach Street	Approach and Entrance  Exterior Access Route  Beach Street   Ext.   Exterior Access Route  Beach Street   Ext.   Ext.   Exterior Access Route  Beach Street   Ext.   Ext.   Ext.   Ext.   Exterior Access to Goods and Services  Beach Street   Ext.   Ext.	Approach and Entrance  Exterior Access Route  Boach Street   Ext.   Ediction   Access Route  Beach Street   Ext.   Ext.   Ediction   Access Route  Beach Street   Ext.   E	Approach and Entrance  Exterior Access Route  Beach Street  - South Side  Ext.   Exterior Access Route  - South Side   Ext.   Exterior Access Route  - South Side   Ext.   Exterior Access Route  - South Side   Ext.   Exterior Access Route  - South Side   Ext.   Exterior Access Route  - South Side   Ext.   Ext.   Exterior Access Route  - South Side   Ext.   Ext.   Exterior Access Route  - South Side   Ext.   Ext.   Ext.   Ext.   Exterior Access Route  - South Side   Ext.   Ex	Approach and Entrance  Exterior Access Route    Rough Size   Fut   South Size   Ext.

## Town of Manchester-by-the-Sea Reed Park and Docks

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Parking										
5	Church Street	Ext.	Parking	N/A	STRONG PARTY AND ADDRESS OF THE PARTY AND ADDR			ommend providing one on-street accessible ing space near the entrance to the park.	1	-	\$0

### **Crowell Chapel**



# Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Year Built: 1904

Crowell Chapel is located at 4 Rosedale Avenue. The chapel is available for rent for events such as weddings all year long for Manchester by-the-Sea residents; it is also available for non-profit groups during business hours. The Chapel can accommodate up to 150 people. Parking around Crowell Chapel is available on the north side of Rosedale Avenue.

### **Key Accessibility Issues**

#### Assembly Area

Accessibility issues include lack of the required number of accessible wheelchair spaces in the chapel area and lack of an assistive listening system.

**Note:** Where a sound system, microphone and/or speaker are integral to the use of the space an assistive listening system must be provided. If an assistive listening system is present, a sign indicating its availability is required.

### Single-User Toilet Room

The major accessibility issue is the lack of an accessible toilet room.

### **Additional Accessibility Issues**

- Lack of an accessible route to the sanctuary.
- Lack of a beveled threshold at the main entrance.
- Excessive opening force is required to open the door (main entrance).
- Lack of the International Symbol of Accessibility (ISA) at the illuminated sign (main entrance).
- Lack of securely attached walk-off mats.

### **Order of Magnitude Cost Estimates**

- Provide a single-user toilet room: \$24,604
- Miscellaneous corrective actions (portable ramp (sanctuary area), threshold, ADA compliant mat, etc.): \$850

Total: \$25,454

## Town of Manchester by-the-Sea Crowell Chapel

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Δ	approach and E	Entrance										
	Entrance											
1	Main Entrance	1		Entrance	Main Entrance		. Threshold not beveled . Door requires > 15 lbs. of force to open	- 17 lbs	Bevel threshold. Adjust closers so doors do not require more than 15 pounds of force.	1	150	\$150
Д	access to Good	ds and S	ervices									
	Means of Egr	ess										
2	Main Entrance	1		Means of Egress	N/A		Illuminated ISA symbol not provided (MAAB)	-	Provide an illuminated sign with the International Symbol of Accessibility (ISA).	1	200	\$200
	Assembly Are	ea										
3	Chapel	1		Assembly Area	N/A		. Minimum # wheelchair spaces not provided	-	Provide comparable accessible seating as needed.	1	Labor	\$0
4	Alter	1		Assembly Area	N/A	Read Control of the C	Accessible route to stage not provided	-	Provide a portable ramp as needed to ensure an accessible route to the stage.	1	500	\$500
Т	oilet & Bathing	Rooms										

## Town of Manchester by-the-Sea Crowell Chapel

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Overall Acces	ss									
5	Single-User Toilet Room	1	Overall Access	Toilet Room		ning space not provided cessible plumbing fixtures or stalls not provided	-	Provide an accessible single-user toilet room.	1	24604	\$24604

### **Singing Beach**



# Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Singing Beach is located at 119 Beach Street. Amenities include men's and women's multi-user toilet/bathing rooms, an accessible single-user toilet room, a ramp to a viewing platform with benches, a dog waste bag dispenser, picnic tables and a concession stand. Additional amenities include a parking lot with approximately 100 spaces including an accessible van and an accessible car parking space and a loading zone located on the north side of the beach. Two additional car accessible parking spaces are located near the viewing platform.

### **Key Accessibility Issues**

#### Exterior

Accessibility issues include lack of an accessible route that extends to the high tide level at the beach and lack of an accessible route to the bike racks. Other accessibility issues include lack of a compliant loading zone (near the concession stand), and lack of an accessible route from the walkway to the parking lot.

#### Toilet and Bathing Rooms

Accessibility issues include lack of accessible wheelchair compartments, lack of accessible changing areas and lack of compliant transfer showers. Other accessibility issues include lack of insulated pipes at the lavatories, mirrors and hand dryers mounted higher than the maximum height allowed and lack of beveled thresholds. Additional accessibility issues include lack of compliant designation signs, lack of directional signs at the emergency exits in the toilet rooms, and a rear grab bar that is shorter than the minimum required in the single-user toilet room.

### **Additional Accessibility Issues**

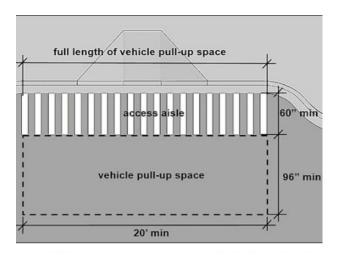
- Lack of a compliant service counter at the concession stand.
- Lack of an accessible picnic table (with knee clearance).
- Faded striping at car accessible parking spaces near viewing platform.

### **Order of Magnitude Cost Estimates**

- Provide an accessible route that extends to the high tide level (beach mat): \$7,464
- Provide a compliant loading zone (access aisle and curb ramp): \$3,400\* - see diagram
- Provide two (2) compliant accessible wheelchair compartments, two (2) compliant transfer showers, two (2) compliant changing areas. Ensure all amenities are compliant (lavatories, hand dryers and mirrors): \$47,094
- Provide compliant signage (designation, egress and directional): \$1,774
- Miscellaneous corrective actions (picnic table, service counter, etc.): \$3.426

Total: \*\$63,158

\*Note: Cost to remove stones at exterior route to beach not provided.



Accessible Passenger Loading Zone

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing 36"x 48" clear floor space at one end of the bench on the viewing platform.
- Recommend closing risers and providing handrails on both sides of stairs descending from the viewing platform.

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Approach and E	Entrance									
	Exterior Acce	ess Route									
1	Towards Parking Lot	Ext.	Exterior Access Route	Walkway	Run	nning slope > 1:20 (5.00%)	6%	Reduce the running slope to be no steeper than 1:20 (5.00%).	1	240	\$240
	Beach Acces	s Routes									
2	Beach Access Route	Ext.	Beach Access Routes	Removable	Bea	nch route not provided	-	Provide an accessible route that is firm and stable. Ensure the accessible route extends to the high tide level.	1	6484	
								(Cost based on 78" wide 100' and 33' beach mats combined to reach high tide level.)			\$6484
3	Walkway From Parking to Beach	Ext.	Beach Access Routes	Removable		ach route not provided face is not firm and stable	-	Ensure surface at the accessible route is firm and stable. (Remove uneven stones, provide beach mat joining beach mat to high tide level.)  (Cost for 78" wide 6.5' long beach mat. Cost to remove stones not provided.)	1	980	\$980
	Off-Street Par	king Lot	or Garage								
4	Accessible Parking Spaces Near Viewing Platform	Ext.	Off-Street Parking Lot or Garage	Visitor	Acce	ess aisle not compliant	-	Restripe both car accessible parking spaces.	2	300	\$600

ID	Location	Floor Roon	n Element	Туре	Photo	Issues	Current Measure	Recommendations Q	Quantity	Price	Cost Estimation
	Passenger Lo	ading Zones									
5	Passenger Loading Zone	Ext.	Passenger Loading Zones	N/A		Not connected to an accessible route Access aisle not provided		Provide a curb ramp to ensure the passenger loading zone is connected to an accessible route.  Provide a marked access aisle that is at least 60" wide and that extends the full length of the vehicle.  (Cost based on a marked access aisle and a new curb ramp.)	1	3400	\$3400
6	Passenger Loading Zone	Ext.	Passenger Loading Zones	N/A	LOADING AND UNLOADING ZONE	ISA not provided	-	Add the International Symbol of Accessibility (ISA) to the sign.	1	500	\$500
	Entrance										
7	Toilet Rooms	Ext.	Entrance	Secondary Entrance		Entrance not on an accessible route Directional sign to accessible entrance not provided	-	Provide a directional sign indicating the location of the nearest accessible entrance.	1	346	\$346
4	Access to Good	ls and Services	3								
	Interior Acces	ss Route									
8	Toilet and Bathing Room Area	1	Interior Access Route	Interior	AED	Obstructed by protruding objects	-	Relocate object./Provide a cane-detectable barrier.	1	306	\$306

ID	Location	Floor Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations C	Quantity	Price	Cost Estimation
	Doors, Doorv	vays, & Gates									
9	Women's Toilet Room	1	Doors, Doorways, & Gates	Toilet Room	RESCUE	Maneuvering clearance(s) not provided	-	Relocate boats to maintained the required maneuvering clearance at the doorway.	1	Labor	\$0
10	Women's Toilet Room	1	Doors, Doorways, & Gates	Toilet Room		Threshold not beveled	-	Bevel threshold.	1	150	\$150
	Signage										
11	Women's Changing Area	1	Signage	Egress		Not provided Directional sign to accessible emergency exit not provided Raised characters not provided	-	Provide a directional sign indicating the location of the nearest accessible emergency exit.  Provide text with raised characters duplicated in braille located on the latch side of the door.	1	232	\$232
12	Men's Toilet Room	1	Signage	Egress		Not provided Raised characters not provided	-	Provide a directional sign indicating the location of the nearest accessible emergency exit.  Provide text with raised characters duplicated in braille located on the latch side of the door.	1	232	\$232
13	Men's Toilet Room	1	Signage	Designation	MEN	Raised characters not provided	-	Provide text with raised characters duplicated in braille.	1	232	\$232

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
14	Women's Toilet Room	1		Signage	Designation	WEMEN	Raised characters not provided . Braille not provided	-	Provide text with raised characters duplicated in braille.	1	232	\$232
	Service Coun	ter	ļ					,				
15	Concession Stand	Ext.		Service Counter	N/A		Counter > 36" high	40.5"	Provide a counter that is 36" max. above the ground.	1	880	\$880
	Operable Par	ts										
16	Near Beach	Ext.		Operable Parts	N/A	SHOKING  SHO	Element not on an accessible route	-	Ensure dog waste bag dispenser is located on an accessible route. (Relocate dispenser so it is at a surface that is stable, firm and slip resistant.)	1	Labor	\$0
17	Women's Toilet Room	1		Operable Parts	N/A		. Reach < 15" or > 48"(forward/side approach)	68"	Mount at least one coat hook 48" above the finished floor.	1	256	\$256
	Picnic Tables				,	111				,		
18	Accessible Parking Spaces Near Viewing Platform	Ext.		Picnic Tables	N/A		Toe or knee clearance at table not provided Picnic table not on an accessible route	:	Provide at least one picnic table with toe and knee clearance.  Locate picnic table on an accessible route.	1	1400	\$1400

Page 5

### Town of Manchester-by-the-Sea Singing Beach

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Bike Racks											
19	By Toilet Rooms - South Side	Ext.		Bike Racks	N/A		Not connected to an accessible route	-	Ensure bike racks are located on an accessible route.	1	Labor	\$0
Т	oilet & Bathing	g Rooms	5									
	Overall Acces	SS										
20	Women's and Men's Toilet Rooms	1		Overall Access	Toilet Room		Turning space not provided  Accessible plumbing fixtures or stalls not provided	-	Provide one accessible wheelchair compartment in both the women's and men's toilet room.	2	6182	\$12364
	Lavatory											
21	Single-User Toilet Room	1		Lavatory	N/A		Exposed plumbing underneath	-	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory.	1	92	\$92
22	Women's Toilet Room	1		Lavatory	N/A		Exposed plumbing underneath Mirror above lavatory w/reflective surface > 40"	- 41"	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory.  Lower mirror so that the bottom surface is at 40" max. above finished floor.	1	348	\$348

### Town of Manchester-by-the-Sea Singing Beach

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
23	Women's and Men's Toilet Rooms	1	Lavatory	N/A		Exposed plumbing underneath  Dispensers not within reach range	- 54"	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory. Relocate dispenser to 42" max. above the floor.	2	798	\$1596
	Single-User T	oilet									
24	Single-User Toilet Room	1	Single-Use Toilet	r		Rear grab bar < 42" long (MAAB)	36"	Provide a rear wall grab bar that is 42" long min. and extends from the toilet 12" min. on one side and 24" min. on the other side (open side).	1	898	\$898
	Changing Area	1									
25	Men's Changing Area	1	Changing Area	N/A		. 5% Accessible not provided		Provide at least one accessible changing area with a turning space.  Provide a bench that is between 17" - 19" above the finished floor, 48" long and between 20" - 24" wide. Ensure a 30" by 48" is provided adjacent to the bench.  Ensure the bench has back support or is affixed to a wall.	1	5866	\$5866
26	Women's Changing Area	1	Changing Area	N/A		. 5% Accessible not provided		Provide at least one accessible changing area with a turning space.  Provide a bench that is between 17" - 19" above the finished floor, 48" long and between 20" - 24" wide. Ensure a 30" by 48" is provided adjacent to the bench.  Ensure the bench has back support or is affixed to a wall.	1	5866	\$5866
	Shower Comp	partmen	t								
27	Men's Shower	1	Shower Compartm nt	Transfer e Type		Size of shower compartment non compliant	43"x43"	Provide a transfer shower that is 36" by 36"	1	9832	\$9832

### Town of Manchester-by-the-Sea Singing Beach

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
28	Women's Changing Area	1		Shower Compartme nt	Transfer Type		Size of shower compartment non compliant	43"x43"	Provide a transfer shower that is 36" by 36".	1	9832	\$9832
ı	Best Practice											
	Bench											
29	Viewing Platform	Ext.		Bench	N/A				Recommend providing 36"x48" clear floor space at one end of bench on viewing platform.	1	-	\$0
	Stairs											
30	Stairs From Viewing Platform	Ext.		Stairs					Recommend closing risers and providing handrails on both sides.	1	-	\$0

### **Sweeney Park**



## Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

Sweeney Park is located at 113 Summer Street. Amenities include two (2) basketball courts, a Little League baseball field with a press box and scoreboard, a softball field, bullpens, a soccer field, a drinking fountain, player and fan seating and the Bill Burgess Canteen concession stand. The main entrance to the park is located Summer Street. On-street parking is available around the park.

### **Key Accessibility Issues**

#### Exterior

Accessibility issues include lack of an accessible route to the second basketball court, lack of an accessible route to the drinking fountain and to other park amenities.

#### Play Areas

Accessibility issues include lack of accessible seating at the bleachers located by the basketball court and by the ballfields, lack of clear floor space at the team seating in the baseball field dugouts, and lack of an accessible route to the softball field team seating due to an excessive change in level at the entry to both bullpens.

### **Additional Accessibility Issues**

- Lack of a drinking fountain for standing users.
- Lack of an accessible picnic table (with knee clearance).
- Lack of closed risers at the stair leading to the press box.
- Lack of compliant hardware at the door to the press box and the concession stand.

### **Order of Magnitude Cost Estimates**

- Provide an accessible route to all amenities in the park (basketball court, team and fan seating, etc.): \$15,760
- Provide a drinking fountain for standing users: \$4,028
- Miscellaneous corrective actions (accessible door hardware, closed risers at press box, accessible picnic table, accessible seating at bleachers, etc.): \$3,152

Total: \$22,940

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

 Recommend providing a 48" min. stable, firm and slip resistant surface around the accessible picnic table.

ID	Location	Floor	Room Eler	ment Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Approach and I	Entrance									
	Exterior Acce	ess Rout	Э								
1	Towards Second Basketball Court	Ext.	Exter Acce Rout	ess		Accessible route not provided		Ensure an accessible route is provided to the second basketball court.  (Cost based on 137 ft. long 48" min. wide stone dust path)	1	4384	\$4384
	Access to Good	ds and S	ervices								
	Doors, Doorv	vays, & G	Sates								
2	Press Box	Ext.	Door Door & Ga	rways,		Hardware not operable with a closed fist		Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
3	Bill Burgess Canteen	Ext.	Door Door & Ga	rways,	- I	Hardware not operable with a closed fist		Provide hardware that can be operable with one hand and not require tight grasping, pinching, or twisting of the wrist.	1	484	\$484
	Stairways										
4	Press Box	Ext.	Stain	ways Exterior		Stair has open risers		Ensure stairs have closed risers.  (Cost based on closing four (4) wood risers.)	1	64	\$64

ID	Location		Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Picnic Tables										
5	Near Second Basketball Court	Ext.	Picnic Tables	N/A		Toe or knee clearance at table not provided	-	Provide at least one picnic table with toe and knee clearance.	1	1400	\$1400
	Additional Acce	ess									
	Drinking Fou	ntains									
6	Near Press Box	Ext.	Drinking Fountains	N/A		Fountain not on accessible route No drinking fountain provided for standing users	- -	Provide an accessible route to the drinking fountain. Provide an additional drinking fountain for standing users.  (Cost based on a 24 ft. long x 48" wide min. stone dust path and a drinking fountain for standing users).	1	4796	\$4796
	Play and Sport	Areas									
	Field										
7	Baseball	Ext.	Field	Baseball		Accessible spaces are not provided at team seating	-	Provide a 36" x 48" clear floor space at team seating bench in each dugout.	2	Labor	\$0
8	Fan Seating Softball	Ext.	Field	Softball		Accessible spaces are not provided at team seating Not connected to an accessible-route	-	Provide a 36" x 48" clear floor space at bleacher seating. Ensure bleacher is connected to an accessible route.  (Cost based on a 60'x48" min. stone dust path to bleachers and a 36'x48' asphalt patch at bleachers.)	1	2160	\$2160

ID	Location	Floor	Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations Qu	uantity	Price	Cost Estimation
9	Softball Fan Seating	Ext.		Field	Softball		Accessible spaces not provided at sidelines seating	-	Provide a 36" x 48" clear floor space at sidelines seating.  (Cost based on a 36'x48' asphalt patch.)	1	240	\$240
10	Baseball Fan Seating	Ext.		Field	Baseball		Accessible spaces not provided at sidelines seating	-	Provide a 36" x 48" clear floor space at sidelines seating.  (Cost based on a 36'x48' asphalt patch.)	1	240	\$240
11	Team Seating Softball	Ext.		Field	Softball		Not connected to an accessible-route	-	Ensure softball team seating is connected to an accessible route. (Provide a concrete walkway 48" wide min. with a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.  (Cost based on two (2) 6'x4' of concrete walkways, one at each softball field dugout.)	2	384	\$768
12	Softball Bullpen	Ext.		Field	Softball		Practice areas are not on an accessible route	-	Provide an accessible route to practice areas (softball bullpen).  (Cost based on a 180'x48" min. stone dust path to edge of bullpen.)	1	5760	\$5760
13	Soccer Field	Ext.		Field	Soccer		No accessible route to all areas of sports activity	-	Provide an accessible route to the soccer field. (Cost based on a 60'x48" min. stone dust path to the edge of sport activity at the soccer field.)	1	1920	\$1920

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Court											
14	Near Second Basketball Court	Ext.		Court	Basketball		Accessible spaces are not provided at sidelines seating	-	Provide a 36" x 48" clear floor space at sidelines seating.  (Cost based on an asphalt 36"x48" patch alongside the bleachers.)	1	240	\$240
В	est Practice											
	Picnic Table											
15	Near Second Basketball Court	Ext.		Picnic Table	N/A				Recommend providing a 48" min. stable, firm and slip resistant surface around the accessible picnic table.	1	-	\$0

### **Tuck's Point**



## Town of Manchester-by-the-Sea ADA Transition Plan

March 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

### **Background**

Tuck's Point is located at 12 Tuck's Point Road. Amenities include a gazebo, picnic areas, benches, horseshoe pits, a Chowder House with a small adjacent kitchen, a beach, row boats and a boat launch and life vest loaner station, a playground and men's and women's multi-user toilet rooms. A parking lot is located on the west side of the park.

### **Key Accessibility Issues**

#### Exterior

Lack of accessible routes to all the amenities in the park (benches, picnic tables, etc.) and excessive running and cross slopes at the route leading to the multi-user toilet rooms.

#### Playground

Major accessibility issues include the lack of a compliant accessible route around the playground and lack of an accessible route to each play component.

**Note:** The Massachusetts Architectural Access Board (MAAB) does not consider engineered wood fiber (EWF) to comply with its regulation requiring an accessible route to each play component and around the playground.

#### **Toilet Rooms**

Accessibility issues include flush control not located on the open/transfer side of the toilet (men's toilet room), lack of insulated pipes at lavatory (women's toilet room).

### **Additional Accessibility Issues**

- Lack of accessible picnic tables.
- Lack of a marked access aisle and sign with the words "Van Accessible" at the van accessible parking space.
- Lack of a sink with knee and toe clearance in the kitchen (Chowder House).

### **Order of Magnitude Cost Estimates**

- Provide compliant accessible routes including an accessible route to and around the playground: \$13,960
- Provide a compliant impact-attenuating accessible route to play components in the playground (poured-in-place rubber): \$8.750
- Miscellaneous corrective actions (renovation to toilet rooms, accessible picnic table, parking, sink, etc.): \$8,786

Total: \$31,496\*

\*Note: Costs to reduce some excessive running and cross slopes are not provided.

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- O IHCD strongly recommends exploring the possibility of an alternative surface to engineered wood fiber (EWF). Overtime, EWF requires continuous maintenance to ensure the surface is maintained in operable working condition (stable, firm and slip-resistant). In addition, when used in combination with other surfaces required for accessible routes to play components in Massachusetts, it will present a challenge to prevent level changes at the transition points between EWF and other surfaces, and to keep the accessible routes clear of EWF.
- Recommend providing benches that are between 20" 24"
   deep in the multi-user toilet rooms.
- Recommend providing a 48" stable, firm and slip resistant surface around the exterior of all accessible picnic tables.
- Recommend proving a 36" x 48" stable, firm and slip resistant surface at the end of at least one bench in each area positioned so that an individual with a wheeled mobility device can have shoulder alignment with a companion seated on the bench.

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
A	approach and E	Entrance	)									
	Exterior Acce	ss Rout	e									
1	Walkway to Chowder House and Kitchen	Ext.		Exterior Access Route	Walkway	Cro	oss slope > 1:48 (2.08%)	6.1%	Reduce cross slope to be no steeper than 1:48 (2.08%).  (Cost based on 6'x4' of asphalt to reduce slope at \$10 a square foot.)	1	240	\$240
2	Towards Toilet Rooms	Ext.		Exterior Access Route	Walkway		oss slope > 1:50 (2.00%) (MAAB) nning slope > 1:20 (5.00%)	4.6% 5.5%	Reduce cross slope to be no steeper than 1:50 (2.00%). Reduce the running slope to be no steeper than 1:20 (5.00%). (Cost to reduce excessive running slope not provided.)	1	-	\$0
3	Gazebo Towards Toilets	Ext.		Exterior Access Route	Exterior		el changes > 1/4"	2"	Alter change in level to be 1/4" high max.  (Cost based on 4'x3' of asphalt to reduce change in level and provide a stable, firm and slip resistant surface between asphalt and mat walkway.)	1	120	\$120
4	Towards Toilet Rooms	Ext.		Exterior Access Route	Walkway	No	t maintained in an operable working condition	-	Ensure the accessible route is maintained in operable working condition.  Cost based on a 60 ft. long by 4 ft wide asphalt route.	1	2400	\$2400
5	Walkway From Parking Towards Gazebo	Ext.		Exterior Access Route	Walkway	Rul	nning slope > 1:20 (5.00%)	8.2%	Reduce the running slope to be no steeper than 1:20 (5.00%).  (Cost to reduce excessive running slope not provided.)	1	-	\$0

ID	Location	Floor	Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
6	Walkway to Gazebo	Ext.		Exterior Access Route	Exterior		Running slope > 1:20 (5.00%)	8.6%	Reduce the running slope to be no steeper than 1:20 (5.00%).  (Cost to reduce excessive running slope not provided.)	1	-	\$0
7	Towards Chowder House	Ext.		Exterior Access Route	Walkway		Accessible route not provided	-	Relocate tables to ensure the min. 36' width is maintained at the accessible route.	1	Labor	\$0
8	Horseshoe Pits	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided to at least one of the horseshoe pits.  (Cost based on a 30'x48" wide min. 30' asphalt path to at least one of the horseshoe pits in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200
9	Path to Boats	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided to the area where the boats are stored.  (Cost based on a 36'x48" wide min. 60' asphalt path to the accessible picnic table in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	2400	\$2400
10	Life Vest Loaner Station	Ext.		Exterior Access Route	Exterior	Har West Learner  Fred Fred Fred Fred Fred Fred Fred Fred	Accessible route not provided	-	Ensure an accessible route is provided to the life vest loaner station.  (Cost based on a 30'x48" wide min. 30' asphalt path to at least one of the horseshoe pits in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Off-Street Par	rking Lot	or Garage								
11		Ext.	Off-Street Parking Lot or Garage	N/A		Total # of parking Total # of designated accessible parking spaces Access aisle < 96" wide at van space Sign does not have the designation "Van Accessible" Sign < 60" above finished grade	55 2 - - 38"	Provide a marked access aisle that is at least 96" wide.  Add the designation "Van Accessible" to the sign located at the van accessible space.  Locate sign with the bottom of the sign 60" above the ground.	1	800	\$800
1	Access to Good	ds and S	ervices								
	Doors, Doorv	vays, & C	Bates								
12	Women's Toilet Room	1	Doors, Doorways, & Gates	Toilet Room	WOMEN	. Door requires > 5 lbs of force to open	14 lbs	Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0
13	Men's Toilet Room	Ext.	Doors, Doorways, & Gates	Toilet Room	T & LOS	. Door requires > 5 lbs of force to open	9 lbs	Adjust closers so doors do not require more than 5 pounds of force to open.	1	Labor	\$0
	Picnic Tables										
14	Near Parking	Ext.	Picnic Tables	N/A		. Toe or knee clearance at table not provided	-	Provide at least one picnic table with toe and knee clearance.	1	1400	\$1400

ID	Location	Floor Rooi	m Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
15	Near Playground	Ext.	Picnic Tables	N/A		Toe or knee clearance at table not provided Picnic table not on an accessible route	-	Provide at least one picnic table with toe and knee clearance. Provide an accessible route to at least one picnic table in this area.  (Cost based on a 15 ft. long by 4 ft. wide asphalt path.)	1	600	\$600
16	Chowder House Exterior by Ocean	Ext.	Picnic Tables	N/A		Picnic table not on an accessible route	-	Locate picnic table on an accessible route.  (Cost based on a 30'x48" wide min. 30' asphalt path to the accessible picnic table in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200
17	Near Gazeebo	Ext.	Picnic Tables	N/A		Picnic table not on an accessible route	-	Locate accessible picnic table in this area on an accessible route.  (Cost based on a 30'x48" wide min. 30' asphalt path to at least one of the horseshoe pits in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200
	Benches										
18	Near Playground	Ext.	Benches	N/A		No accessible route to one bench in this area	-	Provide an accessible route to at least one bench in this area.  Cost based on an 10 ft. long by 4 ft. wide asphalt route.	1	400	\$400
19	Chowder House Exterior by Ocean	Ext.	Benches	N/A		No accessible route to one bench in this area		Provide an accessible route to at least one bench in this area.  (Cost based on a 30'x48" wide min. 30' asphalt path to at least one of the benches in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200

ID	Location	Floor	Room Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
20	Pile Berle	Ext.	Benches	N/A		No accessible route to one bench in this area	-	Provide an accessible route to at least one bench in this area.  (Cost based on a 30'x48" wide min. 30' asphalt path to at least one of the horseshoe pits in this area. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)	1	1200	\$1200
	Bike Racks	_		l							
21		Ext.	Bike Racks	N/A		Not connected to an accessible route	-	Ensure bike racks are connected to an accessible route.  (Cost based on a 18'x48" wide min. 15' asphalt	1	600	
								path to bike rack. Ensure walkway has a running slope of 1:20 (5.00%) max. and a cross slope of 1:50 (2.00%) max.)			\$600
	Γoilet & Bathing	g Rooms	•								
	Lavatory										
22	Women's Toilet Room	Ext.	Lavatory	N/A		Exposed plumbing underneath	-	Insulate or otherwise configure pipes to prevent contact, for at least one lavatory.	1	92	\$92
	Toilet Compa	rtment									
23	Men's Toilet Room	1	Toilet Compartme nt	Accessible Compartme nt		Door with malfunctioning self-closing hinge Coat hook > 48"	- 57"	Repair hinge. Lower coat hook so that it is no higher than 48" above the finished floor.	1	150	\$150

ID	Location	Floor Room	n Element	Туре	Photo	Issues	Current Measure	Recommendations Qua	antity	Price	Cost Estimation
24	Men's Toilet Room	1	Toilet Compartme nt	Accessible Compartme nt		. Flush control not on open side	-	Provide the flush control on the open side of the toilet (transfer side).	1	374	\$374
	Urinal										
25	Men's Toilet Room	Ext.	Urinal	N/A		Clear floor space not provided at urinal	-	Remove partition to provide a 30" min. by 48" min. clear floor space positioned for a forward approach.	1	256	\$256
A	Additional Access										
	Drinking Fountains										
26	By Toilet Rooms	Ext.	Drinking Fountains	Seated		No drinking fountain provided for standing users	-	Provide an additional drinking fountain for standing users or install a Hi-Lo drinking fountain.	1	4028	\$4028
	Sink										
27	Kitchen		Sink	Other		Toe and knee clearances not provided	-	Ensure there is a 27" knee clearance positioned for a forward approach to sink.  (Cost based on a sink with the required minimum toe and knee clearance.)	1	1686	\$1686
Р	Play and Sport	Areas							,		

ID	Location	Floor	Room Elemen	t Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
	Play Areas										
28	Playground	Ext.	Play Area	as N/A		Accessible route not provided to playground Accessible route not provided at play components Surface not stable, firm, and slip-resistant	- - -	Provide an accessible route to and around the playground. (30'x48" wide min. asphalt.) Provide an accessible route that is 60" min. wide to each play component in the playground. (Poured-in-place rubber.) Provide a compliant impact-attenuating surface under and around the play components. (25 sq.' poured-in-place rubber.) (Cost includes poured-in-place rubber.)	1	11150	\$11150
E	Best Practice										
	Bench										
29	Women's Toilet Room & Men's Toilet Room	Ext.	Bench	N/A				Recommend having a bench that is between 20" and 24" deep.	2	-	\$0
30	Chowder House Exterior by Ocean	Ext.	ench	N/A				Recommend proving a 36"x48" stable, firm and slip resistant surface at the end of at least one bench in each area positioned so that an individual with a wheeled mobility device can have shoulder alignment with a companion seated on the bench.	1	-	\$0
	Picnic Table										
31	Near Parking	Ext.	Picnic Ta	ole N/A				Recommend providing a 48" stable, firm and slip resistant surface around the exterior of all accessible picnic tables.	1	-	\$0

### **White Beach**



# Town of Manchester-by-the-Sea ADA Transition Plan

February 2020



200 Portland Street, Boston, MA 02114 www.IHCDesign.org • info@IHCDesign.org 617-695-1225 voice/tty

### **Background**

White Beach is located at 19 Ocean Street. Parking is available along Ocean Street.

### **Key Accessibility Issues**

- Lack of an accessible route that extends to the high tide level.
- Lack of a van accessible parking space.

### **Order of Magnitude Cost Estimates**

- Provide an accessible route that extends to the high tide level (beach mat): \$3,899
- Provide a van accessible parking space: \$800

Total: \$4,699

### **Best Practice and Inclusive Design**

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- o Recommend providing benches along Ocean Street.
- o Recommend providing a sign with the beach name.

### Manchester by-the-Sea White Beach

ID	Location	Floor	Room	Element	Туре	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
4	Approach and Entrance											
	Beach Access Routes											
1	Accessible Route	Ext.		Beach Access Routes	Removable	Beach route n	ot provided	-	Provide an accessible beach access route that is firm and stable. Ensure the accessible route extends to the high tide level. (Provide a beach mat that is at least 72" wide and extends to the high tide level.)  (Cost based on a 72" wide min. by 80' long beach mat.)	1	3899	\$3899
	Off-Street Parking Lot or Garage											
2	Parking Lot	Ext.		Off-Street Parking Lot or Garage	Visitor	Total # of desi	ignated van accessible spaces	-	Provide a van accessible space that is at least 96" wide with a marked access aisle that is at least 96" wide.  Provide a sign with the bottom of the sign 60" min. above the ground and the top 96" max. above the ground. Add the designation "Van Accessible" to the sign.	1	800	\$800
E	Best Practice											
	Benches											
3	19 Ocean Street	Ext.		Benches	N/A				Recommend providing benches along the route.	1	-	\$0
	Wayfinding											
4	19 Ocean Street	Ext.		Wayfinding	N/A				Recommend providing a sign with the beach name.	1	-	\$0

IHCD recommends the following improvements at the Town Park / Outdoor Areas:

#### Singing Beach

- Provide an accessible route that extends to the high tide level (beach mat).
- Provide a compliant loading zone (access aisle and curb ramp).
- Provide two (2) compliant accessible wheelchair compartments, two (2) compliant transfer showers, two (2) compliant changing areas. Ensure all amenities are compliant (lavatories, hand dryers and mirrors).
- Provide compliant signage (designation, egress and directional).
- Provide an accessible picnic table (with knee and toe clearance).
- Provide an accessible service counter.

IHCD recommends the following Best Practice and Inclusive Design improvements at Singing Beach:

- Recommend providing 36" x 48" clear floor space at one end of the bench on the viewing platform.
- Recommend providing closed risers and providing handrails on both sides of stairs descending from the viewing platform.

#### White Beach

- Provide an accessible route that extends to the high tide level (beach mat).
- Provide a van accessible parking space.

IHCD recommends the following Best Practice and Inclusive Design improvements at White Beach:

- Recommend providing benches along Ocean Street.
- Recommend providing a sign with the beach name.

#### Black Beach

 Provide an accessible route that extends to the high tide level of the beach (beach mat).

IHCD recommends the following Best Practice and Inclusive Design improvements at Black Beach:

- Recommend providing benches along Ocean Street.
- Recommend providing a sign with the beach name at both ends of Black Beach, and a sign with a directional arrow and text such as, "Beach Access Point" at the west end of Black Beach.
- Recommend providing a sign with a directional arrow indicating that parking is available at White Beach.
- Recommend extending the walkway along Ocean Street so it spans the full length of Black Beach from the beach access point at the east end to the west end of Black Beach where it is closest to White Beach.

In addition, IHCD received comments from the ADA Advisory Committee regarding accessibility issues in Town buildings and outdoor areas. Please note that some of the comments were documented during the ADA accessibility surveys and recommendations for corrective action were provided.

#### **Tucks Point**

- Provide compliant accessible routes including an accessible route to and around the playground.
- Provide a compliant impact-attenuating accessible route to play components in the playground (poured-in-place rubber).
- Renovate toilet rooms.
- Provide an accessible picnic table (with knee clearance).
- Provide compliant accessible parking spaces.
- Provide a compliant sink (with knee and toe clearance).

IHCD recommends the following Best Practice and Inclusive Design improvements at Singing Beach:

- IHCD strongly recommends exploring the possibility of an alternative surface
  to engineered wood fiber (EWF). Overtime, EWF requires continuous
  maintenance to ensure the surface is maintained in operable working
  condition (stable, firm and slip-resistant). In addition, when used in
  combination with other surfaces required for accessible routes to play
  components in Massachusetts, it will present a challenge to prevent level
  changes at the transition points between EWF and other surfaces, and to keep
  the accessible routes clear of EWF.
- Recommend providing benches that are between 20" 24" deep in the multiuser toilet rooms.
- Recommend providing a 48" stable, firm and slip resistant surface around the exterior of all accessible picnic tables.
- Recommend proving a 36" x 48" stable, firm and slip resistant surface at the
  end of at least one bench in each area positioned so that an individual with a
  wheeled mobility device can have shoulder alignment with a companion
  seated on the bench.

#### Sweeney Park

- Provide an accessible route to all amenities in the park (basketball court, team and fan seating, etc.)
- Provide accessible seating at bleachers.
- Provide a drinking fountain for standing users.
- Provide accessible door hardware.
- Ensure the stairs leading to the press box have closed risers.
- Provide an accessible picnic table (with Knee clearance).

IHCD recommends the following Best Practice and Inclusive Design improvements at Sweeney Park:

 Recommend providing a 48" min. stable, firm and slip resistant surface around the accessible picnic table

#### Masconomo Park

- Provide an accessible route to all the amenities in the park (including around the exterior of the playground).
- Provide a compliant impact-attenuating surface under and around the play components in the playground (poured-in-place rubber).
- Renovate parking lot.
- Provide an accessible picnic table.

IHCD recommends the following Best Practice and Inclusive Design improvements at Masconomo Park:

- Recommend providing a 36" x 48" stable, firm and slip resistant surface at the end of at least one (1) bench positioned to allow shoulder alignment with a person on the bench for someone using a wheeled mobility device.
- Recommend providing a 48" wide stable, firm and slip resistant surface around the exterior of an accessible picnic table that is located on an accessible route.
- IHCD strongly recommends exploring the possibility of an alternative surface
  to engineered wood fiber (EWF). Overtime, EWF requires continuous
  maintenance to ensure that the surface is maintained in operable working
  condition (stable, firm and slip resistant). In addition, when used in
  combination with other surfaces required for accessible routes to play
  components in Massachusetts, it will present a challenge to prevent level
  changes at the transition points between EWF and other surfaces, and to keep
  the accessible routes clear of EWF.

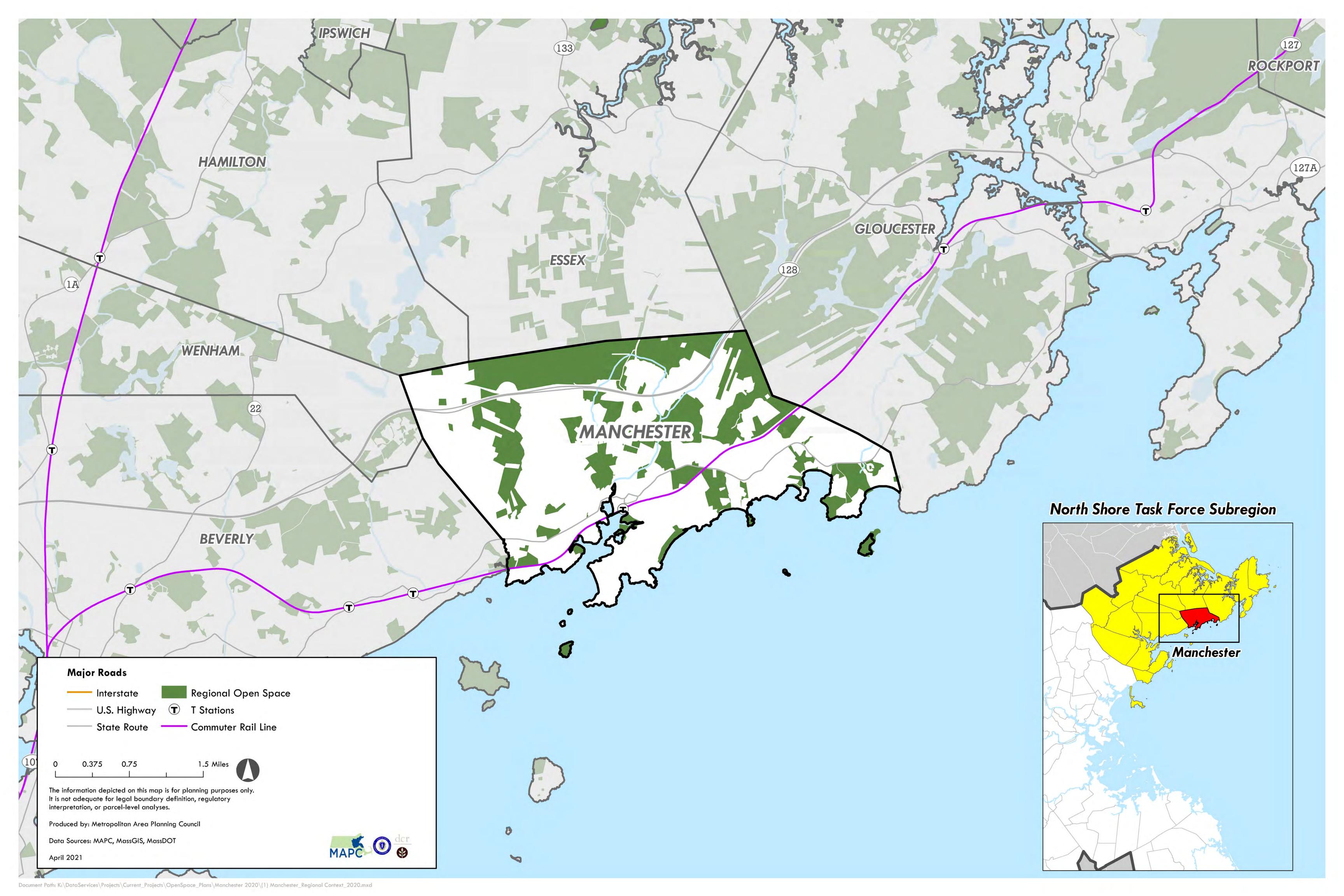
#### Reed Park/Docks\*

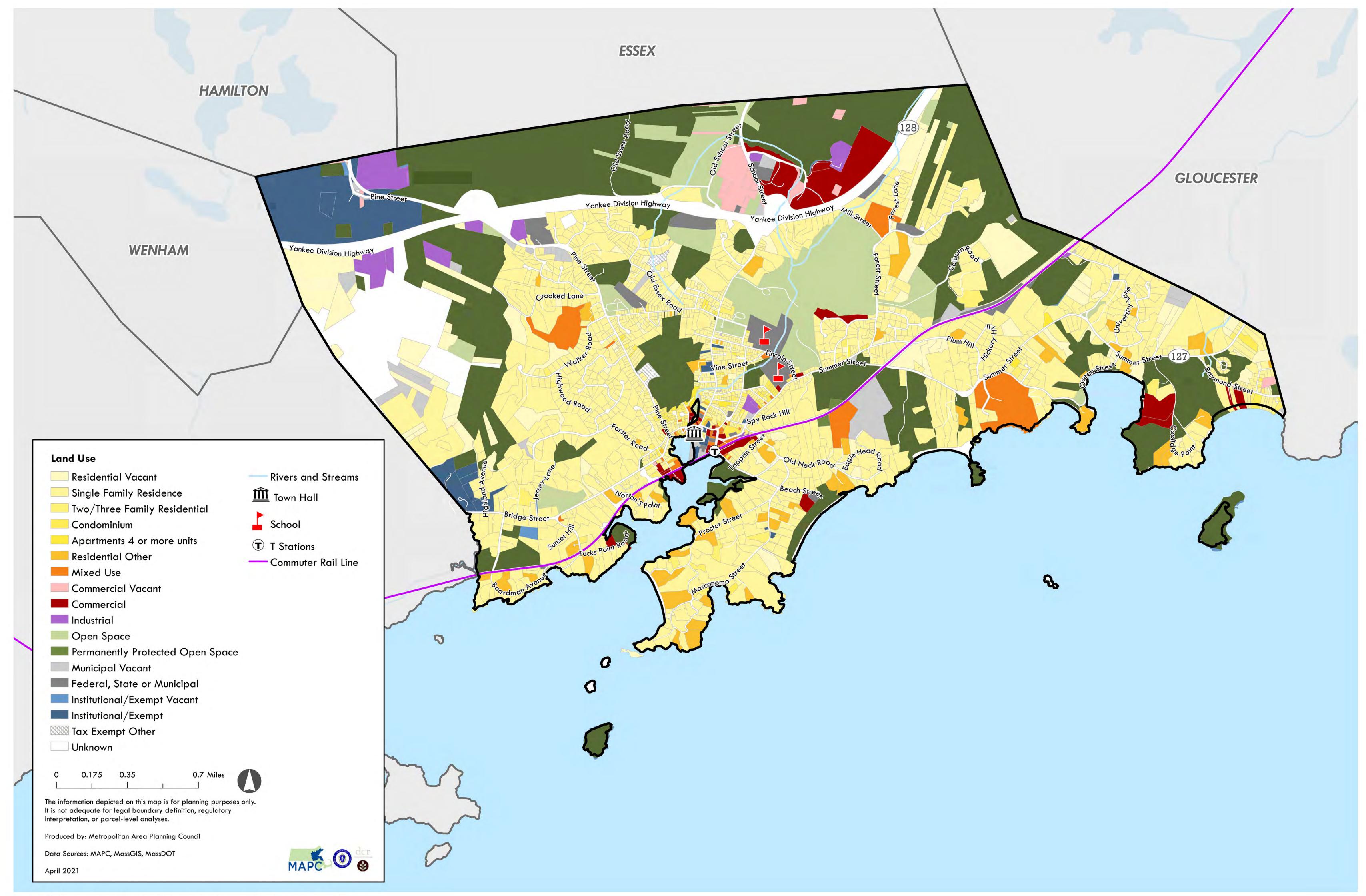
- Provide an accessible route to all the amenities in the park.
- \*The dock was closed the day of IHCD's visit and was not surveyed.

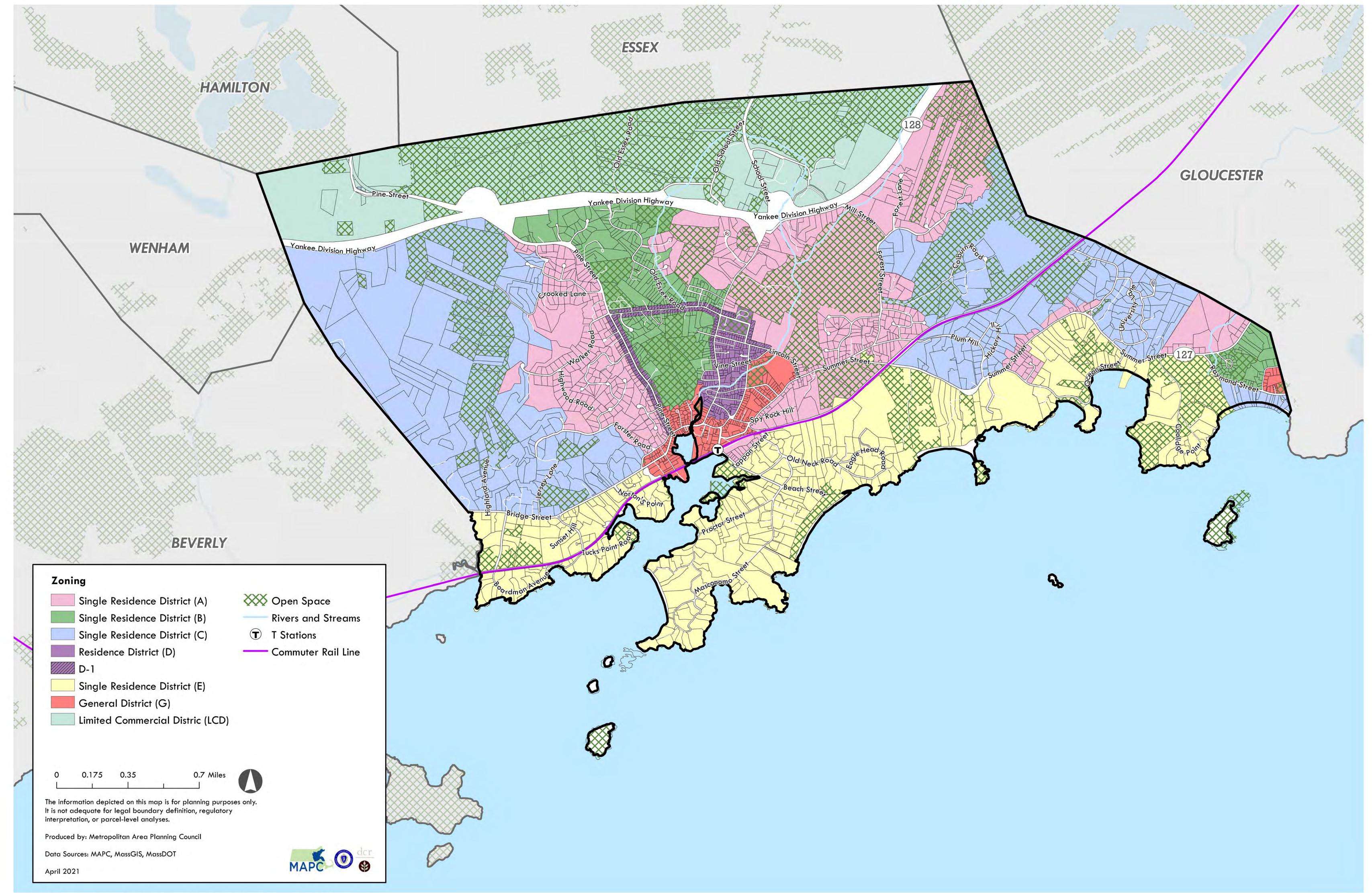
IHCD recommends the following Best Practice and Inclusive Design improvements at the Reed Park/Docks:

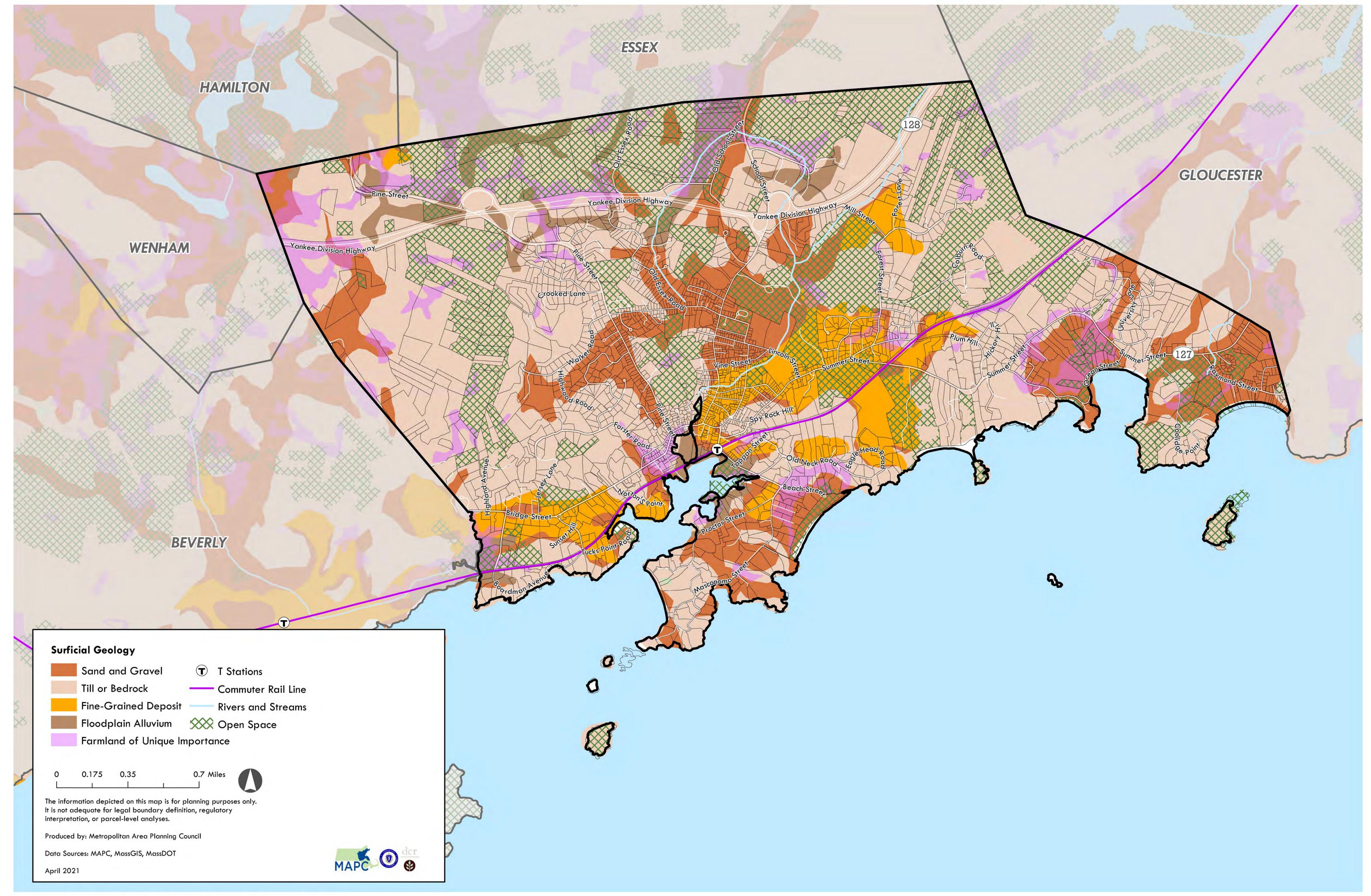
- Recommend providing an accessible parking space near the entrance to the park (Beach Street).
- Recommend providing a sign with the park name.

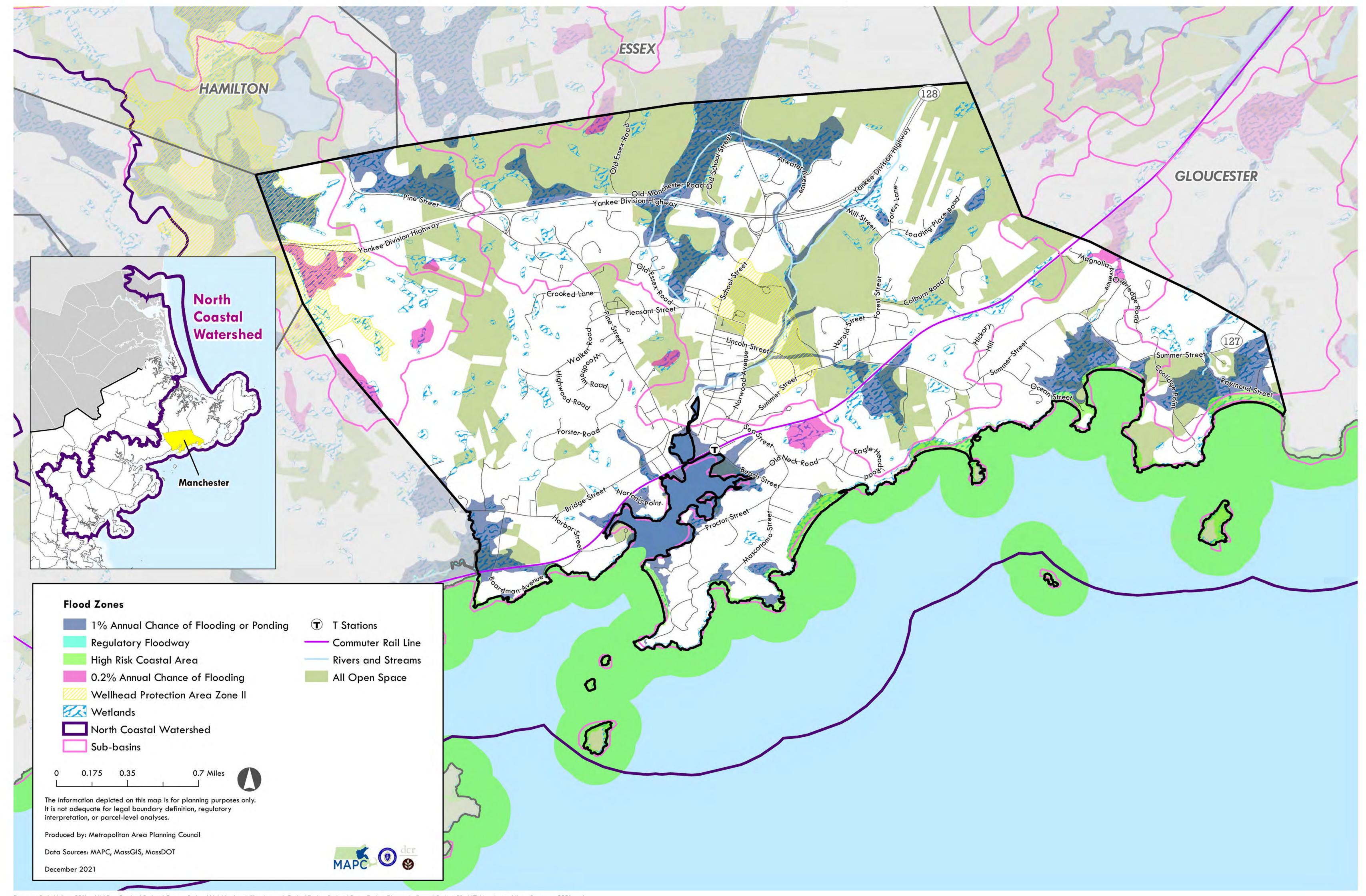
### **Appendix B: Maps**

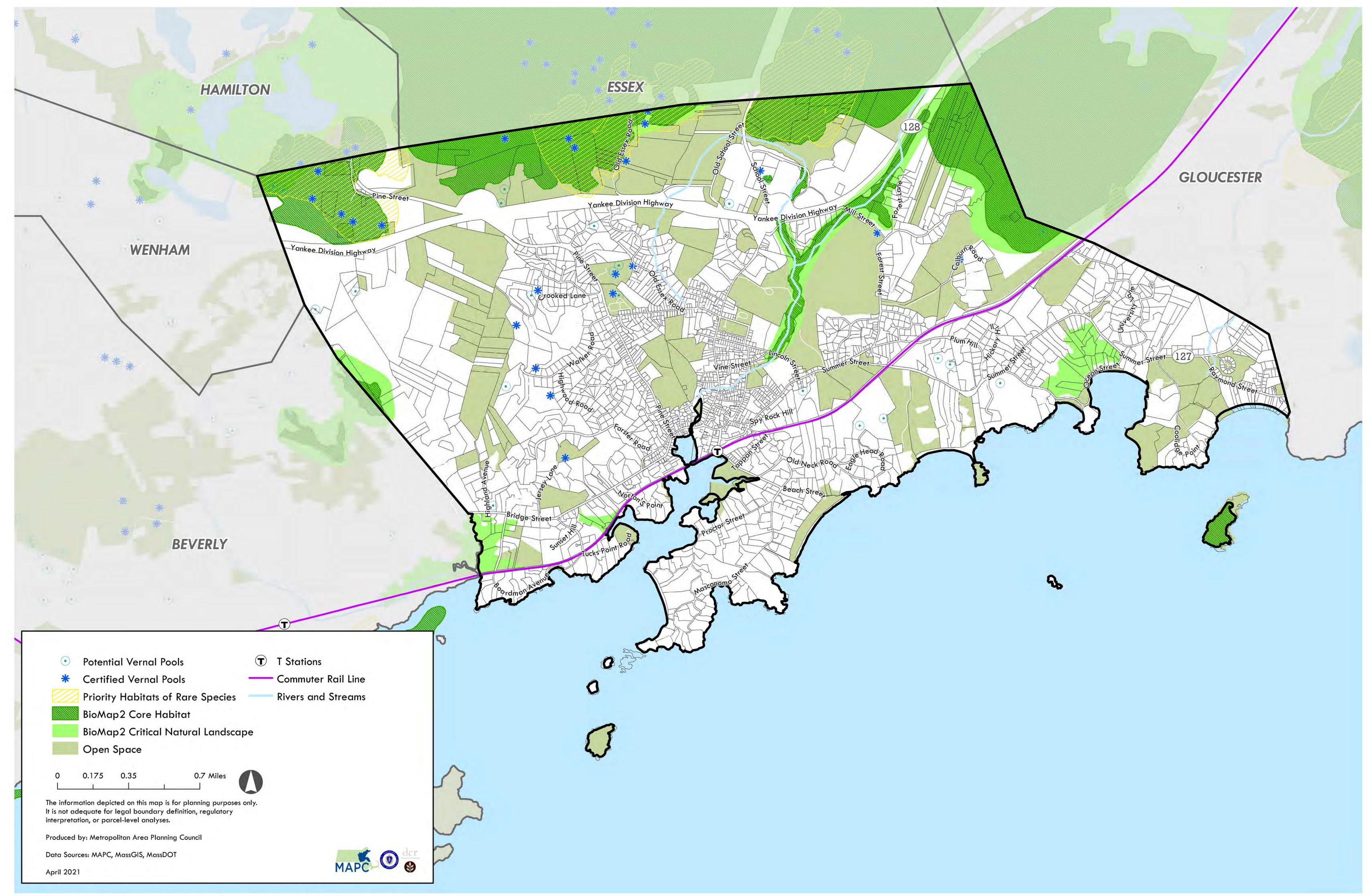


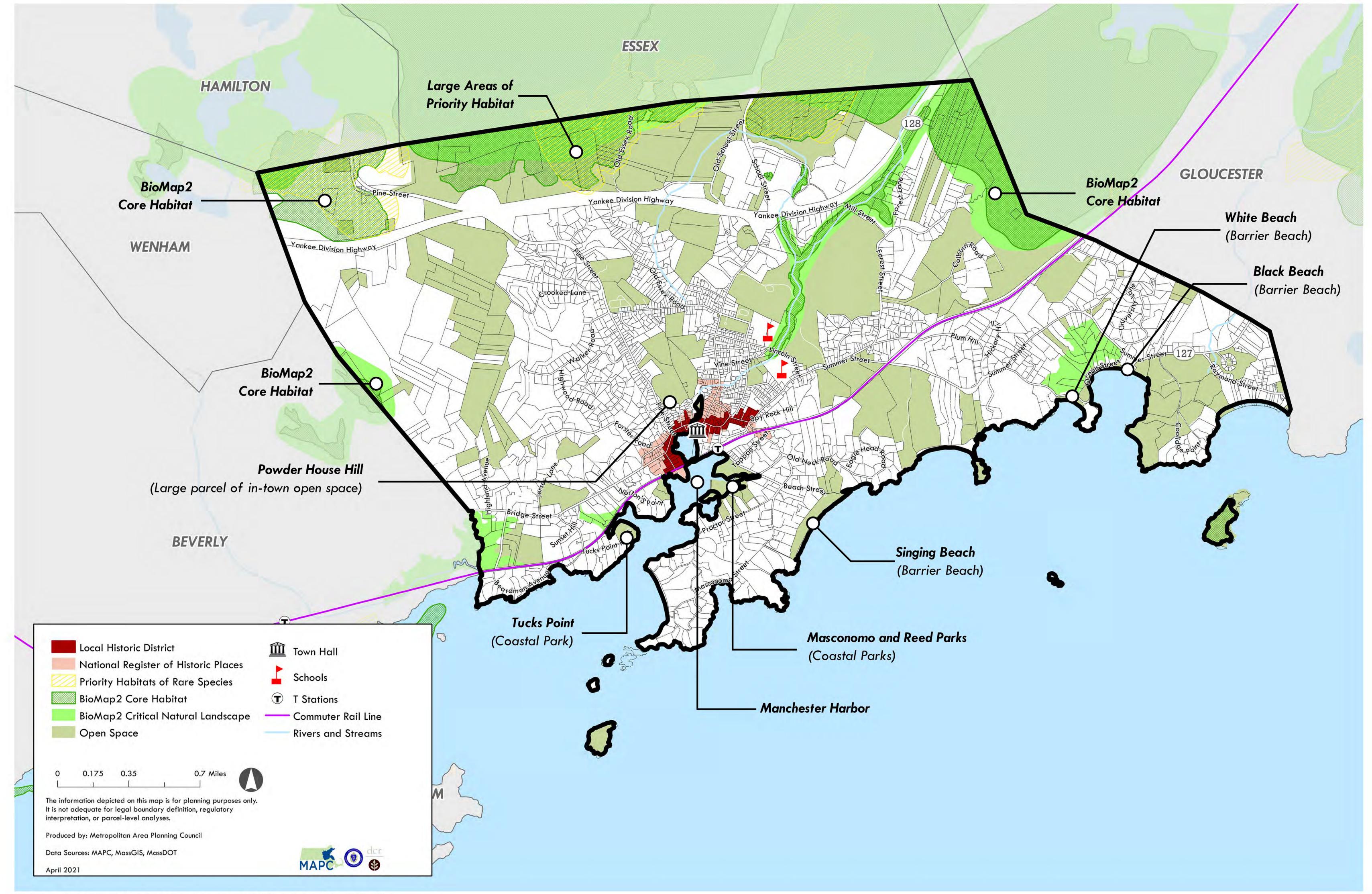


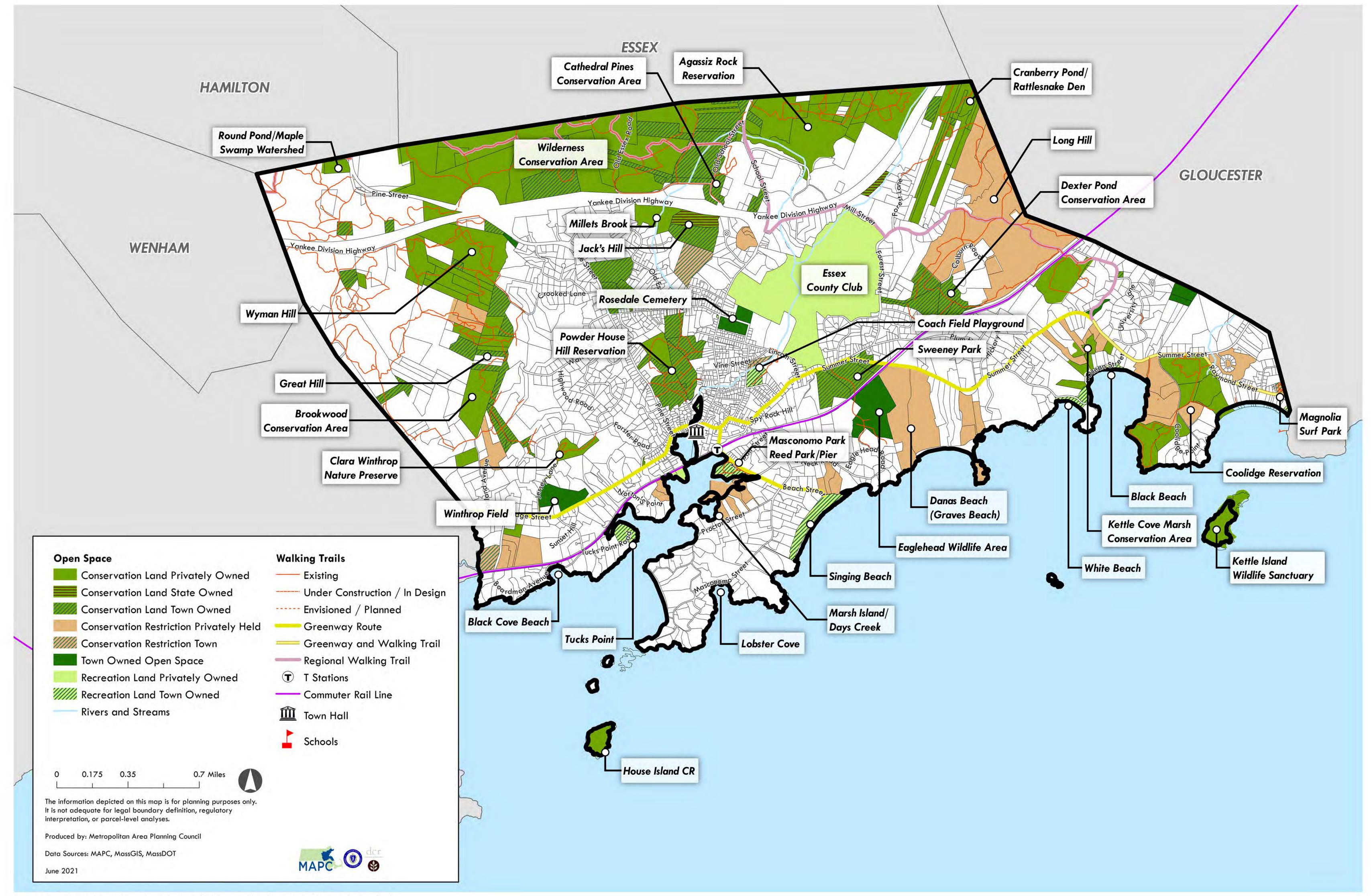


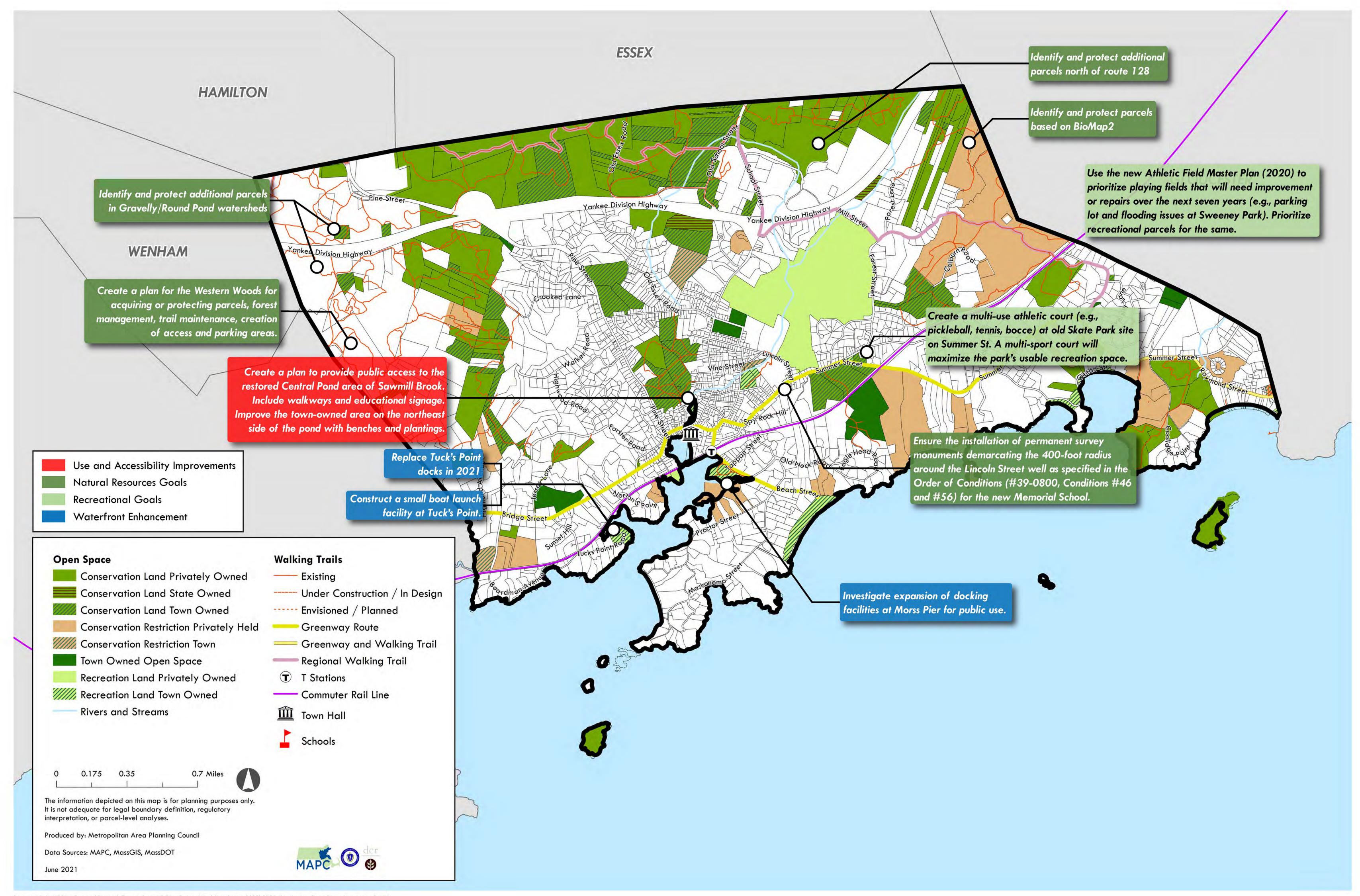












# **Appendix C: Virtual Forum Presentation and Feedback**





### Manchester-by-the-Sea 2021 Open Space and Recreation Plan Update

### OSRP Update Advisory Group Meeting #1 Agenda

July 16, 2020, 2:00 PM

<u>Click here</u> to register and join by video or phone: <u>Meeting number:</u> 951 8678 3754

- 1. Welcome and Introductions (5 minutes)
  - a. Name and affiliation
- 2. Purpose of Open Space and Recreation Plan (OSRP) (5 minutes)
  - a. OSRP Outline (In accordance with the Open Space and Recreation Planner's Workbook)
  - b. Plan process and project timeline
- 3. Project Logistics (15 minutes)
  - a. Role of Open Space and Recreation Committee (OSRC)
    - O Report on progress of 2014 OSRP seven-year action plan
    - Make recommendations to OSRP Update Advisory Group for 2021 seven-year action plan
  - b. Role of OSRP Update Advisory Group
    - o Offer ideas and expertise
    - Do community outreach
    - O Assist with new 2021 seven-year action plan
    - O Assist in developing the inventory of lands
    - O Review project maps and draft sections of the plan
  - c. OSRP ShareFile
  - d. Public Forum #1
    - Discuss possible dates and times

#### 4. Community Engagement (20 minutes)

- a. Targets (i.e. general public, youth, seniors, persons with disabilities, etc.)
- b. How (i.e. town website, mailer, social media, listservs, etc.)

#### 5. Key Issues (10 minutes)

- a. Were you involved in the 2014 OSRP?
- b. Key accomplishments and priorities

#### 6. Next Steps (5 minutes)

- a. Parks Tour
  - Compile a list of key facilities and open spaces to visit so I can learn more about the resources to protect and the specific future needs to be addressed.
- c. Drafting Sections 3, 4 and 5 of the OSRP
- b. Preparing for the virtual Public Forum

#### **MANCHESTER-BY-THE-SEA** OPEN SPACE AND RECREATION PLAN UPDATE

The Town of Manchester-By-The-Sea with the assistance of the Metropolitan Area Planning Council (MAPC) is preparing an Open Space and Recreation Plan (OSRP). This OSRP is an update to Manchester's 2014 Open Space and Recreation Plan and will serve to guide the Town's decisions on open space and recreation activities for the next seven years. The Town and the Open Space and Recreation Plan Update Advisory Group invite you to join us for a virtual meeting and open house to give your input into the development of this plan. This will be the first of several opportunities during the update process to learn more about the OSRP and to provide input. Please register for the Live Presentation using the **Zoom link** below. If you can't join us for the Live Presentation, we will be publishing a link to the recording and the Virtual Open House on the Town's Open-Space-Recreation-Committee web page where you can view content and provide input any time from Aug. 26 through Sept. 11.

#### Live Presentation:

Wednesday, August 26, 2020 6:30pm -7:15 pm

Register Here:

mapc.ma/ManchesterOSRP

(Following the Live Presentation)

#### Virtual Open House:

Aug. 26- Sept. 11, 2020

A link to the site will be posted on the Open-Space-Recreation-Committee web page

#### **MEETING HIGHLIGHTS**

- **■** Demographic Information A snapshot of Manchester's demographic trends.
- **■** Recreational Resources A summary of key open space and recreational resources in Manchester.
- **Virtual Open House** Review project information and potential goals at your convenience and provide feedback on the priorities of the plan.









# Manchester-by-the-Sea 2020 OPEN SPACE AND RECREATION PLAN

#### **Community Forum**

August 26, 2020









### NOTIFICATION OF RECORDING

This meeting will be recorded and the Metropolitan Area Planning Council (MAPC) may choose to retain and distribute the video, still images, audio, and/or the chat transcript. By continuing with this virtual meeting, you are consenting to participate in a recorded event. The recordings and chat transcript will be considered a public record. If you do not feel comfortable being recorded, please turn off your camera and/or mute your microphone, or leave the meeting.







### **Chat Box Question**

In the chat function using **ONLY 2-3** words

Describe what you love most about Manchester...



## Tonight's Agenda

### ■ Live Presentation (via Zoom)

- Introduction to the Manchester BTS Open Space and Recreation Plan and planning process
- Overview of demographic and land use trends
- Prominent Parks and open spaces in Hull
- Next Steps

### Virtual Open House (via Qualtrics)

- Tell us what you enjoy about Manchester's parks and open spaces.
- Prioritize and provide feedback on the OSRP Goals
- Tell us about any current park or recreational deficiencies, opportunities, or challenges
- http://mapc.ma/manchesterosrpopenhouse





# Manchester-by-the-Sea 2020 OPEN SPACE AND RECREATION PLAN

#### **Community Forum**

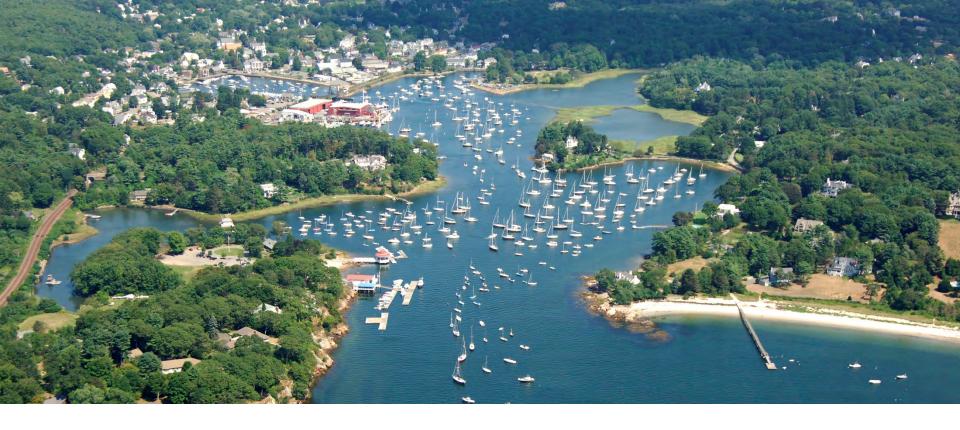
August 26, 2020











## Introduction

- What is "Open Space?"
- Why complete an OSRP?







## What is "open space?"

 Often refers to conservation land, forested land, recreation land, agricultural land, corridor parks and amenities such as small parks or green buffers along roadways







 The term can also refer to vacant or undeveloped lands with conservation or recreation potential

Open space varies by ownership, level of protection, and use



# Why Parks are Important Parks and Open Spaces Help:



Promote Healthy Lifestyles



Increase Access to Healthy Foods



Capture & Clean Stormwater



Stabilize Neighborhoods



Clean Soil



Create Habitat for Wildlife



Promote Social Interaction



Improve Air Quality



Provide Flood Protection



## **Types of Recreation**

Parks and open spaces can be utilized for either passive or active recreation

- Passive recreation requires minimal facilities/development and is often less of an environmental impact
- Examples: walking, hiking, fishing
- Active recreation involves structured activities which require specialized parkland development and management
- Examples: playgrounds, sports/ball fields, swimming pools















## Why complete an OSRP?

# OPEN SPACE AND RECREATION PLANNER'S WORKBOOK

Division de Contenuation Services
Bould/Com os Division
Bould/Com



- An Open Space and Recreation Plan (OSRP) provides information about the community, its environmental and recreational resources, and what residents want to achieve in the **next 7 years**
- OSRPs help encourage community protection and stewardship of these vital resources
- Completion of an OSRP makes municipalities eligible to apply for State grants through the EOEEA to acquire and improve land for conservation and recreation



## The Planning Team

#### **OSRP Update Advisory Group**

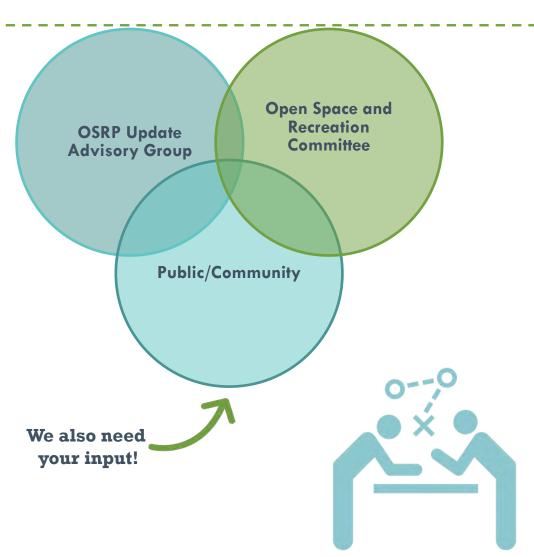
- Olga Hayes
- Mary Foley
- Christine DeLisio
- Gary Russell
- Eva Palmer
- Michelle Vaillancourt
- Beth Heisey
- Lisa Bonneville
- Max Warnock

- Nicky McHugh
- Chris Bertoni
- Sari Oseasohn
- Sue Brown
- Nate Derosiers
- Bion Pike
- Jeff Bodmer-Turner
- Jessica Lamothe
- Mory Creighton

#### **Open Space and Recreation Committee**

- Olga Hayes
- Steve Gang
- Deb Friaze
- Parker Harrison

- Curtis Rising
- Helen Bethell
- Nicoloa McHugh

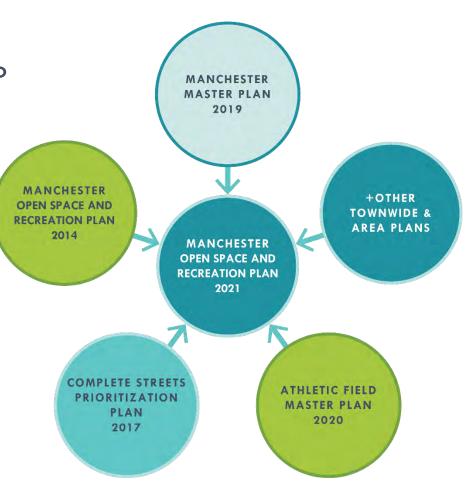




### Relationship to Other Plans

The 2021OSRP will build off the work of the previous OSRP as well as several recently completed Town-wide studies/plans.

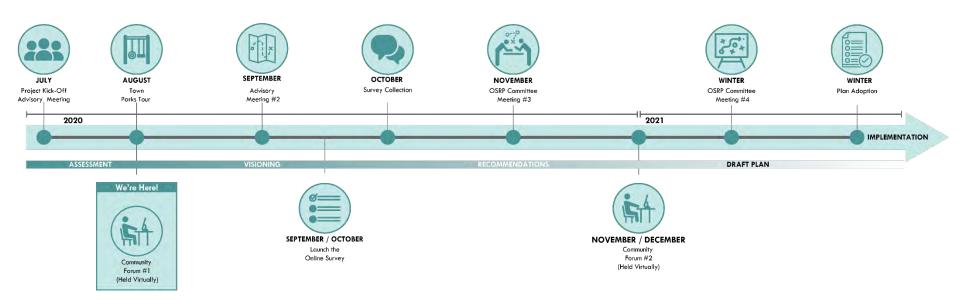






### **The Process**

#### **PROJECT TIMELINE**





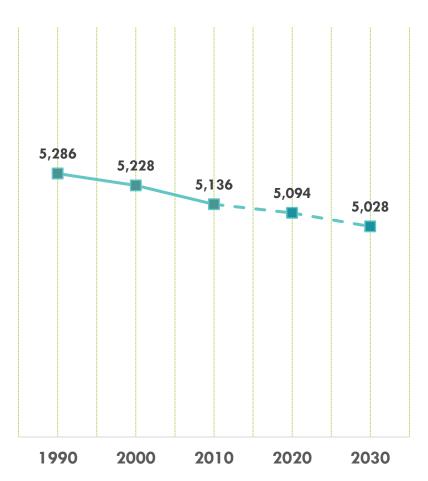
## **Data Trends**

- Population
- Land Use





### **Population**

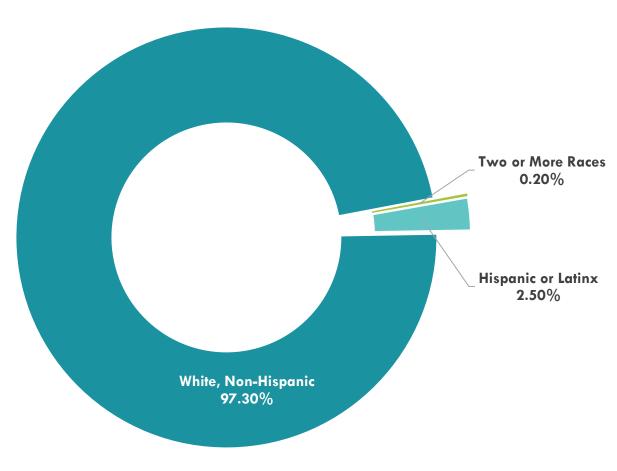


- Total population decreased slightly between 1990-2010 though, more recent Census data estimates that the population is now closer to 5,434
- MAPC estimates that the population will decease to 5,028 by 2030

Source: US Census, American Community Survey, \*MAPC Stronger Region Projections



### Race & Ethnicity

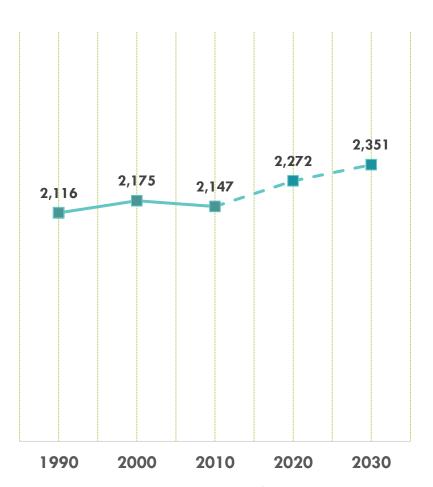


- Manchester has very little racial diversity with about 97.3% of the population identifying as White, Non-Hispanic
- People of Color make up the remaining 3% of the population with 2.5% of individuals identifying as Hispanic or Latinx.

Source: US 2010 Census



### Households

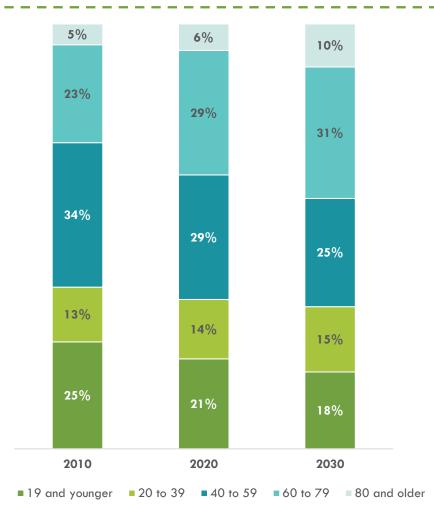


- "A household consists of all the people who occupy a housing unit."
- Household numbers fluctuated slightly between 1990 and 2010
- MAPC projects a 9.5% increase in Manchester households by 2030

Source: US Census, American Community Survey, \*MAPC Stronger Region Projections



## **Age Cohorts**



- A significant portion of the population is between the ages of 40 and 59
- Those in the 65+ age group are expected to experience most growth and make up over 40% of the town's population by 2030
- Different user bases use recreations spaces with variable frequency and for a range of activities.

Source: US 2010 Census and MAPC Stronger Region Projections



## **Age Cohorts**

Example: Facilities required by a large youth sports organization differ from those enabling individual passive recreation activities pursued by older residents.











### **Land Use**

Property Type	Square Feet	Acres	% Total
Residential	109,573,772.37	2,515.47	50.29%
Single Family	78,970,830.04	1,812.92	36.24%
Two/Three Family	2,493,370.31	57.24	1.14%
Multifamily	289,140.79	6.64	0.13%
Other Residential	7,267,110.44	166.83	3.33%
Vacant	20,553,320.79	471.84	9.43%
Mixed Use	3,907,658.37	89.71	1.79%
Commercial/Industrial	17,321,684.66	397.65	7.95%
Commercial/Retail	12,081,185.82	277.35	5.54%
Office	217,893.46	5.00	0.09%
Industrial	3,053,705.07	70.10	1.40%
Vacant	1,968,900.31	45.20	0.90%
Public	62,249,454.95	1,429.05	28.57%
Exempt	837,013.40	19.22	0.38%
Institutional	39,655,964.37	910.38	18.20%
Chapter 61 Land	139,675.37	3.21	0.06%
Right-of-Ways	16,063,697.09	368.77	7.37%
Other	8,619,956.01	197.89	3.95%
Total	217,875,898.81	5,001.74	100%

Source: MassGIS Level 3 Assessors Database, FY19

- Approximately half of Manchester's land is comprised of residential development, the majority of which are single family homes
- More than a quarter is tax-exempt public land, which includes open space, schools, municipal buildings, etc.

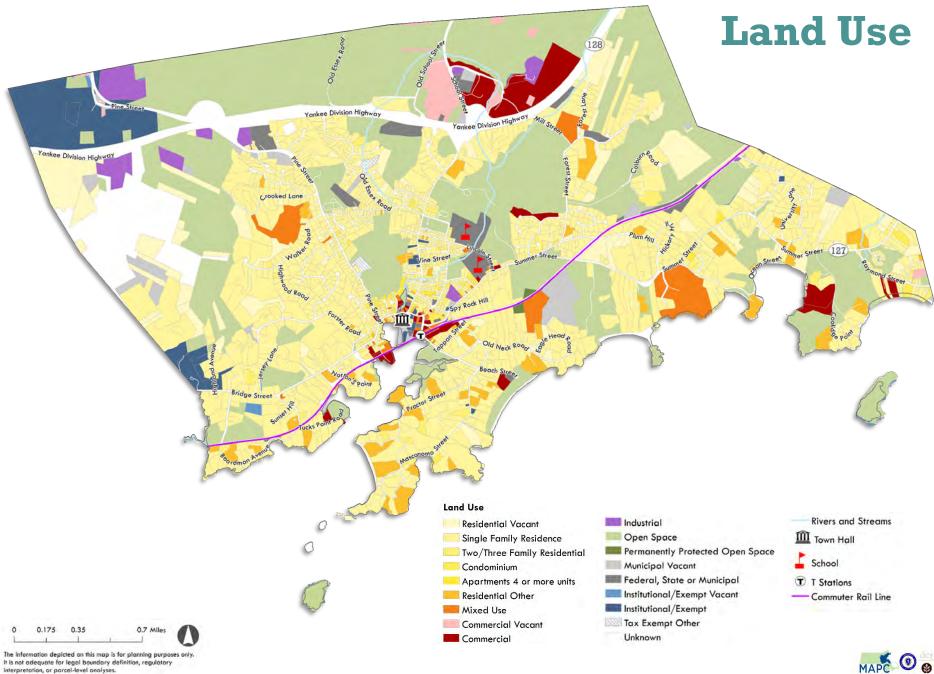


0.13%

9.43%

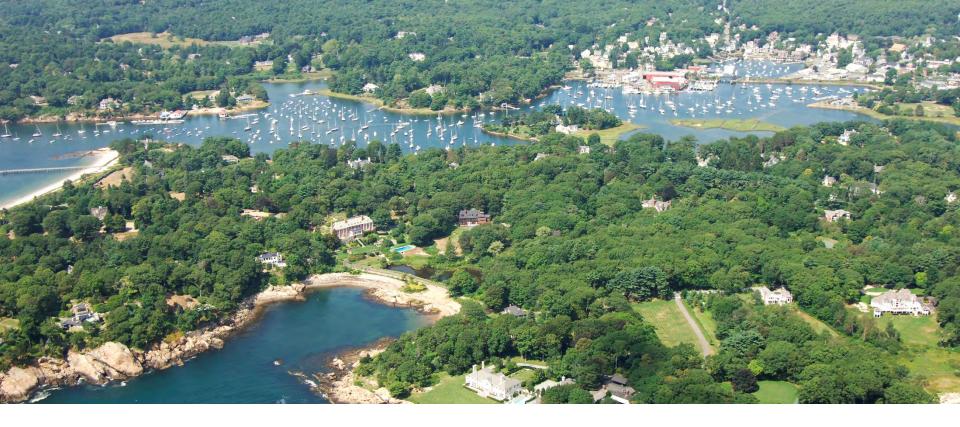
1.14%

36.24%









# Open Space

- Inventory
- Prominent parks and open spaces







## Inventory

Ownership	Acres	% Total
Municipal	362.86	23.06%
Land Trust/Conservation Org.	733.22	46.60%
Private	477.02	30.32%
Total	1,573.10	100%

Level of Protection	Acres	% Total
Protected	1,237.40	78.65%
Limited Protection	26.87	1.70%
No Protection	174.98	11.12%
Unknown	133.85	8.50%
Total	1573.10	100%

Source: MassGIS Protected and Recreational Open Space Database

- The majority of open space in Manchester is owned by Land Trusts and Conservation Organizations
- Land specifically acquired for conservation and recreation purposes are considered protected by "Article 97" of the State Constitution
- Lands purchased for general municipal purposes are not protected by Article 97, but are considered to have limited protection due to their public ownership



## **Inventory**

#### JUST SOME OF MANCHESTER'S RESOURCES

1,237 ac.

**PARKS** 

**PLAYGROUNDS** 

**PERMANENTLY PROTECTED OPEN SPACE** 

4,000+

**ATHLETIC FIELDS** 

**GOLF COURSES** (Private)

**PUBLIC SHADE TREES** 

**TENNIS COURTS**  **BASKETBALL COURTS** 

**CEMETERIES** 



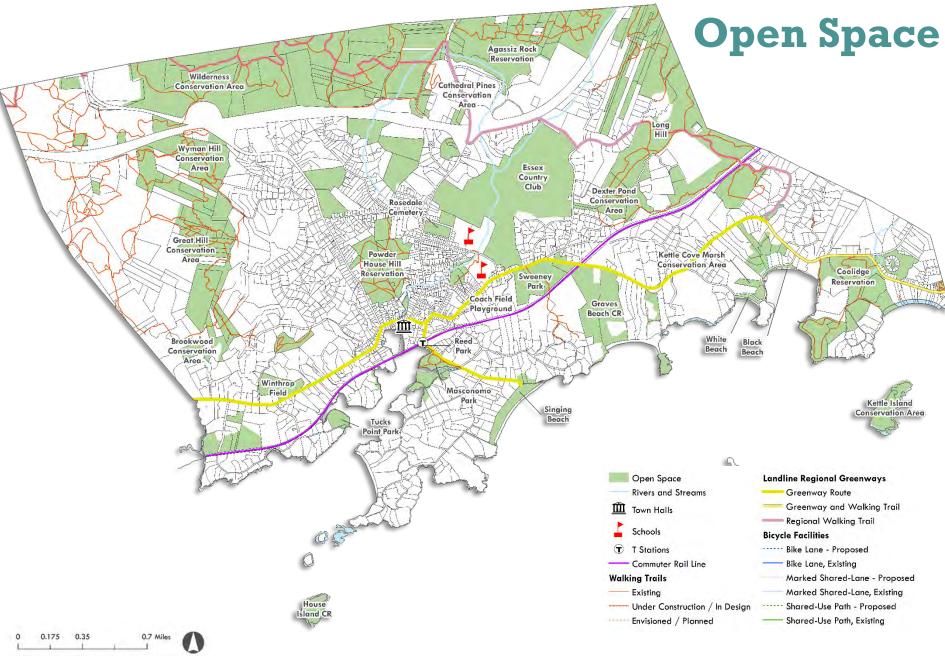












The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.



## Singing Beach

**Town Owned** 

#### **Use: Recreation**

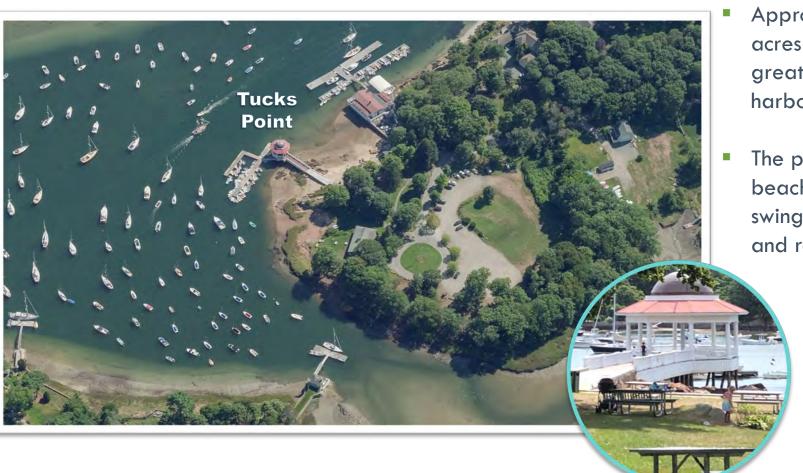




### **Tucks Point**

**Town Owned** 

#### **Use: Recreational**



Approximately 5.4 acres and offers great views of the harbor

The park includes a beach, restrooms, swings, picnic area, and rotunda



### **Sweeney Park**

**Town Owned** 

#### **Use: Recreational**



Approximately 12.6 acres and is the Town's largest recreational site

Includes basketball courts, baseball and softball fields



### Masconomo Park and Reed Park

**Town Owned** 

#### **Use: Recreational**



 Approximately 7 acres

The park includes a playground, baseball field, bandstand, fishing pier, boat docks and parking



### White Beach

**Town Owned** 

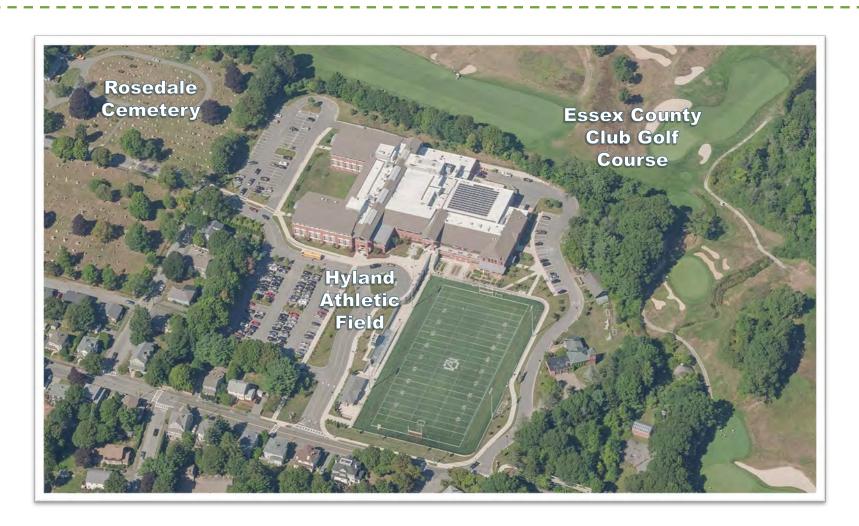
#### **Use: Recreation**



- White Beach measures roughly 1.7 acres
- Facilities include parking and portable restrooms.
- Diverse Ecosystems
- Close proximity to Kettle Cove marsh



### **Diverse Ownership and Uses**





## Questions?





## Virtual Open House

http://mapc.ma/manchesterosrpopenhouse



### Virtual Open House

#### **Instructions:**

- 1. Click on the Open House link that is posted in the Chat Box
- 2. You will have an option to read some background information (this is a summarized version of information covered in the PowerPoint presentation)
- 3. Follow the instructions and answer each question

  Participants will be able to share ideas and provide feedback until September 11th
- 4. Make sure we have your email for updates on the plans and the forthcoming Parks and Recreation Survey

If you have questions about the background information or about the input exercises, feel free to email me at <a href="mailto:Clewis@mapc.org">Clewis@mapc.org</a>



### What Happens Next?

Open House activities will be used to prepare the OSRP Community Survey and the feedback we receive will serve as a basis for the goals, strategies and actions of the Open Space and Recreation Plan.

Be sure to check the Open Space and Recreation Committee website, <a href="https://www.manchester.ma.us/356/Open-Space-Recreation-Committee">www.manchester.ma.us/356/Open-Space-Recreation-Committee</a> and Facebook for updates!





### Manchester-by-the-Sea 2021 Open Space and Recreation Plan Update

#### **OSRP Update Advisory Group Meeting #2 Agenda**

September 22, 2020, 3:00 PM

**<u>Click here</u>** to register and join by **video or phone**:

Meeting ID: 963 0706 1151

Passcode: 748667

- 1. Welcome and Introductions (10 minutes)
  - a. Name and affiliation
- 2. Review Open House Findings (15 minutes)
  - a. Debrief on the kick-off meeting and Virtual Open House
- 3. Project Status Update (10 minutes)
  - a. Status Update on Draft Plan and Mapping
  - b. Role of OSRP Update Advisory Group
- 4. Review Draft Survey Questions (25 minutes)
  - a. Review draft questions for the Online Community Survey
  - b. Suggest additional questions to add
  - c. Discuss promotion and outreach





# Manchester-by-the-Sea 2020 OPEN SPACE AND RECREATION PLAN

#### **Advisory Group Meeting #2**

September 22, 2020









# Presentation & Open House







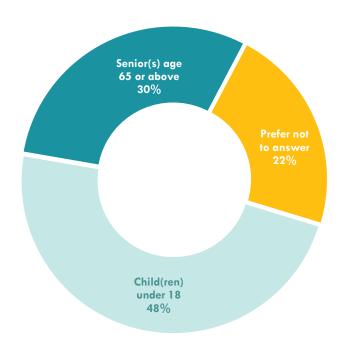
### **60 Respondents**

VISITED/PROVIDED FEEDBACK ONLINE OPEN HOUSE

# Who Participated?

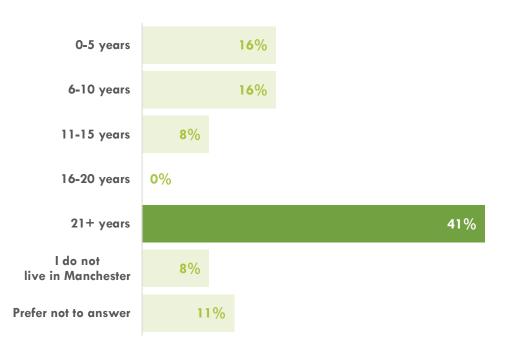
#### **HOUSEHOLD**

Do you or any members of your household match the following descriptions?

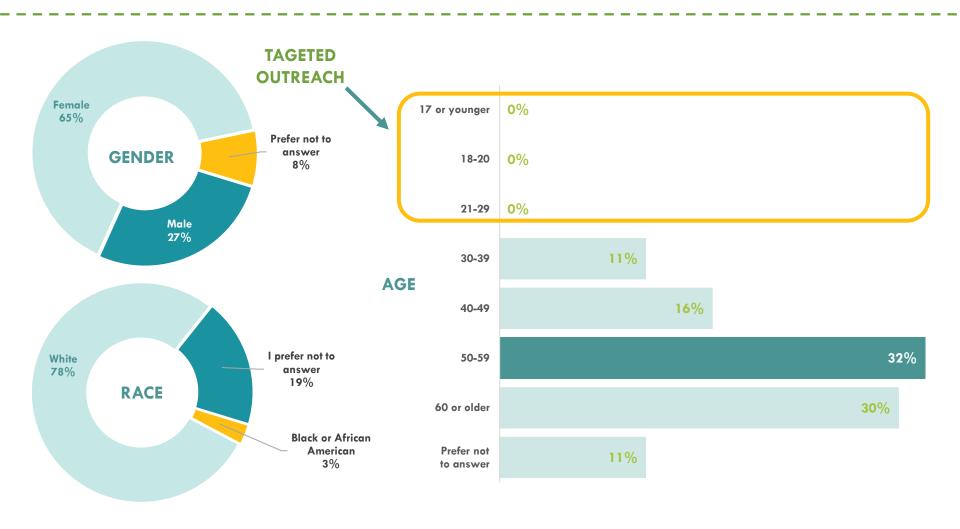


#### **TENURE**

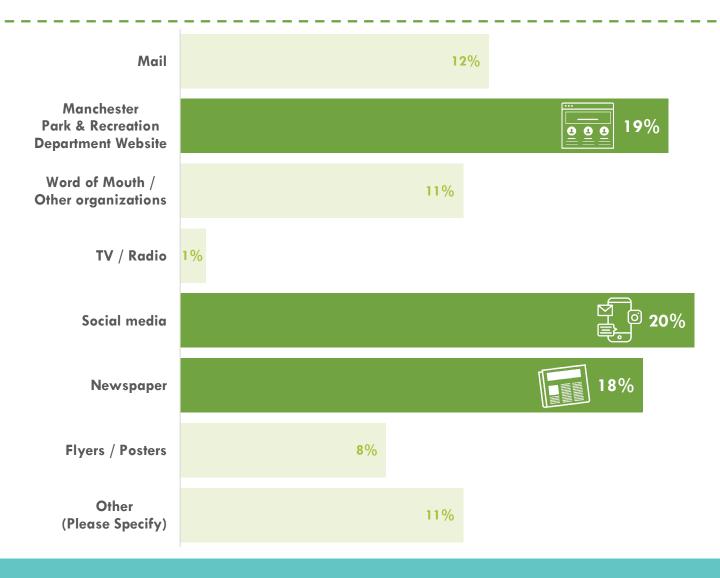
How long have you lived in Manchester?



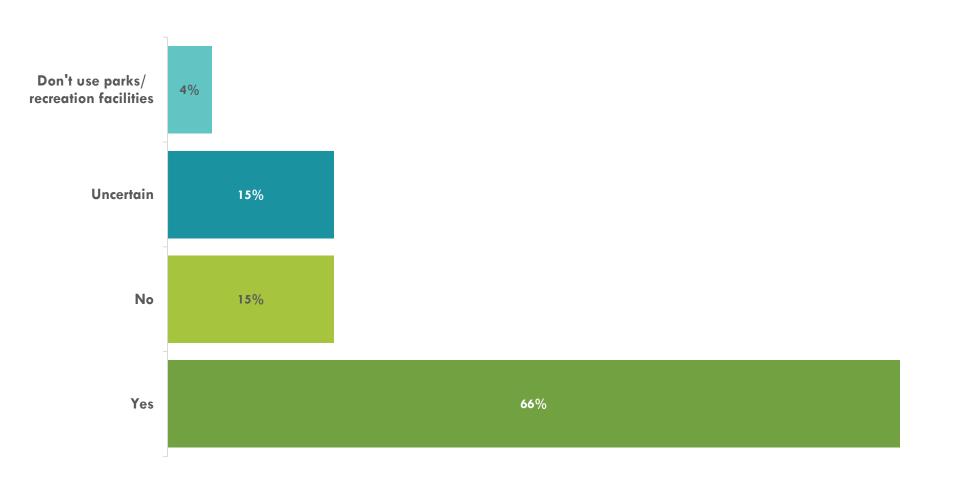
# Who Participated?



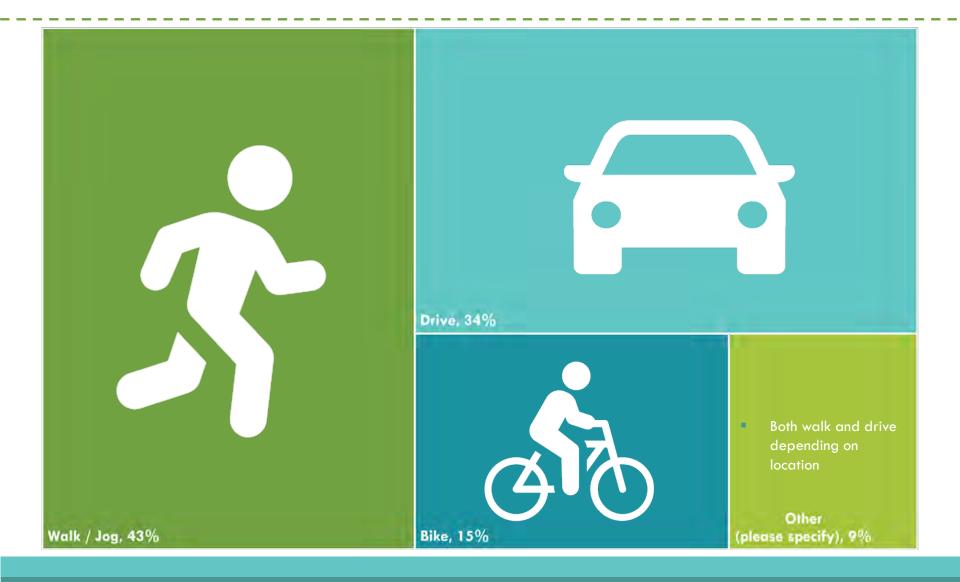
# What is the most effective way for you to find out about Manchester events, recreation opportunities, and park programs? (Select all the apply)



# Do you feel there are adequate parks and usable green space within walking /biking distance from your home?



# How do you usually get to parks and open spaces in Manchester?



# What is your favorite park or open space in Manchester?



### What Respondents Value

In general, what makes a park valuable to you?

"ECOLOGICAL DIVERSITY"

"BEING ABLE TO TAKE MY DOG TO RUN."

"BIRDING"

#1 BEAUTY (e.g. natural features, landscape, views)

#2 CLEANLINESS
PLACES TO CONNECT
WITH NATURE

#3 PLACES TO EXERCISE OR BE ACTIVE

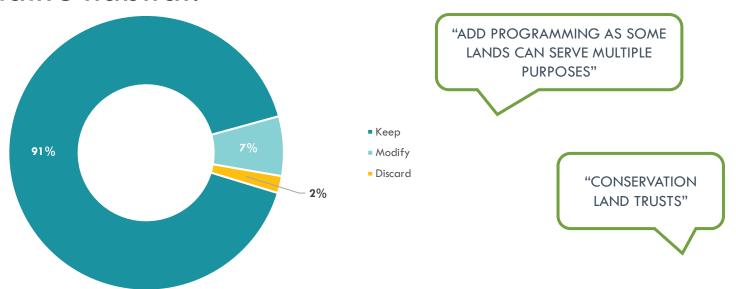
#4 {
 Quiet places and places to relax
 Opportunities to socialize, be with family or friends
 Easy to get to
 Safety

#4 Lots of diverse activities in the park

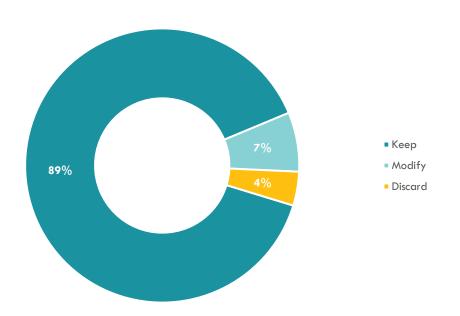
### **Priorities**

Acquire land for conservation purposes (e.g. wildlife habitat and water supply protection) 2 Maintain existing parks and facilities Improve access to parks and facilities through trails, sidewalks, bike 3 lands, safer crossings Improve existing parks and facilities through new playgrounds, athletic 4 fields, paving, trees, buildings Acquire land for recreational purposes (e.g. playgrounds, ballfields, boating) 6 Acquire land for parks and facilities in areas that lack parkland Add or enhance programs at parks and facilities (e.g. group exercise, arts and culture, outdoor education, concerts, markets)

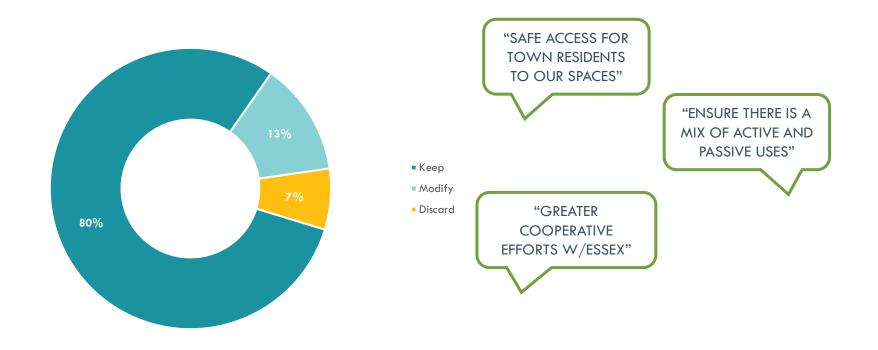
• Goal 3: Manage existing town-owned or town-managed open spaces for the purposes of safe and enjoyable public access and the protection of natural resources and wildlife habitat.



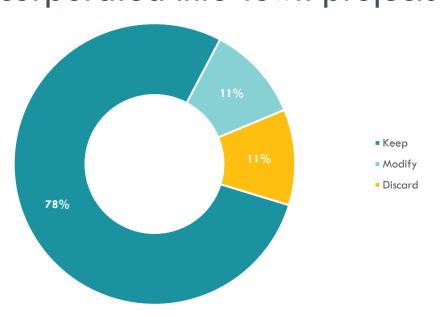
• Goal 2: Protect land significant to drinking water protection, wildlife habitat, and natural resource protection.



Goal 5: Identify the Town's recreational needs and create action plans to address those needs



Goal 7: Continue to advocate for accessibility by ensuring that Town officials, boards, and committees are aware of ADA requirements and that ADA considerations are incorporated into Town projects

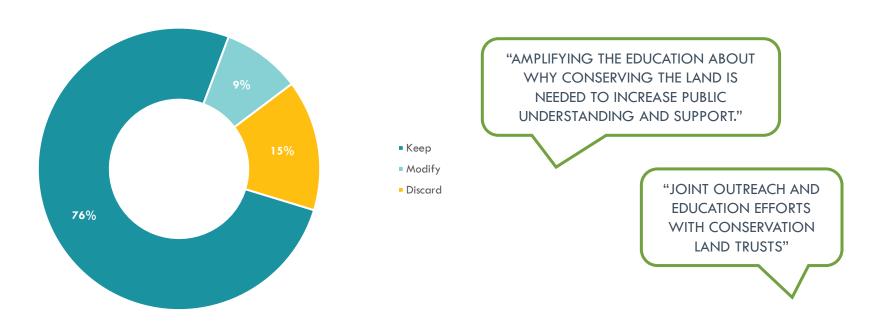


"PROACTIVELY WORK TO ADDRESS ADA COMPLIANCE WITH EXISTING BUILDINGS, SIDEWALKS, ETC."

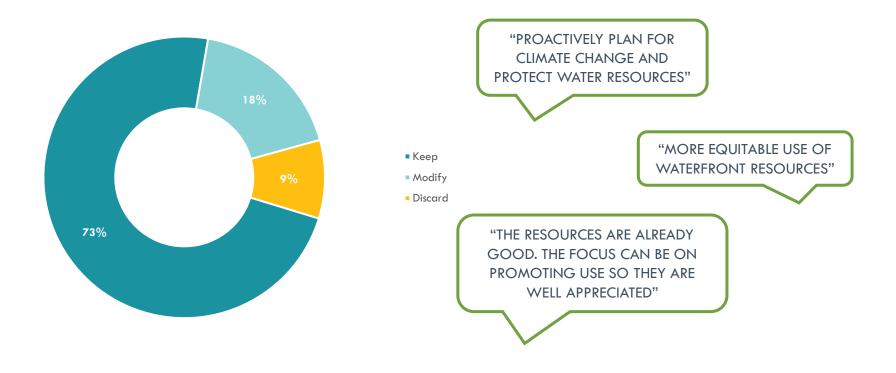
"COOPERATIVE EFFORTS W/CONSERVATION LAND TRUSTS"

"THERE ARE MANY AREAS WHERE
MOBILITY ACCESS COULD
BE IMPROVED AND
ACCOMMODATIONS FOR BLIND
AND DEAF USERS IS ABSENT."

■ Goal 4: Promote awareness, enjoyment, and stewardship of Manchester-By-The-Sea's open spaces and natural resources through outreach and education



 Goal 6: Promote the use and improvement of Town-owned waterfront resources for the purposes of water-related activities



# Suggested New Goal

Climate Change Goal: Consider the potential impacts of climate change and incorporate climate mitigation and resilience in all open space and recreation planning efforts.

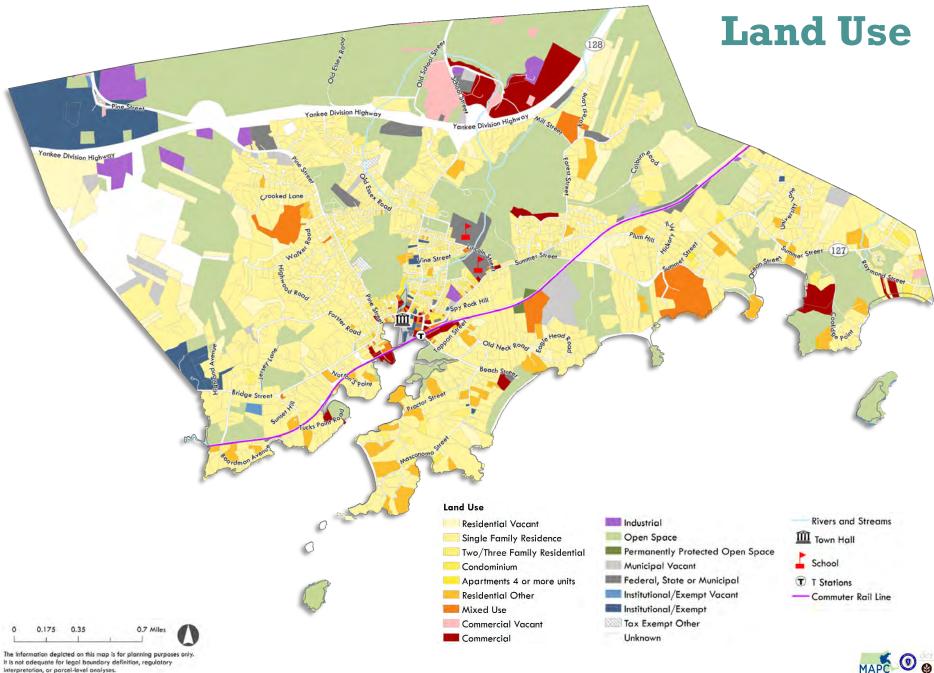
# What did we miss? Please provide any general comments you have on specific town facilities and public spaces. (e.g. better lighting, restrooms, new benches, more trees, better maintenance, etc.)

"Bathrooms at Sweeney park" We would like to see some bike lanes on Pine Street and a path to Magnolia and Black/White beaches. "Better maintenance at Tuck's Point" "Budget for Open Space pursuits" "Accessible public restrooms at recreational athletic facilities" "Sweeney Park should be updated to provide a safer parking area. Playing fields need continual maintenance" "We would like to see pickleball courts at former skate park, we would like to see a pump track/walking paths/dog park at Incinerator site on Pine, " ""We would like to see smaller pocket parks in neighborhoods-like the corner of Norwood/Washington/Union"

### Plan Maps

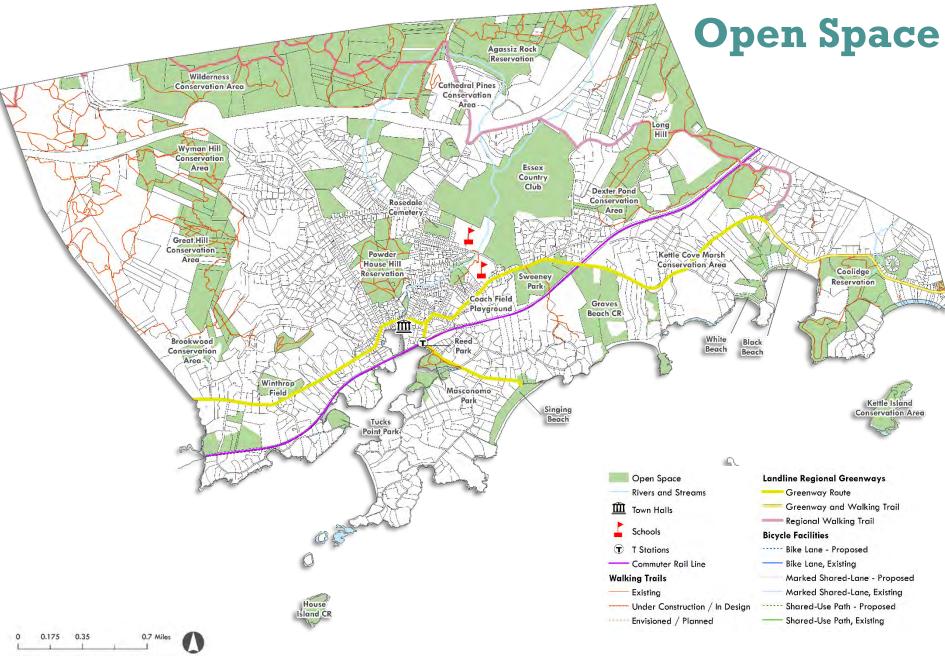
#### Draft Maps

- 1. Regional Context Map
- 2. Zoning Map
- 3. Soils and Geologic Features Map
- 4. Unique Features Map
- 5. Water Resources Map
- 6. Open Space Inventory Map (Working Draft)
- 7. Action Plan Map
- 8. Current Land Use
- 9. Plant and Wildlife Habitat
- 6 out of 8 Required Maps









The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

### **Plan Sections**

#### Draft Plan

```
Section 1
           Plan Summary
Section 2
           Introduction
Section 3
           Community Setting (PARTIALLY DRAFTED)
Section 4
           Environmental Inventory and Analysis (PARTIALLY DRAFTED)
Section 5
           Inventory of Lands of (PARTIALLY DRAFTED)
           Conservation and Recreation Interest
Section 6
           Community Vision
Section 7
           Analysis of Needs
Section 8
          Goals and Objectives
Section 9 Seven-Year Action Plan
Appendix ADA Self-Evaluation
```

Map 10. Manchester Open Space and Recreation Parcels Cranberry Pond/ Rattlesnake Den Round Pond/Maple Swamp Watershed Agassiz Rock MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT Wilderness Conservation Area This data settimap is for planning purposes only and chould not be used for larger raciale analysis. The Town of Manchester-byth-Saa, Ma hardn not be held labels for any use of the data or images shown on this map, nor is any warranty of accuracy expressed. All uses of this data satismap are subject to field verification. Long Hill Millets Brook Essex Co. Club Powder House Hill Black Beach Clara Winthrop Nature Preserve Dana's Beach Coolidge Point Kettle Island Winthrop Field Singing Beach **Tucks Point** Marsh Island/ Open Space\* Days Creek Conservation Land Privately Owned Conservation Land State Owned 0 Black Cove Beach Lobster Cove Conservation Land Town Owned Conservation Restriction Privately Held Conservation Restriction Town Recreation Land Privately Owned House Island Recreation Land Town Owned Town Owned Open Space

# **Survey Questions**

- Values, Goals and Priorities (Open House Questions)
- Park Use and Park Type
  - Most Frequently Visited
  - Active vs Passive Recreation
- Desired Amenities and Facilities (Now and in the future)
- Desired Programing

https://mapc365my.sharepoint.com/:w:/g/personal/clewis\_mapc\_org/EWKNPHxMMCZIvuUsw7YeZYkBVUfG3PXq5x5R3QUS4 Npg?e=SJ40Fu





### Manchester-by-the-Sea 2021 Open Space and Recreation Plan Update

#### OSRP Update Advisory Group Meeting #3 Agenda

April 8, 2021, 3:00 PM

<u>Click here</u> to register and join by **video or phone**: **Meeting ID:** 998 6702 6617

#### 1. Welcome and Introductions

a. Name and affiliation

#### 2. Project Timeline

- a. Briefly discuss updated project timeline
- b. Discuss Draft Review Period

#### 3. Virtual Community Forum #2

a. Set a date and time for Forum #2 (May)

#### 4. 7-Year Action Plan

a. Review draft action items for the 7-Year Action Plan (Section 9)

#### 5. Management Needs

a. Discuss and update Management Needs (Section 7)

# **OSRP Survey Results**





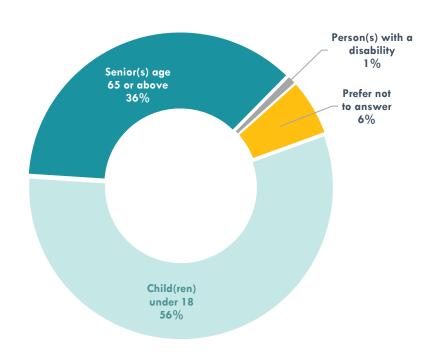
179 Participants

**ANSWERED ALL QUESTIONS** 

### Who Participated?

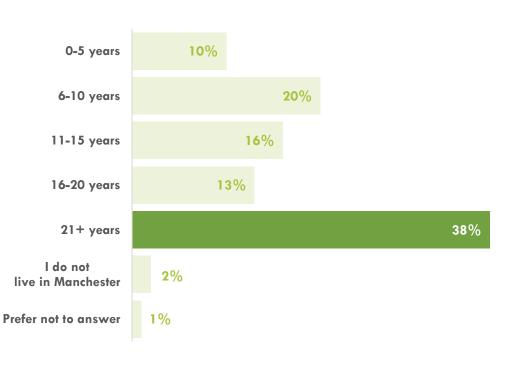
#### **HOUSEHOLD**

Do you or any members of your household match the following descriptions?

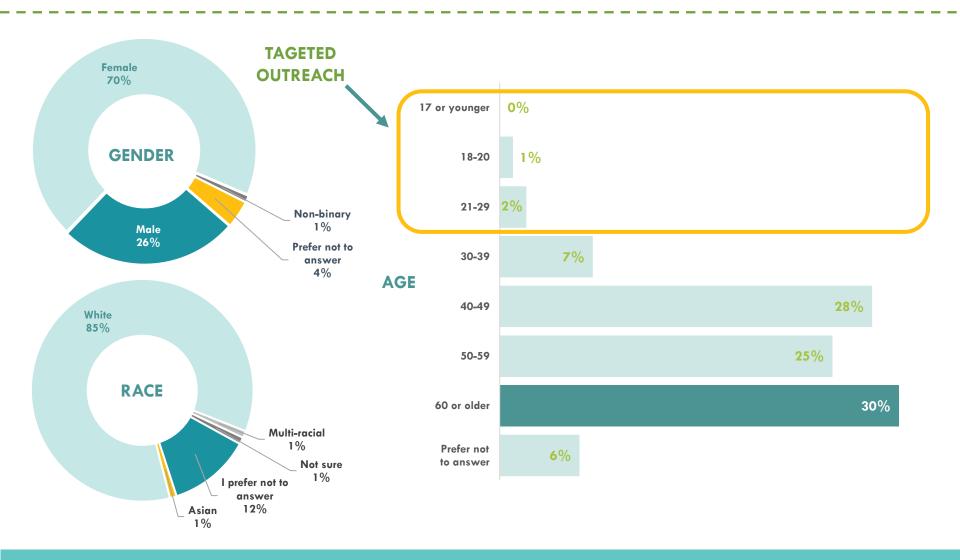


#### **TENURE**

How long have you lived in Manchester?



# Who Participated?



### **Active Recreation Sites**

#### **Most Visited**

#1 SINGING BEACH

#2 MASCONOMO PARK

#3 TUCKS POINT

#### **Least Visited**

#1 MAGNOLIA SURF PARK

**#2** SWEENEY PARK

#3 TOWN BOAT RAMP

### **Passive Recreation Sites**

#### **Most Visited**

#1

MANCHESTER ESSEX WOODS
(WILDERNESS CONSERVATION AREA)

POWDER HOUSE HILL
RESERVATION

#2 COOLIDGE
RESERVATION/POINT

#3 DEXTER POND
CONSERVATION AREA

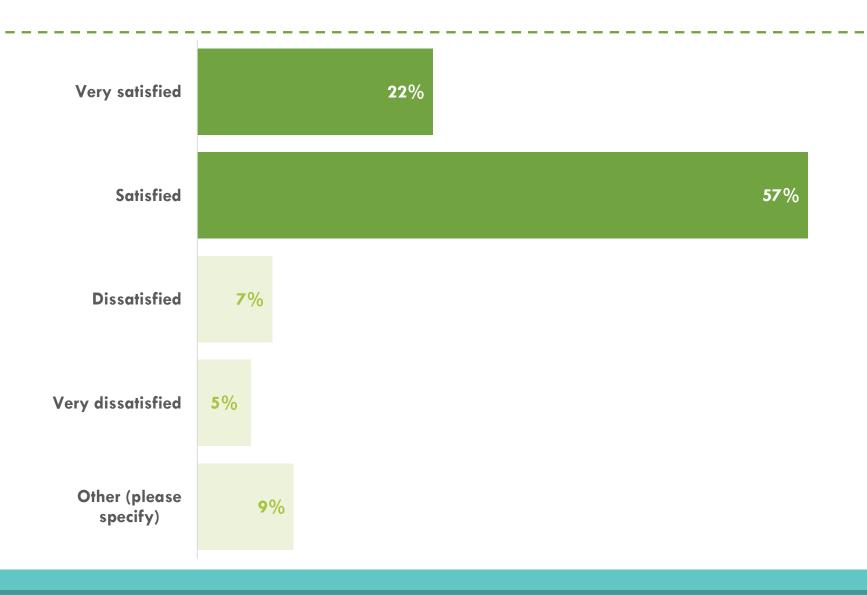
#### **Least Visited**

#1 AGASSIZ ROCK
RESERVATION

#2 WINTHROP FIELD

#3 CLARA B. WINTHROP PRESERVE

# How satisfied are you with the condition of Manchester's parks and open space properties?



# What prevents you from utilizing Manchester's open space, parks, and recreation facilities?

1	Don't know where the site is located	9	My recreational and open space needs are met outside of Manchester
2	Lack of parking	10	No place to sit
3	Site is not accessible by walking or biking from my home	11	Safety concerns
4	Not interested in the sports fields and playgrounds provided	12	Too crowded
5	Lack of restrooms	13	Size of park/amount of space available
6	Dogs are not allowed	14	Lack of shade
7	Poor condition or maintenance	15	Unable to access due to disability barriers
8	Not interested in the trails provided		Other

# Select up to five (5) programs that would increase your use of a park or open space property

Nature programs 2 Guided walks in open space properties 3 Musical or theatrical performances 4 Public art and art programs Activity groups like walking clubs, cycling groups, gardening groups

# Select up to five (5) options below that you would like to see more of in Manchester in the next 10 years.

Trails for walking running, and hiking

Water access points - Rowing/Kayaking/Stand-up Paddle
Boarding

Improved natural areas and preserves

Picnic areas and pavilions

5

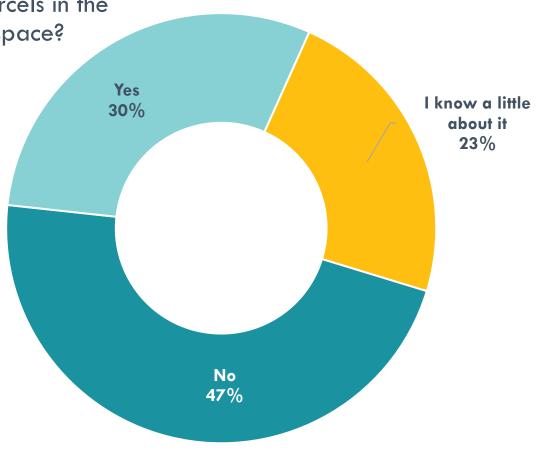
Community gardens

# Select up to three (3) active/recreation programs you would like to see increase in Manchester the next 10 years.

- 1 Kayaking/Stand-up paddle boarding
- Aquatics programs (swim lessons, swim teams, lifeguard training)
- 3 Pickleball

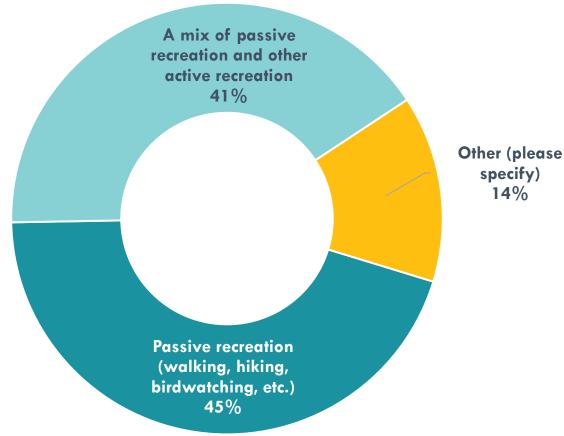
### **Western Woods Initiative**

Are you aware of Manchester's Western Woods Initiative to acquire parcels in the wester part of Town for open space?



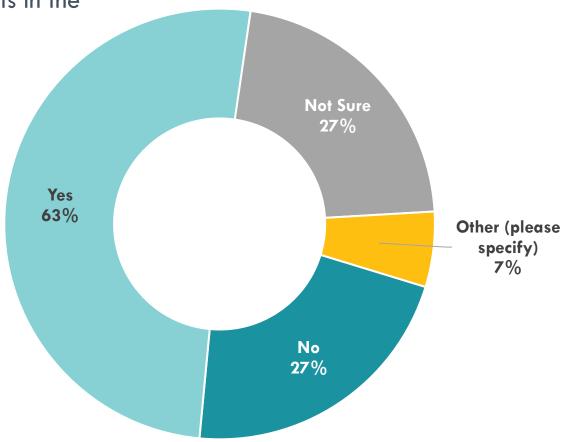
#### **Western Woods Initiative**

How would you like to see these properties used?



#### Western Woods Initiative

Do you support using Town funds towards the acquisition of some of the lots in the Western Woods?



## MANCHESTER-BY-THE-SEA OPEN SPACE AND RECREATION PLAN UPDATE

The Town of Manchester-By-The-Sea with the assistance of the Metropolitan Area Planning Council (MAPC) is preparing an Open Space and Recreation Plan (OSRP). This OSRP is an update to Manchester's 2014 Open Space and Recreation Plan and will serve to guide the Town's decisions on open space and recreation activities for the next seven years. The Town and the Open Space and Recreation Plan Update Advisory Group invite you to join us for a virtual meeting and open house to give your input into the development of this plan. This second Community Forum will provided residents an opportunity to review and provide feedback on draft action items for the OSRP's Seven Year Action Plan. Please register for the Live Presentation using the **Zoom link** below. If you can't join us for the Live Presentation, we will be publishing a link to the recording and the Virtual Open House on the Town's **Open-Space-Recreation-Committee** web page where you can view content and provide input.

#### Live Presentation:

Wednesday, May 26, 2021 6:30pm -8:00 pm

**Register Here:** 

mapc.ma/ManchesterOSRP2

Following the Live Presentation

#### Virtual Open House:

May. 26- Jun. 11, 2021

A link to the site will be posted on the Open-Space-Recreation-Committee web page

#### **MEETING HIGHLIGHTS**

■ Project Update

A brief update on the OSRP planning process.

- OSRP Survey Findings
   A summary of the OSRP Community Survey results.
- Seven Year Action Plan
  An overview of draft action items for the 2021
  OSRP Seven Year Action Plan
- Virtual Open House Review project information and the draft Seven Year Action Plan at your convenience and provide feedback







#### NOTIFICATION OF RECORDING

This meeting will be recorded and the Metropolitan Area Planning Council (MAPC) may choose to retain and distribute the video, still images, audio, and/or the chat transcript. By continuing with this virtual meeting, you are consenting to participate in a recorded event. The recordings and chat transcript will be considered a public record. If you do not feel comfortable being recorded, please turn off your camera and/or mute your microphone, or leave the meeting.









# Manchester-by-the-Sea 2021 OPEN SPACE AND RECREATION PLAN

#### **Community Forum**

May 26, 2021











## Tonight's Agenda

- Introductions
- Background & Project Timeline
- Major Phases of Work
- Draft Seven Year Action Plan



## The Planning Team

#### **OSRP Update Advisory Committee**

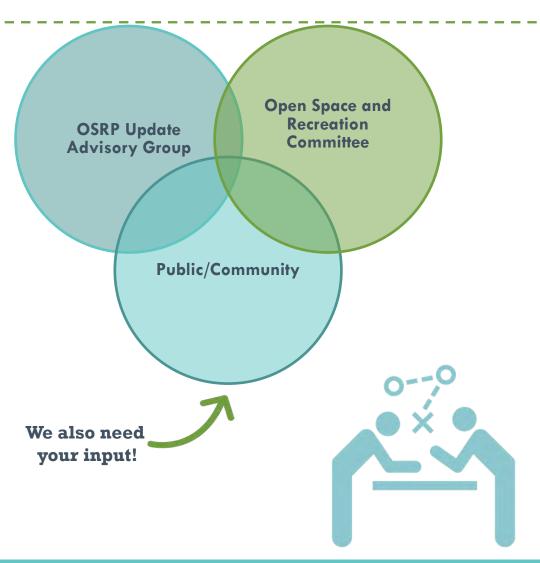
- Olga Hayes
- Mary Foley
- Christine DeLisio
- Gary Russell
- Eva Palmer
- Beth Heisey
- Lisa Bonneville
- Max Warnock

- Chris Bertoni
- Sari Oseasohn
- Sue Brown
- Nate Derosiers
- Bion Pike
- Jeff Bodmer-Turner
- Jessica Lamothe
- Mory Creighton

#### **Open Space and Recreation Committee**

- Olga Hayes
- Steve Gang
- Deb Friaze
- Parker Harrison

- Curtis Rising
- Helen Bethell
- Sheila Linehan

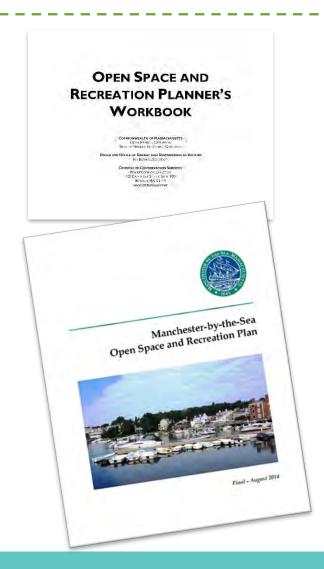




# Project Background & Timeline



## Why complete an OSRP?



- An Open Space and Recreation Plan (OSRP) provides information about the community, its environmental and recreational resources, and what residents want to achieve in the next 7 years
- OSRPs help encourage community protection and stewardship of these vital resources
- Completion of an OSRP makes
   municipalities eligible to apply for
   State grants through the EOEEA to
   acquire and improve land for conservation
   and recreation



#### **Plan Outline**



**Section 1** Plan Summary

Section 2 Introduction

Section 3 Community Setting

**Section 4** Environmental Inventory and Analysis

Section 5 Inventory of Lands of Conservation and

**Recreation Interest** 

Section 6 Community Vision

Section 7 Analysis of Needs

**Section 8** Goals and Objectives

**Section 9** Seven-Year Action Plan

**Appendix** ADA Self-Evaluation



## Plan Maps













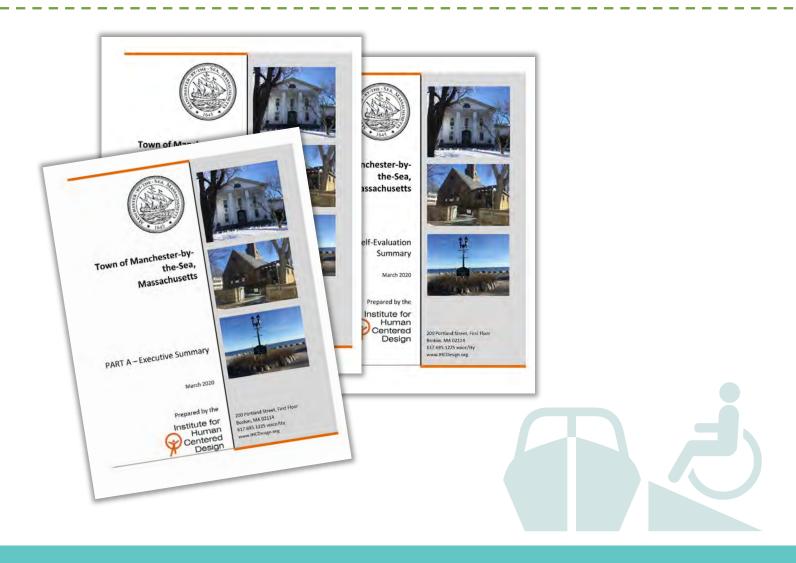








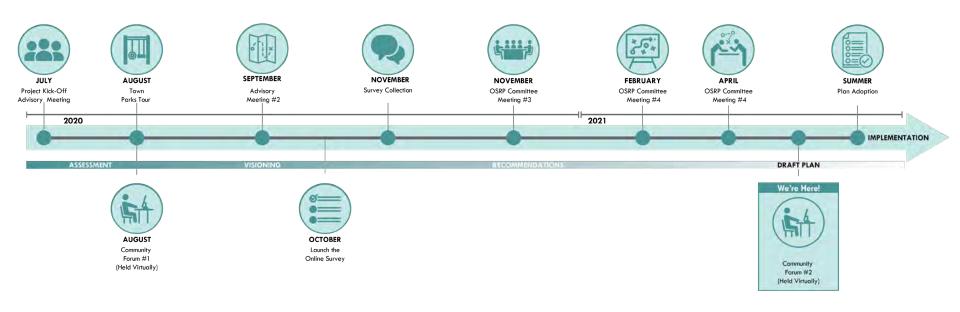
## ADA Access Self-Evaluation

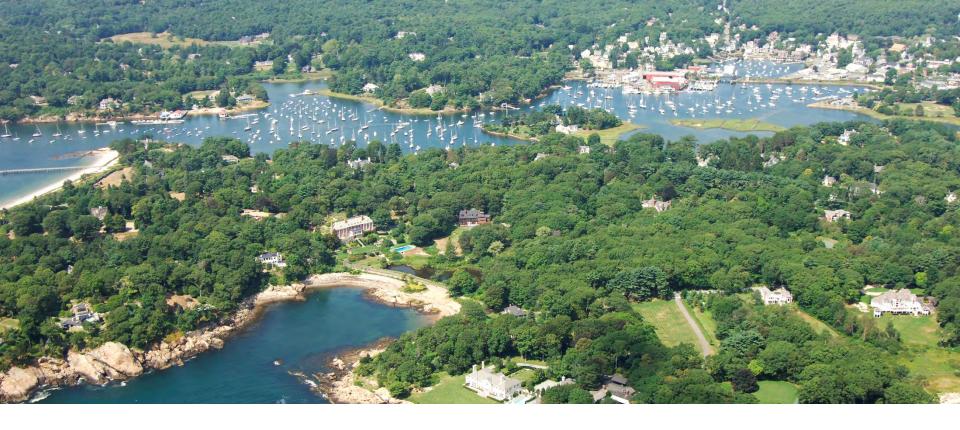




### **The Process**

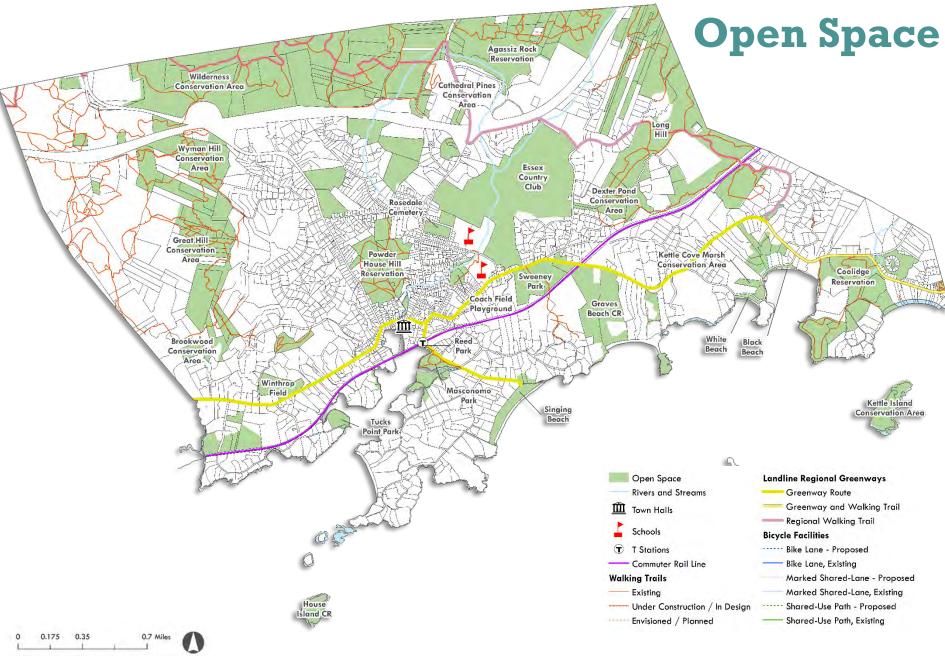
#### **PROJECT TIMELINE**





# Major Phases of Work





The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.



## Parks Tour

**August** 



# Presentation & Open House August



Kick-off
Presentation
AUGUST 26<sup>TH</sup> (via Zoom)



#### **Priorities**

Acquire land for conservation purposes (e.g. wildlife habitat and water supply protection)

Maintain existing parks and facilities

Improve access to parks and facilities through trails, sidewalks, bike lands, safer crossings

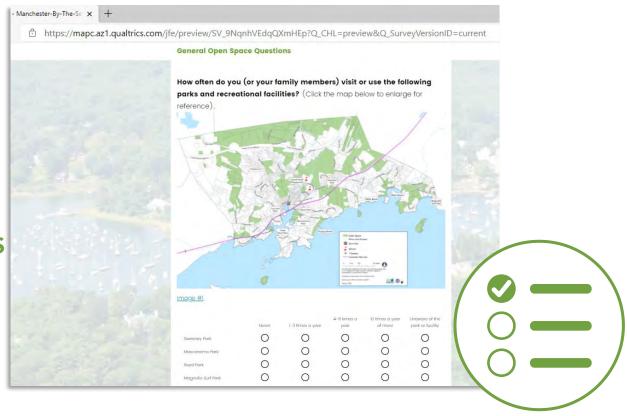
Improve existing parks and facilities through new playgrounds, athletic fields, paving, trees, buildings

Acquire land for recreational purposes (e.g. playgrounds, ballfields, boating)

## **OSRP Community Survey**

Oct.-Nov.





179 Participants
ANSWERED ALL QUESTIONS

#### **Active & Passive Recreation Sites**

#### **Most Visited (Active)**

- #1 SINGING BEACH
- #2 MASCONOMO PARK
- #3 TUCKS POINT

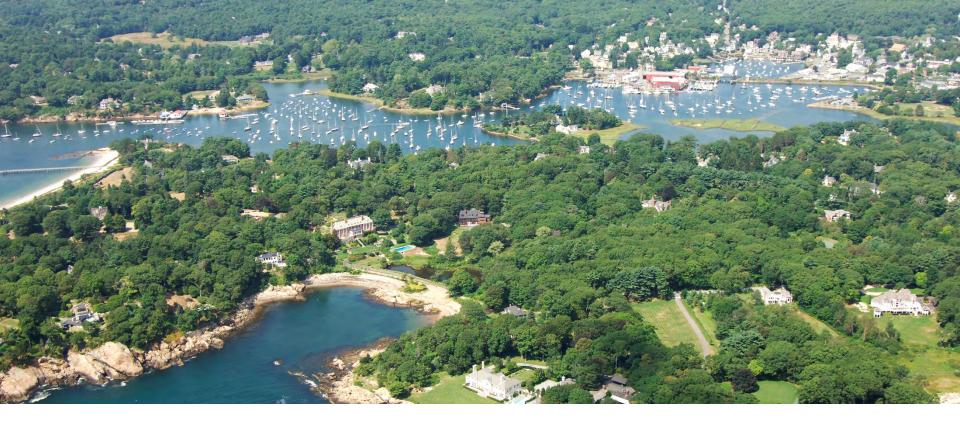
#### **Most Visited (Passive)**



- #2 COOLIDGE
  RESERVATION/POINT
- #3 DEXTER POND
  CONSERVATION AREA

## Select up to five (5) options below that you would like to see more of in Manchester in the next 10 years.

Trails for walking running, and hiking Water access points - Rowing/Kayaking/Stand-up Paddle **Boarding** 3 Improved natural areas and preserves 4 Picnic areas and pavilions 5 Community gardens



# DRAFT: Seven Year Action Plan





### Accomplishments

- Establishment of a permanent Open Space and Recreation Committee in 2015.
- Held a volunteer clean up event at Dexter Pond in 2016.
- Constructed a new public boat ramp at Town Hall in 2017.
- Rebuilt a pedestrian bridge at the Dexter Pond Nature Sanctuary in 2018.
- Implemented a Safe Routes to School project at Memorial School, which included sidewalks, crosswalks and other safety improvements in 2019.
- Secured funding to from Town Meeting to develop Open Space management plans for town owned open space parcels 2020.
- Developed an Athletic Field Master Plan in 2020.
- Updated Manchester's ADA Self-Evaluation and ADA Transition Plan in 2020.
- Added 260 linear feet to the existing docks at Reed Park in 2020.
- Placed approximately 12 acres of land in the Western Woods under the management of the Conservation Commission in 2020.
- Initiated the purchase of a 12-acre lot on Christian Hill for conservation in 2020.
- Created a new walking trail and installed informational kiosks and trail markers at Powder House Hill Reservation in 2020.
- Provided funding to the Manchester Stream Team to develop a video entitled Sawmill Brook: A Visual Survey 2020, to educate and promote protection of the Town's drinking water and natural resources in 2020.



#### **OSRP** Goals



• Goal 1: Ensure that the objectives and actions identified in the Open Space and Recreation Plan (OSRP) are implemented and that the plan is updated as needed for resubmission in 2028.



 Goal 2: Protect land significant to drinking water protection, wildlife habitat, natural resource protection and climate change (for carbon storage)



 Goal 3: Manage existing town-owned or town-managed open space parcels for the purposes of safe and enjoyable public access and the protection of natural resources and wildlife habitat.



• Goal 4: Promote awareness, enjoyment and stewardship of Manchester's open space parcels and natural resources through outreach and education.



• Goal 5: Identify the town's recreational needs and create action plans to address those needs.

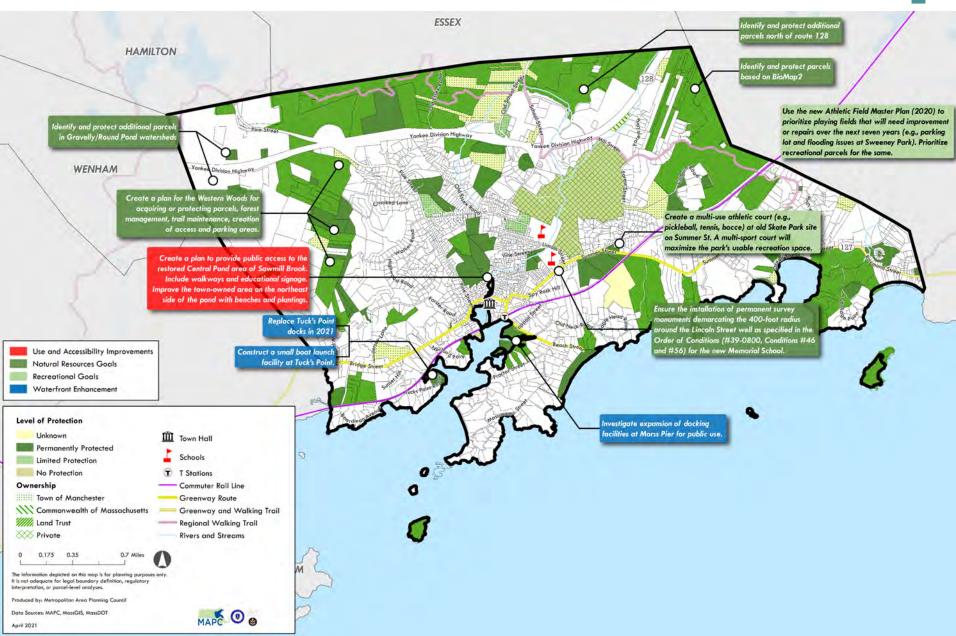


 Goal 6: Promote the use and improvement of the town-owned waterfront resources for the purposes of water-related activities.



 Goal 7: Continue to advocate for accessibility by ensuring that town officials, boards and committees are aware of Universal Design Standards and ADA requirements and that ADA considerations are incorporated into town projects.

#### **DRAFT** Action Plan Map





Goal 1: Ensure that the objectives and actions identified in the Open Space and Recreation Plan (OSRP) are implemented and that the plan is updated as needed for resubmission in 2028.	
Actions:	Priority/ Time Frame
Action 1.1: Update the 2021 plan with a view to a submission of a revised plan in 2028 establish a budget as needed.	3 and HIGH Continuous



Goal 2: Protect land significant to drinking water protection, wildlife habitat, natural resource protection	tion and
climate change (for carbon storage)	

climate change (for carbon storage)	
Actions:	Priority/ Time Frame
<b>Action 2.1:</b> Revise the Town's list of high- priority parcels which are not currently protected for potential acquisition or protection by other means.	or
Possible candidates include unprotected parcels within the Round Pond and Gravelly Pond watersheds; remaining unprotected woodlands north of Route 128; parcels in the "Weste Woods"; parcels that would link existing parcels to create greenway corridors including Will, Great Hill and Owl's Nest Nature Preserve; and the Eaglehead Wildlife Study Area	Wyman  Short-term
Consideration should be given to those areas identified in the BioMap2 (or, Biomap3 who available), created by the Massachusetts Natural Heritage and Endangered Species Program The BioMap2 project includes a report for the town of Manchester which should be consuidentifying high-priority parcels.	gram.
<b>Action 2.2:</b> Using the list created in <b>Action 2.1</b> , set priorities and actions for each parcel (e.g acquisition, conservation restrictions, Conservation Commission management)	HIGH Year 1 Short-term



Goal 2: Protect land significant to drinking water protection, wildlife habitat, natural resource protection and climate change (for carbon storage)	
Actions:	Priority/ Time Frame
Action 2.3: Initiate steps to acquire or protect those high-priority parcels identified in Action 2.2.	
Seek allies among other local nonprofits to help encourage conservation outcomes for these parcels.	
Work with Town Planner and Planning Board to identify and assess zoning bylaws that protect resource values. (or perhaps this is an action on its own — whereby parties evaluate zoning bylaws to strengthen resource protection — clustering, LID, etc. are all valid resource protection tools).	HIGH Year 2 - 7 Short- to long- term
Seek Town Meeting votes to conserve or protect the resource values of the Town-owned undisturbed parcels in the Gravelly/Round Pond watershed recently identified by the Assessors and those in the Western Woods.	
Action 2.4: Maintain an ongoing inventory of parcels that need additional protection through acquisitions, dedications, or conservation restrictions. These include parcels that are important for water supply protection, wildlife habitat and natural resource protection. Reassess and update the inventory annually and apply it to Manchester's online mapping utility.	HIGH Year 1 — 7 Ongoing



Goal 3: Manage existing town-owned or town-managed open space parcels for the purposes of safe and enjoyable public access and the protection of natural resources and wildlife habitat.	
Actions:	Priority/ Time Frame
<b>Action 3.3:</b> Create a plan for the Western Woods for acquiring or protecting parcels, forest management, trail maintenance, creation of access and parking areas.	<b>HIGH</b> Year 1 - 2
Create a Western Woods webpage where all relevant information and documents can be posted.	Short-term
Action 3.4: Create a plan to provide public access to the restored Central Pond area of Sawmill Brook.  Include walkways and educational signage.	HIGH Year 3-7 Mid- to long-term

Improve the town-owned area on the northeast side of the pond with benches and plantings



and others.

Goal 4: Promote awareness, enjoyment and stewardship of Manchester's open space parcels and natural resources through outreach and education.	
Actions:	Priority/ Time Frame
Action 4.2: Create trail maps of existing town-owned open space parcels in both paper and electronic form (GIS) for use by the public. Coordinate volunteer efforts to help map the parcels (e.g., Scouts, Cape Ann Trail Stewards).	MEDIUM Start in Year 1 Short-term; then ongoing
Action 4.3: Plan and hold events which would enhance and promote town-owned open space. Events could include trail cleanup days; removal of invasive species; coordinated "theme" walks; etc. Partner with local organizations such as Mass Audubon, MECT, Cape Ann Trails Stewards, local school groups and others	<b>MEDIUM</b> Year 1 — 7 Ongoing



Goal 5: Identify the town's recreational needs and create action plans to address those needs.	
Actions:	Priority/ Time Frame
Action 5.1: Continue to maintain the inventory of all existing town-owned recreational areas including playing fields, parks, and beaches.  Assess each one for frequency of use, condition, need for improvement or management, ADA compliance, etc.	HIGH Year 1 Short-term; then ongoing
Follow-through on recommendations, especially for high priority fields and recreational parcels.	
Action 5.2: Use the new Athletic Field Master Plan (2020) to prioritize playing fields that will need improvement or repairs over the next seven years (e.g., parking lot and flooding issues at Sweeney Park). Prioritize recreational parcels for the same.  Create and initiate plans for improvements to priority parcels  Refer to Chapter 5 of the Athletic Field Master Plan for specific design recommendations	HIGH Year 1 Short-term; then ongoing
Action 5.5: Continue to explore and implement ways to make Manchester more bicycle and pedestrian friendly including working with the Police, the DPW, the BOS, and the MERSD administration through a combination of infrastructure improvements, safety training and community involvement.	HIGH Start in Year 1 Short-term; then ongoing



Goal 6: Promote the use and improvement of the town-owned waterfront resources for the purposes of water	-
related activities.	

related activities.	
Actions:	Priority/ Time Frame
<b>Action 6.1:</b> Continue to update the inventory of existing town-owned and publicly accessible docks and piers.	
Assess each site for frequency of use; condition, need for improvement or management, ADA compliance, etc.	HIGH Year 1 Short- term and
Replace Tuck's Point docks in 2021	ongoing
Investigate expansion of docking facilities at Morss Pier for public use.	
<b>Action 6.2:</b> Work towards improving town docks and piers to ensure that facilities are publicly accessible and ADA compliant.	HIGH Year 1 Short- term and ongoing



Goal 7: Continue to advocate for accessibility by ensuring that town officials, boards and committees are aware of Universal Design Standards and ADA requirements and that ADA considerations are incorporated into town projects.

Actions:	Priority/ Time Frame
<b>Action 7.1:</b> In order to improve accessibility to Manchester's parks and open spaces and serve the recreation needs of all residents, the Town should adopt and integrate universal design principles and programming.	<b>HIGH</b> Ongoing
Action 7.2: Monitor the implementation of the latest ADA Transition Plan.	HIGH Year 2 Short-term
Action 7.4: Participate in research, planning and monitoring for Phase II of the Downtown Improvement Project (DIP) to guarantee that all routes meet Mass. accessibility standards.	HIGH Year 3-7 Mid-to long- term
Action 7.5: Continue to recognize businesses and facilities that prioritize accessibility and accommodate residents of all abilities by honoring them with the prestigious Access Award.	HIGH Ongoing



## Questions?





# Virtual Open House

http://mapc.ma/ManchesterOSRPForum2



# Virtual Open House

# **Instructions:**

- 1. Click on the Open House link that is posted in the Chat Box
- 2. You will have an option to read some background information (this is a summarized version of information covered in the PowerPoint presentation)
- 3. Follow the instructions and answer each question

  Participants will be able to share ideas and provide feedback until June 4th
- 4. Make sure we have your email for updates on when the Draft of the full OSRP is posted for public comment

If you have questions about the background information or about the input exercises, feel free to email me at <a href="mailto:Clewis@mapc.org">Clewis@mapc.org</a>

# **Appendix D: Community Survey**

# **OSRP Community Survey Comments**

Favorite things to when I visit:	Things I would like to see here in the future:
Enjoy nature	Additional trails
Walk/run/hike/bike on trails or paths	Fitness equipment
• Picnic, relax	Signage and trail markers
	Mountain biking trails
	Loop trail
	Clean up/maintenance/removal of dead and
	dangerous trees; litter removal
ditional Comments:	

Favorite things to when I visit:	Things I would like to see here in the future:
• Enjoy nature	<ul> <li>Preserve the natural beauty and eliminate the boats overcrowding and partying in the summer</li> <li>Better access</li> </ul>
Additional Comments:	,

Favorite things to when I visit:	Things I would like to see here in the future
Walk/run/hike/bike on trails or paths	Additional trails
Enjoy nature	Signage and trail markers
Be in, on, or near the water	Fitness equipment
Picnic, relax	Trail maintenance
Walk dog off leash	• Loop trail
ditional Comments:	

Coach Field Playground	
Favorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Recreational sports</li> </ul>	• Canteen
<ul> <li>Take part in events (Festivals, races,</li> </ul>	Fitness equipment
sporting events, farmers market)	Barbecuing area
<ul> <li>Kids used to play on school playground</li> </ul>	Restrooms
	Picnic tables
	Better maintenance. The equipment is not maintained and there is always trash and left clothing all over the field. It is a disgrace given how much we invested in it.
Additional Comments:	
• N/A	

Things I would like to see here in the future:
Trail maps
Nature-based play elements (i.e. grassed berms,
playground boulders)
Community garden
Picnic tables
Barbecuing area
Loop trail
<ul> <li>Ability to walk from black beach to a trail on Coolidge Point and avoid walking on Rt 127</li> <li>Ability to drive my 95-year-old mother up to the park and be able to park my car. She can walk at Coolidge Point, but walking in is too much.</li> <li>Nothing else</li> <li>More parking.</li> </ul>

Cranberry Pond Reservation	
Favorite things to when I visit:	Things I would like to see here in the future:
Walk/run/hike/bike on trails or paths	<ul> <li>Safe biking walking access from surrounding neighborhoods</li> </ul>
Additional Comments:	
• N/A	

Favorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Walk/run/hike/bike on trails or paths</li> </ul>	Additional trails
• Enjoy nature	Signage and trail markers
	Trail maps
	Community garden
Additional Comments:	

Eaglehead Wildlife Area	
Favorite things to when I visit:	Things I would like to see here in the future:
Photographing birds	Signage and trail markers
	Trail maps
	• Loop trail
Additional Comments:	
• N/A	

Long Hill	
Favorite things to when I visit:	Things I would like to see here in the future:
Photographing birds	<ul><li>Signage and trail markers</li><li>Trail maps</li></ul>
Additional Comments:  N/A	

Magnolia Surf Park	
Favorite things to when I visit:	Things I would like to see here in the future:
Walk/run/hike/bike on trails or paths	Better maintenance of trees, shrubs there.
Enjoy nature	
Be in, on, or near the water	
Walk dog off leash	
Additional Comments:	
• N/A	

avorite things to when I visit:	Things I would like to see here in the future:
• Walk/run/hike/bike on trails or paths	Signage and trail markers
• Enjoy nature	Walk dog off leash
• Picnic, relax	Additional trails
<ul> <li>Walk dog off leash</li> </ul>	Loop trail
Hikes with MECT	Picnic tables
	Community garden
	Signage and trail markers
	Trail maps
	Bike racks
	Retain and safeguard all MECT properties
	Waste barrels and dog poop bags/barrel
	• Removing the loose rocks from the trail(s)
	Accessible trail for my 94-year old mother

### Additional Comments:

- Trail markers could be better at certain points within the woods. Have gotten lost and had to back track a few times
- Keep it quiet and pristine. Keep development away from it!

Masconomo Park	
Favorite things to when I visit:	Things I would like to see here in the future:
Enjoy nature	Additional trails
Enjoy playground / play structures	<ul> <li>Shade trees along the paths beyond the parking</li> </ul>
Be in, on, or near the water	area
Read while taking in the view	• Trail maps
Music in the Park	• Loop trail
Picnic, relax	Nicer playground

- Walk/run/hike/bike on trails or paths
- Walk dog off leash
- Take part in events (Festivals, races, sporting events, farmers market)
- Summer Concerts
- Recreational sports
- Events, music programs
- Admire the trees, use the Little Free Library

- Climbing apparatus for kids
- Community garden
- Picnic tables
- Better bathrooms. No outhouses
- Fitness Equipment
- Barbecuing areas
- Water based play feature
- Nature-based play elements (i.e. grassed berms, playground boulders)
- Weekly Farmer's Market would be AWESOME, and I think MBTS can support it!
- Masconomo could be a combined field space and outdoor fitness park for grownups. We need to elevate the connection to outdoors for all our age groups
- Rowing shell/ kayak racks behind band stand.
   Raise bandstand with maintenance department underneath. Put back drinking fountains
- Fenced dog park
- Another portable toilet
- Better maintained trees

#### **Additional Comments:**

- Just maintain what is there
- Some of the bench's at Masco are in bad shape. Need updates plus a couple more picnic tables

Powder House Hill Reservation						
Favorite things to when I visit:	Things I would like to see here in the future:					
Walk/run/hike/bike on trails or paths	Signage and trail markers					
Enjoy nature	Trail maps					
Walk dog off leash	Additional trails					
	Loop trail					
A 1 19:2 1 C						

#### **Additional Comments:**

- The people who go here enjoy it as it is.
- Nothing, it's great as is! But a little pruning of the thorny vines at the access points would be nice.
- Nothing more. Perfect in town nature escape as is

Reed Park	
Favorite things to when I visit:	Things I would like to see here in the future:
• Enjoy nature	<ul> <li>Harbormaster office + bathrooms would be great</li> </ul>
• Picnic, relax	at Reed Park
Be in, on, or near the water	
Additional Comments:	
• N/A	
,	

Singing Beach	
Favorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Walk/run/hike/bike on trails or paths</li> </ul>	Resident only parking year round
Picnic, relax	Visitor parking
Enjoy nature	Dogs kept on leash
Be in, on, or near the water	Enforce dog bylaws that already exist
Recreational sports	Picnic tables
Walk dog off leash	Barbecuing areas
Enjoy the sunshine & walk in the sand	Fitness Equipment
when dogs are not permitted on the	Water based play feature
beach	Better trash maintenance.
Swim and exercise	Volleyball court/space
Watch fireworks at the 4th; get-	Nice safe fire pit
<ul> <li>togethers with friends; camp fires</li> <li>Stand-up-paddleboard access at certain times of day or year; and more ways to recycle</li> </ul>	<ul> <li>Longer dog season on weekdays or certain hours</li> </ul>
	<ul> <li>I would love to see a few rafts at singing beach and a program for young kids to learn water safety combined with a lifeguard training program</li> <li>Renovation of bath house and expanded facility to better support town and generate additional revenue through leasing of expanded food services year round.</li> </ul>
	Improve the Bath House and keep portable toilets out ALL year, clean more regularly especially in peak season
	Improved showers and bathrooms
	Trash cans. Less signage.
	<ul> <li>More restrictions on out of town visitors or higher fees, better management of walk on visitors, more trash receptacles, Better management of visitors with dogs.</li> </ul>

Easier to access for bikes, shuttle to bring residents
Restrooms when beach house closed
Shade opportunities
Permitted cooking fires should be allowed
Better maintenance of the bluff.
Fewer dogs or limited hours for dog walkers
Enforcement of designated recreation area.
<ul> <li>Signage for Out of Towners to alert them of aggressive seagulls</li> </ul>
Keep keeping non-residents out!

#### Additional Comments:

- Improve the access on to the Beach. The rocks are steep and slippery when they are sandy.
- Off season is dangerous/unpleasant with dogs off leashes
- Limit dogs to certain hours per day or days per week
- Keep dogs off beach!

All-abilities playground Water based play feature Picnic tables Barbecuing areas
Picnic tables
Barbecuing areas
More basketball/better parking
Redesign so more field space and training access for kids is accessible
Needs restrooms
Improved parking

vorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Walk/run/hike/bike on trails or paths</li> </ul>	Picnic tables
Be in, on, or near the water	
<ul> <li>Walk dog off leash</li> </ul>	
Take part in events (Festivals, races,	
sporting events, farmers market)	
dditional Comments:	•

Tucks Point	
Favorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Walk/run/hike/bike on trails or paths</li> </ul>	Picnic tables
<ul> <li>Picnic, relax</li> </ul>	Barbecuing areas
<ul> <li>Be in, on, or near the water</li> </ul>	More benches
<ul> <li>Beach</li> </ul>	dog control and enforcement
<ul> <li>Enjoy nature</li> </ul>	Signage and trail markers
<ul> <li>Walk dig off leash</li> </ul>	Trail maps
<ul> <li>Recreational sports</li> </ul>	Loop trail
<ul><li>Reading</li></ul>	<ul> <li>Nature-based play elements (i.e. grassed berms,</li> </ul>
<ul> <li>Take part in events (Festivals, races,</li> </ul>	playground boulders)
sporting events, farmers market)	Community garden
Go crabbing	Fitness equipment
<ul> <li>Use boat docks</li> </ul>	Better playground equipment
<ul> <li>Stand-up paddleboard! It's the best</li> </ul>	Water based play feature
place to put in from.	Open lawn
	All-abilities playground
	Raft at beach
	More visitor parking
	Town should expand usage of Tucks Point and
	improve open space for small athletic/practice
	space for town sports.
	Tucks Point should be better used for small field
	space and a new facility for town access to water.
	Clear overgrown areas on perimeter of whole area
	and enforce dog bylaw
Additional Comments:	1

• Keep dogs out of Tucks Point! And, keep out non residents!

• I feel that there should be parking for non-residents at Tucks Point, particularly during the week.

avorite things to when I visit:	Things I would like to see here in the future:
<ul> <li>Walk/run/hike/bike on trails or paths</li> </ul>	<ul> <li>Maybe easier access points/parking</li> </ul>
<ul> <li>Enjoy nature</li> </ul>	Additional trails
	Signage and trail markers
	• Trail maps
ditional Comments:	1

White Beach	
Favorite things to when I visit:	Things I would like to see here in the future:
Be in, on, or near the water	Picnic tables
Play with grandchildren	Barbecuing areas
• Enjoy nature	<ul> <li>Enforce dog bylaws that already exist</li> </ul>
Picnic, relax	
Additional Comments:	1
• N/A	

Wyman Hill Conservation Area					
Favorite things to when I visit:	Things I would like to see here in the future:				
Walk/run/hike/bike on trails or paths	Additional trails				
Enjoy nature	Signage and trail markers				
	Trail maps				
Additional Comments:					
• N/A					

### **General Comments**

- There are existing bylaws prohibiting dogs from all parks and cemeteries YEAR ROUND. Not enforced
- Tucks Point, views obscured by overgrown brush & shrubs adjacent left side of path leading to Rotunda
- Put the swimming rafts back Tucks, Singing and add to White Beach
- Manchester has wonderful woods and trails that I hope we continue to preserve.
- I grew up in Manchester and the parks are deplorable the hedges all uneven separated, quite messy
- Tough to park at Coolidge Reservation on a beautiful day.
- HS/middle school field because it's a turf field with lights. Brook St. field but the turf is tired and we need lights
- More parking and better signage at the conservation areas. Movies, exercise classes, softball
- We need more sports playing fields & lights. Tennis courts need more maintenance. We need a track.
- Powderhouse park is my other fave! Love the new trail signs. More/improved points of public access
- Enforce the dog rules. Keep dogs under control and pick up poop.
- Thanks for offering such beautiful parks & for keeping them up so well. Singing Beach is a true gem.
- Would really like to see a bike/walking path from loading place, Forest lane connecting Forest St
- When can we work on getting a pump track built for biking?
- So grateful to have many options to get outside as a family without experiencing crowds of people.
- Minor complaint about Wyman hill area are hunting tree stand and few camouflage tents
- Tuck's Point is pretty perfect already
- We have limited park space however we are currently underutilizing our existing spaces.
- Thanks for doing a great job. I love our parks.
- The staff at Singing Beach does an amazing job
- Parks should remain as natural as possible & reserved for residents
- Designated times for certain activities would be nice. Pollution and over development is a worry.
- What is the Towns maintenance budget for Parks? Increase that, let's fix and maintain what we have.
- So grateful to have many options to get outside as a family without experiencing crowds of people.
- Manchester Parks and Rec does a great job managing these precious resources.
- There also should be a small facility for town sponsored water sports (paddle boarding, kayaking, and sailing). There are also revenue opportunities if a facility were designed with ability to support community boating and water sports in mind (M/E sailing team, area schools looking for athletic sport access to water)
- Thank you for doing this! I hope that I can also help you with tree planting and park restoration.
- It would be nice to stay longer but need bathrooms and additional parking to do so.
- Amazing assets for our small town

- We should invest in maintenance of our Parks. DPW cannot keep up. Consider privatizing to landscape.
- It was really really nice having Singing beach open only to residents.
- Keep WIDE open spaces in MBTS. This is a treasured community and an escape from Suburbia.
- We chose MBTS because of its schools and parks. Very important feature of our town!
- The bluff on Singing Beach is not properly maintained. It is overgrown and there is trash from kids drinking. It needs to be patrolled. I haven't spent a lot of time in other parks and open spaces...wondering if they are the same.
- I think you all are doing a great job! Keep up the good work!
- Keep dogs out!! Parking for tax paying residents of Manchester at beach and Tucks Point ONLY!!!
- We need more spaces for sports and outdoor recreation. The existing parks can be redesigned so
  they are better utilized for our growing and aging community.
- It was wonderful this summer when the beach was residents only. Please keep it that way! The beach was not overcrowded. Whatever revenue the non residents pay is not worth the crowding. If you do decide to let non residents come, please charge them more. \$20 a person.
- We need more playing fields in town.
- Maintenance is key
- Poor quality of grass. Poorly maintained. Dog bylaws not enforced. People should have priority
- We are so fortunate to live in the middle of the forest close to the ocean, let's keep it this way
- I would like all park areas to be maintained and safeguarded from development. Community gardens.
- Need ALOT more trash cans, emptied more often. Need consistent enforcement of resident access
- Sweeney Park is one of the most important places to us- we have made so many friends and family there
- I think the town of Manchester should purchase as much open space as possible. Vote no on 40B
- I think a place to get food and tables at Masconomo would be great, overlooking harbor.
- Please improve the maintenance at Masconomo Park. Remove invasive, care for new plantings
- I am not familiar with a lot of the parks listed educate the community
- Love our parks and access to space. More public art shows increases sense of community
- More advertising of underutilized parks with additional parking
- These trails should be considered as a "Network" too, not just individual areas!
- A map of all community resources online and in hard copy
- Concerned about impact of 40B development on Cedar Swamp and watershed.

# Blank

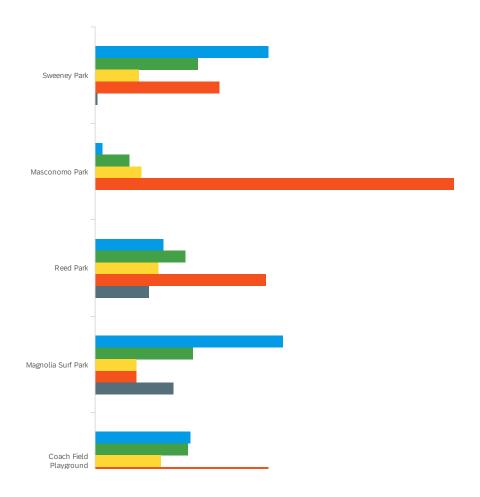
*Manchester-by-the-Sea OSRP Community Survey* June 6, 2021 6:30 PM EDT

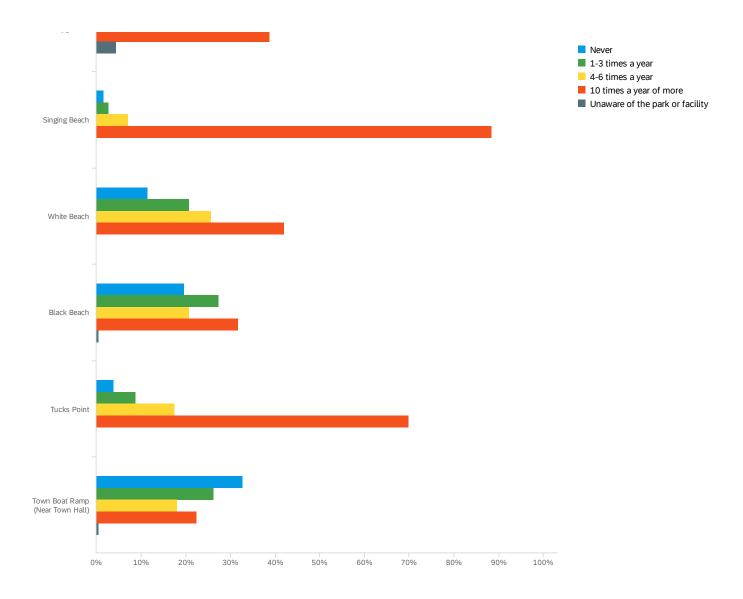
How often do you (or your family members) visit or use the following parks and

# recreational facilities? (Click the map below to enlarge for reference). Image #1

# Field	Never	1-3 times a year	4-6 times a year	10 times a year of more	Unaware of the park or facility	Total
1 Sweeney Park	39%	23%	10%	28%	1%	183
2 Masconomo Park	2%	8%	10%	80%	0%	183
3 Reed Park	15%	20%	14%	38%	12%	183
4 Magnolia Surf Park	42%	22%	9%	9%	17%	183
5 Coach Field Playground	21%	21%	15%	39%	4%	183
6 Singing Beach	2%	3%	7%	89%	0%	183
7 White Beach	11%	21%	26%	42%	0%	183
8 Black Beach	20%	27%	21%	32%	1%	183
9 Tucks Point	4%	9%	17%	70%	0%	183
Town Boat Ramp (Near Town Hall)	33%	26%	18%	22%	1%	183

Showing rows 1 - 10 of 10

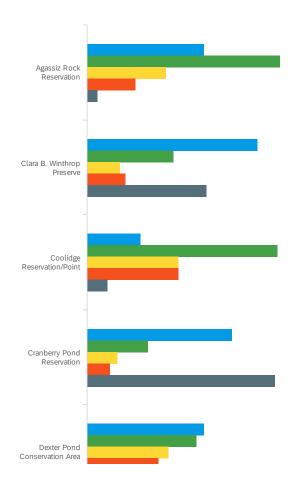


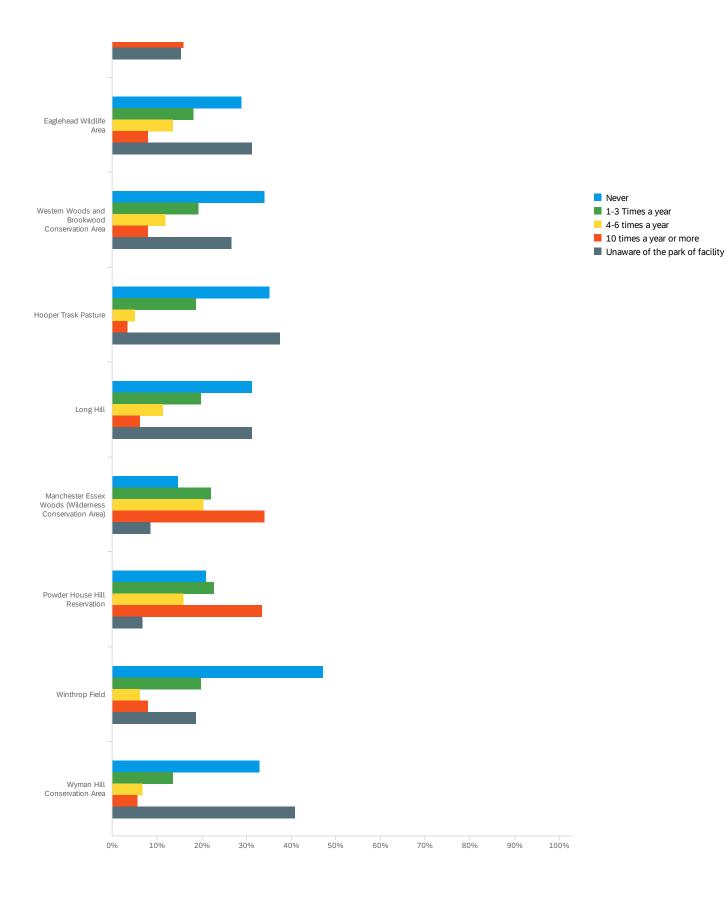


# How often do you visit or use the following open spaces for walking, jogging, biking, bird watching, etc. (Click on the map below to enlarge for reference). Image #1

# Field	Never	1-3 Times a year	4-6 times a year	10 times a year or more	Unaware of the park of facility	Total
1 Agassiz Rock Reservation	26%	43%	18%	11%	2%	176
2 Clara B. Winthrop Preserve	38%	19%	7%	9%	27%	176
3 Coolidge Reservation/Point	12%	43%	20%	20%	5%	176
4 Cranberry Pond Reservation	32%	14%	7%	5%	42%	176
5 Dexter Pond Conservation Area	26%	24%	18%	16%	15%	176
6 Eaglehead Wildlife Area	29%	18%	14%	8%	31%	176
Western Woods and Brookwood Conservation Area	34%	19%	12%	8%	27%	176
8 Hooper Trask Pasture	35%	19%	5%	3%	38%	176
9 Long Hill	31%	20%	11%	6%	31%	176
10 Manchester Essex Woods (Wilderness Conservation Area)	15%	22%	20%	34%	9%	176
11 Powder House Hill Reservation	21%	23%	16%	34%	7%	176
12 Winthrop Field	47%	20%	6%	8%	19%	176
13 Wyman Hill Conservation Area	33%	14%	7%	6%	41%	176

Showing rows 1 - 13 of 13





# What, if anything, prevents you from utilizing Manchester's open space, parks, and recreation facilities listed in the previous questions? (Check all that apply).

#	Field	Percentage
1	Site is not accessible by walking or biking from my home	23%
2	Lack of parking	31%
3	Poor condition or maintenance	11%
4	Not interested in the trails provided	9%
5	Not interested in the sports fields and playgrounds provided	14%
6	Lack of restrooms	12%
7	Lack of shade	1%
8	No place to sit	5%
ç	Safety concerns	4%
10	Too crowded	5%
11	Size or park/amount of space available	5%
12	Unable to access due to disability barriers	1%
13	Dogs are not allowed	14%
14	Don't know where the site is located	53%
15	My recreational and open space needs are met outside of Manchester	6%
16	Other (please specify)	22%
		176

Showing rows 1 - 17 of 17

#### Q21\_16\_TEXT - Other (please specify)

Other (please specify)

Not enough time to visit them all.

covid protocols

I would use Winthrop Field, as would many local kids, but it seems discouraged by the neighborhood and feels like private property.

need to find out how to access sites and if parking is available

Our children have grown up - we used to use more of Sweeney, Masconomo, etc

Dogs are allowed

No particular reasons

Kids are older (still support)

Other (please specify)

Unaware that a site is a public park/unsure if permitted to use land as member of the public We spend a lot of time outside town or on the water It would be great if the Town provided a booklet with all the open spaces and the amenities available. I didn't know most of these existed! I was unaware that many of these were public spaces. Not great for toddlers time just not enough time in the day Didn't know about some of them, I mostly use the ones closest to my house Park space for young kids to bike that is family friendly and not near high traffic/car park areas. Playing fields are often too crowded or unavailable for my children to use as there aren't enough playing fields in Manchester No good reason Unaware the site exists, which is a shame. Nothing prevents me, I visit them all Kids were babies. Now old enough to start using the hiking spaces more often and looking forward to it! No Barriers Won't go by myself. Mainly, I usually walk alone so like to be in a more populated area. Also, I am not very aware of what these areas offer. We need a track in this town- unacceptable nit too have a oval As life moves forward, needs change. While I have not only utilized, but also helped to enable the use of these areas, I tend to enjoy a good episode of "Matlock" rather than stress my physical condition. Let me say, my family enjoys all listed. Love masconomo for access to village water views and athletic area to workout outside Haven't made the time. But love knowing it's there. Already satisfied

my own physical limitations

Generally run down condition; poor tree maintenance

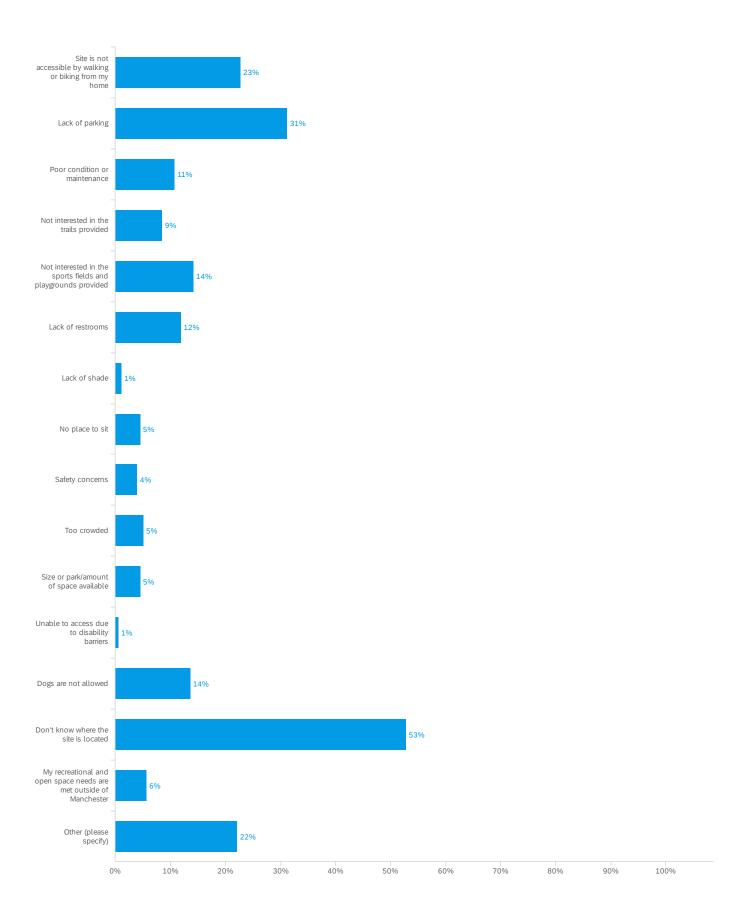
Awareness of where and what kind of recreation is allowed on certain protected lands. Would be good to get the word out more!
Nothing prevents me
Live out of Town so parking is a problem

Nothing prevents us

Other (please specify)

We tend to spend our recreational time on the water. Not hikers or bike riders. Truly love Singing Beah and Masconomo Park.

just testing...



# Select up to five (5) programs that would increase your use of a park or open space

# property

#	Field	Percentage
4	Nature programs	35%
5	Guided walks in open space properties	34%
6	Musical or theatrical performances	29%
7	Public art and art programs	26%
8	Activity groups like walking clubs, cycling groups, gardening groups	26%
9	Movies in the park	23%
10	Culture and heritage events	18%
11	Neighborhood gatherings and parties	20%
12	Fitness classes like yoga, Zumba, boot camps, circuit training	17%
13	Stewardship and volunteer opportunities	16%
14	Children's programming	20%
15	Organized sports leagues	24%
16	Concessions such as boat/bike rentals	20%
17	Improved ADA accessibility	3%
18	Programming is not a priority for me	24%
19	Other (please specify)	14%
		176
	Showing rows 1 - 17 of 17	

Showing rows 1 - 17 of 17

#### Q23\_19\_TEXT - Other (please specify)

Other (please specify)

A dog park

These are too specific or broad! For Masconomo - yes of course more programming. For something like Western woods, no thank you!

Places to keep kayaks ans paddle boards

Porto-potties or proper facilities

It would be nice if the town had a full regulation 8-lane track facility

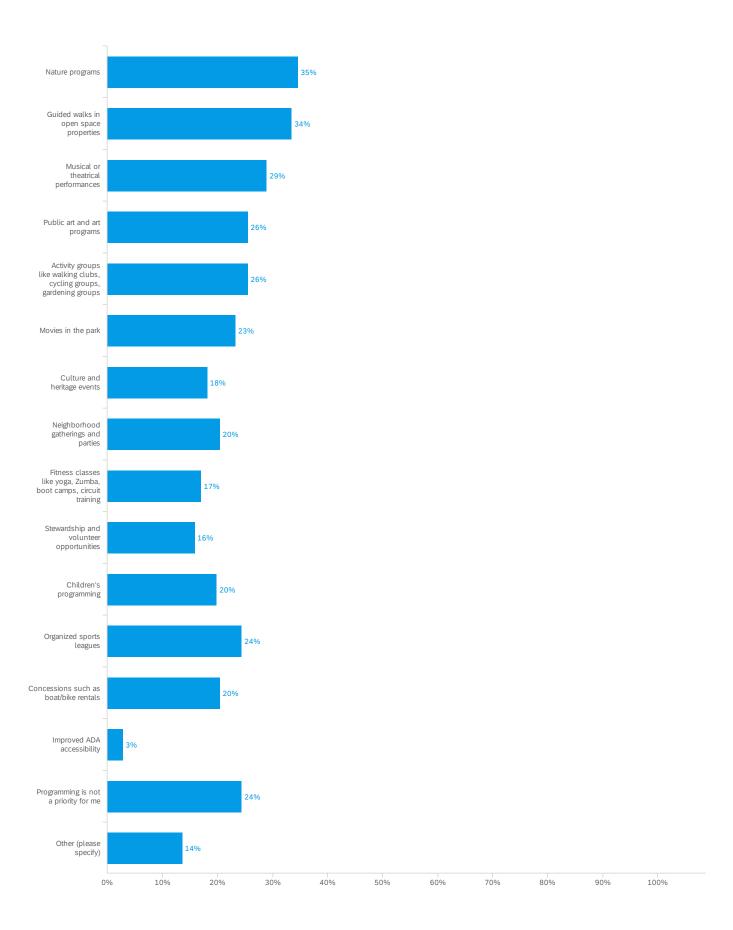
More rock scavenger hunts!

bathrooms

Publications of trails, parking, etc

Skating rink
I would welcome a birding group.
Fitness equipment in park that people could use as a loop let's say around mascons morning park. Different obstacles/ work out items around the activity course
My schedule changes frequently so I could not take part in ;many of these activities.
Park/trail guides
Track please
Signage- some of the places listed I did not realize were open to public
Clean up the messes. Not interested in local foolishness/virtue signalling. Thoreau did just fine without "children's programming."
Certain areas need to be kept quiet for enjoyment, like the woods, and areas near the water. Other spaces like parks - perhaps Sweeney, Coach field, boat ramp, etc. having fitness classes and more organized programs, would be great.
events like Kids Pan Mass Challenge
ok
Guided walks in cemeteries
Just hanging
ljij

Other (please specify)



# Select up to five (5) options below that you would like to see more of in Manchester in the

# next 10 years.

# Field	Percentage
4 More natural areas and preserves	37%
5 Improved natural areas and preserves	35%
6 Trails for walking running, and hiking	61%
7 Sharrows and trails for biking. (Click the image to see a definition of sharrow)	28%
8 Off leash dog areas	28%
9 Community gardens	32%
10 Outdoor performance spaces/amphiteaters	26%
11 Water access points - Rowing/Kayaking/Stand-up Paddle Boarding	50%
12 Picnic areas and pavilions	33%
13 Other (please specify)	14%
	176
Showing rows 1 - 11 of 11	

#### Q24\_13\_TEXT - Other (please specify)

Other (please specify)

Athletic fields

Better trail signage

more connected trails for biking and walking not so close to the road

Sports fields - complete shortage for youth sports.

Playgrounds, we are new to town but only know of one so far

Areas to sit and read in the shade with views

Improved and additional field and courts for tennis/ pickleball

Our open spaces are adequate.

It would be really nice to have a bike path connecting Manchester and Essex. If the new 40b development is going to go through, I think the developer should be required to pay for it.

Sports fields with lights, more sports fields in general that are regulation playing size, and a track.

More playing fields for athletics

Other (please specify)

Park area for young children to ride their bikes that is safe from traffic. Currently there is no park that offers a path around a park for children to cycle safely away from the road.

More mountain biking trails

Off-road, paved bike trails

None

Organized sport/athletic fields and courts

More sport fields and an area that includes a track

Use the old skateboard park for something like a pickle ball court.

I enjoy the music in the park but otherwise do not participate in many group events. Also, I imagine am one of the few people who are very upset that dogs are allowed on Singing Beach in the winter which makes the beach unavailable to me because of my fear of dogs.

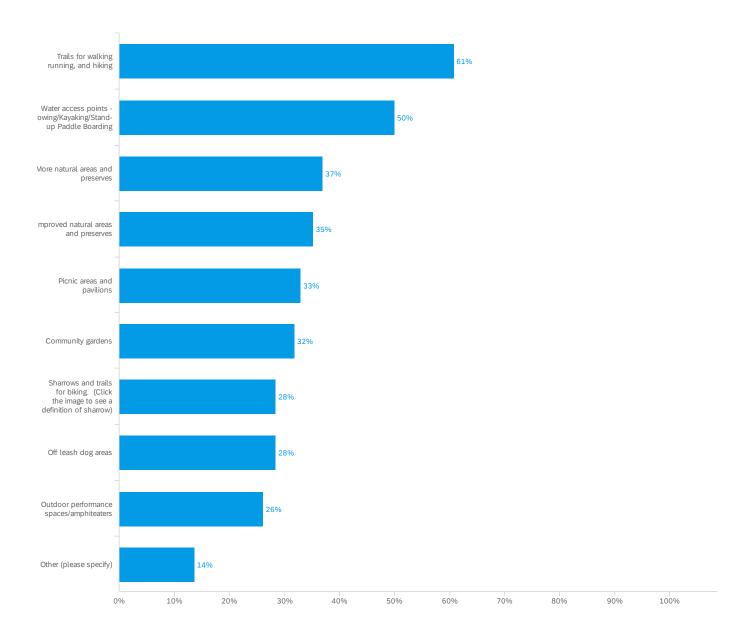
better maintenance of Masconomo Park landscaping

#### PLAYGROUNDS!!

It would appear that upkeep of the current lineup exceeds capabilities/vision. I wouldn't add to the mess.

Trails for biking off road

More town run programs through Parks and Rec focused on water sports such as swimming lessons, sailing lessons, paddle board lessons, and boater safety



# Select up to three (3) active/recreation programs you would like to see increase in

# Manchester the next 10 years.

# Field	Percentage
1 Aquatics programs (swim lessons, swim teams, lifeguard training)	27%
2 Kayaking/Stand-up paddle boarding	38%
3 Disc golf	7%
4 Rock climbing	10%
5 Bocce courts	22%
6 Pickleball	26%
7 Basketball	10%
8 Cycling	19%
9 Dance	7%
10 Other (please specify)	15%
11 Gardening programs	23%
12 Group exercise programs	14%
14 Soccer	6%
15 Tennis	25%
	175

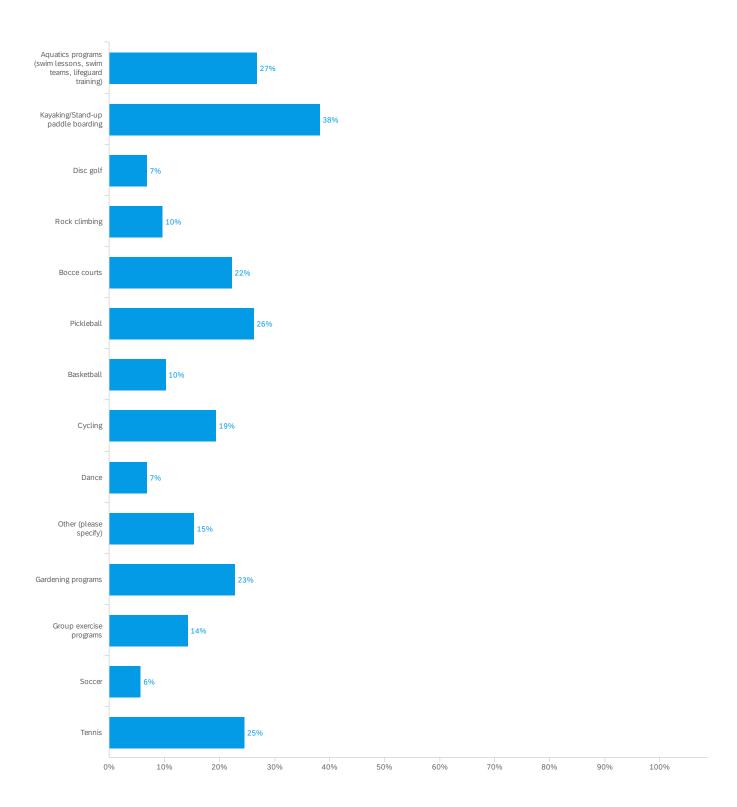
Showing rows 1 - 15 of 15

#### Q26\_10\_TEXT - Other (please specify)

Bike paths

Other (please specify)			
pump track, running track, miles of trails for wa	alking/biking		
Paddle tennis			
Skate park			
volleyball (beach or otherwise)			
Track			
None			
Skate park			
ice skating			

Other (please specify)
Better sidewalks for walking
Skating rinks
Motorized bikes, skate board park
birding group.
I don't need this
Rowing Shell club
another playground with equipment
Senior programs
I'm retired, just walking my dog these days.
not interested in programs
Tai Chi, Qigong
Softball
Lowest impact on nature
none. not interested in programs.
None.
Bird and nature watching
bike track
Sailing (both recreational and competitive for different levels)



## How satisfied are you with the condition of Manchester's parks and open space

## properties?

# Field	Percentage
1 Very satisfied	22%
2 Satisfied	57%
3 Dissatisfied	7%
4 Very dissatisfied	5%
5 Other (please specify)	9%
	175

Showing rows 1 - 6 of 6

#### Q28\_5\_TEXT - Other (please specify)

Other (please specify)

Love Singing Beach but it gets too crowded on weekends.

We need more connected trails, what we have now is getting crowded

The planting that the garden club did on the corner of school street and Central street look really nice—it would be great to incorporate some of those plantings into our parks as well. The plantings throughout town could be coordinated and it would look really nice. Maybe add some planter boxes at Reed park or Masconomo park?

The bluff on Singing Beach is not properly maintained. It is overgrown and there is trash from kids drinking. It needs to be patroled. I haven't spent alot of time in other parks and open spaces...wondering if they are the same.

A huge improvement would be a bike/walking path on Forest St connecting Forest lane and loading place

There is no public park that offers a pathway around the park or area for young children to cycle safely away from the road.

Overall not bad, but some kept in much better shape than others.

We need more spaces for sports and outdoor recreation . The existing parks can be redesigned so they are better utilized for our growing and aging community

trash sometimes a problem

Sweeney Park Needs attention

need more playing fields!

Satisfied but wish trails were better marked and maintained

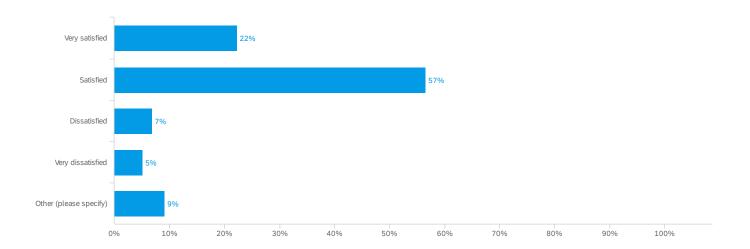
Not enough playing fields

Other (please specify)

We've gotta fix our fences! So ugly.

#### land preservation

Somewhat satisfied. Better marked trails would help.



# What are your top three (3) favorite parks or open space properties in Manchester?

# (Please scroll to view all the options)

# Field	Percentage
9 Agassiz Rock Reservation	8%
11 Other:	3%
12 Black Beach	7%
13 Chebacco Woods	10%
14 Clara B. Winthrop Preserve	2%
15 Clark Pond and Trials	0%
16 Coach Field Playground	5%
18 Coolidge Reservation/Point	16%
19 Cranberry Pond Reservation	2%
20 Dexter Pond Conservation Area	3%
21 Eaglehead Wildlife Area	3%
22 Hooper Trask Pasture	1%
23 Long Hill	2%
24 Magnolia Surf Park	2%
25 Manchester Essex Woods (Wilderness Conservation Area)	22%
26 Masconomo Park	44%
27 Powder House Hill Reservation	17%
28 Reed Park	3%
29 Singing Beach	75%
30 Sweeny Park	9%
31 Town Boat Ramp (Near Town Hall)	2%
32 Tucks Point	49%
33 Western Woods and Brookwood Conservation Area	3%
34 White Beach	7%
35 Winthrop Field	1%
36 Wyman Hill Conservation Area	2%
	174

Showing rows 1 - 27 of 27

#### Q34\_11\_TEXT - Other:

Other:

There is a beautiful field near the Clara b Winthrop preserve which I believe is town land. However, I never feel comfortable using it because it is not marked and I am unsure of whether it actually is town land. It would be great if this could be clarified!

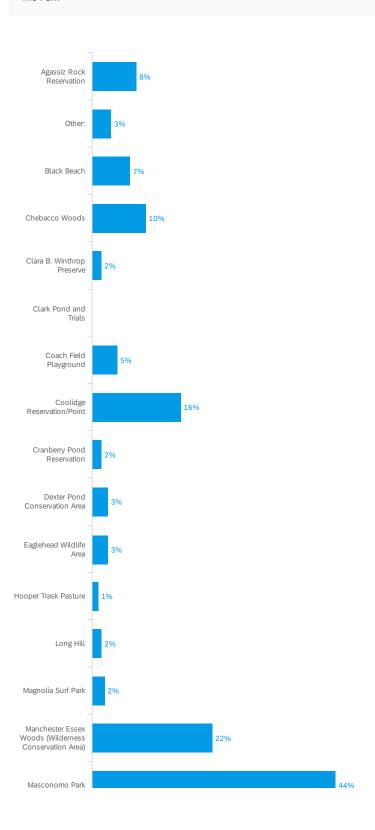
HS/middle school field b/c it's a turf field with lights. Brook st field but the turf is tired and we need lights.

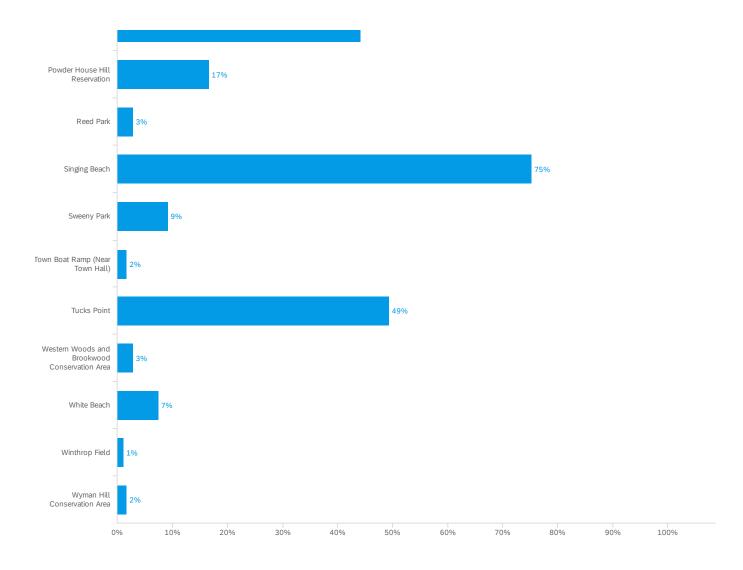
#### Tuck's point

I love driving by Winthrop field. Is there parking there?

you have two coach field playground perhaps one was meant to be fields and the other playgroun

#### The Park





## What are your favorite things to do when you visit [Field-K1]? (Select all that apply).

# Field	Percentage
1 Walk/run/hike/bike on trails or paths	63%
2 Enjoy nature	60%
3 Enjoy playground / play structures	16%
4 Picnic, relax	27%
5 Be in, on, or near the water	47%
6 Recreational sports	16%
7 Walk dog off leash	23%
8 Take part in events (Festivals, races, sporting events, farmers market)	23%
9 Other (please specify)	5%
	171
Showing rows 1 - 10 of 10	

#### Showing rows 1 - 10 of 10

#### Q35\_9\_TEXT - Other (please specify)

Other (please specify)

Off season is dangerous/unpleasant with dogs off leashes

Read while taking in the view

Music in the Park!

Photographing birds.

Put the swimming rafts back Tucks, Singing and add to white beach

Concerts

kids used to play on school playground

events, music programs

Summer concerts

#### What would you like to see at [Field-K1] in the future? (Select all that apply).

# Field	Percentage
1 Additional trails	18%
2 Signage and trail markers	28%
3 Trail maps	23%
4 Nature-based play elements (i.e. grassed berms, playground boulders)	15%
5 Community garden	11%
6 All-abilities playground	3%
7 Water based play feature	9%
8 Picnic tables	30%
9 Loop trail	18%
10 Fitness Equipment	10%
11 Barbecuing areas	14%
12 Open lawns	7%
13 Other (please comment)	29%
	152
Showing rows 1 - 14 of 14	

Showing rows 1 - 14 of 14

#### Q36\_13\_TEXT - Other (please comment)

Other (please comment)

Canteen

Restrooms

The Wilderness Conservation Area is not appropriate for most of the items listed here! It should remain as "wilderness"!!

resident only parking byear round.dogs kept on leash

preserve the natural beauty and eliminate the boats overcrowding and partying in the summer

Fenced dog park

Nothing else - open lawns? That is what it is!

Shade trees along the paths beyond the parking area

No changes

Another Porto

Better bathrooms

Other (please comment)
Track and turf fields with lights.
accessible trail for my 94-year old mother!
Removing the loose rocks from the trail(s)
parking
Nicer playground
ability to drive my 95 year old mother up to the park and be able to park my car. She can walk at Coolidge Point, but walking in is too much.
Safe biking walking access from surrounding neigborhoods
bathrooms
Mountain biking trails
Trail maintance
None
Rowing shell/ kayak racks behind band stand. Raise bandstand with maintenance department underneath. Put back drinkingfountains s
Leave it the way it is
climbing apparatus for kids
Waste barrels and dog poop bags/barrel
Masconomo could be a combined field space and outdoor fitness park for grownups . We need to elevate the connection to outdoors for all our age groups
Doesn't need any additions.
I have not been there in quite a while so I cannot comment. I enjoyed it as it was when I went there.
More parking
Not ramp for sunfish
fine as is
Better Access
I love it the way it is

Closer parking

leave alone; it is beautiful as is.  None
None
Clean up/maintenance/removal of dead and dangerous trees; litter removal
Keep it quiet and pristine.
Trash cans. Less signage.
Perfect as is, certainly NO Visitor Information Booth or Harbormaster Building.
Weekly Farmer's Market would be AWESOME, and I think MBTS can support it!
Better bathrooms. No outhouses
Renovation of bath house and expanded facility to better support town and generate additional revenue through leasing of expanded food services year round.

#### What are your favorite things to do when you visit [Field-K2]?

# Field	Percentage
1 Walk/run/hike/bike on trails or paths	61%
2 Enjoy nature	64%
3 Enjoy playground / play strucutres	6%
4 Picnic, relax	38%
5 Be in, on, or near the water	67%
6 Recreational sports	15%
7 Walk dog off leash	25%
8 Take part in events (Festivals, races, sporting events, farmers market)	11%
9 Other (please specify)	9%
	171
Showing rows 1 - 10 of 10	

9 Other (please specify)

Showing rows 1 - 10 of 10

Q68\_9\_TEXT - Other (please specify)

Other (please specify)

Admire the trees, use the Little Free Library

beach

Enjoy the sunshine & walk in the sand when dogs are not permitted on the beach

watch fireworks at the 4th; get-togethers with friends; camp fires

love the fireworks July 4!

Keep dogs off beach!

Baseball

Photograph birds in nature.

Swim and exercise

use boat docks

Yoga in field and be by water

Hikes with MECT

Needs restrooms

look at trees

Other (please specify)

ha. does this change based on what I select?

#### What would you like to see at [Field-K2] in the future? (Select all that apply).

# Field	Percentage
1 Additional trails	13%
2 Signage and trail markers	18%
3 Trail maps	11%
4 Nature-based play elements (i.e. grassed berms, playground boulders)	7%
5 Community garden	5%
6 All-abilities playground	4%
7 Water based play feature	9%
8 Picnic tables	20%
9 Loop trail	8%
10 Fitness Equipment	6%
11 Barbecuing areas	17%
12 Open lawns	2%
13 Other (please comment)	45%
	125
Showing rows 1 - 14 of 14	

#### Q69\_13\_TEXT - Other (please comment)

Other (please comment) Better maintained trees bike racks dog control and enforcement

Additional parking

improved parking

ability to walk from black beach to a trail on Coolidge Point and avoid walking on Rt 127

Tuck's Point is pretty perfect already

rest rooms when beach house closed

No change

Volleyball Court/Space

Better maintenance. The equipment is not maintained and there is always trash and left clothing all over the field. It is a disgrace given how much we invested in it.

Other (please comment) Permitted cooking fires should be allowed Improve the Bath House & Keep Portos out ALL year, clean more regularly especially in Peak season Parking is an issue when overnight boating Nothing, it's perfect. Stand-up-paddleboard access at certain times of day or year; and more ways to recycle Better maintenance of the bluff. bathrooms Bathrooms Singing beach is perfect Limit dogs to certain hours or days per week Nothing! Leave it as is! Just maintain what is there Nothing, it's great as is! But a little pruning of the thorny vines at the access points would be nice. Nothing more. Perfect in town nature escape as is None Leave it beautiful as it is now Farmers market

Nothing else. The people who go here enjoy it as it is.

I would love to see a few rafts at singing beach and a program for young kids to learn water safety combined with a lifeguard training program

Better trash maintenance.

Enforcement of designated recreation area.

It was wonderful this summer when the beach was residents only. Please keep it that way! The beach was not overcrowded. Whatever revenue the non residents pay is not worth the crowding. If you do decide to let non residents come, please charge them more. \$20 a person.

Not ramp for sunfish arms kayaks

Leave it be

Other (please comment) Signage for Out of Towners to alert them of aggressive seagulls better maintenance of trees, shrubs there. fine as is! clear overgrown areas.on perimeter of whole area and enforce dog bylaw Harbormaster office + bathrooms would be great at Reed Park Keep it natural Improved showers and bathrooms Retain and safequard all MECT properties Keep keeping non-residents out! Nothing, leave along and keep clean; it is beautiful as is. Fewer dogs or limited hours for dog walkers None Ibid. Keep it quiet and pristine. Keep development away from it! Improve the access on to the Beach. The rocks are steep and slippery when they are sandy. visitor parking Bathrooms Nice safe fire pit Longer dog season on weekdays or certain hours

Town should expand usage of Tucks Point and improve open space for small athletic/practice space for town sports. There also should be a small facility for town sponsored water sports (paddle boarding, kayaking, and sailing). There are also revenue opportunities if a facility were designed with ability to support community boating and water sports in mind (M/E sailing team, area schools looking for athletic sport access to water)

upgraded turf field

## What are your favorite things to do when you visit [Field-K3]?

# Field	Percentage
1 Walk/run/hike/bike on trails or paths	42%
2 Enjoy nature	72%
3 Enjoy playground / play strucutres	12%
4 Picnic, relax	55%
5 Be in, on, or near the water	68%
6 Recreational sports	19%
7 Walk dog off leash	14%
8 Take part in events (Festivals, races, sporting events, farmers market)	16%
9 Other (please specify)	6%
	171
Showing rows 1 - 10 of 10	

#### Q70\_9\_TEXT - Other (please specify)

Other (please specify)

Stand up paddle boarding

Go crabbing

Reading

Stand-up paddleboard! It's the best place to put in from.

Better bathroom facilities especially after 5pm.

Keep dogs out of Tucks Point! And, keep out non residents!

Ability to use the Chowder House for Reunions

play with grandchildren

access to kayaking.

birdwatch

h;j

#### What would you like to see at [Field-K3] in the future? (Select all that apply).

# Field	Percentage
1 Additional trails	12%
2 Signage and trail markers	15%
3 Trail maps	9%
4 Nature-based play elements (i.e. grassed berms, playground boulders)	10%
5 Community garden	6%
6 All-abilities playground	7%
7 Water based play feature	12%
8 Picnic tables	23%
9 Loop trail	4%
10 Fitness Equipment	6%
11 Barbecuing areas	24%
12 Open lawns	6%
13 Other (please comment)	38%
	108
Showing rows 1 - 14 of 14	

Showing rows 1 - 14 of 14

#### Q71\_13\_TEXT - Other (please comment)

Other (please comment)

Leave it as it is.

easier to access for bikes, shuttle to bring residents

longer season when dogs are allowed

stand up paddle board overnight storage for residents

No dogs off lease

trail markers could be better at certain points within the woods. Have gotten lost and had to back track a few times

Maybe easier access points/parking

More benches

No change

Beach cleaning to maintain like Singing Beach

More restrictions on out of town visitors or higher fees, better management of walk on visitors, more trash receptacles, Better management of visitors with dogs.

Nothing. It is perfect as is

leave as is; it is beautiful as is.	
None	
Try to limit the crowds - have been going there less because of noise.	
more visitor parking	
Safe structures	

uuhkj

Other (please comment)

#### Is there anything else we should know about these parks?

Would really like to see a bike/walking path from loading place, Forest lane connecting Forest st

Some of the bench's at masco are in bad shape. Need updates plus a couple more picnic tables

Is there anything else we should know about these parks? Thank you for doing this! I hope that I can also help you with tree planting and park restoration. Is there a way to make it so that Singing Beach does not get so crowded on the weekends? There are existing bylaws prohibiting dogs from all parks and cemeteries YEAR ROUND. Not enforced It would be nice to stay longer but need bathrooms and additional parking to do so. Need improved trash pick-up at Masconomo Park. Dog waste disposal by Powder House, Pleasant St path. We need to create field space for youth sports more than anything else. What is defined as a park here is so vague and they are so different - Tucks vs Western Woods?! Amazing assets for our small town We are new to town but only seem to know about one actual playground with a play structure Tucks Point, views obscured by overgrown brush & shrubs adjacent left side of path leading to Rotund All good as is We enjoy the open space and would love to consider the conversation of additional space We should invest in maintenance of our Parks. DPW cannot keep up. Consider privatizing to landscape. It was really really nice having Singing beach open only to residents. Keep WIDE open spaces in MBTS. This is a treasured community and an escape from Suburbia. We need more sports playing fields & lights. Tennis courts need more maintenance. We need a track. Powderhouse park is my other fave! Love the new trail signs. More/improved points of public access Enforce the dog rules. Keep dogs under control and pick up poop. ENFORCe Need ALOT more trash cans, emptied more often. Need consistent enforcement of resident access Thanks for offering such beautiful parks & for keeping them up so well. Singing Beach is a true gem.

Is there anything else we should know about these parks? I think you all are doing a great job! Keep up the good work! When can we work on getting a pump track built for biking? Sweeney Park is one of the most important places to us- we have made so many friends and family ther I think the town of Manchester should purchase as much open space as possible. Vote no on 40B Limit dogs to certain hours per day or days per week Keep dogs out!! Parking for tax paying residents of Manchester at beach and Tucks Point ONLY!!! Manchester has wonderful woods and trails that I hope we continue to preserve. We chose MBTS because of its schools and parks. Very important feature of our town! So grateful to have many options to get outside as a family without experiencing crowds of people. I grew up in Manchester and the parks are deplorable the hedges all uneven separated, quite messy Minor complaint about Wyman hill area are hunting tree stand and few camouflage tents We have limited park space however we are currently underutilizing our existing spaces . I think a place to get food and tables at masconomo would be great, overlooking harbor. Thanks for doing a great job. I love our parks. Tough to park at Coolidge Reservation on a beautiful day. We need more playing fields in town.

Please improve the maintenance at Masconomo Park. Remove invasives, care for new plantings

Safe places to walk or jog

We could use a track

i am not familiar with a lot of the parks listed - educate the community

maintenance is key

The 3 I chose are fine! Others like WCA-trailmarkers, maps, and somewhere a community garden in town

Keep them as natural as possible. No play structures, etc.

Poor quality of grass. Poorly maintained. Dog bylaws not enforced. People should have priority

Is there anything else we should know about these parks?

We are so fortunate to live in the middle of the forest close to the ocean, let's keep it this way

The staff at singing beach does an amazing job

Love them. Love our parks and access to space. More public art shows increases sense of community

There's always trash at Masco from Captain Dusty's and I feel they should clean help clean up.

I would like all park areas to be maintained and safeguarded from development. Community gardens.

More advertising of underutilized parks with additional parking

More parking and better signage at the conservation areas. Movies, exercise classes, softball

For the most part, they are all beautiful. They need to be taken care of and kept clean.

They should remain as natural as possible & reserved for residents

Designated times for certain activities would be nice. Pollution and over development is a worry.

Maintenance with regular trash removal very important. No residential construction close to.

These trails should be considered as a "Network" too, not just individual areas!

A map of all community resources online and in hard copy

I feel that there should be parking for non-residents at Tucks Point, particularly during the week.

0k

What is the Towns maintenance budget for Parks? Increase thatLet's fix and maintain what we have.

Concerned about impact of 40B development on Cedar Swamp and watershed.

Manchester Parks and Rec does a great job managing these precious resources.

Tucks Point should be better used for small field space and a new facility for town access to water.

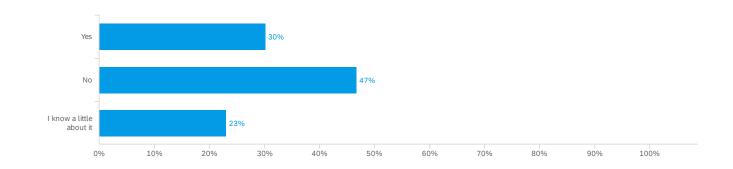
Can't think of anything.

Are you aware of Manchester's Western Woods Initiative to acquire parcels in the wester

## part of Town for open space?

# Field	Percentage
1 Yes	30%
2 No	47%
3 I know a little about it	23%
	169

Showing rows 1 - 4 of 4

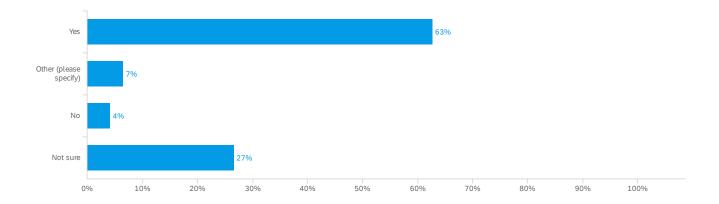


## Do you support using Town funds towards the acquisition of some of the lots in the

#### Western Woods?

# Field	Percentage
1 Yes	63%
2 Other (please specify)	7%
4 No	4%
5 Not sure	27%
Showing rows 1 - 5 of 5	169
Q32_2_TEXT - Other (please specify)	
Other (please specify)	
Yes and I believe the money was already approved.	
Depends upon cost/benefit	
depends on how space to be used	
Possibly, if there are ecological reasons to protect them yes. Recreational, no.	
What about Comm PreservFunds?	
If this prevents it from being developed with condos etc. I support the town purchasing to keep it open space.	
i would need more information	
What's the development plan? I prefer a less developed town. Traffic is becoming DANGEROUS!	
If they are not land locked parcels	
Not a priority for town funds unless needed for watershed protection.	

Yes but the overall strategy and plan for how acquisition is done needs to be better explained and socialized.



## How would you like to see these properties used?

Don't know to answer

# Field	Percentage
1 Passive recreation (walking, hiking, birdwatching, etc.)	45%
3 Other (please specify)	14%
4 A mix of passive recreation and other active recreation	41%
	169
Showing rows 1 - 4 of 4	
Q31_3_TEXT - Other (please specify)	
Other (please specify)	
Not sure of the exact location	
Active recreation.	
Do nothing	
We would definitely like to see an area where young children can safely ride their bikes in a park setting that is safe from the roads.	
Gardening, food, nature walk	
Sporting fields. This town needs more.	
A mix of passive and active recreation would require parking.	
possibly a dog park	
We need more playing fields for youth sports. Soccer, lacrosse, etc.	
Don't know the area	
i would need more information	
I don't know enough about Western Woods	
conservation	
I don't know the area but I would lean toward passive recreation it would be nice to have a community garden somewhere or if near water, boat rentals	
Sport fields and trails	
Not sure	

dont know	
No development	
Presumably the goal here is to get Essex residents/dupes to pay for part of this and then ban them from use.	
Town garden share	

dedicated trails with maintenance- for mountain biking and improved ped/handicap access

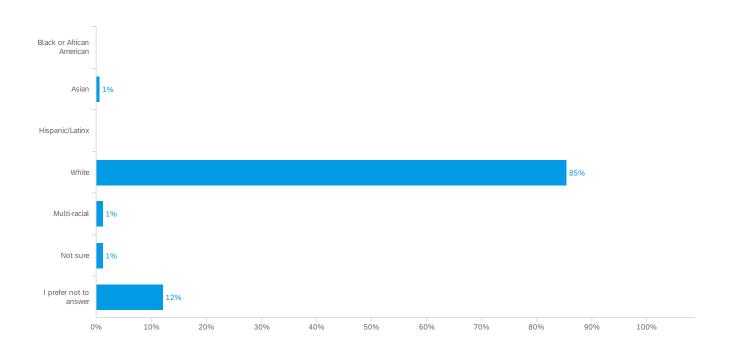
Undisturbed

Other (please specify)

## How do you identify your race and ethnicity? Select any that apply:

# Field	Percentage
1 Black or African American	0%
2 Asian	1%
3 Hispanic/Latinx	0%
4 White	85%
5 Multi-racial	1%
6 Not sure	1%
7 I prefer not to answer	12%
	165

Showing rows 1 - 8 of 8



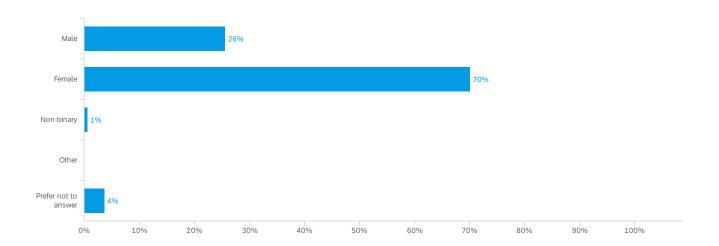
## What is your gender?

# Field	Percentage
1 Male	26%
2 Female	70%
3 Non-binary	1%
4 Other	0%
5 Prefer not to answer	4%
	164

Showing rows 1 - 6 of 6

#### Q41\_4\_TEXT - Other

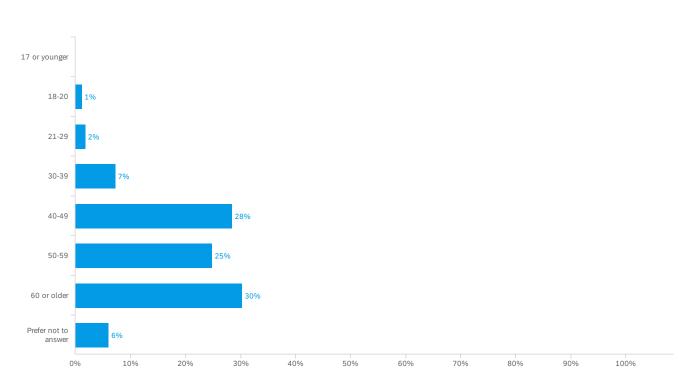
Other



## What is your age?

# Field	Percentage
1 17 or younger	0%
2 18-20	1%
3 21-29	2%
4 30-39	7%
5 40-49	28%
6 50-59	25%
7 60 or older	30%
8 Prefer not to answer	6%
	165

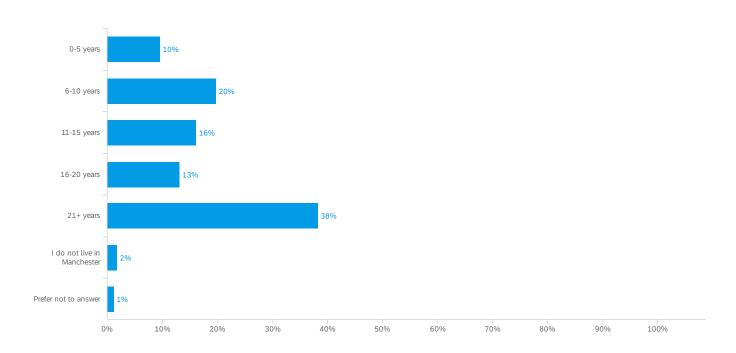
Showing rows 1 - 9 of 9



## How long have you lived in Manchester-By-The-Sea?

# Field	Percentage
1 0-5 years	10%
2 6-10 years	20%
3 11-15 years	16%
4 16-20 years	13%
5 21+ years	38%
6 I do not live in Manchester	2%
7 Prefer not to answer	1%
	167

Showing rows 1 - 8 of 8

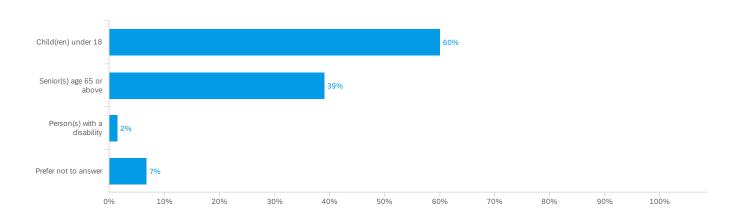


Do you or any members of your household match the following descriptions? Check all

## that apply.

# Field	Percentage
1 Child(ren) under 18	60%
2 Senior(s) age 65 or above	39%
3 Person(s) with a disability	2%
4 Prefer not to answer	7%
	133

Showing rows 1 - 5 of 5

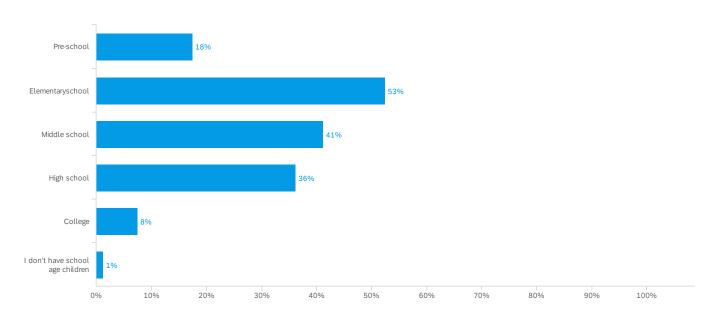


If you have school age children, please check which schools they attend (check all that

## apply).

#	‡ Field	Percentage
1	L Pre-school	18%
2	2 Elementaryschool	53%
3	3 Middle school	41%
4	1 High school	36%
5	5 College	8%
6	5 I don't have school age children	1%
		80

Showing rows 1 - 7 of 7



**End of Report** 

## **Appendix E: Comments on Draft Plan**

From: Frances Caudill
To: Lewis, Courtney

**Subject:** Difficulty using the Comment Matrix for Open Space and Recreation Plan

**Date:** Tuesday, June 8, 2021 4:00:16 PM

Courtney, I was on the OSRC for Manchester, MA from 2015 to 2021, so helped execute the Action Plan on the previous OSRPlan for our Town. Although I have recently left that committee, I was interested in the work of the group creating the next 7-year plan, and attended the Open Fora (plural of Forum?) that you conducted virtually.

I registered to get the Draft Plan, so have spent quite a bit of time on this huge document, skimming parts of it, and reading other sections carefully. Then I decided to try filling out the matrix, so clicked on your link to that. It tells me that this is "Read Only" and doesn't let me enter anything into the matrix. I have given up, but only have 2 brief comments, so am writing these to you now. You have my name, date and email address with this message, so I hope you can accept my comments this way.

Comment 1. P. 54: Under Fisheries and Wildlife: I know this is an "abbreviated list" of species found in Manchester. However, only 10 common bird species are listed of the over 200 species we know we have from birding experts, many of them catalogued over recent years in the Wilderness Conservation Area just north of Route 128. On the other hand, almost all of the mammals, amphibians, reptiles and fish that I know we have are correctly listed. Perhaps you could just add a note on the listing of birds, that there are over 200 bird species that have been recorded in Manchester!

Comment 2. P. 103: In Figure 26 is written "Sharrows and trails for biking". I looked up the word "sharrow" both online and in printed dictionaries, and cannot find it. Is this a "typo"?

Thanks. Frances Caudill, 16 Magnolia Ave., Manchester, MA 01944 Sent from my iPad

## **Comment Matrix**

#### HOW TO USE THIS FORM

Please use this form when submitting comments. You may email your completed comment matrices to Courtney Lewis, Regional Land Use Planner II, at clewis@mapc.org

- 1. Fill out the general information at the top of the page, then use the matrix on the next page to provide comments on the draft plan.
- **2**. Complete the matrix fields as follows:
  - Column 1: Item #
  - Column 2: Page number being referenced
  - Column 3: Paragraph number being referenced
  - Column 4: Your comment (only one comment/issue per row)

Note: If you need more rows, simply highlight the last row, right click, go to *Insert*, and click *Insert Row Below*.

3. Save your file and send to clewis@mapc.org

Please save your Word file in this format: (Your last name date)

**Your Name: David Saunders** 

Your Email and/or Telephone: david saunders@me.com

1

2

(Example)

4

(Example)

<sup>&</sup>quot;Greenways should be considered a multi-modal transportation option."

1-4

The Safe Routes to school is a fantastic initiative. It seems that there are more students walking and riding bikes to school - perhaps a consequence of COVID? I observe unsafe behaviors by drivers and cyclists, as well as some areas that could use some work to enhance visibility and safety for everyone involved. As such, I think it's super important for us to continue building on the Safe Routes program through education, infrastructure shifts, and a careful assessment of how to manage car traffic during excessively busy times of school commutes during the academic year.

## **Comment Matrix**

#### HOW TO USE THIS FORM

Please use this form when submitting comments. You may email your completed comment matrices to Courtney Lewis, Regional Land Use Planner II, at <a href="mailto:clewis@mapc.org">clewis@mapc.org</a>

- 1. Fill out the general information at the top of the page, then use the matrix on the next page to provide comments on the draft plan.
- 2. Complete the matrix fields as follows:
  - Column 1: Item #
  - Column 2: Page number being referenced
  - Column 3: Paragraph number being referenced
  - Column 4: Your comment (only one comment/issue per row)

Note: If you need more rows, simply highlight the last row, right click, go to *Insert*, and click *Insert Row Below*.

3. Save your file and send to <a href="mailto:clewis@mapc.org">clewis@mapc.org</a>

Please save your Word file in this format: (Your last name\_date)

Your Name: Sue Brown

Your Email and/or Telephone: browns@manchester.ma.us

Item #	Page #	Paragraph #	Your Comments			
1	2 (Example)	4 (Example)	"Greenways should be considered a multi-modal transportation option."  (Example)			
1	26	4	I would not classify the LCD as allowing mixed use as it only allows commercial and not residential			
2	26	Table	You included a single overlay district, though we have many. I would simply remove the overlay district.			
3	60	1	Replace "This will be achieved by" With "Strategies for achieving this include"			
4	71	1	The Town just completed a WWTF Study too determine if there is a viable alternative to the Facility at this site. I expect the report within a week or so and will offer a brief summary to add to this section.			
5	77	Fig 20	Move Graves Beach marker to the Beach area. Add Christian Hill Label in the Western Woods. Ask me about the location. Should you add other cemeteries? Largest is Pleasant Grove on Pleasant St and it abuts other protected land.			

		1	
6	93	2	Middle sentence has a number of phrases beginning with "if", but no connective phrase. Add "Also" to the beginning of the sentence.
7	99	4	I would suggest the Plans also address the accommodation, as appropriate of passive recreation.
8	99	1 <sup>st</sup> bullet middle of page	Add a period
9	107	4th full	Add "or part time environmental planner" to option for increased management
10	107	6 <sup>th</sup> full	Add Cape Ann Trail Stewards to partners list.
11	114	Fig 30	The Western Woods text and end points should be moved to the west. As currently placed, they are pointing to parcels that are already protected and managed.
12			
13			
14			
15			
16			
17			
18			
19			
20			

# **Appendix F: Activity and Use Limitation (AUL) Inventory**

	Activity and Use Limitation (AUL) Inventory									
RTN	City/Town	Release Address	Site Name Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
3-0027520	MANCHESTER BY THE SEA	156 PINE ST	RESIDENCE	TWO HR	02/22/200	08 PSC	02/29/201	6	PA	Hazardous Material
3-0022977	MANCHESTER BY THE SEA	2 PINE ST	BENNETT ST	120 DY	06/18/200	O3 PSC	06/19/201	8	PA	Oil and Hazardous Material

# **Appendix G: BioMap 2 Report**



# Manchester

Produced in 2012

This report and associated map provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is <u>not</u> intended for use in state regulations.









#### Table of Contents

#### Introduction

What is *BioMap2* – Purpose and applications

One plan, two components

Understanding Core Habitat and its components

Understanding Critical Natural Landscape and its components

Understanding Core Habitat and Critical Natural Landscape Summaries

Sources of Additional Information

Manchester Overview

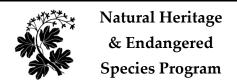
Core Habitat and Critical Natural Landscape Summaries

Elements of BioMap2 Cores

Core Habitat Summaries

Elements of *BioMap2* Critical Natural Landscapes

Critical Natural Landscape Summaries



#### Introduction

The Massachusetts Department of Fish & Game, through the Division of Fisheries and Wildlife's Natural Heritage & Endangered Species Program (NHESP), and The Nature Conservancy's Massachusetts Program developed *BioMap2* to protect the state's biodiversity in the context of climate change.

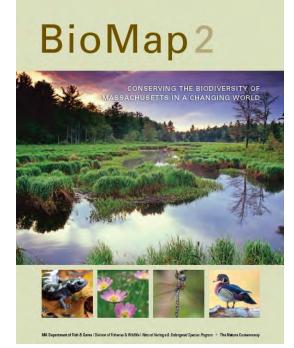
BioMap2 combines NHESP's 30 years of rigorously documented rare species and natural community data with spatial data identifying wildlife species and habitats that were the focus of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). BioMap2 also integrates The Nature Conservancy's assessment of large, well-connected, and intact ecosystems and landscapes across the Commonwealth, incorporating concepts of ecosystem resilience to address anticipated climate change impacts.

Protection and stewardship of *BioMap2* Core Habitat and Critical Natural Landscape is essential to safeguard the diversity of species and their habitats, intact ecosystems, and resilient natural landscapes across Massachusetts.

#### What Does Status Mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act, M.G.L. c.131A, and its implementing regulations 321 CMR 10.00. Rare species are categorized as Endangered, Threatened or of Special Concern according to the following:

 Endangered species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.



Get your copy of the BioMap2 report! Download from http://www.mass.gov/nhesp or contact Natural Heritage at 508-389-6360 or natural.heritage@state.ma.us.

- Threatened species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- Special Concern species have suffered a
   decline that could threaten the species if
   allowed to continue unchecked or occur in
   such small numbers or with such restricted
   distribution or specialized habitat
   requirements that they could easily become
   Threatened in Massachusetts.

In addition NHESP maintains an unofficial watch list of plants that are tracked due to potential conservation interest or concern, but are <u>not</u> regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are <u>not</u> regulated by any law or regulations, but they can help to identify ecologically important areas that are worthy of



Natural Heritage & Endangered Species Program

#### Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890

protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- Critically Imperiled communities typically have 5 or fewer documented sites or have very few remaining acres in the state.
- Imperiled communities typically have 6-20 sites or few remaining acres in the state.
- Vulnerable communities typically have 21-100 sites or limited acreage across the state.
- Secure communities typically have over 100 sites or abundant acreage across the state; however, excellent examples are identified as Core Habit to ensure continued protection.

In 2005 the Massachusetts Division of Fisheries and Wildlife completed a comprehensive State Wildlife Action Plan (SWAP) documenting the status of Massachusetts wildlife and providing recommendations to help guide wildlife conservation decision-making. SWAP includes all the wildlife species listed under the Massachusetts Endangered Species Act (MESA), as well as more than 80 species that need conservation attention but do not meet the requirements for inclusion under MESA. The SWAP document is organized around habitat types in need of conservation within the Commonwealth. While the original BioMap focused primarily on rare species protected under MESA, BioMap2 also addresses other Species of Conservation Concern, their habitats, and the ecosystems that support them to create a spatial representation of most of the elements of SWAP.

# BioMap2: One Plan, Two Components

*BioMap2* identifies two complementary spatial layers, Core Habitat and Critical Natural Landscape.

Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity.

Critical Natural Landscape identifies large natural Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their long-term integrity.

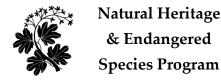
The long-term persistence of Massachusetts biological resources requires a determined commitment to land and water conservation. Protection and stewardship of both Critical Natural Landscapes and Core Habitats are needed to realize the biodiversity conservation vision of *BioMap2*.

#### Components of Core Habitat

Core Habitat identifies specific areas necessary to promote the long-term persistence of rare species, other Species of Conservation Concern, exemplary natural communities, and intact ecosystems.

#### Rare Species

There are 432 native plant and animal species listed as Endangered, Threatened or Special Concern under the Massachusetts Endangered Species Act (MESA) based on their rarity, population trends, and threats to survival. For



Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890



Table 1. Species of Conservation Concern described in the State Wildlife Action Plan and/or included on the MESA List and for which habitat was mapped in *BioMap2*. Note that plants are not included in SWAP, and that marine species such as whales and sea turtles are not included in *BioMap2*.

Taxonomic	MESA-	Non-listed Species	
Group	listed	of Conservation	
	Species	Concern	
Mammals	4	5	
Birds	27	23	
Reptiles	10	5	
Amphibians	4	3	
Fish	10	17	
Invertebrates	102	9	
Plants	256	0	
Total	413	62	

*BioMap2*, NHESP staff identified the highest quality habitat sites for each non-marine species based on size, condition, and landscape context.

#### Other Species of Conservation Concern

In addition to species on the MESA List described previously, the State Wildlife Action Plan (SWAP) identifies 257 wildlife species and 22 natural habitats most in need of conservation within the Commonwealth. *BioMap2* includes species-specific habitat areas for 45 of these species and habitat for 17 additional species which was mapped with other coarse-filter and fine-filter approaches.

#### **Priority Natural Communities**

Natural communities are assemblages of plant and animal species that share a common environment and occur together repeatedly on the landscape. *BioMap2* gives conservation priority to natural communities with limited distribution and to the best examples of more common types.

#### Vernal Pools

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

#### **Forest Cores**

In *BioMap2*, Core Habitat includes the best examples of large, intact forests that are least impacted by roads and development, providing critical habitat for numerous woodland species. For example, the interior forest habitat defined by Forest Cores supports many bird species sensitive to the impacts of roads and development, such as the Black-throated Green Warbler, and helps maintain ecological processes found only in unfragmented forest patches.

#### Wetland Cores

BioMap2 used an assessment of Ecological Integrity to identify the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

#### **Aquatic Cores**

To delineate integrated and functional ecosystems for fish species and other aquatic



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890

Species of Conservation Concern, beyond the species and exemplary habitats described above, *BioMap2* identifies intact river corridors within which important physical and ecological processes of the river or stream occur.

### Components of Critical Natural Landscape

Critical Natural Landscape identifies intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames.

#### Landscape Blocks

*BioMap2* identifies the most intact large areas of predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes.

# Upland Buffers of Wetland and Aquatic Cores

A variety of analyses were used to identify protective upland buffers around wetlands and rivers.

# Upland Habitat to Support Coastal Adaptation

BioMap2 identifies undeveloped lands adjacent to and up to one and a half meters above existing salt marshes as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

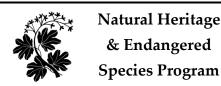
The conservation areas identified by *BioMap2* are based on breadth and depth of data, scientific expertise, and understanding of Massachusetts' biodiversity. The numerous sources of information and analyses used to

## **Legal Protection of Biodiversity**

BioMap2 presents a powerful vision of what Massachusetts would look like with full protection of the land most important for supporting the Commonwealth's biodiversity. While BioMap2 is a planning tool with no regulatory function, all state-listed species enjoy legal protection under the Massachusetts Endangered Species Act (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00). Wetland habitat of state-listed wildlife is also protected under the Wetlands Protection Act Regulations (310 CMR 10.00). The Natural Heritage Atlas contains maps of Priority Habitats and Estimated Habitats, which are used, respectively, for regulation under the Massachusetts Endangered Species Act and the Wetlands Protection Act. For more information on rare species regulations, and to view Priority and Estimated Habitat maps, please see the Regulatory Review page at http://www.mass.gov/eea/agencies/dfg/dfw/natur al-heritage/regulatory-review/.

BioMap2 is a conservation planning tool that does not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the BioMap2 vision is fully realized, we must continue to protect our most imperiled species and their habitats.

create Core Habitat and Critical Natural
Landscape are complementary, and outline a
comprehensive conservation vision for
Massachusetts, from rare species to intact
landscapes. In total, these robust analyses define
a suite of priority lands and waters that, if
permanently protected, will support
Massachusetts' natural systems for generations
to come.



Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890

## **Understanding Core Habitat Summaries**

Following the Town Overview, there is a descriptive summary of each Core Habitat and Critical Natural Landscape that occurs in your city or town. These summaries highlight some of the outstanding characteristics of each Core Habitat and Critical Natural Landscape, and will help you learn more about your city or town's biodiversity. You can find out more information about many of these species and natural communities by looking at specific fact sheets at <a href="https://www.mass.gov/nhesp">www.mass.gov/nhesp</a>.

#### **Additional Information**

For copies of the full *BioMap2* report, the Technical Report, and an <u>interactive mapping tool</u>, visit the *BioMap2* <u>website</u> via the Land Protection and Planning tab at <u>www.mass.gov/nhesp</u>. If you have any questions about this report, or if you need help protecting land for biodiversity in your community, the Natural Heritage & Endangered Species Program staff looks forward to working with you.

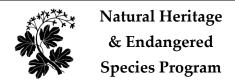
Contact the Natural Heritage & Endangered Species Program

By phone 508-389-6360 By fax 508-389-7890

By Mail natural.heritage@state.ma.us
100 Hartwell Street, Suite 230

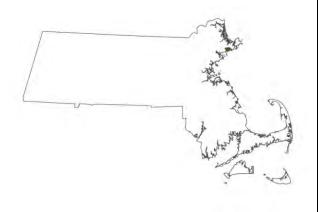
West Boylston, MA 01583

The GIS datalayers of *BioMap2* are available for download from MassGIS at <a href="https://www.mass.gov/mgis">www.mass.gov/mgis</a>.



#### **Town Overview**

Manchester lies within the Southern New England Coastal Plains and Hills Ecoregion, an area comprised of plains with a few low hills. Forests are mainly central hardwoods with some transition hardwoods and some elm-ash-red maple and red and white pine. Many major rivers drain this area.



#### Manchester at a Glance

- Total Area: 4,983 acres (7.8 square miles)
- Human Population in 2010: 5,136
- Open space protected in perpetuity: 1,140 acres, or 22.9% percent of total area\*
- BioMap2 Core Habitat: 569 acres
- BioMap2 Core Habitat Protected: 324 acres or 56.9%
- *BioMap2* Critical Natural Landscape: 548 acres
- *BioMap2* Critical Natural Landscape Protected: 257 acres or 46.9%.

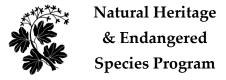
## **BioMap2** Components

#### Core Habitat

- 3 Forest Cores
- 2 Wetland Cores
- 4Aquatic Cores
- 4 Species of Conservation Concern Cores\*\*
   2 birds, 1 amphibian, 1 insect

#### Critical Natural Landscape

- 2 Landscape Blocks
- 2 Wetland Core Buffers
- 4 Aquatic Core Buffers
- 3 Coastal Adaptation Areas
- \* Calculated using MassGIS data layer "Protected and Recreational Open Space—March, 2012".
- \*\* See next pages for complete list of species, natural communities and other biodiversity elements.

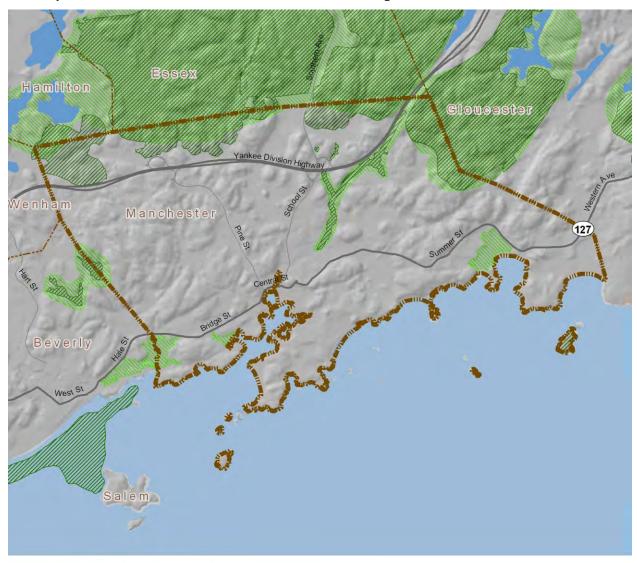


Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890



## BioMap2 Core Habitat and Critical Natural Landscape in Manchester





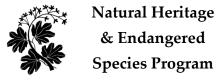
BioMap2 Core Habitat



BioMap2 Critical Natural Landscape

1 Mile





# Species of Conservation Concern, Priority and Exemplary Natural Communities, and Other Elements of Biodiversity in Manchester

#### **Insects**

#### **Beetles**

Hentz's Redbelly Tiger Beetle, (Cicindela rufiventris hentzii), T

#### **Amphibians**

Blue-spotted Salamander, (Ambystoma laterale), SC

#### **Birds**

Black-crowned Night-heron, (*Nycticorax nycticorax*), Non-listed SWAP Snowy Egret, (*Egretta thula*), Non-listed SWAP

#### Other BioMap2 Components

**Forest Core** 

**Aquatic Core** 

**Wetland Core** 

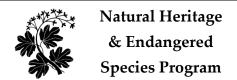
Landscape Block

Aquatic Core Buffer

Wetland Core Buffer

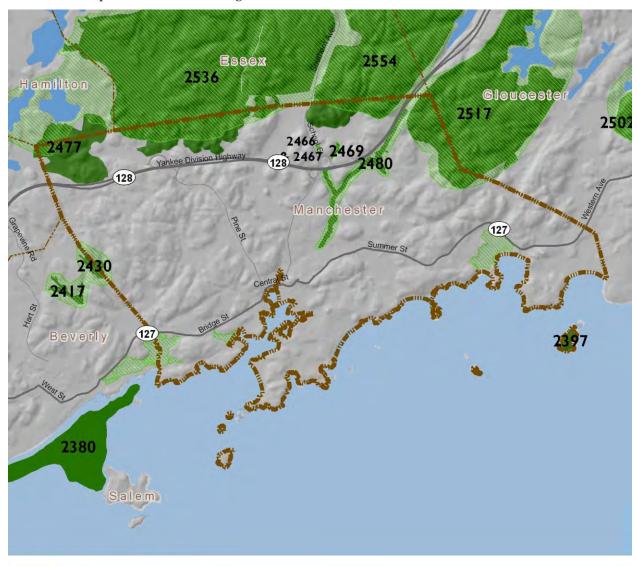
Coastal Adaptation Area

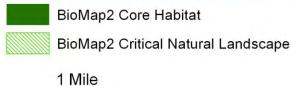
- E = Endangered
- T = Threatened
- SC = Special Concern
- S1 = Critically Imperiled communities, typically 5 or fewer documented sites or very few remaining acres in the state.
- S2 = Imperiled communities, typically 6-20 sites or few remaining acres in the state.
- S3 = Vulnerable communities, typically have 21-100 sites or limited acreage across the state.



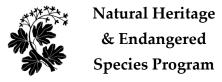
## BioMap2 Core Habitat in Manchester

Core IDs correspond with the following element lists and summaries.









#### Elements of BioMap2 Cores

This section lists all elements of *BioMap2* Cores that fall *entirely or partially* within Manchester. The elements listed here may not occur within the bounds of Manchester.

Core 2397

Species of Conservation Concern

Black-crowned Night-heron Nycticorax nycticorax Non-listed SWAP Snowy Egret Egretta thula Non-listed SWAP

Core 2430

Wetland Core

**Core 2466** 

Aquatic Core

Core 2467

Aquatic Core

**Core 2469** 

Aquatic Core

**Core 2477** 

Species of Conservation Concern

Blue-spotted Salamander Ambystoma laterale SC

**Core 2480** 

Aquatic Core

Core 2517

Forest Core

Acidic Rocky Summit/Rock Outcrop Community

Species of Conservation Concern

Sweetbay Magnolia Magnolia virginiana E

Core 2536

Forest Core Wetland Core

Species of Conservation Concern

Four-toed Salamander Hemidactylium scutatum Non-listed SWAP Spotted Turtle Clemmys guttata Non-listed SWAP

Core 2554

Forest Core

Species of Conservation Concern

Hentz's Redbelly Tiger Beetle Cicindela rufiventris hentzii T



Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife

1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890

#### Core Habitat Summaries

#### Core 2397

A 12-acre Core Habitat featuring Species of Conservation Concern.

The breeding colonies of Black-crowned Night-herons, stocky, short-legged herons, are widely distributed along the Massachusetts coast. Habitats of Black-crowned Night-herons in Massachusetts include salt marshes and tidal flats, fresh and brackish marshes, ponds, and creeks. Night-herons are primarily nocturnal and crepuscular foragers on small fish, amphibians, crabs and other crustaceans, and insects.

Medium-sized white herons, Snowy Egrets nest in mixed colonies with other species of egrets and herons. The nests are in trees or patches of shrubs on coastal islands, presumably to reduce the likelihood of mammalian predation. Snowy Egrets forage in marshes and ponds near their breeding colonies for small fish, snails, and aquatic invertebrates.

#### Core 2430

A 15-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

#### **Core 2466**

A <1-acre Core Habitat featuring Aquatic Core.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

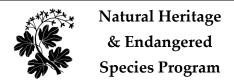
#### **Core 2467**

A <1-acre Core Habitat featuring Aquatic Core.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

#### **Core 2469**

A 2-acre Core Habitat featuring Aquatic Core.



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581 phone: 508-389-6360 fax: 508-389-7890

For more information on rare species and natural communities, please see our fact sheets online at www.mass.gov/nhesp.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

#### **Core 2477**

A 173-acre Core Habitat featuring a Species of Conservation Concern.

Adult and juvenile Blue-spotted Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

#### **Core 2480**

A 51-acre Core Habitat featuring Aquatic Core.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

#### Core 2517

A 737-acre Core Habitat featuring Forest Core, Priority Natural Communities, and a Species of Conservation Concern.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

Acidic Rocky Summits are open communities of shrubs, scattered grasses, mosses, lichens and occasional trees found on exposed rocky summits. These areas are dry with little soil, and can often be found as patches within other ridgetop communities. This example of Acidic Rocky Summit/Rock Outcrop is large and in very good condition, with little human disturbance beyond a low density trail system. It is well buffered within a larger naturally vegetated area.

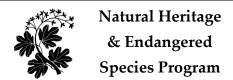
In Massachusetts, Sweetbay Magnolia is a deciduous, multi-trunked tall shrub or small tree to 10 meters in height. It is found in red maple swamps on the coastal plain in this state.

#### Core 2536

A 1,628-acre Core Habitat featuring Forest Core, Wetland Core, and Species of Conservation Concern.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581

most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Four-toed Salamanders live in forested habitats surrounding swamps, bogs, marshes, vernal pools, and other fish-free waters that are used as breeding sites. Most breeding sites in Massachusetts are characterized by pit-and-mound topography with significant sphagnum-moss cover. Eggs are typically laid in mounds or patches of sphagnum moss that overhang water. Upon hatching, the larvae wriggle through the moss and drop into the water, where they will develop for several weeks prior to metamorphosis.

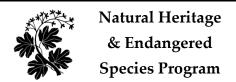
Strong populations of Spotted Turtles in good habitat - large, unfragmented, protected open space - continue to be of interest for the conservation of this species. This small, dark-colored turtle with yellow spots on its carapace inhabits a variety of wetlands year-round and nests in nearby uplands during spring. Road and collection are the primary conservation concerns.

#### Core 2554

A 1,040-acre Core Habitat featuring Forest Core and a Species of Conservation Concern.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

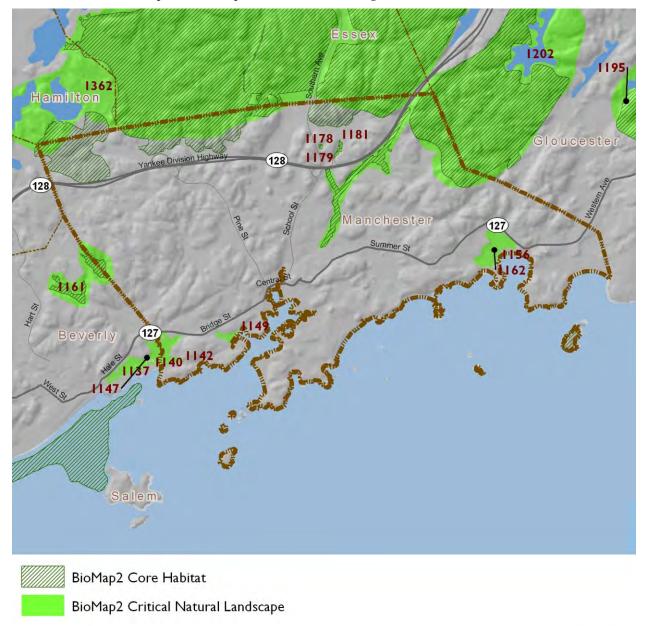
Hentz's Redbelly Tiger Beetle inhabits rock outcrops and ridges with sparse vegetation; soil-filled fissures must be present for the larvae to construct their burrows. Some of the outcrops occupied by Hentz's Redbelly Tiger Beetles burn frequently, which may enhance habitat for both adults and larvae by clearing vegetation and opening the canopy.





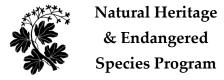
## BioMap2 Critical Natural Landscape in Manchester

Critical Natural Landscape IDs correspond with the following element lists and summaries.



1 Mile





#### Elements of *BioMap2* Critical Natural Landscapes

This section lists all elements of *BioMap2* Critical Natural Landscapes that fall *entirely or partially* within Manchester. The elements listed here may not occur within the bounds of Manchester.

**CNL 1140** 

Coastal Adaptation Area

**CNL 1142** 

Coastal Adaptation Area

**CNL 1147** 

Coastal Adaptation Area

**CNL 1149** 

Coastal Adaptation Area

CNL 1156

Coastal Adaptation Area

**CNL 1161** 

Wetland Core Buffer

**CNL 1162** 

Coastal Adaptation Area

**CNL 1178** 

Aquatic Core Buffer

**CNL 1179** 

Aquatic Core Buffer

**CNL 1181** 

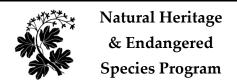
Aquatic Core Buffer

**CNL 1202** 

Aquatic Core Buffer Landscape Block

**CNL 1362** 

Aquatic Core Buffer Coastal Adaptation Area Landscape Block Tern Foraging Area



## Critical Natural Landscape Summaries

#### **CNL 1140**

A <1-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of *BioMap2* examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1142**

A 2-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of *BioMap2* examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1147**

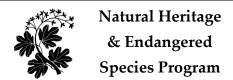
A 56-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of *BioMap2* examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1149**

A 6-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of *BioMap2* examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581

high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1156**

A <1-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of BioMap2 examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1161**

A 105-acre Critical Natural Landscape featuring Wetland Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

#### **CNL 1162**

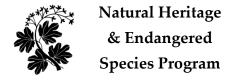
A 42-acre Critical Natural Landscape featuring Coastal Adaptation Area.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of BioMap2 examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

#### **CNL 1178**

A <1-acre Critical Natural Landscape featuring Aquatic Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581

#### **CNL 1179**

A <1-acre Critical Natural Landscape featuring Aquatic Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

#### **CNL 1181**

A 2-acre Critical Natural Landscape featuring Aquatic Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

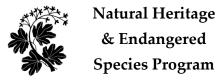
#### **CNL 1202**

A 1,127-acre Critical Natural Landscape featuring Aquatic Core Buffer and Landscape Block.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

Landscape Blocks, the primary component of Critical Natural Landscapes, are large areas of intact predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes. Pastures and power-line rights-of-way, which are less intensively altered than most developed areas, were also included since they provide habitat and connectivity for many species. Collectively, these natural cover types total 3.6 million acres across the state. An Ecological Integrity assessment was used to identify the most intact and least fragmented areas. These large Landscape Blocks are most likely to maintain dynamic ecological processes such as buffering, connectivity, natural disturbance, and hydrological regimes, all of which help to support wide-ranging wildlife species and many other elements of biodiversity.

In order to identify critical Landscape Blocks in each ecoregion, different Ecological Integrity thresholds were used to select the largest intact landscape patches in each ecoregion while avoiding altered habitat as much as possible. This ecoregional representation accomplishes a key goal of *BioMap2* to protect the ecological stages that support a broad suite of biodiversity in the context of climate change. Blocks were defined by major roads, and minimum size thresholds differed among ecoregions to ensure that *BioMap2* includes the best of the best in each ecoregion.



Massachusetts Division of Fisheries and Wildlife 1 Rabbit Hill Road, Westborough, MA 01581

#### **CNL 1362**

A 50,627-acre Critical Natural Landscape featuring Aquatic Core Buffer, Landscape Block, Coastal Adaptation Area, and Tern Foraging Area.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

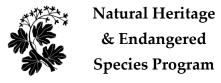
Landscape Blocks, the primary component of Critical Natural Landscapes, are large areas of intact predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes. Pastures and power-line rights-of-way, which are less intensively altered than most developed areas, were also included since they provide habitat and connectivity for many species. Collectively, these natural cover types total 3.6 million acres across the state. An Ecological Integrity assessment was used to identify the most intact and least fragmented areas. These large Landscape Blocks are most likely to maintain dynamic ecological processes such as buffering, connectivity, natural disturbance, and hydrological regimes, all of which help to support wide-ranging wildlife species and many other elements of biodiversity.

In order to identify critical Landscape Blocks in each ecoregion, different Ecological Integrity thresholds were used to select the largest intact landscape patches in each ecoregion while avoiding altered habitat as much as possible. This ecoregional representation accomplishes a key goal of *BioMap2* to protect the ecological stages that support a broad suite of biodiversity in the context of climate change. Blocks were defined by major roads, and minimum size thresholds differed among ecoregions to ensure that *BioMap2* includes the best of the best in each ecoregion.

This 8,989-acre Landscape Block is the fourth largest of 62 Blocks in the ecoregion. Unlike Landscape Blocks in much of the state that are dominated by upland forests, this coastal Landscape Block is dominated by unique and important salt marsh, barrier beach, and estuary habitats.

The coastal habitats of Massachusetts are particularly vulnerable to potential sea-level rise in the next century, which many estimates suggest is likely to exceed one meter. Therefore, in addition to prioritizing current coastal habitats, the creators of *BioMap2* examined the landward side of salt marshes to determine where these habitats might move to as sea levels rise. Undeveloped lands adjacent to and up to one and a half meters above existing salt marshes were identified, and included as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

Terns range widely from their breeding colonies to forage. While the breeding and staging areas for Roseate, Arctic, Common, and Least Terns were included in the Species of Conservation Concern Core Habitat for *BioMap2*, tern foraging areas were included in *BioMap2* as part of Critical Natural Landscape. The extent of foraging habitat for Arctic, Common, and Roseate Terns depends on the size of the breeding colony. For Least Tern, all shallow marine and estuarine waters within 2 miles of recent colony sites and up to 1 mile offshore were mapped as foraging habitat.



**Massachusetts Division of Fisheries and Wildlife** 1 Rabbit Hill Road, Westborough, MA 01581

# Help Save Endangered Wildlife!

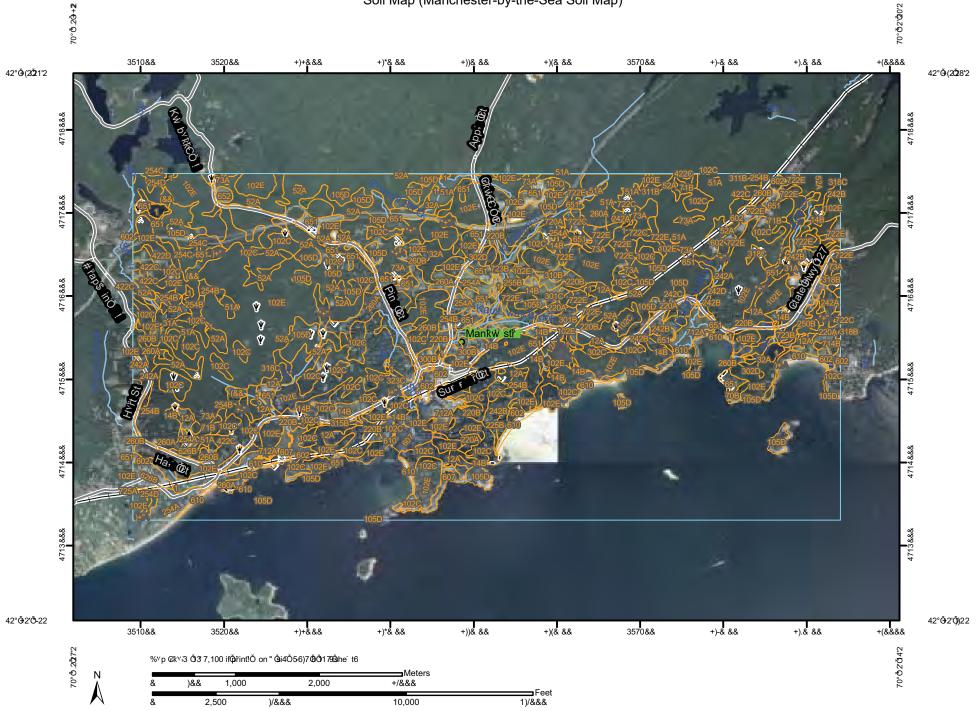
Please contribute on your Massachusetts income tax form or directly to the



# Natural Heritage & Endangered Species Fund

To learn more about the Natural Heritage & Endangered Species Program and the Commonwealth's rare species, visit our web site at <a href="https://www.mass.gov/nhesp">www.mass.gov/nhesp</a>.

# Appendix H: USGS Soils Map and Report



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Units

#### **Special Point Features**

( ) Blowout

■ Borrow Pit

Clay Spot

Closed Depression

X Gravel Pit

Gravelly Spot

A Landfill

∧ Lava Flow

علن Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

"." Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Spoil Area

↑ Stony Spot

#### --

Very Stony Spot



Wet Spot

# ▲ Other Special Line Features

20

Gully

Short Steep Slope

Other

#### **Political Features**

0

Cities

#### **Water Features**

~

Streams and Canals

#### Transportation

+++

Rails

Interstate Highways

~

US Routes



Major Roads



Local Roads

#### MAP INFORMATION

Map Scale: 1:47,100 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your "?>Owere mapped at 1:15,840.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 19N NAD83

This product is generated from the @G,"KH KGŎcertified data as of the version date(s) listed below.

Soil Survey Area: Essex County, Massachusetts, Southern Part Survey Area Data: Version 9, Feb 26, 2010

Date(s) aerial images were photographed: 7/31/2003; 8/14/2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend (Manchester-by-the-Sea Soil Map)

Essex County, Massachusetts, Southern Part (MA606)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
1	Water	*.6*	&6(N		
12A	Maybid silt loam, 0 to 3 percent slopes	154.6	1.8%		
14B	Scitico silt loam, 0 to 5 percent slopes	184.8	2.1%		
31A	Walpole fine sandy →€ ∀r/Č& Čo + Čpercent slopes	**6&	&6)N		
32A	Wareham loamy sand, 0 to 3 percent slopes	*(6-	&6)N		
+-"	Pipestone loamy fine sand, 0 to 3 percent slopes	(6+	0.1%		
*+"	Scarboro mucky loamy fine sand, & *\vec{\vec{\omega}} 1 percent slopes	83.7	1.0%		
51A	Swansea muck, 0 to 1 percent slopes	82.4	&6.N		
52A	Freetown muck, 0 to 1 percent slopes	342.0	+6.N		
)+"	Freetown muck, ponded, 0 to 1 percent slopes	12.4	0.1%		
70B	Ridgebury fine sandy loam, 0 to 6 percent slopes	+6-	&6&N		
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	25.6	&6+N		
73A	Whitman →C <sup>V</sup> r/Č&Čo +Čoercent slopes, extremely stony	51.7	&6(N		
102C	Chatfield-Hollis-Rock outcrop complex, 3 to 15 percent slopes	640.7	7.3%		
102E	Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes	2,623.4	+&6&N		
105D	Rock outcrop-Hollis complex, 3 to 25 percent slopes	249.8	2.9%		
220A	Boxford silt loam, 0 to 3 percent slopes	40.1	&6)N		
220B	Boxford silt loam, 3 to 8 percent slopes	123.9	1.4%		
225B	Belgrade very fine sandy loam, 0 to 8 percent slopes	7.4	0.1%		
242A	Hinckley gravelly fine sandy loam, 0 to 3 percent slopes	**6-	&6)N		
242B	Hinckley gravelly fine sandy loam, 3 to 8 percent slopes	78.3	&6.N		
242C	Hinckley gravelly fine sandy loam, 8 to 15 percent slopes	9.2	0.1%		
242D	Hinckley gravelly fine sandy loam, 15 to 25 percent slopes	7.6	0.1%		
250B	Pollux fine sandy loam, 0 to 8 percent slopes	24.8	&6+N		
254A	Merrimac fine sandy ,€ 'r/ <b>Č</b> & <b>Ö</b> + <b>Ö</b> ercent slopes	108.0	1.2%		
254B	Merrimac fine sandy →C <sup>∨</sup> r/Ŏ+ðð -ðþercent slopes	76.3	&6.N		

## Custom Soil Resource Report

Essex County, Massachusetts, Southern Part (MA606)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
254C	Merrimac fine sandy loam, 8 to 15 percent slopes	29.4	&6+N		
254D	Merrimac fine sandy loam, 15 to 25 percent slopes	19.6	0.2%		
255A	Windsor loamy sand, 0 to 3 percent slopes	2.6	86&N		
255B	Windsor loamy sand, 3 to 8 percent slopes	7.7	0.1%		
255C	Windsor loamy sand, 8 to 15 percent slopes	2.4	86&N		
260A	Sudbury fine sandy ,€'r/Č& <b>®</b> + <b>♥</b> ercent slopes	218.0	2.5%		
260B	Sudbury fine sandy ,€ ° ŧ / Č+ Čb - Čpercent slopes	83.7	1.0%		
300B	Montauk fine sandy →€ V r/Ŏ+ Ob - Opercent slopes	37.6	&6*N		
+&&K	Montauk fine sandy loam, 8 to 15 percent slopes	2.8	4888		
301B	Montauk fine sandy -€ 'r/Ŏ+Ď -Čpercent slopes, very stony	5.7	0.1%		
301C	Montauk fine sandy loam, 8 to 15 percent slopes, very stony	(6)	0.1%		
302C	Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony	-6.	0.1%		
302D	Montauk fine sandy loam, 15 to 25 percent slopes, extremely stony	10.0	0.1%		
310B	Woodbridge fine sandy loam, 3 to 8 percent slopes	8.1	0.1%		
311B	Woodbridge fine sandy loam, 3 to 8 percent slopes, very stony	6.7	0.1%		
315B	Scituate fine sandy →C∀r/Ŏ+Ŏo -Ŏpercent slopes	(6(	0.1%		
316B	Scituate fine sandy →C∀r/Č+Čb -Čpercent slopes, very stony	1.5	&6&N		
316C	Scituate fine sandy loam, 8 to 15 percent slopes, very stony	12.3	0.1%		
318B	Scituate fine sandy ·Є'r/Ŏ··Čo -Čpercent slopes, extremely bouldery	20.9	0.2%		
318C	Scituate fine sandy loam, 8 to 15 percent slopes, extremely bouldery	-6*	0.1%		
323C	Poquonock loamy sand, -Õto 15 percent slopes, very stony	18.2	0.2%		
420C	Canton fine sandy ₁€√r/Č/Člo 20 percent slopes	2.9	86&N		
422C	Canton fine sandy ⋅C <sup>v</sup> f/Ŏďo 15 percent slopes, extremely stony	+-6)	&6*N		
422D	Canton fine sandy loam, 15 to 25 percent slopes, extremely stony	11.1	0.1%		
(&&	Pits, gravel	41.2	&6)N		
602	Urban land	82.3	&6.N		
607	Water, saline	6+	1.0%		
610	Beaches	)&6.	&6(N		
626B	Merrimac-Urban land complex, gently sloping	((6.	&6-N		

Essex County, Massachusetts, Southern Part (MA606)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
651	Udorthents, smoothed	205.6	2.4%	
652	Udorthents, refuse substratum	8.1	0.1%	
712A	Ipswich and Westbrook mucky peats, 0 to 1 percent slopes	6+	1.0%	
714B	Melrose fine sandy →€∀r/Ŏ+Ŏo -Ŏpercent slopes	11.3	0.1%	
720A	Whately Variant mucky fine sandy loam, 0 to 1 percent slopes	20.0	0.2%	
722B	Annisquam fine sandy loam, 3 to 8 percent slopes, extremely bouldery	*6(	0.1%	
722C	Annisquam fine sandy loam, 8 to 15 percent slopes, extremely bouldery	).6.	0.7%	
722E	Annisquam fine sandy loam, 15 to 35 percent slopes, extremely bouldery	178.7	2.0%	
723B	Elmridge fine sandy ,C <sup>v</sup> f/Ŏ+Ōo -Čpercent slopes	17.0	0.2%	
725A	Shaker fine sandy loam, 0 to 3 percent slopes	7.7	0.1%	
Subtotals for Soil Survey Area		6,623.5	75.7%	
Totals for Area of Interest		8,745.2	100.0%	

# Map Unit Descriptions (Manchester-by-the-Sea Soil Map)

The map units delineated on the detailed soil maps in Yooil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there 'řĎprecisely defined limits for the properties of the soils. On the landscape, however, the soils 'řĎnatural phenomena, and they  $\dot{w}$ \*Ďthe characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is  $\dot{r}$ \*Ö up of the soils  $\dot{c}$ \*Öiscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These Yroky 1.10 contrasting, Crossimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the

#### Custom Soil Resource Report

contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in Yonap unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms Crandform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. 'Vkw description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, Y,, Ohe soils of YGeries WYSOrYFCTOrizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, !Ero of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

"Čcomplex consists of two or more soils or miscellaneous areas in such an intricate pattern Cronsular such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils Cronsular scellaneous areas Yrosomewhat similar in Y, areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group*  $\check{\mathbf{g}}$   $\mathsf{r}^{\mathsf{v}}$   $\check{\mathbf{O}}$  up of two  $\check{\mathsf{Cr}}\check{\mathbf{G}}$   $\check{\mathsf{r}}\check{\mathsf{O}}$  iscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be  $\mathsf{r}^{\mathsf{v}}$ ! $\check{\mathsf{O}}$  for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

G€rÕ surveys include *miscellaneous areas*6Ďuch areas ẇ<sup>v</sup>\$Õittle €ṙ̀Ďo soil material and support little or no vegetation. Rock outcrop is an example.