

Wompatuck State Park

Circulation Master Plan

Project Introduction and Listening Session

May 16, 2023



Commonwealth of Massachusetts

Governor

Maura Healy

Lieutenant Governor

Kim Driscoll

Energy and Environmental Secretary

Rebecca Tepper

Department of Conservation and Recreation Commissioner

Brian Arrigo



DCR MISSION

To protect, promote and enhance our
common wealth of natural, cultural
and recreational resources
for the well-being of all.

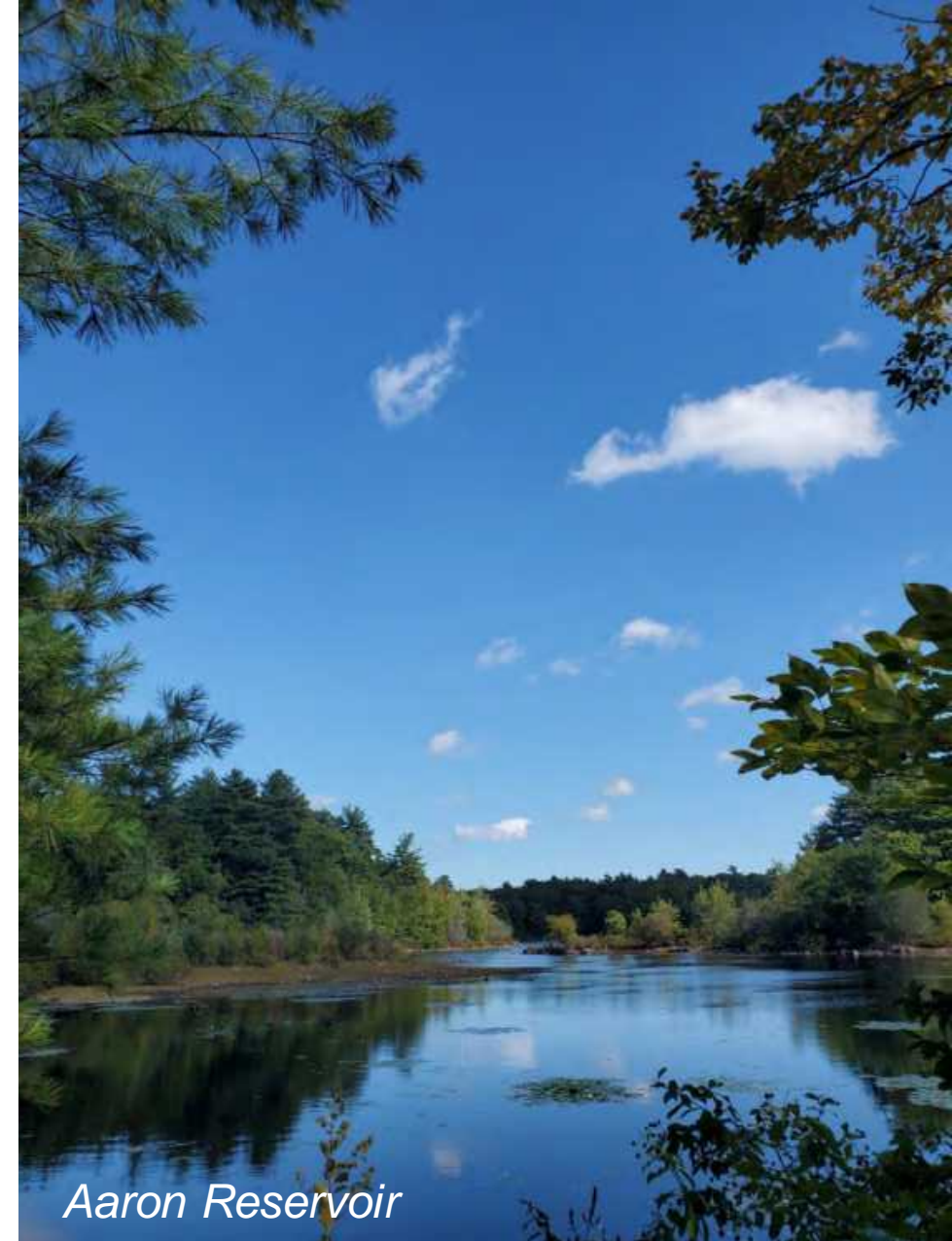
Meeting Logistics

- Please provide feedback after the presentation
 - You will find information on how to give feedback at the end of the presentation
- Chat and Q&A function is open for comments during the presentation
- Cameras + microphones
 - Your camera is off
 - We will enable your microphone only when you are speaking after the presentation

Please note that this public meeting will be recorded and the recording will be posted online shortly after.

Meeting Agenda

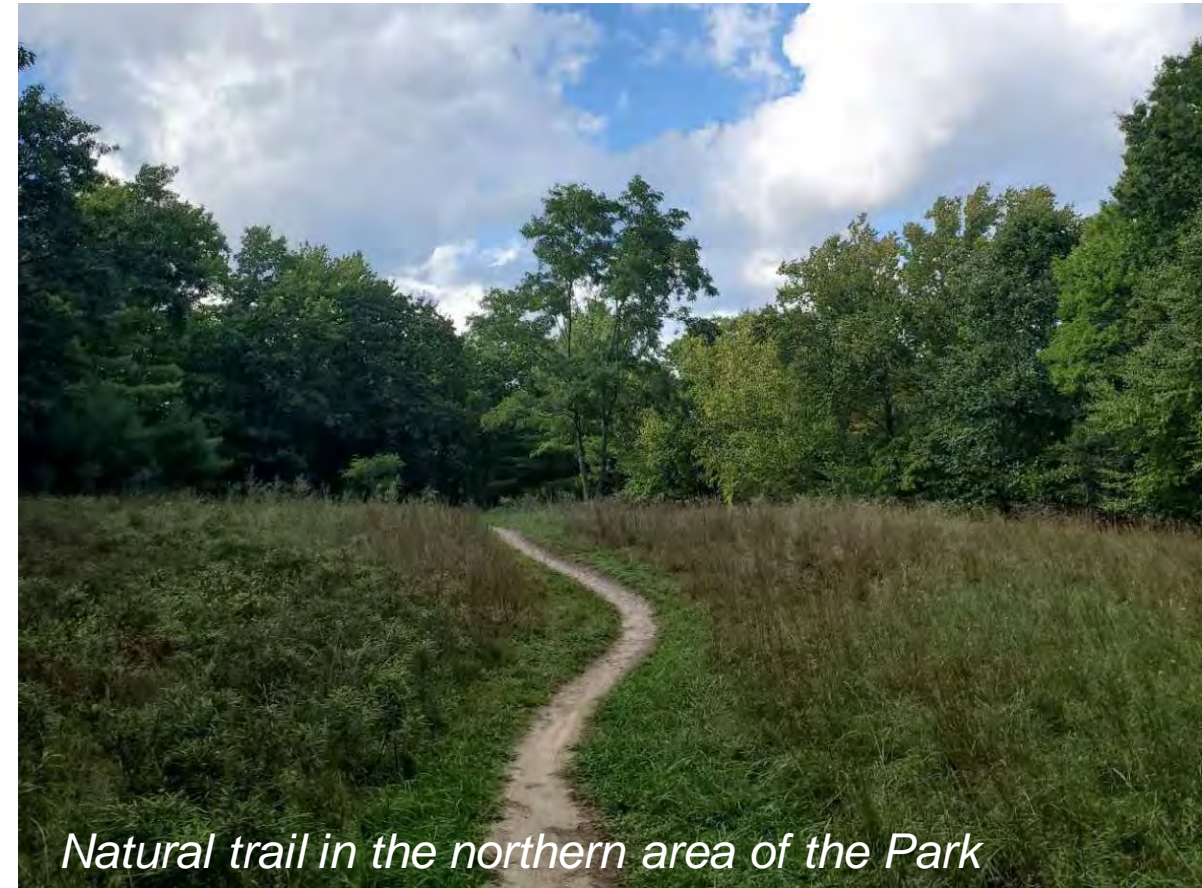
- Introductions
- Project Summary
- Existing Conditions
- Listening Session
- Closing and Next Steps



Aaron Reservoir

Project Team

- DCR: **Cass Chroust - PM**
- Consultant Team:
 - Toole Design
 - Karen Fitzgerald – PIC
 - Kathleen Fasser – PM**
 - John Dempsey – Deputy PM/LA
 - Jacob Stein – Planner
 - LEC - Environmental Assessment
 - PAL - Archeological and Cultural Assessment

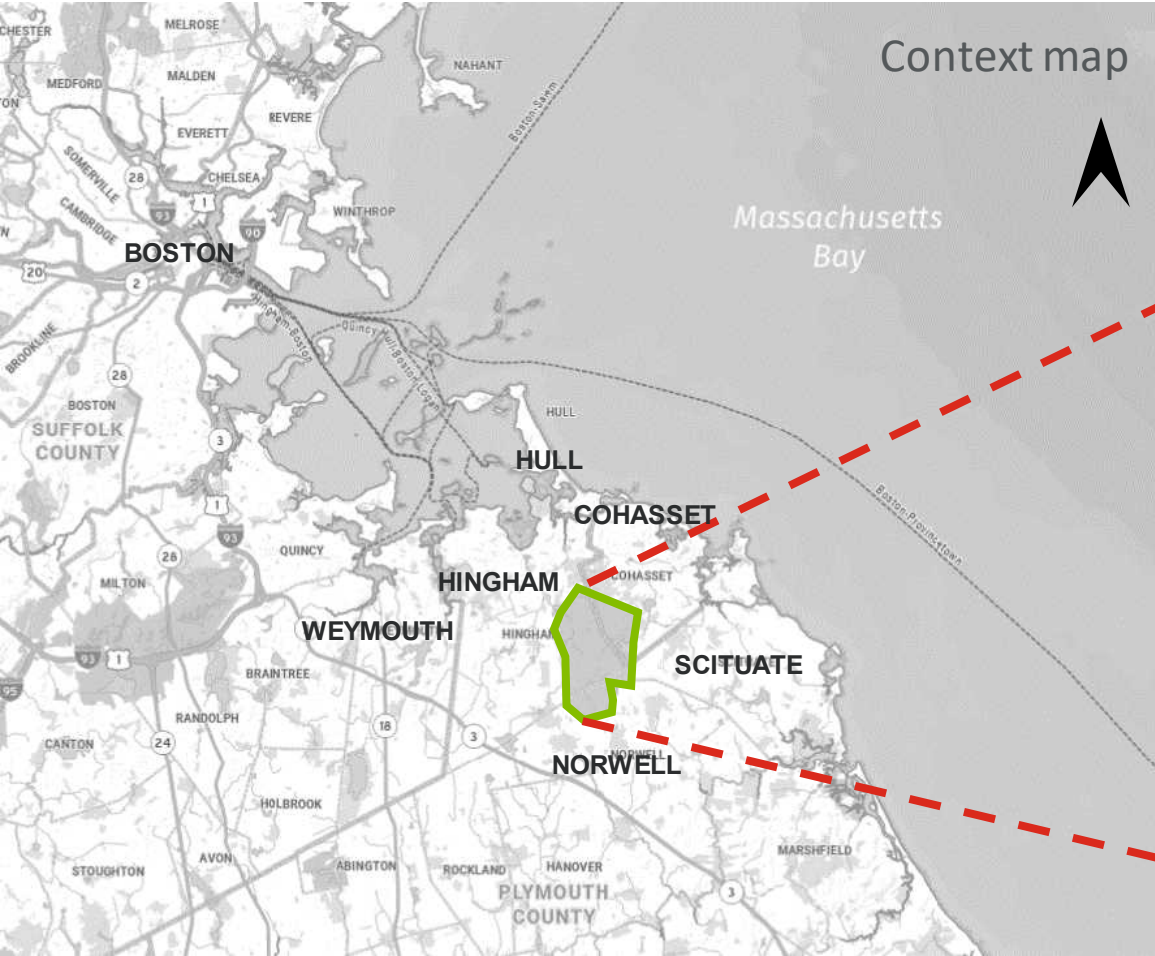


Natural trail in the northern area of the Park




PROJECT SUMMARY

Project Location



Park Map & Info

This map was produced and paid for entirely by the non-profit Friends of Wompatuck. Please join them at friendsowompatuck.org

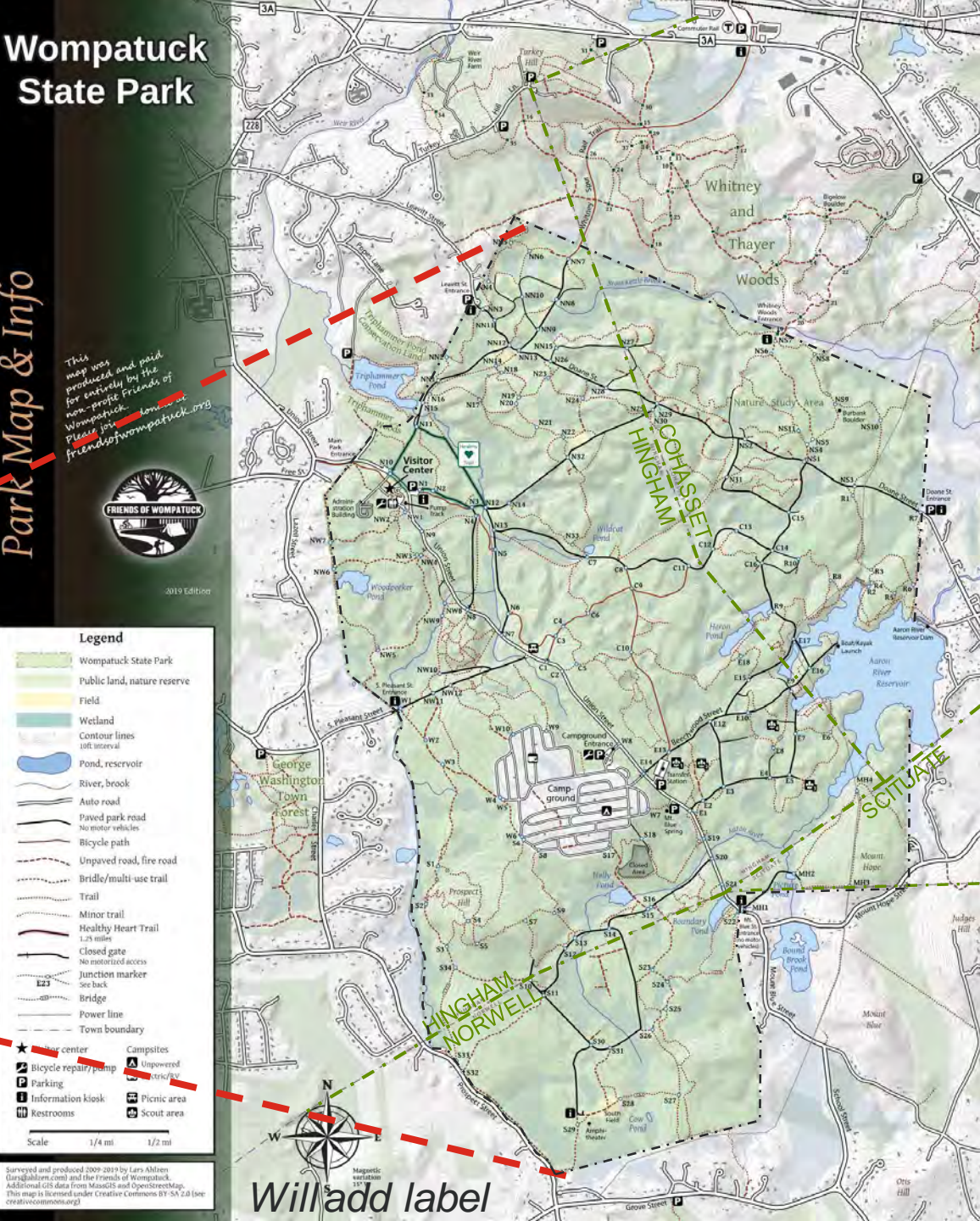


2019 Edition

Legend

- Wompatuck State Park
- Public land, nature reserve
- Field
- Wetland
- Contour lines 10ft interval
- Pond, reservoir
- River, brook
- Auto road
- Paved park road
- No motor vehicles
- Bicycle path
- Unpaved road, fire road
- Bridle/multi-use trail
- Trail
- Minor trail
- Healthy Heart Trail 1.25 miles
- Closed gate
- No restricted access
- Junction marker
- See back
- Bridge
- Power line
- Town boundary
- Star center
- Campsites
- Bicycle repair/pump
- Unpowered electric
- Parking
- Information kiosk
- Picnic area
- Restrooms
- Scout area

Scale 1/4 mi 1/2 mi



Will add label

A Much-loved Park



Project Scope

Circulation Master Plan

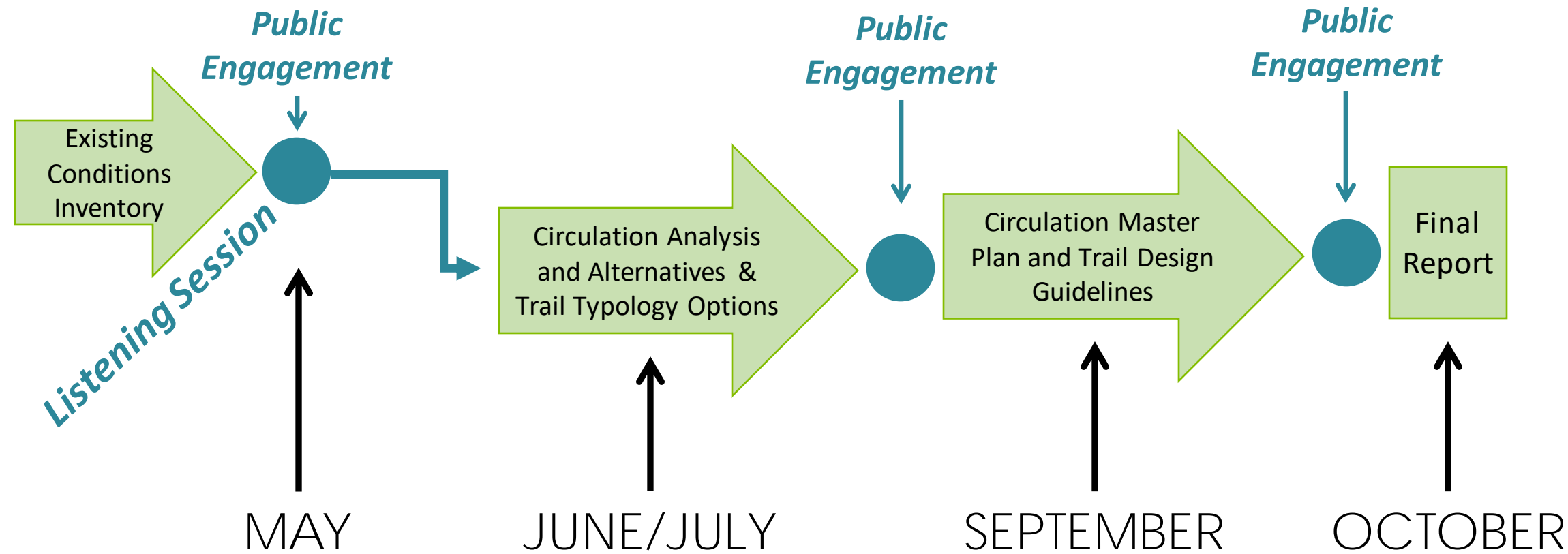
- Identify and evaluate trails, connections and environmentally & culturally sensitive areas
- Develop a hierarchical trail network master plan
- Develop new trail typology
- Recommend wayfinding changes to improve visitor orientation

Develop a comprehensive park guide with long-term and short-term trail circulation recommendations that will balance these recreational opportunities with the natural and cultural environment



Wompatuck Visitor Center

Project Timeline





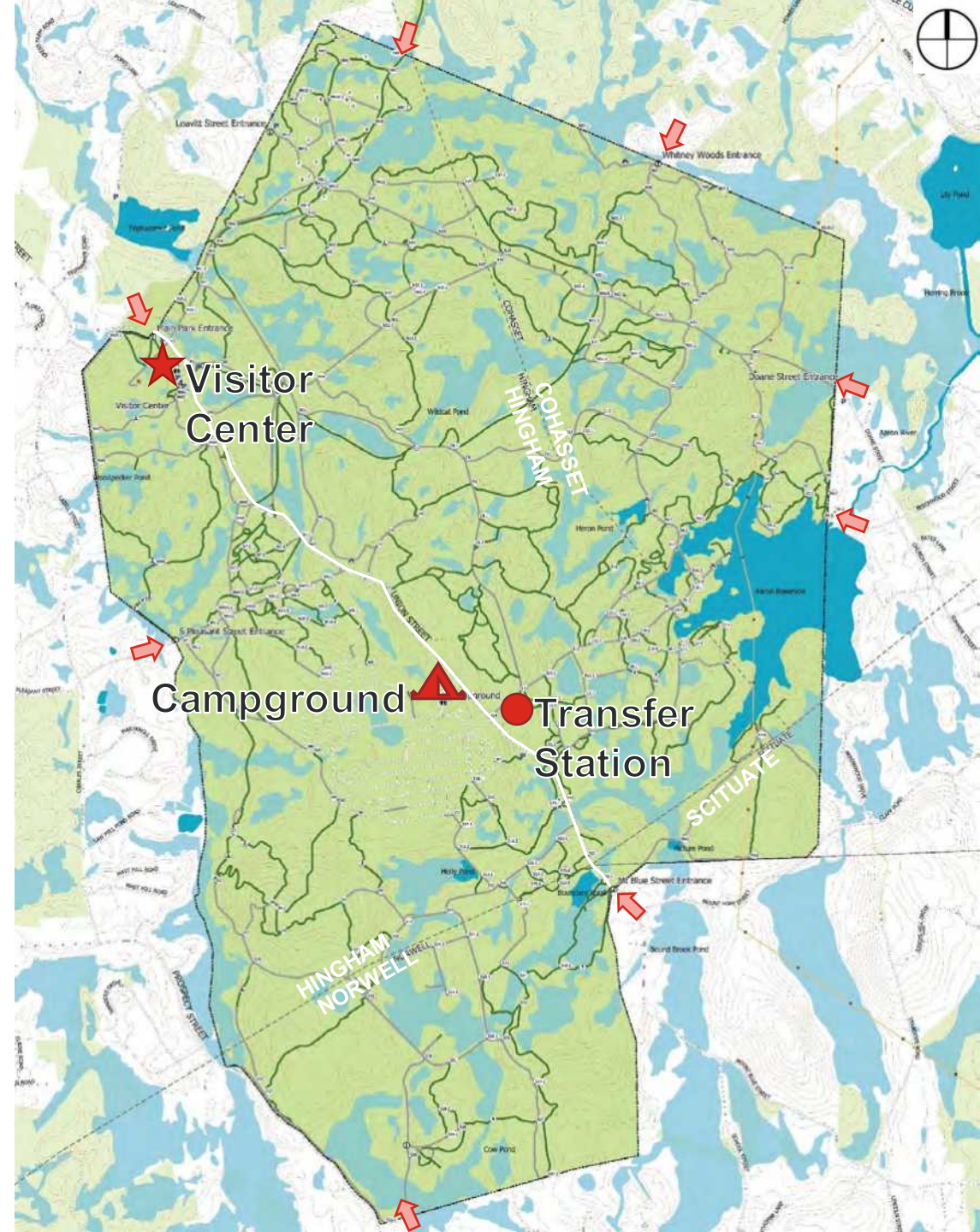
EXISTING CONDITIONS



Existing Conditions

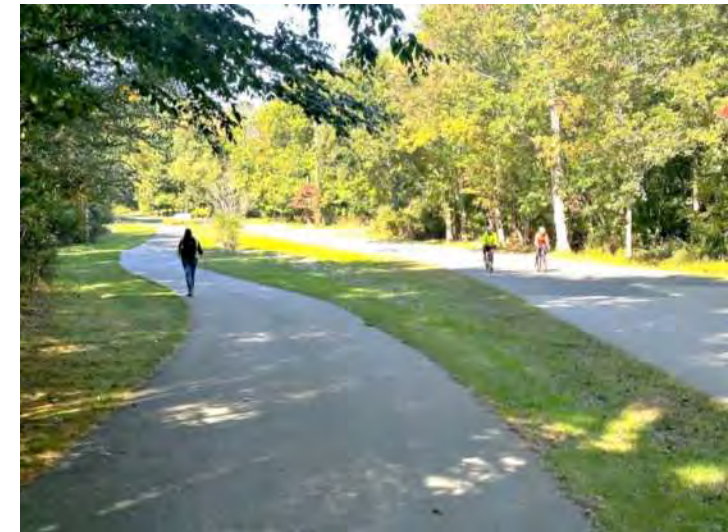
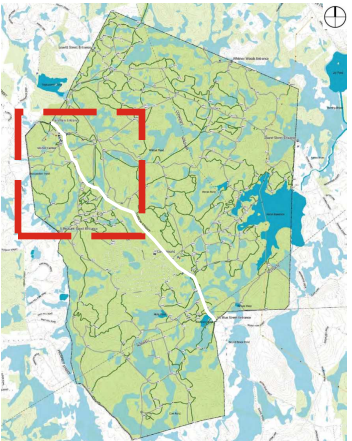
Wompatuck State Park

- 3,526 acres
- >80 miles of trails
- 175 feet of elevation change
- 30% of park is in low-lying areas



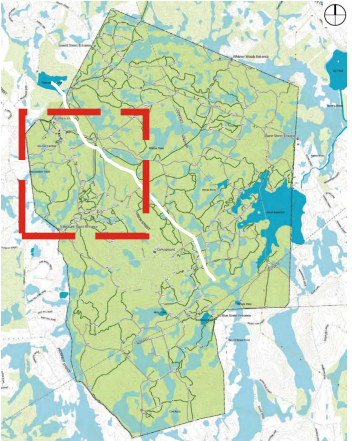
Existing Conditions

Area from Visitor Center to South Pleasant St.



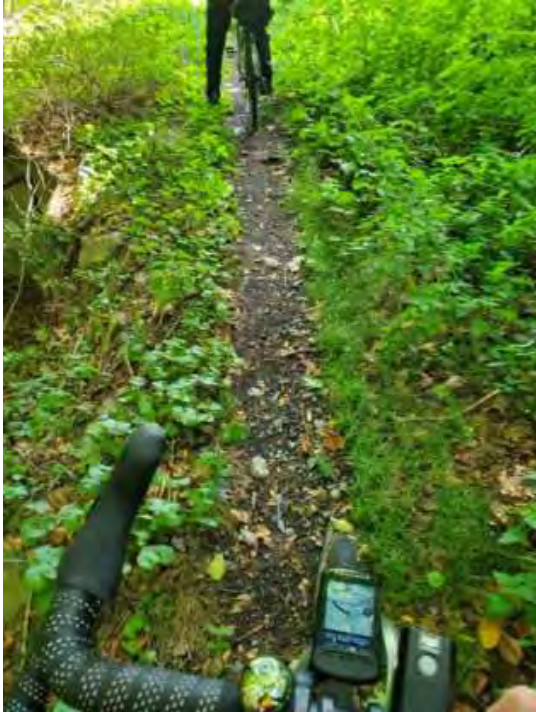
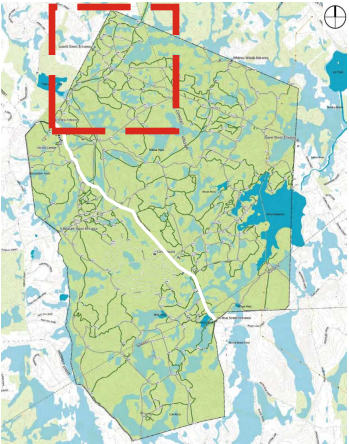
Existing Conditions

Area from Visitor Center to
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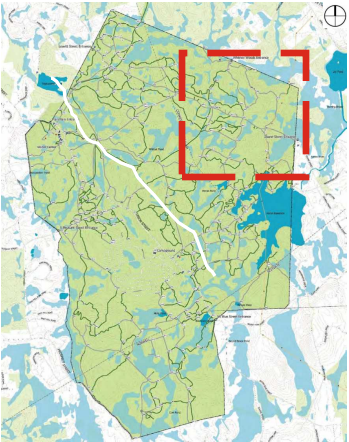
Existing Conditions

Northern Area



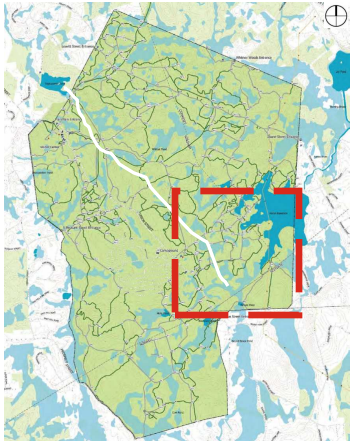
Existing Conditions

Nature Study Area



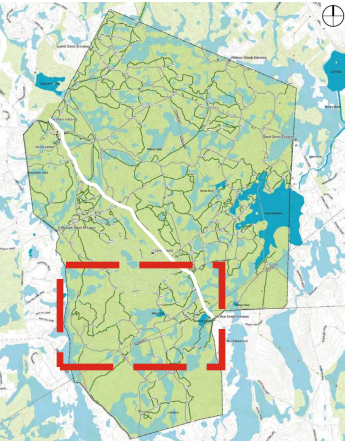
Existing Conditions

Area near Aaron Reservoir



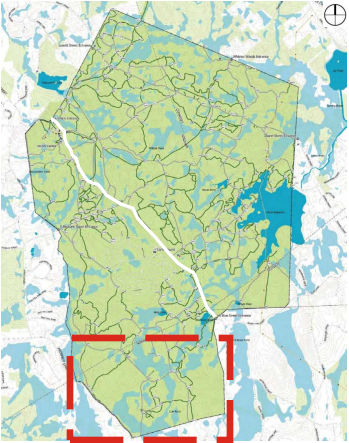
Existing Conditions

Prospect Hill Area



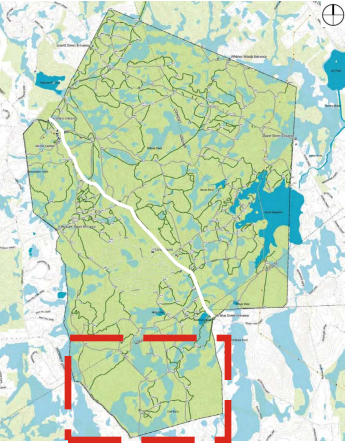
Existing Conditions

Southern Area



Existing Conditions

Southern Area



Inventory Process

- Gather and compile GIS data
 - MassGIS
 - MassMapper
 - DCR
 - Additional data of trails consistent with FOW



- DCR Trail Guidelines and Best Practice Manual
- Fieldwork (Toole Design, LEC, PAL)
- Mapped fieldwork data



Base Map

LEGEND

- Wompatuck State Park
- Lakes and Streams
- Marshes and Ponds
- Park Boundary
- MBTA Stop
- 10 Foot Contours
- Buildings
- Electrical Transmission Line

- Trail
- Forest Road/Trail
- Public Road
- Picnic Areas
- Restrooms
- Trash Cans
- Information Kiosk
- Parking
- Bridges
- Junction Markers



Fieldwork Framework

ASSESSMENT FACTORS = **METRICS** → LEGENDS

SOURCES:

- DCR Trail Guidelines and Best Practice Manual: Mapping the DCR Way
- Minnesota Dept. of Natural Resources – Trail and Waterways: Trail Planning, Design and Development Guidelines
- Federal Trail Data Standards
- US Forest Service: Trail Accessibility Guidelines
- Industry best practices and Toole Design experience on similar projects



Fieldwork

- Documented *OBSERVATIONS* and photographed conditions
- Information Noted:
 - Location
 - Surface Material
 - Trail Width
 - Surface Condition
 - Potential safety concerns (obstacles, slopes, and signs of flooding/ponding and erosion)
 - Geospatial attributes (water crossings, observed proximity to environmental and cultural resources)
 - Trail connectivity
 - Signage, fencing and site amenities



Wompatuck- C irculation Master Plan

NOTES:

FIELD WORK

Date of Site Visit:

Names of Team:

Walking / Biking / Driving:

Weather Conditions:

TRAIL SEGMENT														
Trail	Surface			Permitted Use (signage)			Surface Condition			Fence				
Seg. Id.	Width	Natura	Applied	Paved	Hiking	Hiking / Biking / Mtn Biking	All Users / Motor Vehicles	Good	Fair	Poor	Other Edge:			
			Mulch	Gravel										

TRAIL SEGMENT

Safety Concerns

Length of Issue		Encroachment								Slope		Eroding	Blind Spot	Flooding		
Spot	<50'	50' +		Ht.		Object				Location		On trail / cross-slope	Off Trail - drop-off	Saturated Surface	Standing Water	
		<3'	3' +	Vertical	Varies	Tree	Railing	Wall	Post /Bolla	Sign	Curb	On Trail	Within 1'	Within 1'-2'		
Other:																

TRAIL SEGMENT

Geospatial

Water Crossing		all at Environmental Resour				Trail at Cultural Resource											
Water Type	Surface of Crossing	Along / Near Resource	Through Resource	Impacted Resource	Along / Near Resource	Through Resource	Impacted Resource										
Stream	Open water	Stone /Boards	Built Bridge	Resource		Resource											

TRAIL INTERSECTIONS

Inter id.	No. of trails	Type	Interconnectivity								Signage							
			Trail Connectivity				Trail Density at Trailheads				Inter #	Blazing	DCR		Rules	User		
Trail/ Trail	Trail/ Drive	To Other Open Space	To Parking	To Trailhead	Dead Ends	Bike / Ped	Bike / Ped / Maint	All + Public	All + Parking	All + Pkg.			Mile	I.D.			Directional	Interpretive
		Other:																
			Wayfinding Sign	Yes	No													

Notes:

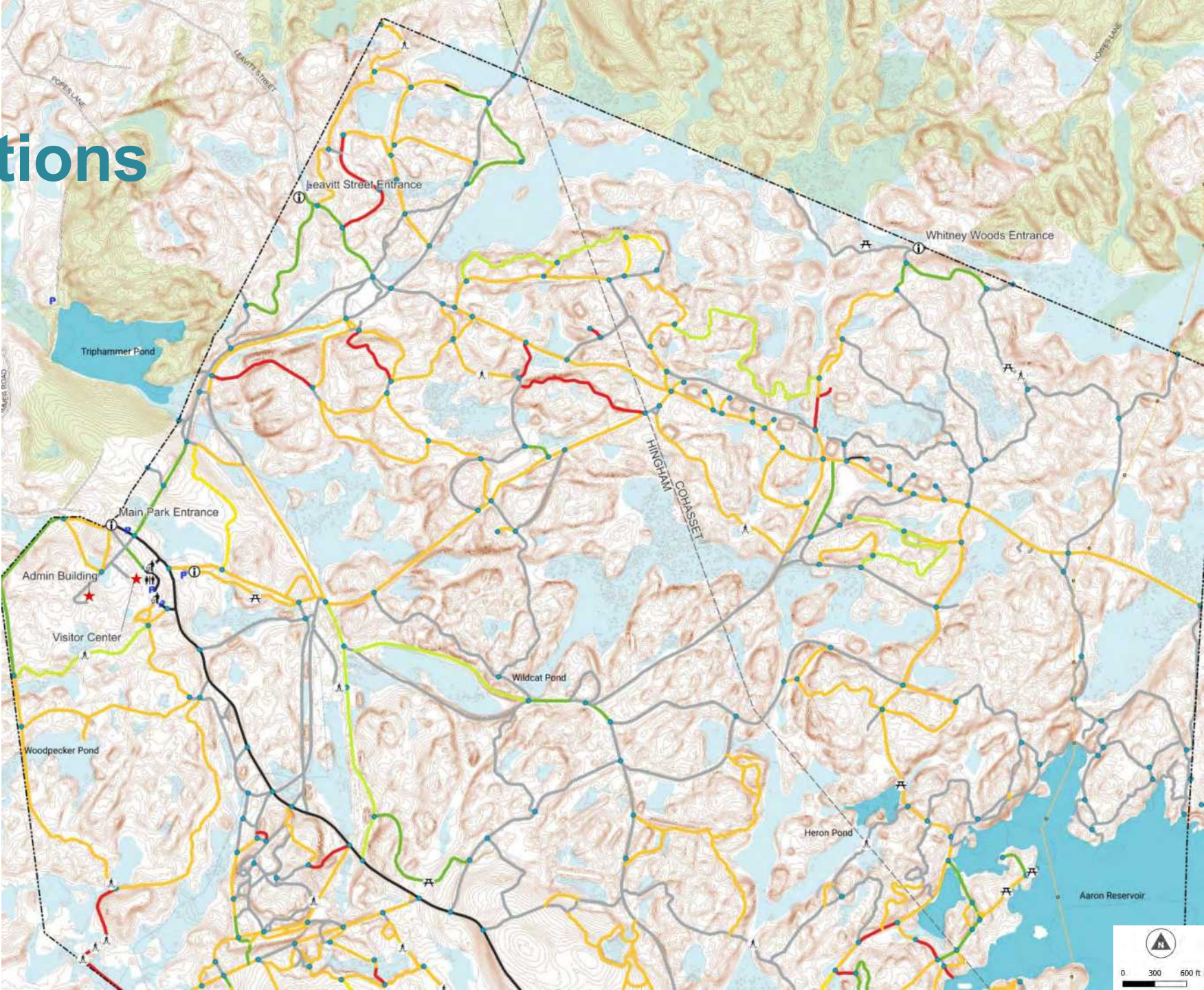
Existing Conditions

Surface Material

Legend

- Natural
- Gravel
- Paved
- Not Rated *

* Fieldwork for these trails has not yet been completed due to the need to prioritize trail based on the team (walking and biking), remoteness and weather.



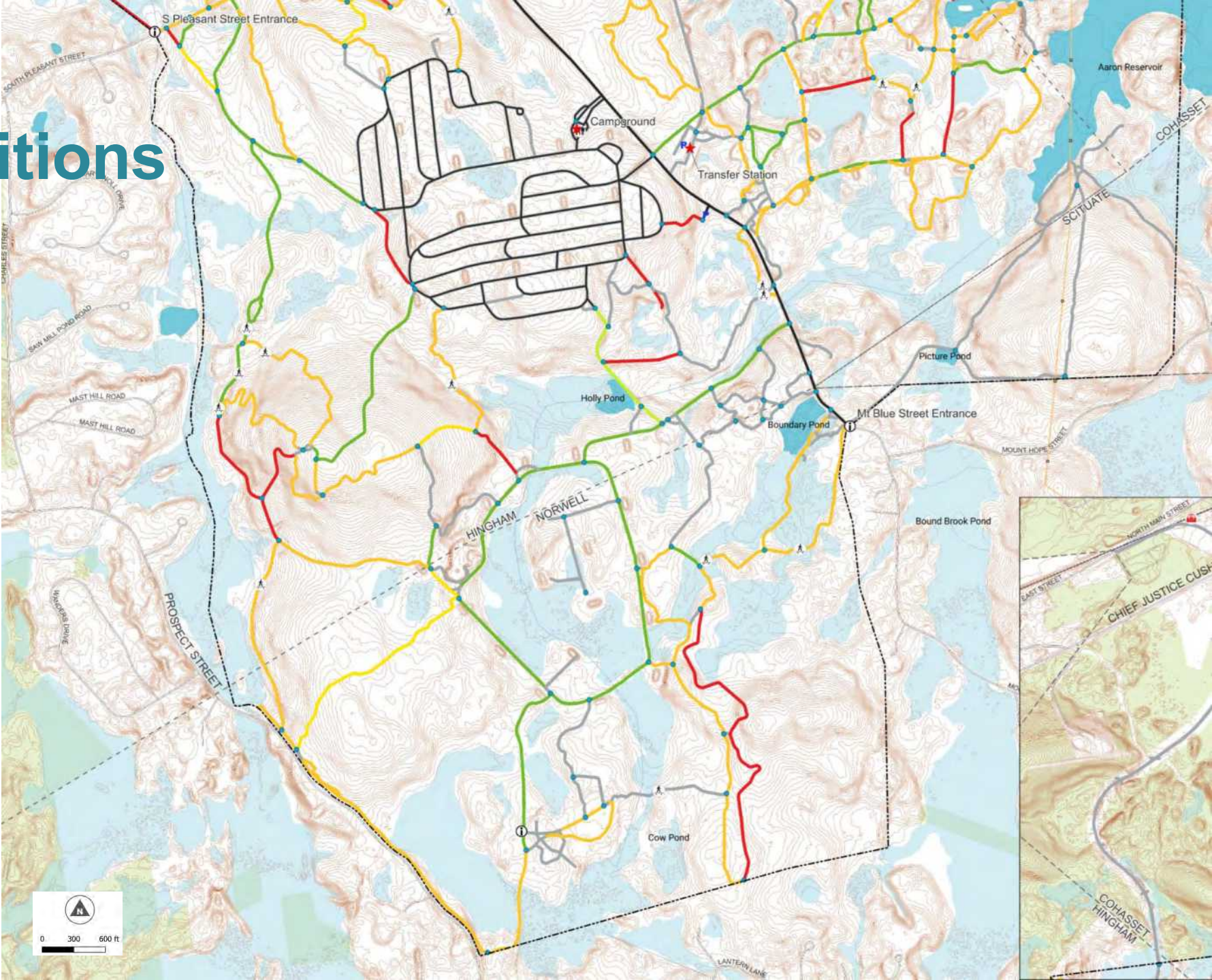
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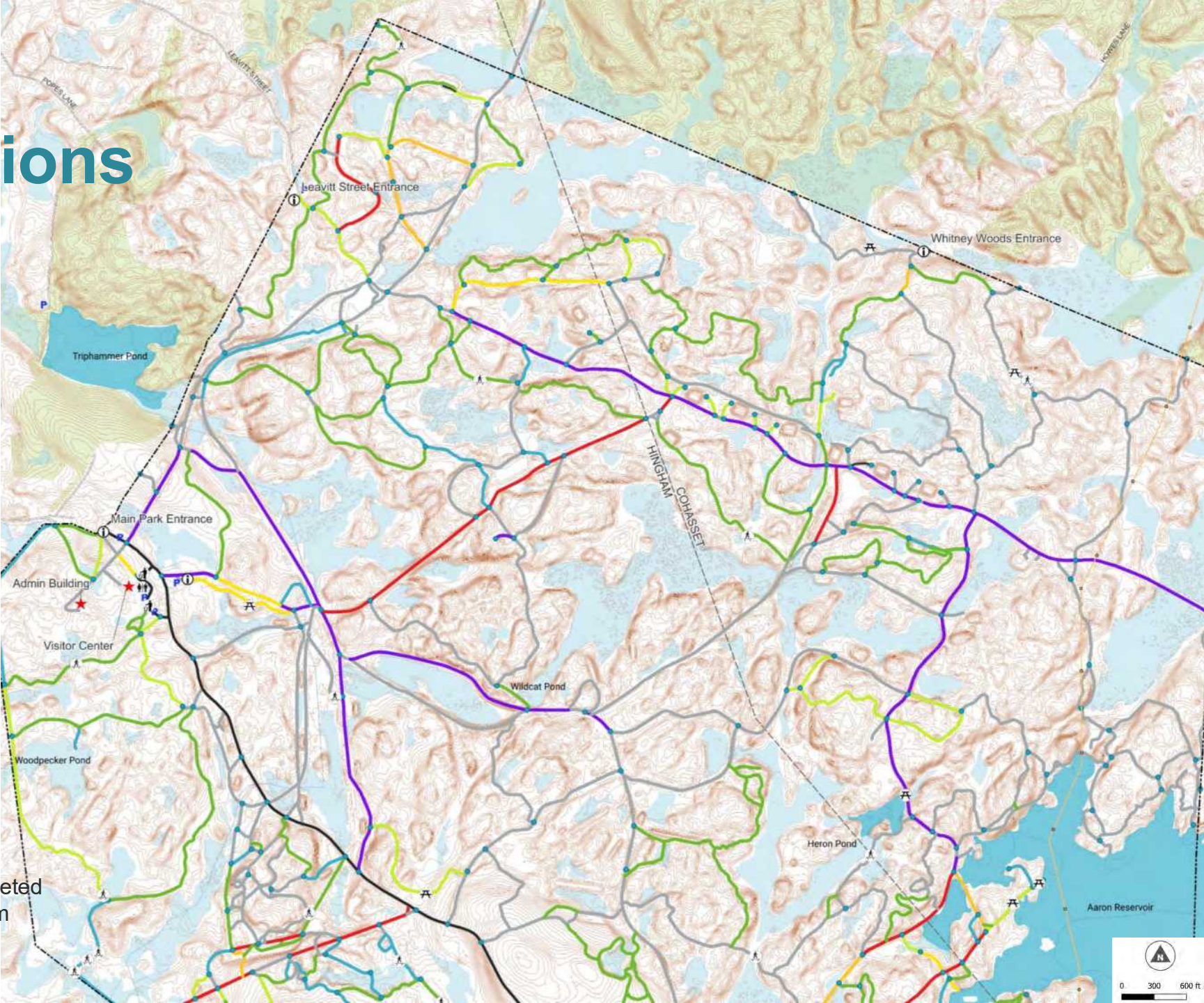
Existing Conditions

Trail Width

Legend

- 1'-3'
- 3'-5'
- 5'-8'
- 8'-12'
- 12'-15'
- 15'-20'
- 20' +
- Not Rated *

* Fieldwork for these trails has not yet been completed due to the need to prioritize trail based on the team (walking and biking), remoteness and weather.



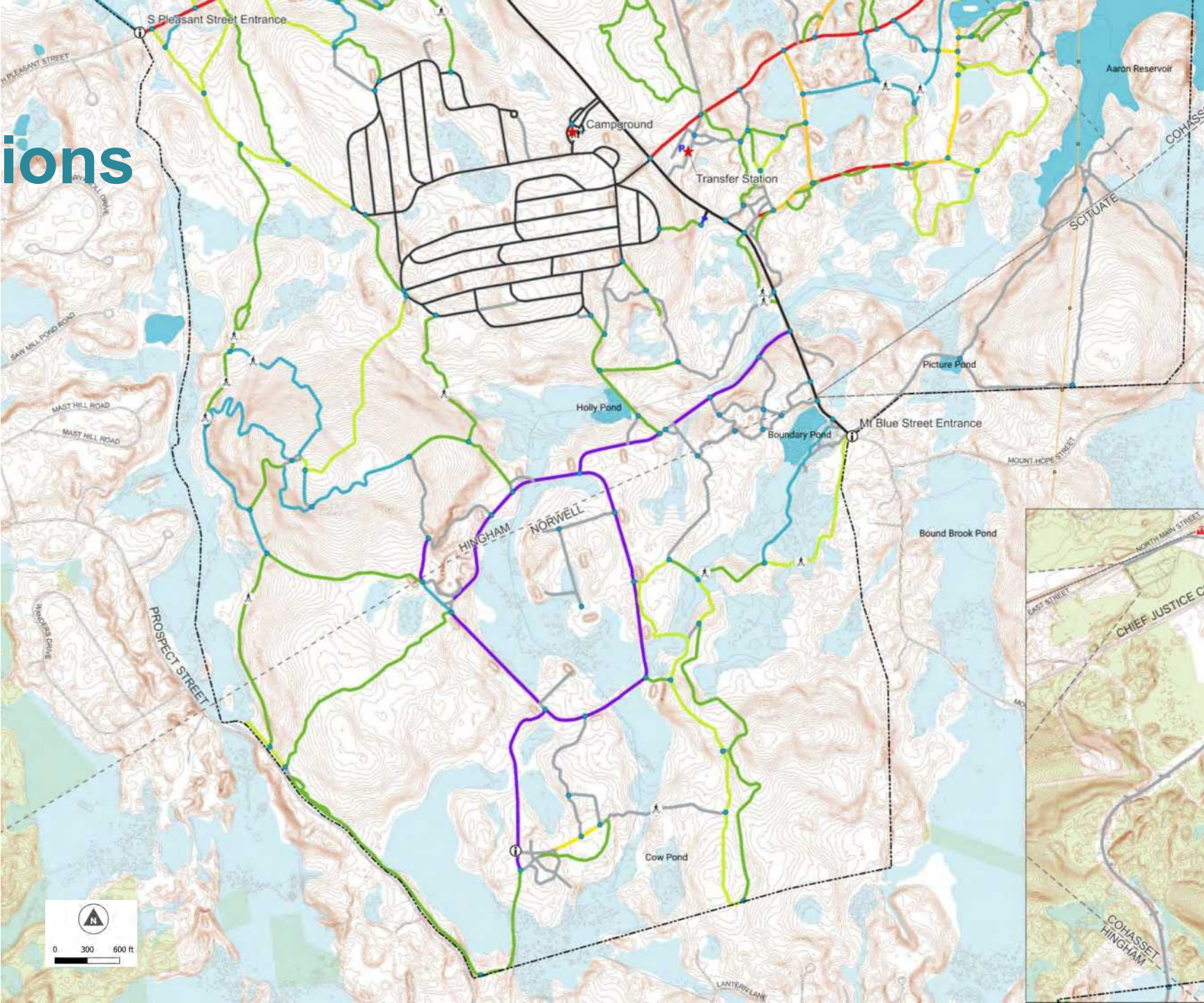
Existing Conditions

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Existing Conditions

Trail Condition

Legend



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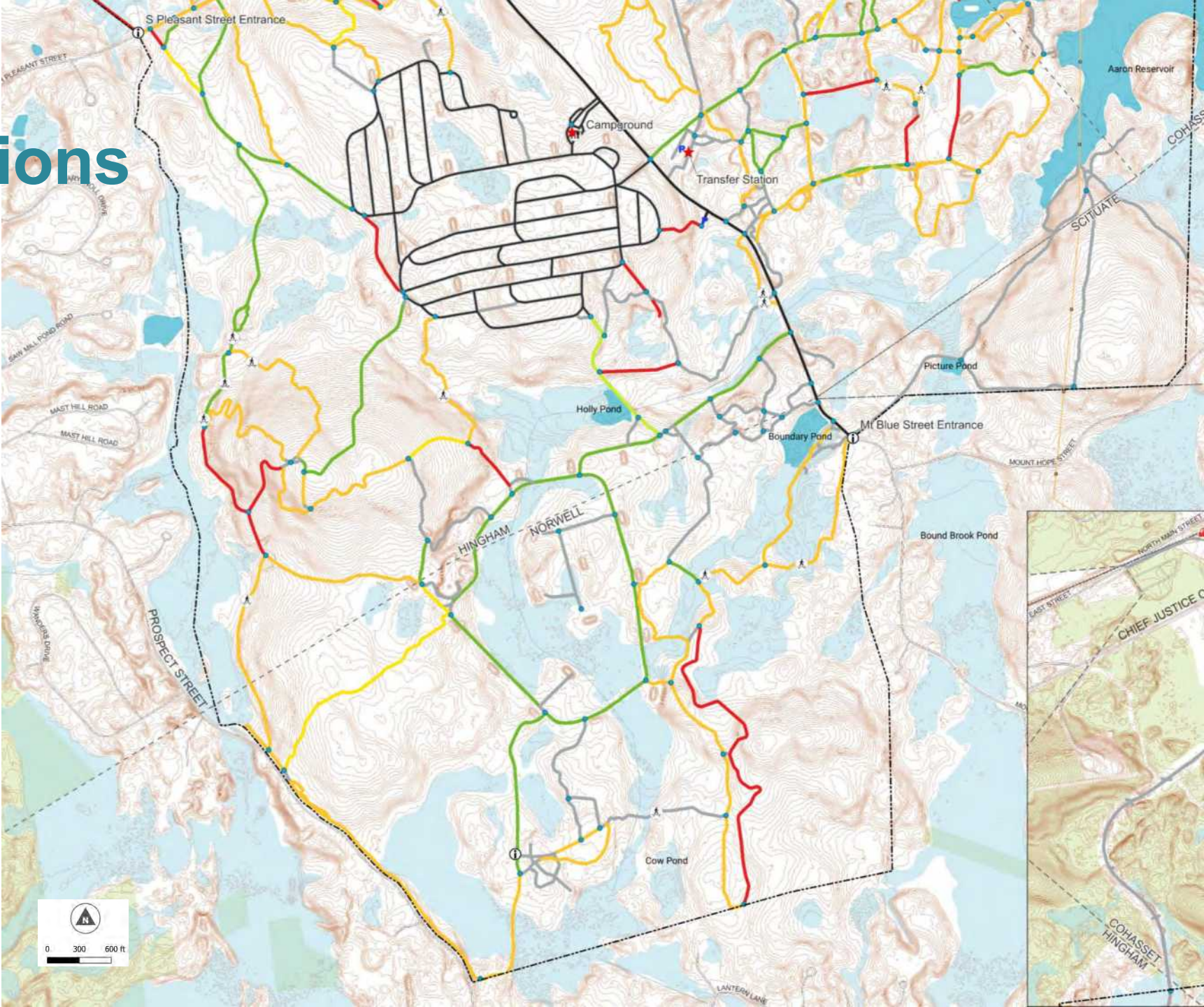
Existing Conditions

Trail Condition

Legend

- Good
- Good to Fair
- Fair
- Fair to Poor
- Poor
- Not Rated *

* Fieldwork for these trails has not yet been completed due to the need to prioritize trail based on the team (walking and biking), remoteness and weather.



Existing Conditions

Trails by Slope Class

Legend

- <5%
- 5 - 9.9%
- 10 - 14.9%
- 15 - 19.9%
- 20%+

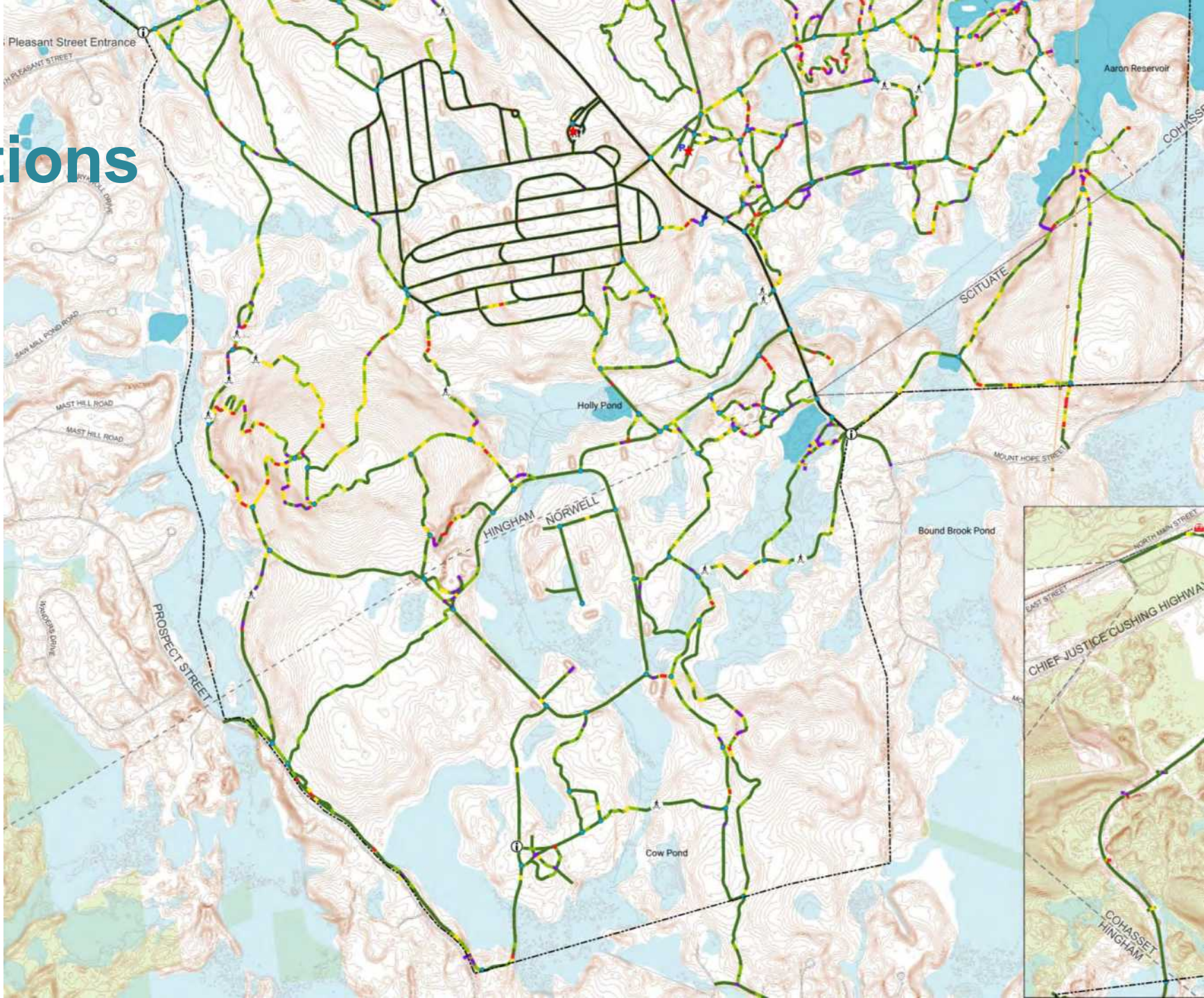


Existing Conditions

Trails by Slope Class

Legend

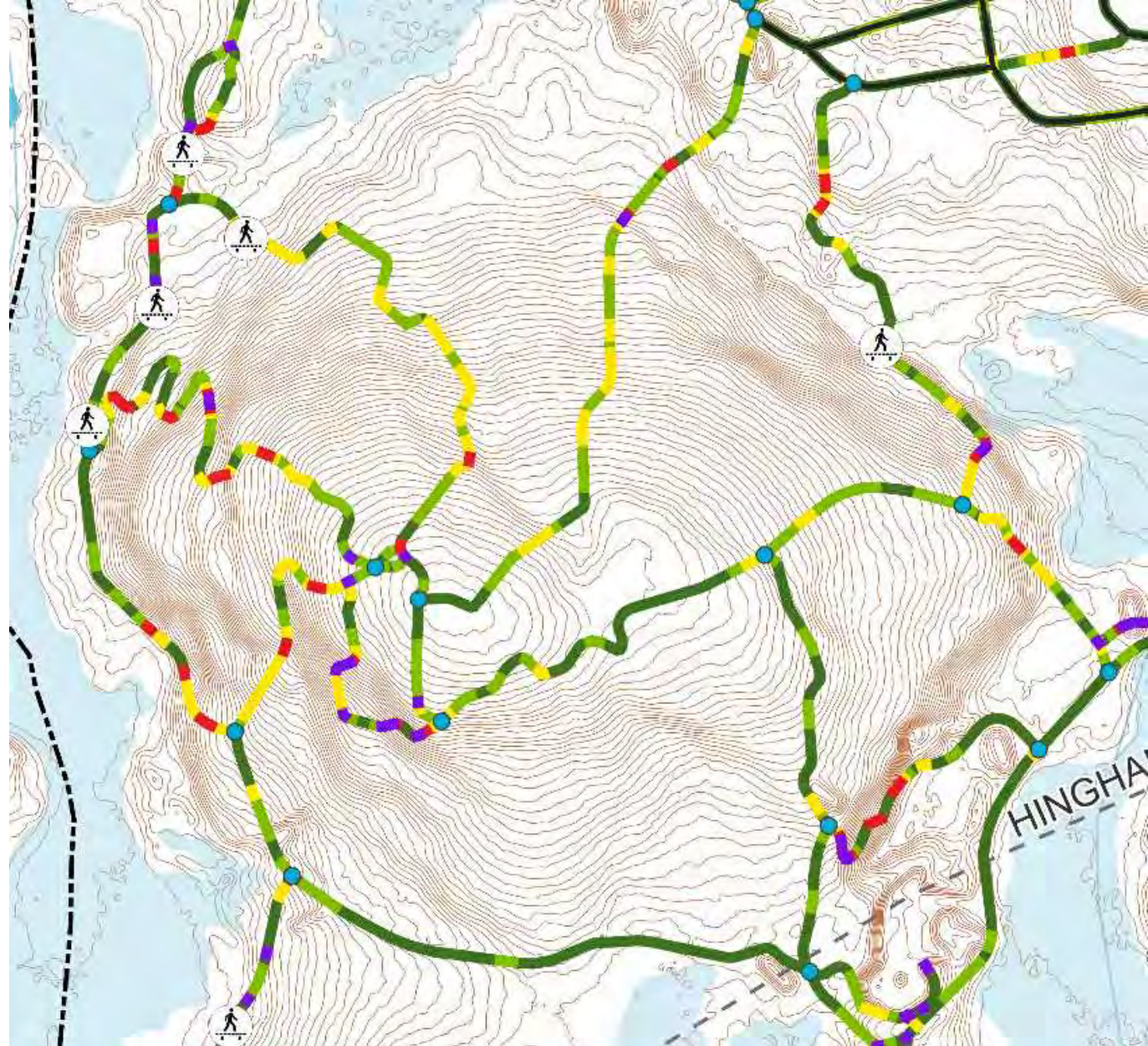
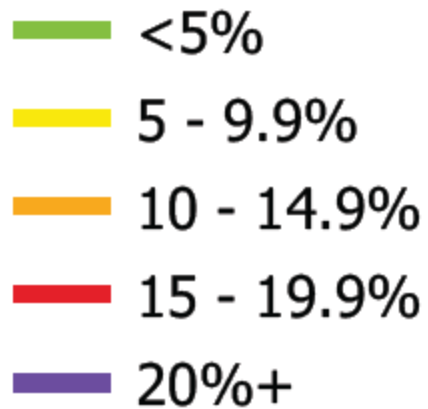
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- 10 - 14.9%
- 15 - 19.9%
- 20%+



Existing Conditions

Trails by Slope Class

Legend



Environmental Inventory and Assessment

- Environmentally sensitive areas
- Trail interface with environmental resources
- Permitting implications

Goal: To inform circulation recommendations, in particular trails that should be considered for restoration, realignment, or decommissioning



Potential Vernal pool along trail

Environmental Inventory

MassDEP Wetlands

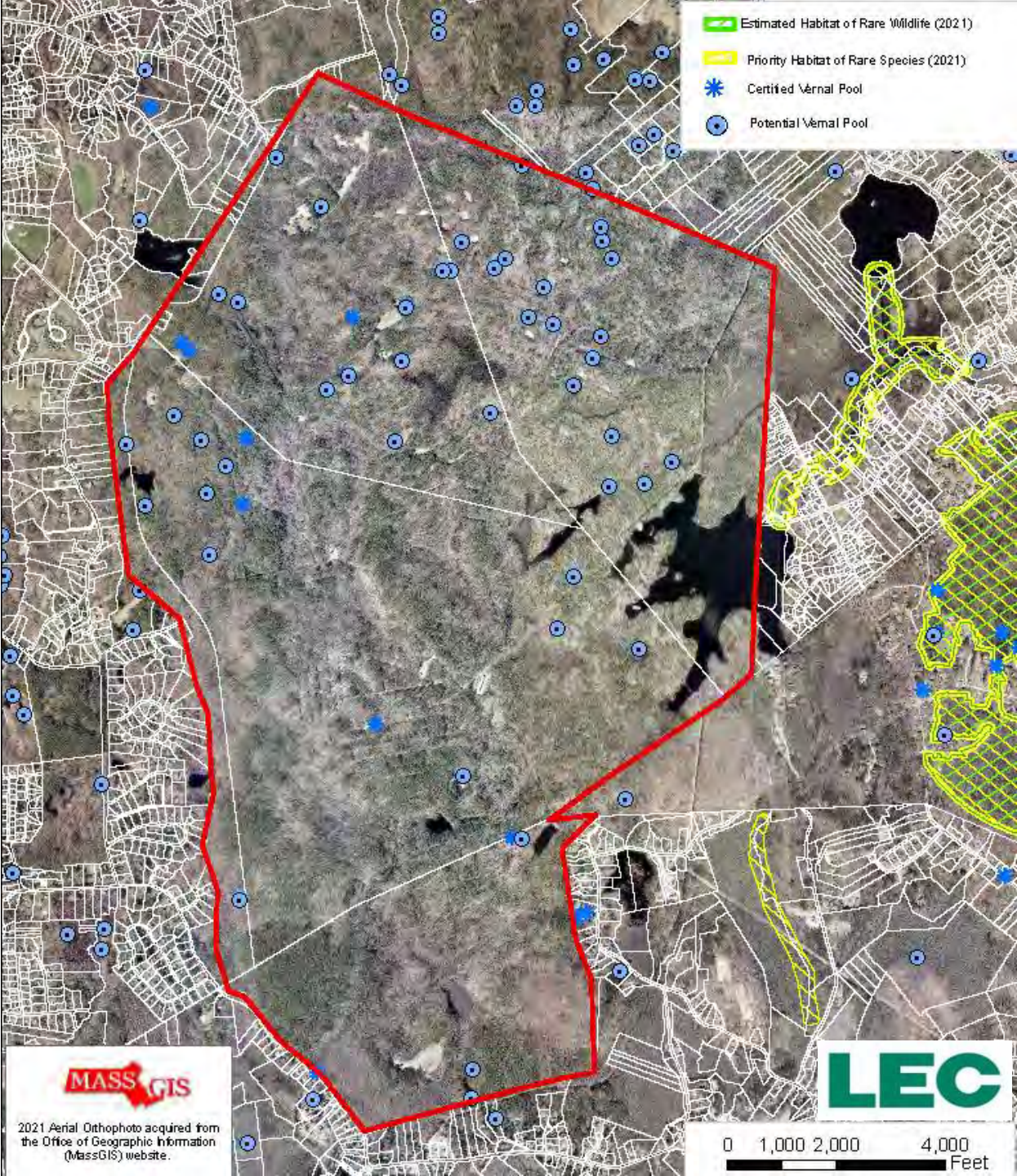
LEGEND



Environmental Inventory

National Heritage and Endangered
Species Program (NHESP)

LEGEND

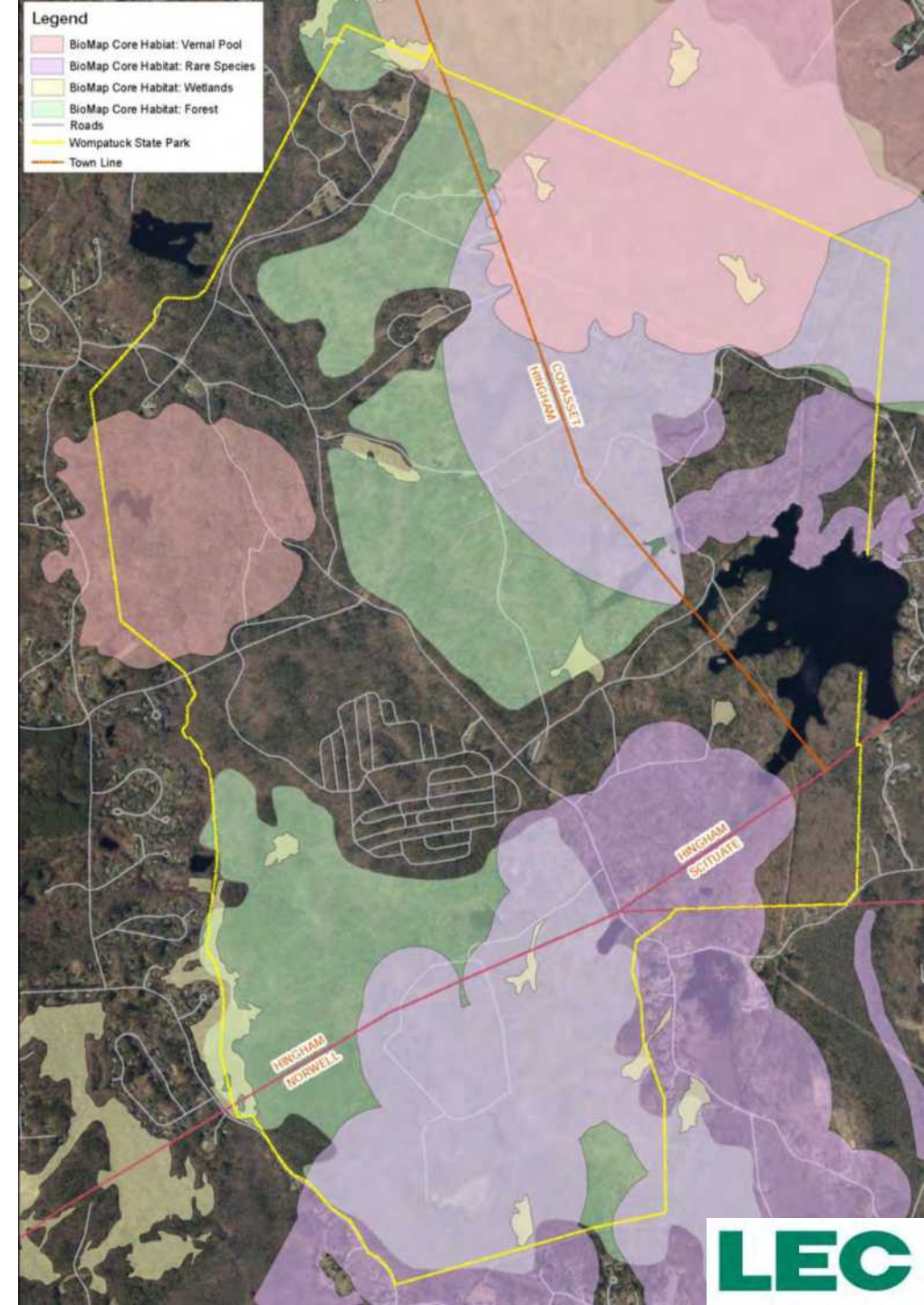


Environmental Inventory

NHESP *BioMap2*

Areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems.

LEGEND



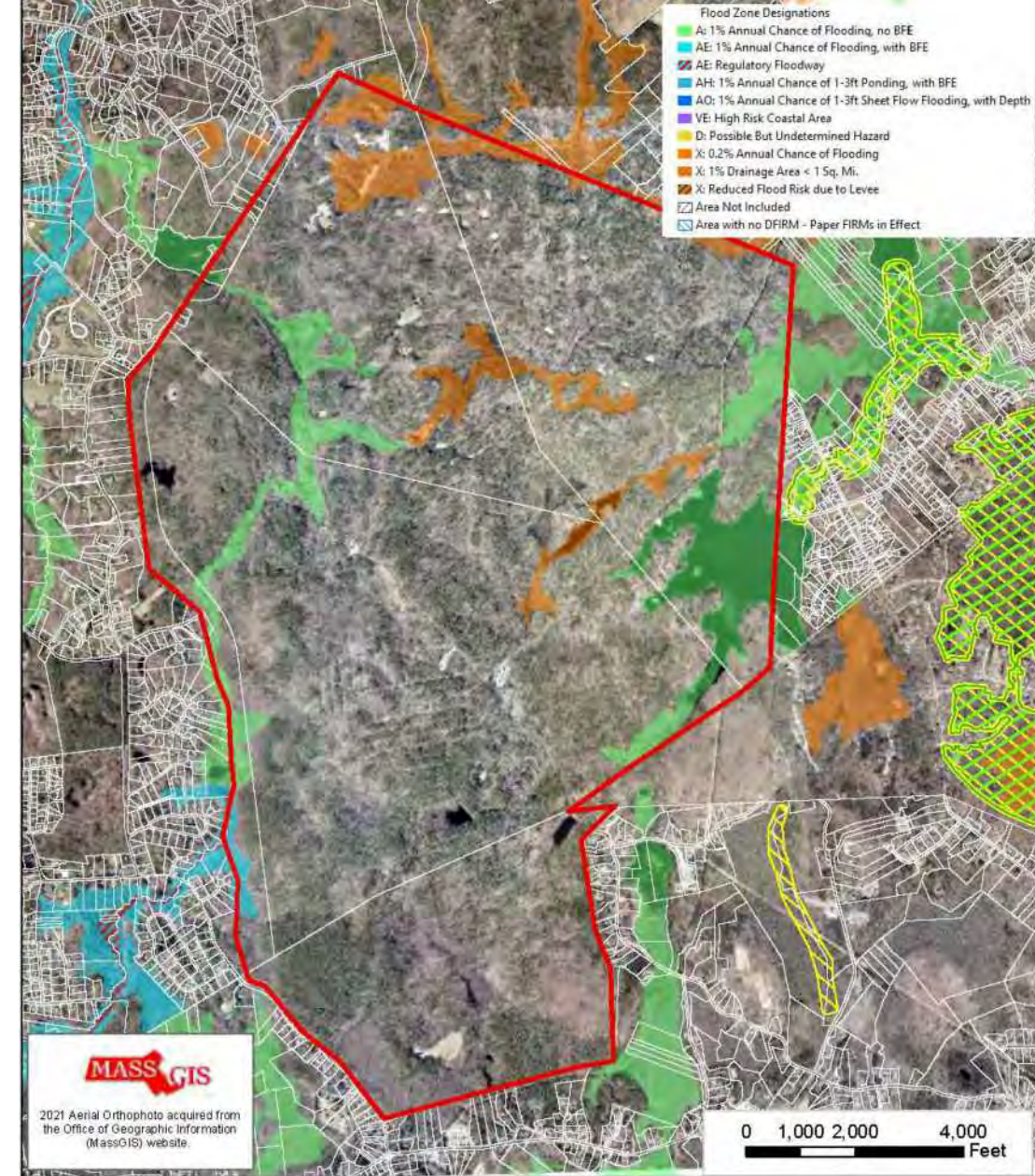
Environmental Inventory

FEMA Flood Map

LEGEND

Flood Zone Designations

- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with BFE
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Ponding, with BFE
- AO: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with Depth
- VE: High Risk Coastal Area
- D: Possible But Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: 1% Drainage Area < 1 Sq. Mi.
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM - Paper FIRMs in Effect



Cultural Inventory & Assessment

- Archaeological sensitivity assessment
- Previously identified historic and archaeological resources
- Trail interface with cultural resources
- Online Massachusetts Cultural Resource Information System (MACRIS)



Goal: To inform circulation recommendations, in particular trails that should be considered for realignment or decommissioning

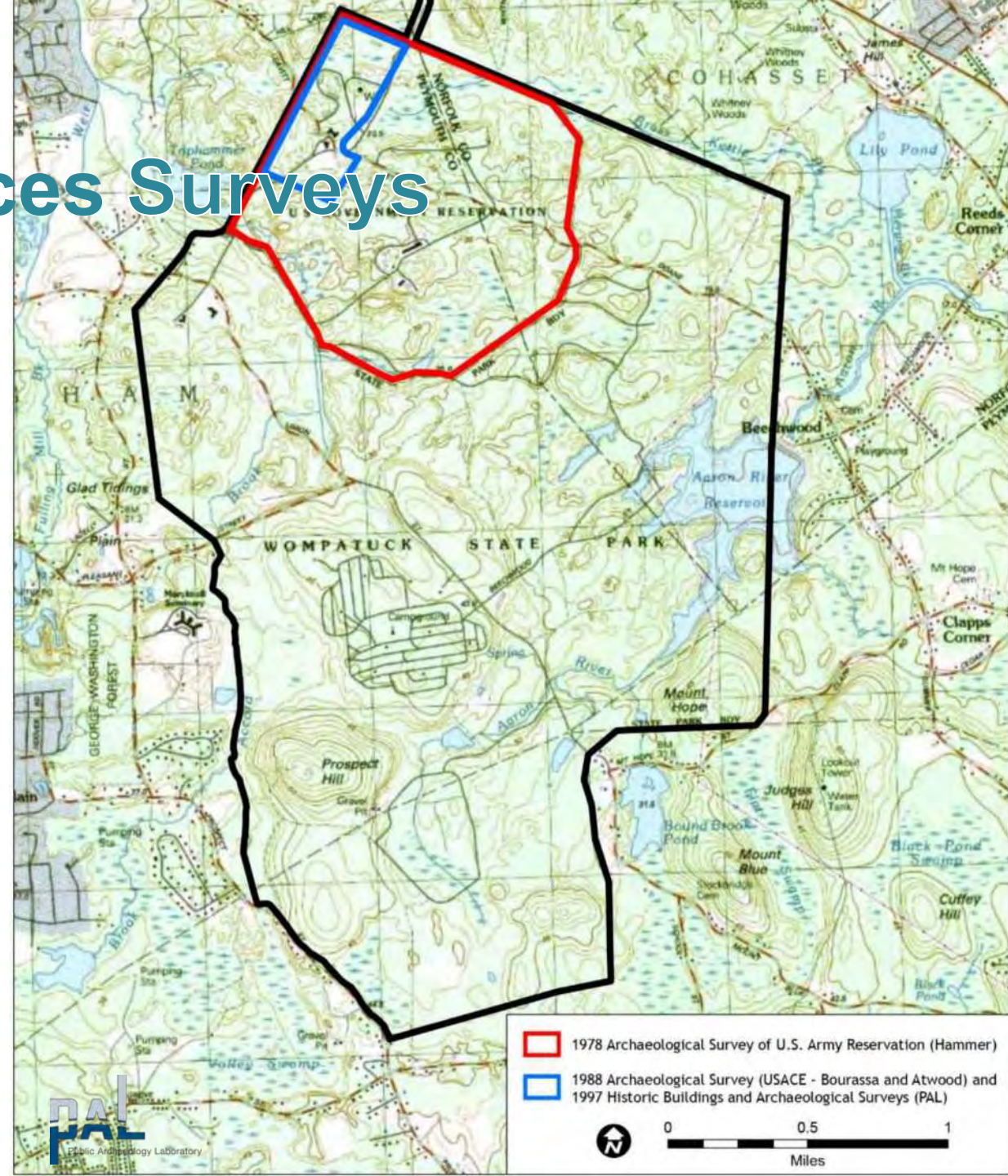


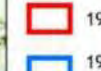

Previous Cultural Resources Surveys

- 1983 Archaeological Survey of Fort Devens and Its Off-Base Facilities
- 1988 Historic Properties Reconnaissance of Selected Fort Devens Off-Base Facilities
- 1997 Intensive Archaeological and Historic Buildings Surveys
- 2022 DCR Pilot Study of Visible Historic Resources

Legend

-  1978 Archaeological Survey of U.S. Army Reservation (Hammer)
-  1988 Archaeological Survey (USACE - Bourassa and Atwood) and 1997 Historic Buildings and Archaeological Surveys (PAL)



-  1978 Archaeological Survey of U.S. Army Reservation (Hammer)
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- 0 0.5 1
Miles

Cultural Resources & Archeological Sensitivity

Legend



Wompatuck State Park Boundary



Recorded Pre-Contact Site



Recorded Post-Contact Site



State Inventoried Property



US Navy and Other Resources on Lidar



Documented Resource



Archaeological Non-Sensitive Area*

* All other areas within the park boundary are areas of archaeological sensitivity



DCR CRI Building



DCR CRI Structure



DCR CRI Object



DCR CRI Landscape



Cultural Inventory & Assessment

- A total of 325 inventoried, field-verified, and documented historic and archaeological resources within park lands
- Preliminary archaeological sensitivity has been assigned to nearly all upland, well-drained areas, including the Whitney Spur Rail Trail
- PAL assumes that all or some of these resources could contribute to the historical significance of the Wompatuck State Park as an historic district covering multiple periods of pre- and post-contact occupation(s).
- Only non-sensitive areas: 125-acre parcel in the northwest previous subjected to intensive survey, lowlands, steeply sloping terrains >15%, mapped “pits” natural soils have been removed

Existing Conditions

How will this inform the Circulation Master Plan?

- Potential to maximize universally accessible trails (ADA and other)
- Assure multiple users are accommodated
- Adjust system capacity
- Reduce conflict points
- Opportunities to increase stormwater infiltration
- Indicators for seasonal closures or decommissioning



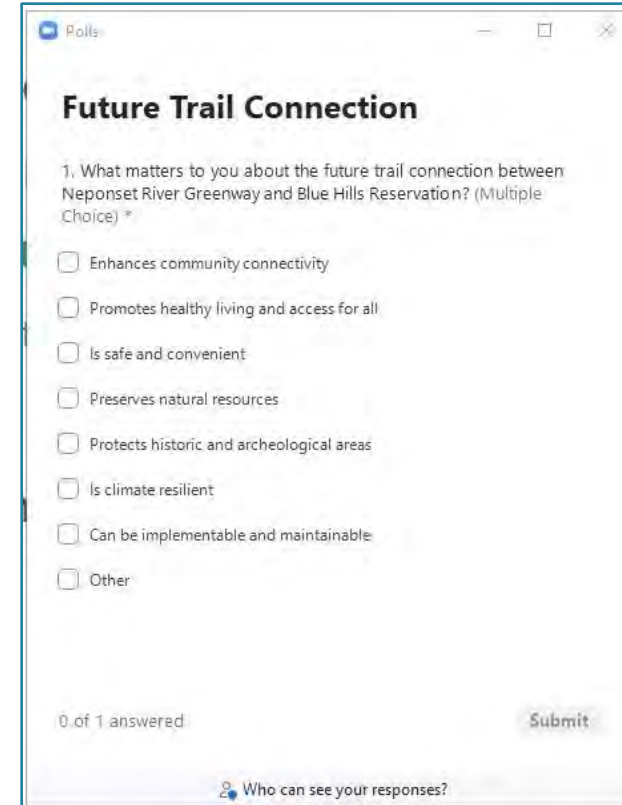
A wide, paved path winds through a lush park. On the left, a person in a dark jacket and blue jeans walks away from the camera. On the right, two cyclists are riding towards the camera; one is wearing a bright yellow-green jacket and the other a red jacket. The path is flanked by green grass and dense trees with vibrant autumn foliage in shades of yellow, orange, and red. Sunlight filters through the leaves, creating dappled shadows on the path.

LISTENING SESSION

Questions for the Public

5 multiple choice questions on zoom to get us thinking about the trail.

1. How often do you use the trails at Wompatuck State Park?
2. How do you currently navigate the trails at Wompatuck State Park?
3. Why do you visit Wompatuck State Park?
4. Which two (2) of the following circulation goals do you feel are most important to consider at Wompatuck State Park?
5. What Town/City do you live in?



The screenshot shows a Zoom poll interface. At the top, it says 'Polls' with a blue icon. The poll title is 'Future Trail Connection'. Below the title is the question: '1. What matters to you about the future trail connection between Neponset River Greenway and Blue Hills Reservation? (Multiple Choice) *'. There are seven options, each with an unchecked checkbox: 'Enhances community connectivity', 'Promotes healthy living and access for all', 'Is safe and convenient', 'Preserves natural resources', 'Protects historic and archeological areas', 'Is climate resilient', and 'Can be implementable and maintainable'. There is also an 'Other' option with a checkbox. At the bottom left, it says '0 of 1 answered'. At the bottom right, there is a 'Submit' button. Below the poll, there is a link that says 'Who can see your responses?' with a small icon.

Listening Session



- We will take comments in the order hands are raised
 - If calling in, dial *9 to raise your hand and *6 to unmute
- Additional comments can be made using the Q+A function and/or the chat function
- In order to allow everyone to speak, please try to limit your time to 1 minute
- Approximately every 15 minutes, we will provide responses to Q/A and chat
- The meeting is scheduled to end at 7:30 PM



CLOSING AND NEXT STEPS

Additional Information

- Recording and slide deck will be available at:
 - <https://www.mass.gov/dcr/past-public-meetings>
- If you have comments on this project, please use the link below. The public comment period will end on June 6th:
 - *Submit online:* www.mass.gov/dcr/public-comment

Please note: the contents of comments submitted to DCR, including your name, town and zip code, will be posted on DCR's website. Additional contact information provided, notably email address, will only be used for outreach on future updates to the subject project or property.

- If you wish to subscribe to a DCR general information or project-related listserv: contact DCR's Office of Community Relations via email at mass.parks@mass.gov

Next Steps

- Summarize input from this meeting and from DCR
- Develop circulation analysis and alternatives
- Develop trail typology options

Thank you!

