WORCESTER CONSERVATION COMMISSION

Patch Pond and Reservoir

Conservation Property Baseline Assessment

July 2024

DAVEY Resource Group

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Section One: Introduction

Property Information

Property Name: Patch Pond and Reservoir

Address: 31 Glendale Street; 446 Mill Street, 520 Mill Street

MBL: 48-022-00009; 30-29A-00001; 30-29A-00002

Date of Visits: 6/10/2024; 6/28/2024

Visits conducted by: Elise LeBlanc and Lori Carlos; Lori Carlos and Moriah Day, MAA & ISA Certified Arborist

Property Background and Setting

The Patch Pond and Reservoir property is located between Mill Street and residential properties adjacent to the campus of Worcester State University. The reservoir and pond are situated at about elevation 550 feet above mean sea level (AMSL). Dams created the upstream and downstream reservoirs and ponds. In the 1700s a dam was installed across Tatnuck Brook, creating the Patch Reservoir as a mill pond. The streams that flow into and out of these reservoirs are perennial streams. The dam and spillway between Patch Reservoir and Tatnuck Brook create a waterfall that is a hiking destination. However, these structures are now deteriorating and being evaluated for repair, replacement, or removal.

The primary focus areas are the northwest corner of the reservoir and the land that lies between Patch Reservoir and Patch Pond. The land between Patch Pond and Patch Reservoir is accessible from Mill Street and has about 0.5 miles of hiking loop trails and a boat launch. Most of the property is surrounded by privately owned residential properties, public roads, or the university. There are reports that sediment is filling in the pond, a natural process that accelerates when the surrounding land is densely developed. There are also reports that wetlands plants, often invasive, are taking root in places that were formerly submerged. There are periodic reports of cyanobacteria outbreaks. Local universities conduct research projects at Patch Reservoir and Worcester State University has entered into a long-term agreement with the Greater Worcester Land Trust (GWLT) to conduct classes and research at the Patch Reservoir Research Facility.

Statement of Purpose

The purpose of this baseline report is to provide useful information for park planning and management; identify areas of conservation value, areas impacted by non-native plants, encroachments from abutting properties, public accessibility, and regulated areas such as wetlands, perennial rivers, certified vernal pools, and rare habitat. The observations and management recommendations provided in this report will aid the Worcester Conservation Commission in maintaining and improving their conservation properties, tracking changes in the properties over time, and securing funding to support necessary park management activities.

Equipment Used for Data Collection

- Apple Iphone 11 MHCA3LL/A phone (photos)

- Panasonic FZ-G1 Toughpad (polygons and notes)
- Notepad (notes)
- Google Pixel 8 phone (photos)
- Samsung Galaxy S9 SM-G960U phone (photos and notes)

Acknowledgements

This project was funded in part by the USDA Forest Service through the Massachusetts Department of Conservation and Recreation Urban and Community Forestry Program. All elements of the project were completed by Davey Resource Group, Inc. with support from the Worcester Conservation Commission. Both institutions are equal opportunity employers.

Section Two: Findings

Forest Structure & Health

Field Observations

Entering the section of property between Patch Reservoir and Patch Pond on the blue/red hiking trail, the forest is a mixed-age, early- to mid-successional, deciduous forest. The dominant canopy trees are black locust (*Robinia pseudacacia*) and American elm (*Ulmus americana*), with Norway maple (*Acer platanoides*), red maple (*A. rubrum*), and sugar maple (*A. saccharum*) in the mid-story and more maple and white ash (*Fraxinus americana*) regenerating in the understory. The shrub layer is primarily invasive burning bush (*Euonymus alatus*), honeysuckle (*Lonicera* spp.) and multiflora rose (*Rosa multiflora*). As you travel away from Mill Street, there are occasional over-mature eastern cottonwood (*Populus deltoides*) among the canopy. The herbaceous layer is sparse along Mill Street but becomes more robust toward the interior of the property.

Around the shoreline of Patch Reservoir are many dead and declining trees of various species which corresponds well to the UTC canopy health results. The cause of shoreline tree decline is unclear, but it could be due to fluctuating water levels and saturated soils or to cyanobacterial blooms in the reservoir. Possible evidence of a cyanobacterial bloom was present during the June 28th visit as a dark emerald green scum around the edges of the reservoir.

The red/blue trail travels into an open meadow area over an earthwork dam at the southeastern edge of the reservoir. The meadow area is edged with young and regenerating black locust and eastern cottonwood and contains crownvetch (*Securigera varia*), mugwort (*Artemisia vulgaris*), jewelweed (*Impatiens capensis*), and asters (*Eurybia* spp.) among diverse herbaceous species. This area provides excellent forage for pollinators and habitat for birds.

Toward the dam between Patch Reservoir and Tatnuck Brook the overstory contains northern red oak (*Quercus rubra*), black locust, and red maple with sweet birch (*Betula lenta*), red maple, and black locust in the midstory. Sassafras (*Sassafras albidum*), red oak, and white pine (*Pinus strobus*) are regenerating among a shrub layer of highbush blueberry (*Vaccinium corymbosum*). Other native shrubs such as sweet pepperbush (*Clethra alnifolia*), redosier dogwood (*Cornus sericea*), buttonbush (*Cephalanthus occidentalis*), and alder (*Alnus* spp.) are abundant around the reservoir shore. The blue loop trail in this area is partially overgrown and difficult to identify and follow.

Following the red loop trail south along Tatnuck Brook, the overstory continues to be dominated by black locust and northern red oak in older age categories than elsewhere on the property. The midstory continues to contain mixed maples and black birch, with some hickory (*Carya* spp.) as well. The shrub layer is mainly invasive, including burning bush and Japanese barberry (*Berberis thunbergii*) with Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and bloodroot (*Sanguinaria canadensis*) in the herbaceous layer. The trail dips down to the edge of Tatnuck Brook where stepping stones and a rope have been placed across the brook to allow property access from the end of Ada Street. Ash, American beech (*Fagus grandifolia*), and elm are dead or dying in this area, likely due to emerald ash borer (*Agrilus planipennis*), beech leaf disease, and Dutch elm disease. Oriental bittersweet (*Celastrus orbiculatus*) is common along the red loop trail with some vines attaining 4-inch diameters and larger. Bittersweet at this size can overwhelm and pull down canopy trees and should be cut and treated to prevent further canopy damage. Multiple large overstory oaks are in decline, possibly due to bittersweet, drought, spongy moth (*Lymantria dispar*), and/or saturated soils at the lower elevations along the swampy northern portion of Patch Pond. There also appears to

have been sporadic canopy tree blowdowns within the last several decades. All of these elements may be contributing to patches of poor canopy health visible in the UTC assessment results.

Toward the middle of the red loop trail, Japanese knotweed (*Reynoutria japonica*) becomes prevalent in the shrub layer and is beginning to grow over the trail. There are several challenging and hazardous portions of the southern red loop trail, including a hidden dropoff to the south and several points where the trail narrows and handles have been attached to trees to help hikers navigate the trail. Throughout this area, the underlying ground appears to be made up nearly entirely of construction or deconstruction debris, including concrete, brick, carved stone, and asphalt.

Where the red loop trail crosses a semi-maintained access road across from Midgley Avenue the trail disappears into dense meadow herbaceous vegetation but can be picked back up along the treeline to the north.

In the northwestern corner of the property near Patch Island, the forest structure is more open with little shrub cover and significantly fewer invasive species present. The canopy is made up of red oaks and sugar maples in a semi-mature age category, with more of the same filling the mid and understory and regenerating among sparse herbaceous and shrub cover. A stream flows through the woodland and empties into Patch Reservoir. Tatnuck Brook also enters the reservoir from this area, and becomes quite swampy. There are no trails in this area, and it provides good habitat and water hydrologic benefits.

Potential Impacts of Climate Change

Table 2 includes a summary of the USFS Climate Change Atlas information for tree species commonly found in Patch Pond and Reservoir.

Table 1: Expected response of common Patch Pond and Reservoir species to climate change.

Species		Model Reliability	Abundance	Habitat Area Change		Capability to Cope with Climate Change	
Common	Scientific			RCP 4.5	RCP 8.5	RCP 4.5	RCP 8.5
Norway maple	Acer platanoides	Due to nonnative status, Norway maple suitability under climate change is not adequately modeled by the USFS Climate Change Atlas.					
Red maple	Acer rubrum	High	Abundant	Small decrease	Small decrease	Good	Good
Sugar maple	Acer saccharum	High	Common	Large Increase	Large increase	Very Good	Very Good
Sweet Birch	Betula lenta	High	Common	No change	Small decrease	Poor	Poor
Pignut hickory	Carya glabra	Medium	Common	No change	Small increase	Fair	Good

Species		Model Reliability	Abundance	Habitat Area Change		Capability to Cope with Climate Change	
Common	Scientific			RCP 4.5	RCP 8.5	RCP 4.5	RCP 8.5
Shagbark hickory	Carya ovata	Medium	Rare	Small decrease	No change	Very Poor	Poor
American beech	Fagus grandifolia	High	Common	Large increase	Large increase	Very Good	Very Good
White ash	Fraxinus americana	Medium	Common	Small increase	No change	Fair	Poor
Eastern white pine	Pinus strobus	High	Abundant	Large decrease	Large decrease	Poor	Poor
Eastern cottonwood	Populus deltoides	Low	Rare	Large decrease	Large decrease	Very Poor	Very Poor
Red oak	Quercus rubra	Medium	Abundant	No change	Small decrease	Very Good	Good
Black locust	Robinia pseudoacacia	Low	Rare	No change	Large increase	Poor	Good
American elm	Ulmus americana	Medium	Common	Small decrease	No change	Poor	Fair

The predicted outcomes for common tree species at Patch Pond and Reservoir under climate change are mixed. Oaks and maples are predicted to do well, while the birches and poplars are predicted to struggle. Other species which could be expected to adapt well to climate change such as American beech are under threat from pests and disease and are likely to decline regardless of climate change impacts. Several common species, including Norway maple and black locust, have either no information provided by the climate change atlas or low predictive modeling power, so their future under climate change is uncertain. However, due to the high diversity of species and good mixture of ages and regeneration occurring at the property, the canopy of Patch Pond and Reservoir is likely to be able to persist and adapt to climate change.

Key Results

- It was not possible to access the area around Patch Pond during the inspection due to marshy ground, lack of trails, and lack of access points.
- Invasive species are abundant at the property, particularly in the shrub layer which often consists entirely of burning bush, invasive honeysuckle, multiflora rose, Japanese knotweed, and/or Japanese barberry.
- Oriental bittersweet is also common at Patch Pond and Reservoir and is damaging canopy trees, especially along the red loop trail.

- Poor canopy health along the reservoir edges may be related to changing water levels and saturated soils or cyanobacterial damage, although it is difficult to positively identify the cause in the field.
- Patches of poor canopy health elsewhere on the property are likely related to pests and disease, invasive species, and/or saturated soils.
- Cyanobacterial blooms are a known challenge for Patch Pond and Reservoir, and potential evidence of cyanobacteria was observed on the reservoir during the inspection.
- The property provides a variety of benefits, including diverse wildlife habitat, passive recreation opportunities, drinking water supply, water catchment and flood control, and educational opportunities.
- Existing dam infrastructure may need to be repaired or replaced within the near future.
- Tree species present on the property are diverse and of mixed ages. Although some species are likely to struggle and decline under climate change, there are others present which should be able to adapt well.
- Some of the trails could use maintenance to mitigate hazards and better define trail locations.
- Encroachment on the property appeared to be minimal, with the only areas of concern being along 518 Mill Street and behind 15 Patch Reservoir Drive.
- Future monitoring should focus on tracking the progress of invasive species management programs.

UTC Results

Canopy Cover

Table 2. Canopy cover at Patch Pond and Reservoir.

	Number of Parcels	Total Property Acres	Acres of Canopy Cover	% Canopy Cover
Patch Pond and Reservoir	3	60.74	24.19	39.83

Canopy Health

Table 3. Canopy Health at Patch Pond and Reservoir.

	Very Good		Good		Fair		Poor		Dead/Dying		Not Classified	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Patch Pond and Reservoir	1.52	6.27	7.99	33.01	9.62	39.78	4.19	17.31	0.59	2.43	0.25	1.02

Overall, canopy health in Patch Pond and Reservoir is fair or better (~79%). Areas with poor or worse canopy health ratings seemed to be related to a variety of factors, including saturated soils in wetland areas and around the reservoir, pests and diseases, invasive species, and possibly cyanobacterial blooms.

Benefits

Table 4. Canopy Benefits at Patch Pond and Reservoir.

Air Pollution Removal (Annual)		Avoided Stormwater Runoff (Annual)		Carbon Sequestration (Annual)		Carbon Storage (Lifetime)	
Pounds	$	Gallons	$	Tons	$	Tons	$
1,740.18	393.82	332,597.03	291.28	27.41	4,674.12	829.17	141,415.75

Please note that the trees at Patch Pond and Reservoir provide many additional benefits not calculated here. Only benefits for which there are well-supported algorithms were estimated for this project.

Section Three: Management Recommendations

Recommendations in Priority Order

1. Implement a management strategy for Oriental bittersweet
    a. Cutting large vines followed by a cut-stump treatment can be effective for established individuals.
    b. Do not attempt to remove vines from the canopy - this can further damage trees. Allow the vines to die on the tree and decay over time.
    c. Significant monitoring and follow-up treatments will be needed to manage Oriental bittersweet at Patch Reservoir.
2. Implement a management strategy for invasive shrubs, including Japanese barberry, Japanese knotweed, burning bush, invasive honeysuckle, and multiflora rose.
    a. Use a variety of management methods including herbicide treatment, manual and mechanical cutting/removal, and cultural practices (ex. Reseeding areas cleared of invasive species) to minimize the existing infested areas.
    b. Small patches of invasives or individual plants may be fully eradicated from the property, while larger infested areas may need to be managed to prevent further spread of the invasive without full eradication.
    c. Monitor treated areas long-term to look for regrowth of invasive species from root or seed.
3. Maintain and improve trails.
    a. Reestablish the blue loop trail or remove it from trail maps.
    b. Improve the Tatnuck Brook crossing from Ada Street.
    c. Determine if trails can be rerouted or widened to lessen the necessity for handles attached to trees.
    d. Reroute trail and/or improve visibility of the dropoff hazard along the red loop trail.
    e. Manage Japanese knotweed infestations around the red loop trail to improve trail visibility.
4. Pursue options to mitigate current encroachment and prevent further encroachment around boundaries with 518 Mill Street and 15 Patch Reservoir Drive.
    a. Cease and desist and other legal measures to stop imminent and ongoing encroachment.
    b. Consider more collaborative and outreach-based efforts to develop better relationships with abutters and educate about the harm that encroachment can cause to conservation property.
    c. Post clear boundary signage along property boundaries to mark where the conservation property begins. Observations at the time of the property assessment did not reveal any clear boundary markers.
    d. Post signage which specifically prohibits dumping at key locations where dumping appears to be an issue.
5. Work with collaborators such as the Worcester Water Department to determine if the existing dam structure at the Patch Reservoir outflow is sufficient and repair/replace if necessary.
6. Improve water quality and reduce sedimentation within the Reservoir and Pond.
    a. Continue water quality monitoring efforts in collaboration with the Worcester Water Department, Worcester State University, and GWLT to identify challenges and opportunities for improvement.
    b. Identify ways to manage sedimentation.
    c. Maintain Tatnuck Brook and the northwestern portion of the property as a no-access area to protect reservoir inflow.

References

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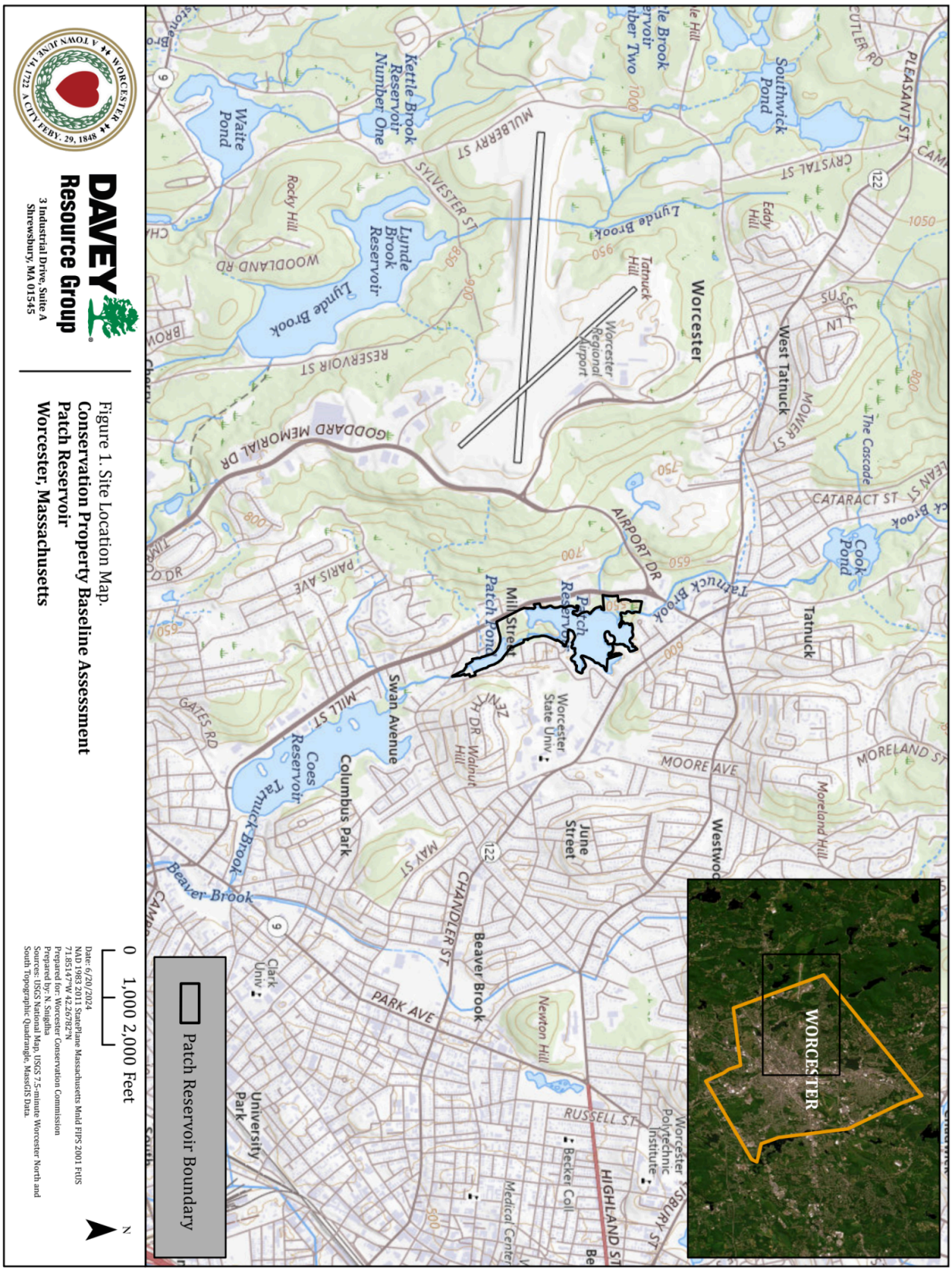
APPENDIX A: MAPS



Map 1: *Site location map.*

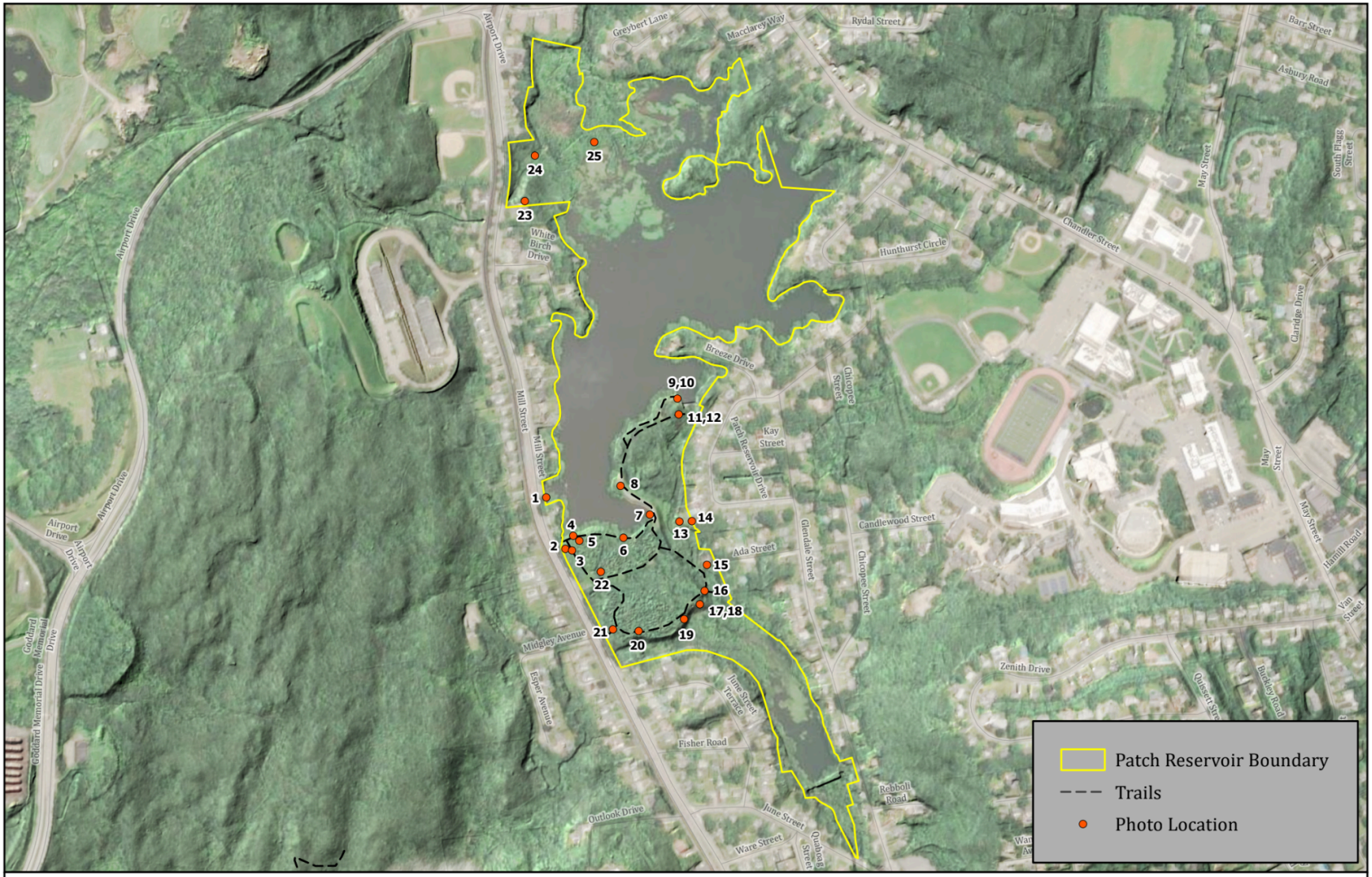
Map 2: *Existing resources summary map.*

Map 3: *Existing trails summary map.*

Figure 4. Existing Tree Health Rank Summary Map.
Conservation Property Baseline Assessment
Patch Reservoir
Worcester, Massachusetts

DAVEY Resource Group
3 Industrial Drive, Suite A
Shrewsbury, MA 01545

Map 4: *Existing tree health rank summary map.*



DAVEY Resource Group
3 Industrial Drive, Suite A
Shrewsbury, MA 01545

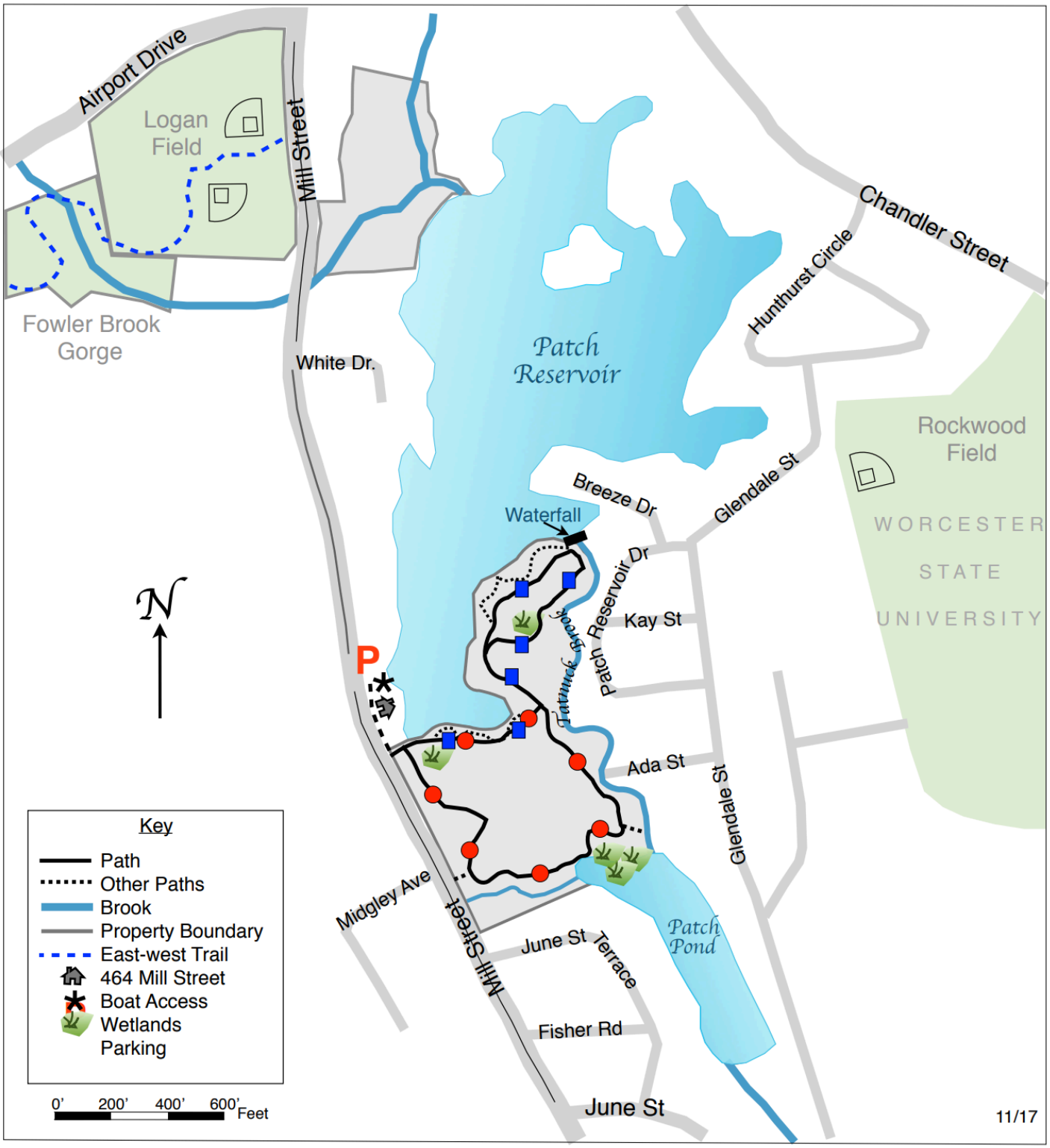
Figure 5. Representative Photo Locations Summary Map.
Conservation Property Baseline Assessment
Patch Reservoir
Worcester, Massachusetts

Date: 7/31/2024
NAD 1983 2011 StatePlane Massachusetts Mnld FIPS 2001 FtUS
71.85141°W 42.26796°N
Prepared for: Worcester Conservation Commission
Prepared by: N. Snigdha
Sources: ESRI World Imagery, MassGIS Data, DRG Site Visit 6/10/2024.

Map 5: *Representative photo locations summary map.*

Patch Conservation Area

Worcester, MA



Map 6: *Patch Conservation Area trail map from Hike Worcester.*

APPENDIX B: FINDINGS BY PHOTO & POLYGON

Table 5. Summary of Field observations by photo and/or polygon ID.

Photo ID	Polygon ID	Type	Comments
1	53249	Sign/Marking	Sign identifying Patch Reservoir where the pond meets Mill Street. The sign indicates prohibited uses for the site, including gas or diesel boats, vehicles, and dumping. Sign is not especially close to trail entry to the property.
2-3	53217	Sign/Marking	(Photo 2) The northernmost trailhead off Mill Street has no signage. (Photo 3) The trails in the property are marked with red and blue blazes.
4	53227	Invasive Species	A variety of invasive species are present around the trailhead including burning bush (*Euonymus alatus*), multiflora rose (*Rosa multiflora*), and Oriental bittersweet (*Celastrus orbiculatus*). These invasives are widespread throughout the property.
5	53237	Wetland	Several periodically wet patches along the red trail which may be vernal pools.
6	53246	Invasive Species	Heavy Oriental bittersweet infestation may cause hazards as it kills and pulls down overstory trees.
7	53338	Hazard	A dark green scum, possibly cyanobacteria, was floating along reservoir edges during a late June visit.
8	53215	Other	Trees in dead/dying condition are most common around the margins of the reservoir. The reason for dieback is unclear, although it may be related to saturated soils or harsher conditions on forest edges.
9-10	53226	Other	(Photo 9) The blue trail appears to end at the shore with several lookout points over the reservoir. This end of the trail is somewhat overgrown. (Photo 10) A dam at the end of the blue trail regulates water flow from the reservoir into Tatnuck Brook.
11-12	53235	Sign/Marking	(Photo 11) The blue loop trail is partially overgrown and difficult to spot, with faded blue blazes. (Photo 12) Image of the Hike Worcester map of Patch Reservoir trails indicating which portion of the blue loop trail is disused.
13	53244	Invasive Species	Where the raised southern reservoir border dips downward there is more multiflora rose and Oriental bittersweet.

Photo ID	Polygon ID	Type	Comments
14	53339	Encroachment	Aerial imagery indicates that portions of 15 Patch Reservoir Drive's yard and pool may extend into the reservoir property.
15	53250	Amenities	Access to the red trail from the end of Ada Street is aided by flat stones and a rope crossing Tatnuck Brook. These amenities may have been installed by property users rather than Worcester officials.
16	53253	Disease/Pest	Beech leaf disease is affecting all American beech (*Fagus grandifolia*) on the property, which may explain patches of poor canopy health.
17-18	53255	Hazard	A dangerous drop-off to the southern side of the red trail, possibly caused by an uprooted tree, is not easily visible or marked. DRG added pink flagging as a temporary measure to identify the hazard.
19	53257	Hazard	The trail slopes sharply on the southern side and a large, partially fallen cottonwood makes trail navigation difficult. Handles have been attached to the tree to aid hikers in navigating this portion of trail.
20	53252	Invasive Species	A portion of the trail is being overgrown with Japanese knotweed (*Reynoutria japonica*).
21	53254	Other	The trailhead across from Midgley Avenue is lined with fallen logs.
22	53256	Sign/Marking	Where the access road crosses the red trail, the trail is heavily overgrown with meadow vegetation. No trail markings indicate how to return to the trail.
23	53258	Encroachment	The yard of 518 Mill Street appears to extend into the reservoir property. There is a pile of dumped wood scraps.
24	No polygon	Waterway	A stream runs through the northwestern portion of the reservoir property. There are no trails or access to this piece of the property.
25	No polygon	Wetland	Tatnuck Brook flows into the reservoir through a wooded deciduous swamp.

Photo 1
Polygon ID: 53249
Type: Sign/Marking
Comments: Sign identifying Patch Reservoir where the pond meets Mill Street. The sign indicates prohibited uses for the site, including gas or diesel boats, vehicles, and dumping. Sign is not especially close to trail entry to the property.

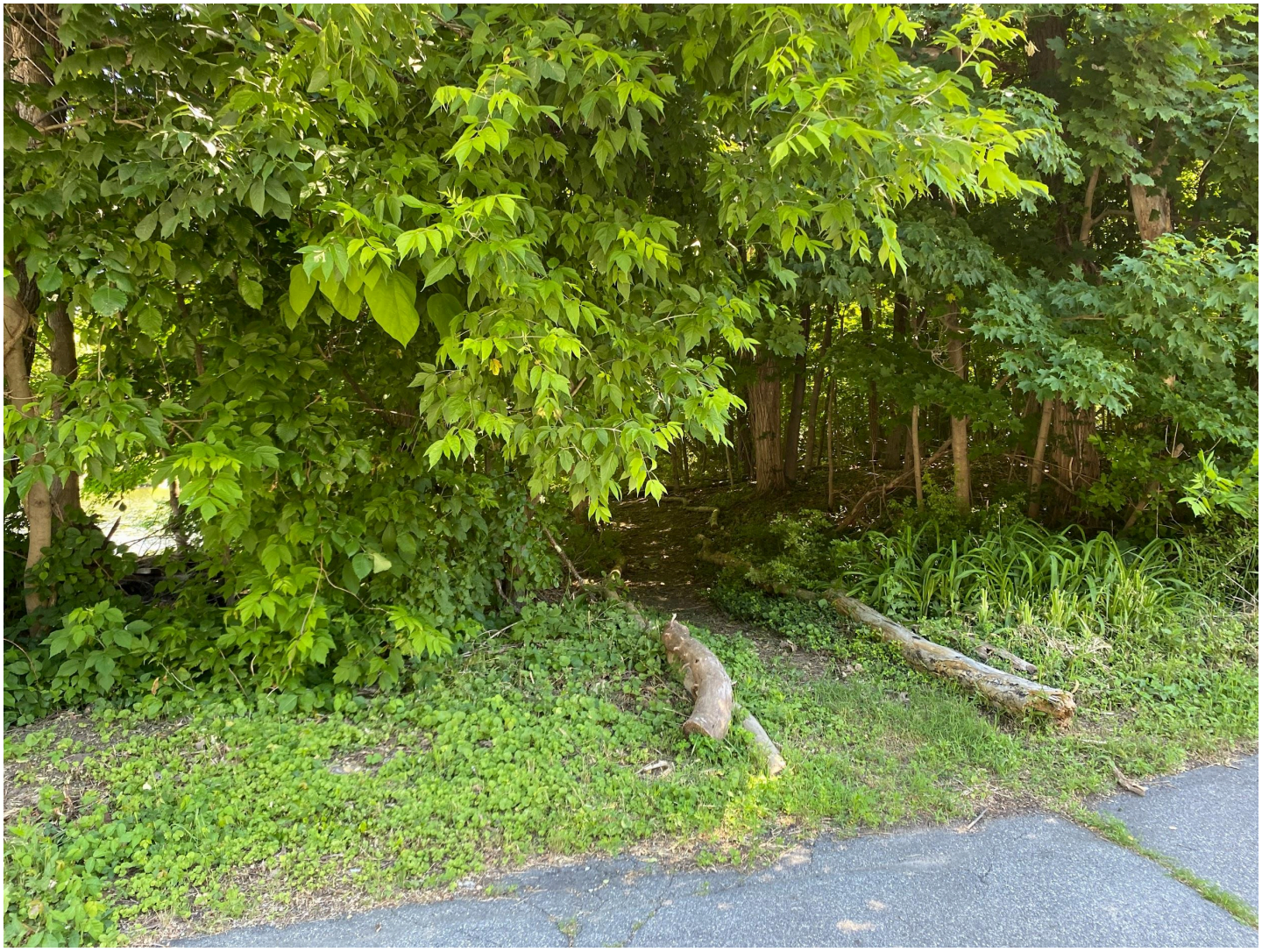


Photo 2
Polygon ID: 53217
Type: Sign/Marking
Comments: The northernmost trailhead off Mill Street has no signage.

Photo 3
Polygon ID: 53217
Type: Sign/Marking
Comments: The trails in the property are marked with red and blue blazes.

Photo 4
Polygon ID: 53227
Type: Invasive Species
Comments: A variety of invasive species are present around the trailhead including burning bush (*Euonymus alatus*), multiflora rose (*Rosa multiflora*), and Oriental bittersweet (*Celastrus orbiculatus*). These invasives are widespread throughout the property.

Photo 5
Polygon ID: 53237
Type: Wetland
Comments: Several periodically wet patches along the red trail which may be vernal pools.

Photo 6
Polygon ID: 53246
Type: Invasive Species
Comments: Heavy Oriental bittersweet infestation may cause hazards as it kills and pulls down overstory trees.

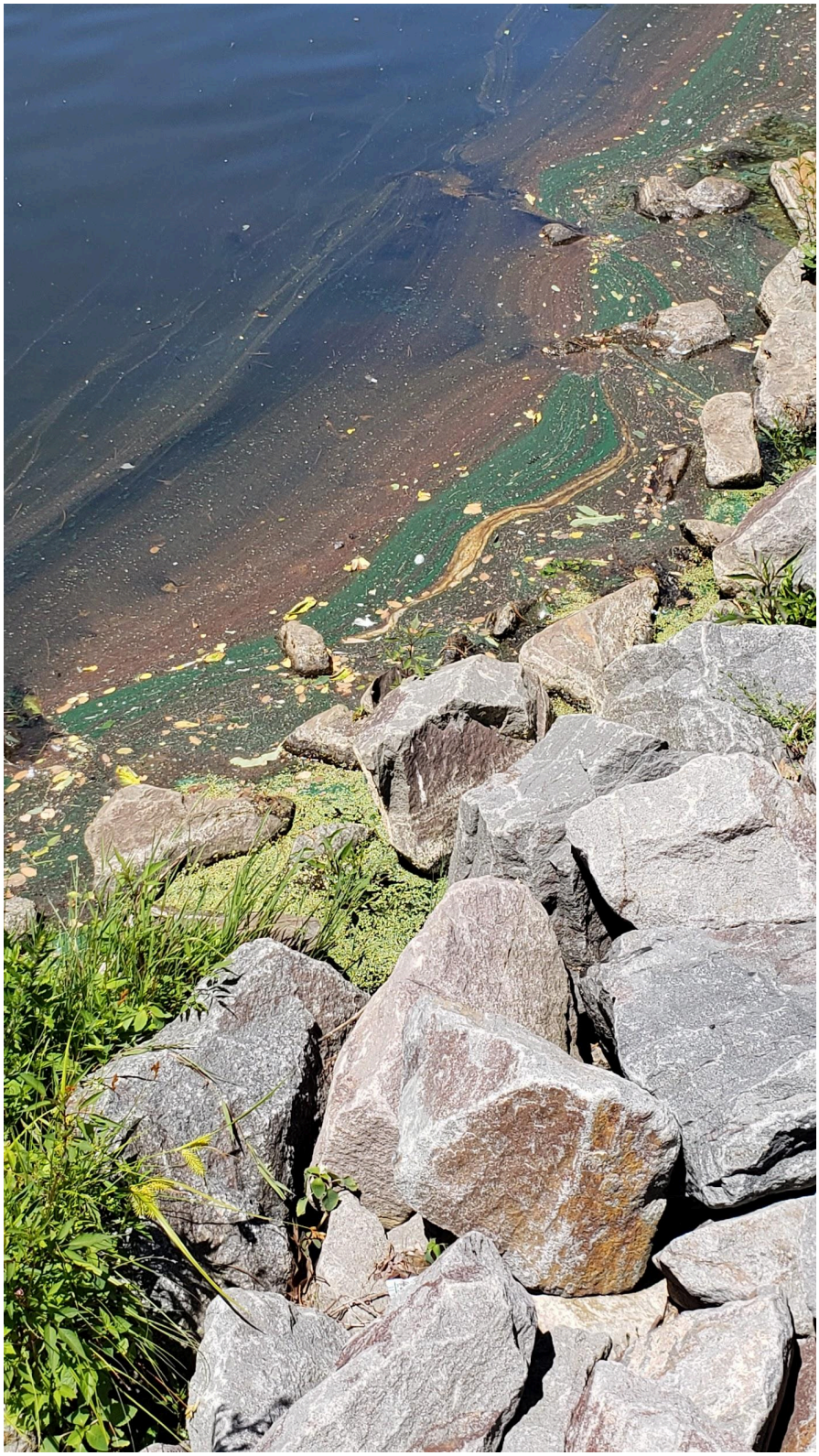


Photo 7
Polygon ID: 53338
Type: Hazard
Comments: A dark green scum, possibly cyanobacteria, was floating along reservoir edges during a late June visit.

Photo 8
Polygon ID: 53215
Type: Other
Comments: Trees in dead/dying condition are most common around the margins of the reservoir. The reason for dieback is unclear, although it may be related to saturated soils or harsher conditions on forest edges.

Photo 9
Polygon ID: 53226
Type: Other
Comments: The blue trail appears to end at the shore with several lookout points over the reservoir. This end of the trail is somewhat overgrown.

Photo 10
Polygon ID: 53226
Type: Other
Comments: A dam at the end of the blue trail regulates water flow from the reservoir into Tatnuck Brook.

Photo 11
Polygon ID: 53235
Type: Sign/Marking
Comments: The blue loop trail is partially overgrown and difficult to spot, with faded blue blazes.

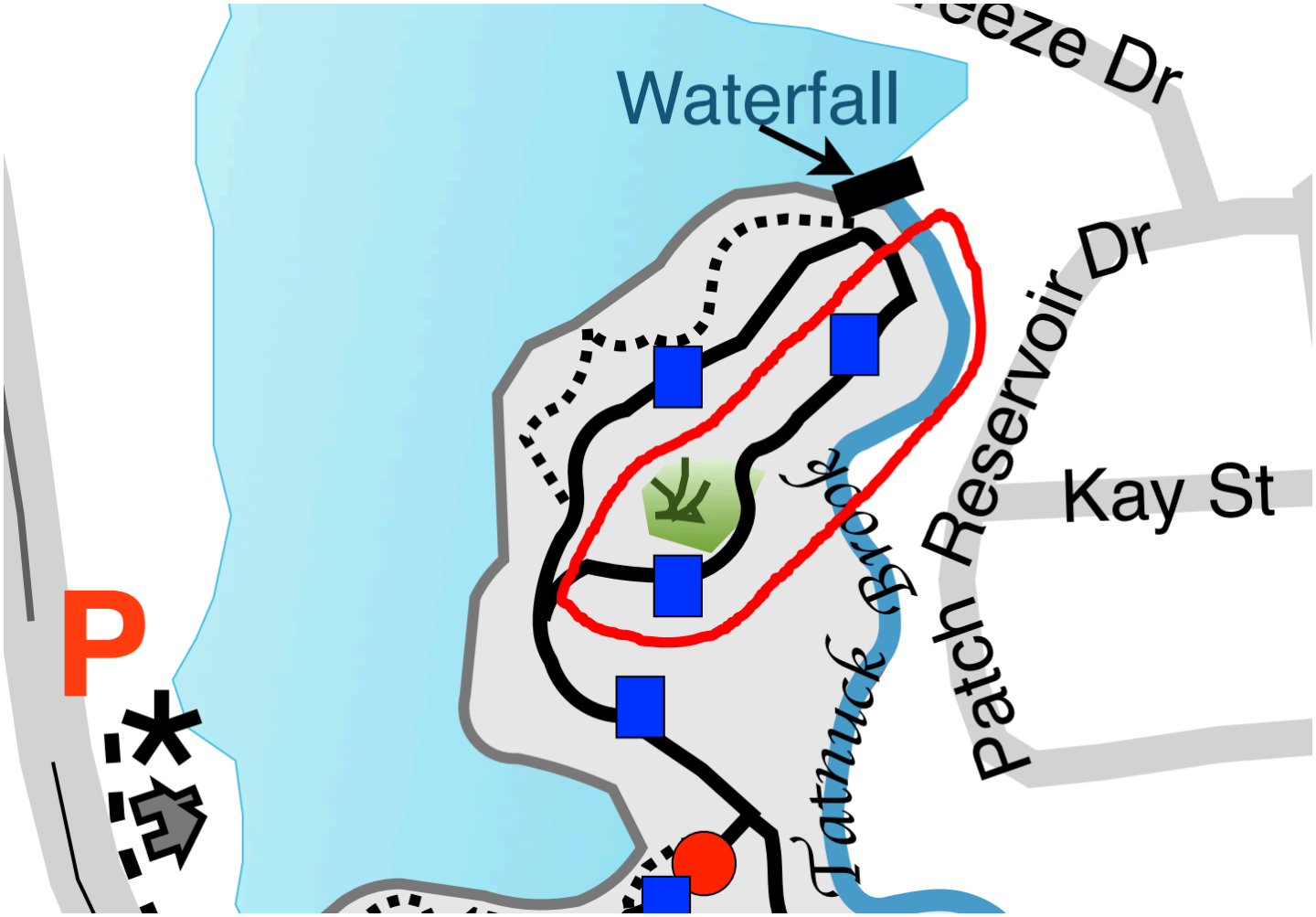


Photo 12
Polygon ID: 53235
Type: Sign/Marking
Comments: Image of the Hike Worcester map of Patch Reservoir trails indicating which portion of the blue loop trail is disused.

Photo 13
Polygon ID: 53244
Type: Invasive Species
Comments: Where the raised southern reservoir border dips downward there is more multiflora rose and Oriental bittersweet.

Photo 14
Polygon ID: 53339
Type: Encroachment
Comments: Aerial imagery indicates that portions of 15 Patch Reservoir Drive's yard and pool may extend into the reservoir property.

Photo 15
Polygon ID: 53250
Type: Amenities
Comments: Access to the red trail from the end of Ada Street is aided by flat stones and a rope crossing Tatnuck Brook. These amenities may have been installed by property users rather than Worcester officials.

Photo 16
Polygon ID: 53253
Type: Disease/Pest
Comments: Beech leaf disease is affecting all American beech (*Fagus grandifolia*) on the property, which may explain patches of poor canopy health.

Photo 17
Polygon ID: 53255
Type: Hazard
Comments: A dangerous drop-off to the southern side of the red trail, possibly caused by an uprooted tree, is not easily visible or marked. DRG added pink flagging as a temporary measure to identify the hazard.

Photo 18
Polygon ID: 53255
Type: Hazard
Comments: A dangerous drop-off to the southern side of the red trail, possibly caused by an uprooted tree, is not easily visible or marked. DRG added pink flagging as a temporary measure to identify the hazard.

Photo 19
Polygon ID: 53257
Type: Hazard
Comments: The trail slopes sharply on the southern side and a large, partially fallen cottonwood makes trail navigation difficult. Handles have been attached to the tree to aid hikers in navigating this portion of trail.

Photo 20
Polygon ID: 53252
Type: Invasive Species
Comments: A portion of the trail is being overgrown with Japanese knotweed (*Reynoutria japonica*).

Photo 21
Polygon ID: 53254
Type: Other
Comments: The trailhead across from Midgley Avenue is lined with fallen logs.

Photo 22
Polygon ID: 53256
Type: Sign/Marking
Comments: Where the access road crosses the red trail, the trail is heavily overgrown with meadow vegetation. No trail markings indicate how to return to the trail.

Photo 23
Polygon ID: 53258
Type: Encroachment
Comments: The yard of 518 Mill Street appears to extend into the reservoir property. There is a pile of dumped wood scraps.

Photo 24
Polygon ID: No Polygon
Type: Waterway
Comments: A stream runs through the northwestern portion of the reservoir property. There are no trails or access to this piece of the property.

Photo 25
Polygon ID: No Polygon
Type: Wetland
Comments: Tatnuck Brook flows into the reservoir through a wooded deciduous swamp.