Massachusetts Department of Conservation and Recreation

Division of Water Supply Protection, Office of Watershed Management

Forest Management Project Proposal Summary for Public Comment

Location, goals, and summary of proposed forest management.

Proposal Summary Item	Item Information/Description
Lot Proposal ID	**WR-26-45**
Fiscal Year	2026
Watershed	Ware River
Town(s)	Hubbardston
Forester	Russ Wilmot
Estimated Acres by Treatment Type	About 6 acres in regeneration openings ranging in size from 0.25 to 4.9 acres. Up to 4 acres of thinning.
Total Proposal Acres	13.2
Block	
Compartment and/or Working Unit	45
Location and Boundary Description	Evergreen Road to the West, Mason brook to the South, private land and houses to the North and private land to the East.
Previous Proposal?	No
Project Goals and Summary Description	The goal of this project is to increase the vertical structure and species diversity by creating regeneration openings in the thin crowned and declining white pine overstory.

Forest Cover Types and Acreages

Overstory Forest Types	Acres
White Pine - Oak	4.3
White pine	7.3
White pine - Hemlock	1.6

Understory Cover Types and Relative Importance

Understory Cover Type	**Relative area covered** (Dominant, Secondary, Minor, None)
Tree seedlings and saplings	Secondary
Mountain laurel	
Mesic site - witch hazel, highbush blueberry	
Dry site -Huckleberry, blueberry	
Mesic site - cinnamon fern, mixed hardwood	
Hayscented fern	
Invasive shrubs/vines	
Other	No understory - Dominant

Forest Vegetation Description

Vegetation Topic	Description
General Description, Forest Composition, Stand History, and Harvest History	This site is comprised of two different stands. 35% of plots taken were in the white pine oak stand in front that has some (35% of plots taken) diverse regeneration with beaked hazelnut, low bush blueberry and wintergreen underneath. The white pine-hardwood-hemlock stand in the back (46%) has no understory (46%) other than a trace of witch hobble. Both stands are crowded (~BA 173) and are lacking diversity of vertical structure. There is a Continuous Forest Inventory plot in the proposal area.
Advance Regeneration description	Regeneration surveys showed that in the white pine-oak stand there is abundant regeneration (35%) including red oak, white oak, sugar maple, white ash, hemlock, red maple, beech and white pine. There is no regeneration (46%) in the white pine-hardwood-hemlock stand.
Terrestrial Invasive Plants description	Survey showed no invasives. However, a trace of burning bush was noted along the Northern property line near the road.

Description of Wetland Resources Present

Resource Type	Description of resources present
Wetlands	A small wetland area in the Northeastern end of the lot.
Streams	No streams in this proposal
Vernal pools	None known
Seeps	None known

Description of Soils by Hydric Class

Soil Hydric Classes	% of area	Soil series and any further comments
Excessively Drained	60	Hinckley loamy sand
Well-drained Thin	0	
Well-drained thick	40	Montauk-Scituate-Canton
Moderately well-drained	0	
Poorly to very poorly drained	0	

Proposed Silvicultural Activities

Topic	Description
Site Selection and Silvicultural Objectives	This site was selected because the overstory is dominated by declining white pines and the stands lack vertical structure diversity. The objectives will be to remove the white pine while retaining the large red oaks on site as retention in order to release diverse regeneration where it exists and establish diverse regeneration where it does not. The treatment as prescribed will help make the forest more resistant and resilient to future disturbances at a landscape level.
Silviculture Prescription	One opening between 2.0-4.9 acres in size and the remaining acreage of openings .25-2.0 acres in size totaling about 6 acres. Openings will focus on removing the white pine in the worst condition and leaving large red oaks as retention, while also thinning between openings to help release the other red oaks and provide daylight on the sides of the openings.

Climate Change Considerations: DWSP has determined that the decision to implement this project is consistent with EEA climate goals and guidelines and agency land management objectives. Carbon and climate change considerations specific to the activities proposed for this project are discussed below.

Proposed Activity	Alignment of Activity with Climate Oriented Strategies and Recommendations
Full overstory removal, partial stand, patch regeneration cut.	Patch cutting is a regeneration technique that straddles the boundary between classic even-aged and uneven-aged forest management systems. Foresters select appropriate areas ('patches' or 'groups') covering a portion of the stand to harvest rather than removing the entire stand and then return periodically to repeat the process in other portions of the stand. In using patch cutting there is no final regeneration cut. Patch size and shape are determined by many different factors including overstory condition, desired species composition in the regeneration layer, other desirable herbaceous and woody vegetation, location, stand re-entry period, etc. Harvesting in patches aligns with many **climate-smart forestry practices**: • Increasing **structural diversity** improves resiliency by reducing the impact of age/size related disturbances. • Extending regeneration periods minimizes short term impacts to groundwater and nutrient cycling. • Partial stand overstory removals more closely align with **natural disturbance patterns**. • More **carbon is left on the landscape** for longer periods, and within-patch live tree, snag, and coarse debris retention allow for development of old forest characteristics. • Can also be used as opportunities to increase the stocking of **future climate adapted species, current climate imperiled species**, or other types of desirable vegetation.
Diffuse overstory removal, partial cut, mid-rotation thinning.	Classic thinnings are partial cuts implemented during the 'middle years' of stand development ('intermediate treatments') to **adjust species composition**, shift growth towards desirable and more vigorous trees, and maintain desired density and stocking levels. Stands may be thinned multiple times prior to initiating the regeneration phase near the end of a planned rotation. Time intervals between thinnings are generally considerations between rotation lengths and the response of the trees on the site. Climate-smart practices that agency foresters keep in mind when conducting thinnings include: • **Retaining higher residual densities** that maintain higher levels of carbon stocks on the landscape. • Retaining better-formed and more vigorous individuals which will improve **carbon sequestration capacity**. • Taking the opportunity to favor **desired species**, especially those species that are better adapted to **future climate scenarios**.

Proposed Activity	Alignment of Activity with Climate Oriented Strategies and Recommendations
General/other Climate Change Considerations	This silvicultural approach is designed to improve forest resilience by addressing both structural and compositional vulnerabilities across two distinct stand types. Both stands are currently overcrowded and lack vertical structural diversity, making them less adaptable to future stressors such as pests, drought, and storm damage. Retaining large red oaks ensures continuity in forest function and habitat while the openings encourage the regeneration of a variety of native hardwoods and conifers suited to future climate conditions.

Equipment and Access Constraints and Considerations

Constraint Topic	Description and Considerations
Proposed Equipment requirements	None
Proposed wetland or stream crossings	None
Further wetland comments	No harvesting in wetlands.
Vernal Pools	None known
Access improvements needed	The landing will need some slight modification to gain access from the road. A driveway permit inquiry to the town will be pursued if required.
Other EQ issues	None
In-kind Services	None
Other Access Concerns (parking, trails, etc.)	There are unauthorized trails in the proposal area.

Subwatershed Analysis

Sub-Watershed number/name	Total DCR-owned acres in this sub-watershed	Acres regenerated on DCR land in the last 10 years in this sub-watershed	Total DCR-owned acres remaining for regenerating up to the 25% per 10 year limit for this sub-watershed	Acres in this sub-watershed that are part of this proposed lot
Mason	47	0.5	11.2	12
Brigham	220	0	55	1

Additional comments on Subwatershed analysis:

Wildlife and Habitat Observations and Considerations

Wildlife/Habitat	Observations and Considerations
Natural Heritage Priority Habitats?	Yes, a Natural heritage layer associated with Mason Brook.

Wildlife/Habitat	Observations and Considerations
State Listed species present:	NHESP has determined that certain state-listed sensitive species or habitats may exist within the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected species and their locations is not included in this report. DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed activity.
Rare Natural Communities:	None known.
General Wildlife Comments	Surveys showed mild deer browse where there is regeneration.

Cultural Resources Description and proposed protection measures

Cultural Resource	Description and proposed protection measures
Historical features present; comments regarding protection	Collins mill historical site along Mason Brook will be buffered and avoided.
Description of site characteristics in relation to Ancient sites modeling or other verified evidence	This site is fairly flat and close to Mason brook and Brigham Pond. There are stony soils in the back of the lot.

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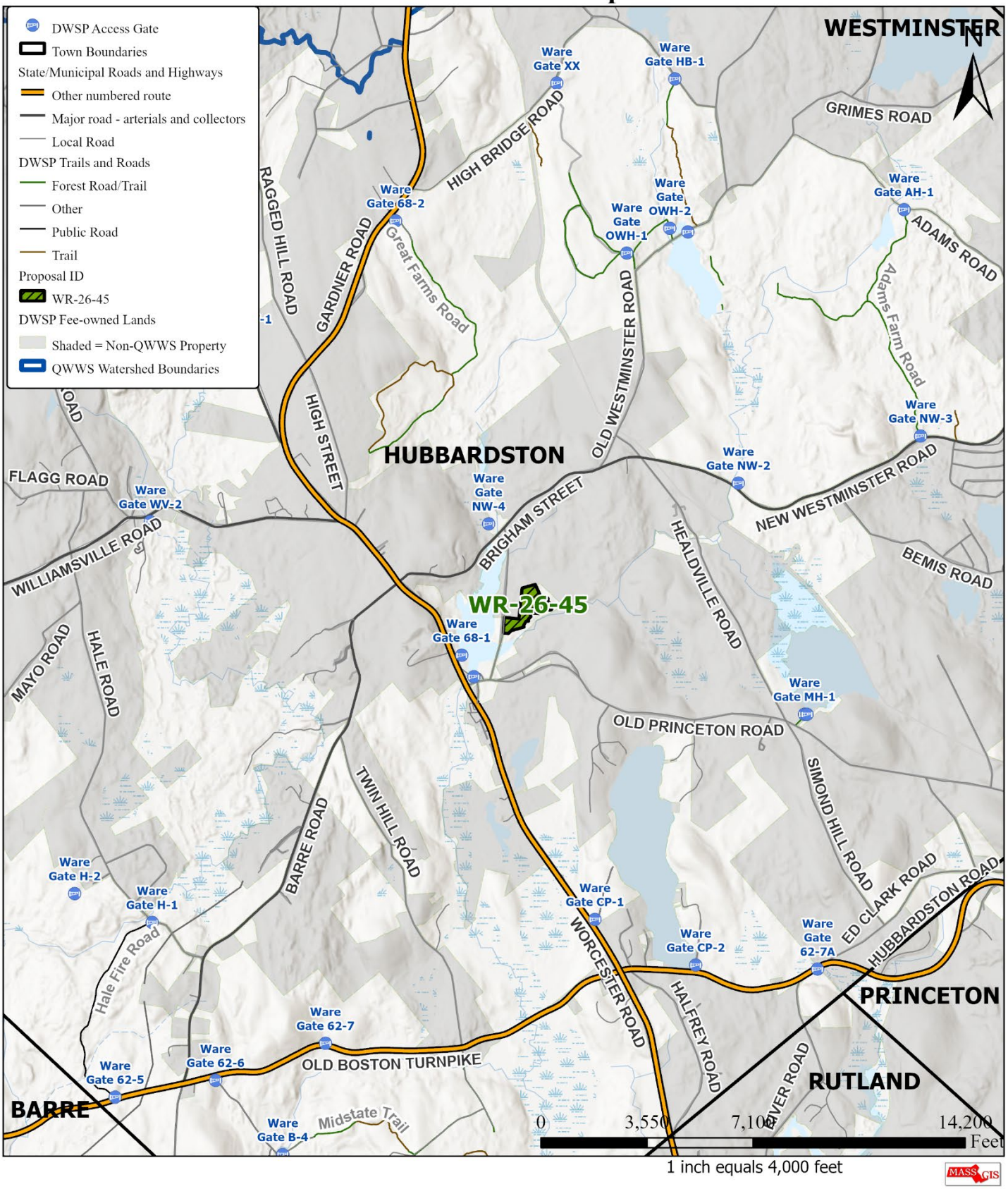
WR-26-45 -- Locus Map



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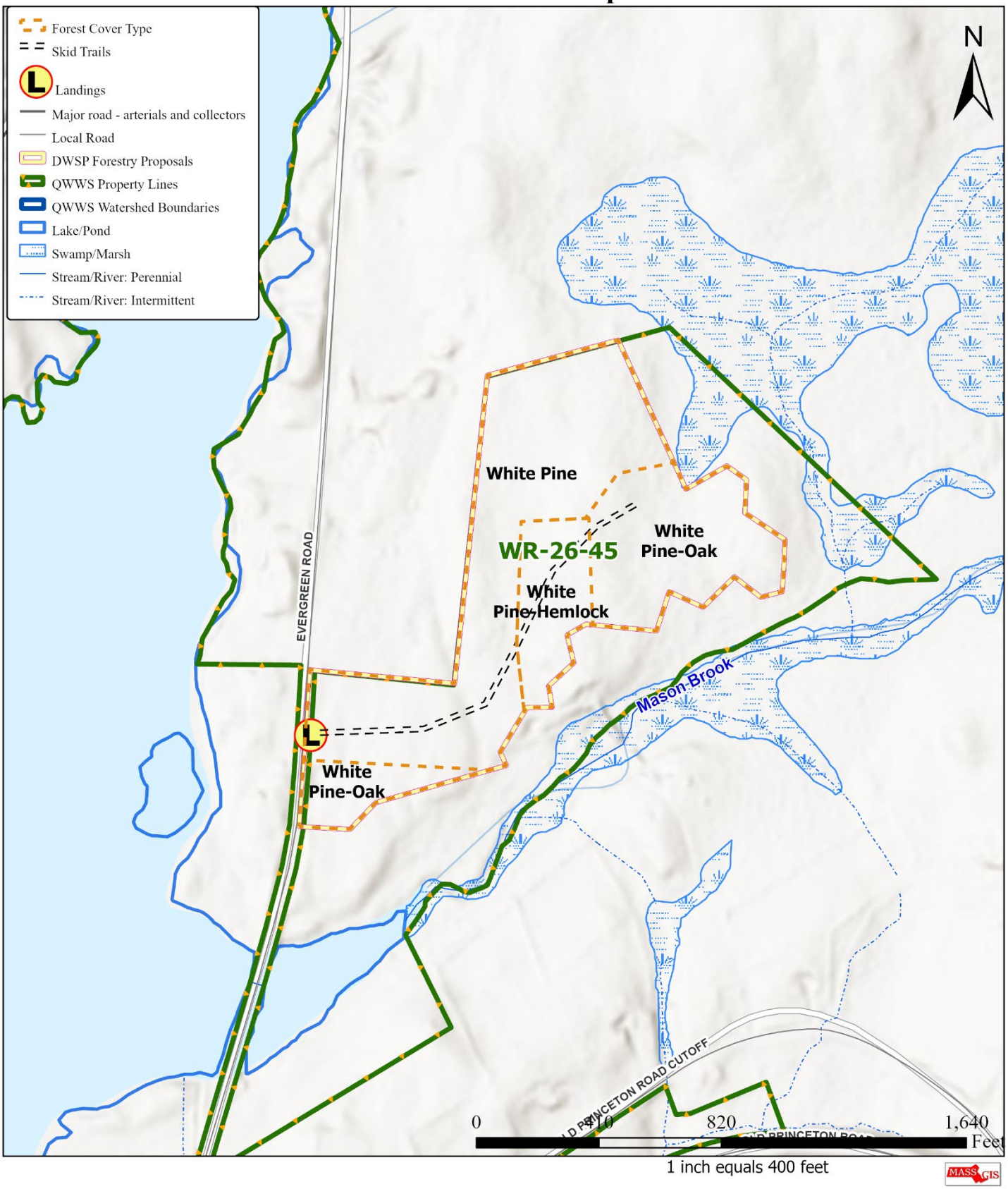
WR-26-45 -- Stand Map



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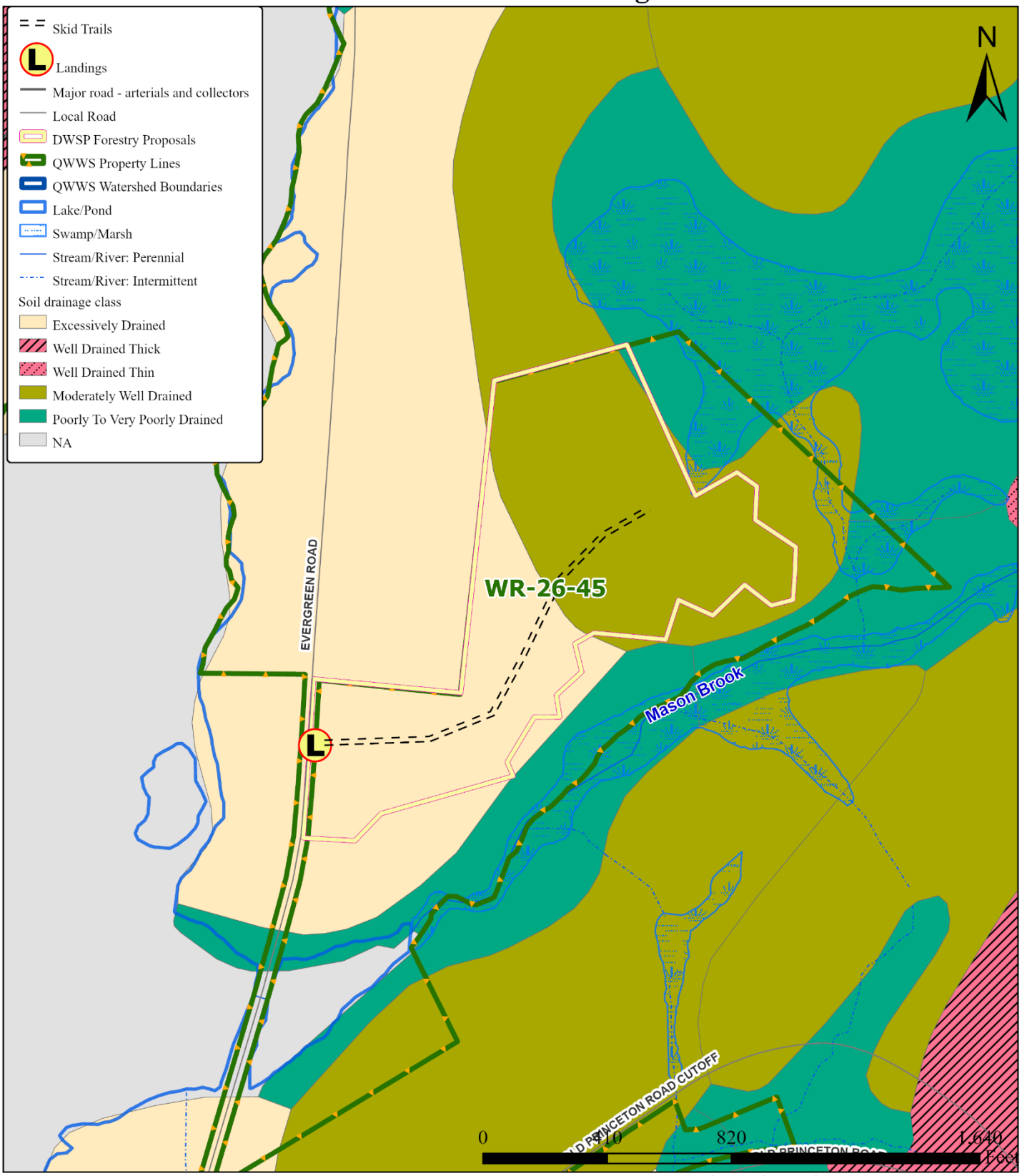
WR-26-45 -- Soil Drainage Classes



1 inch equals 400 feet

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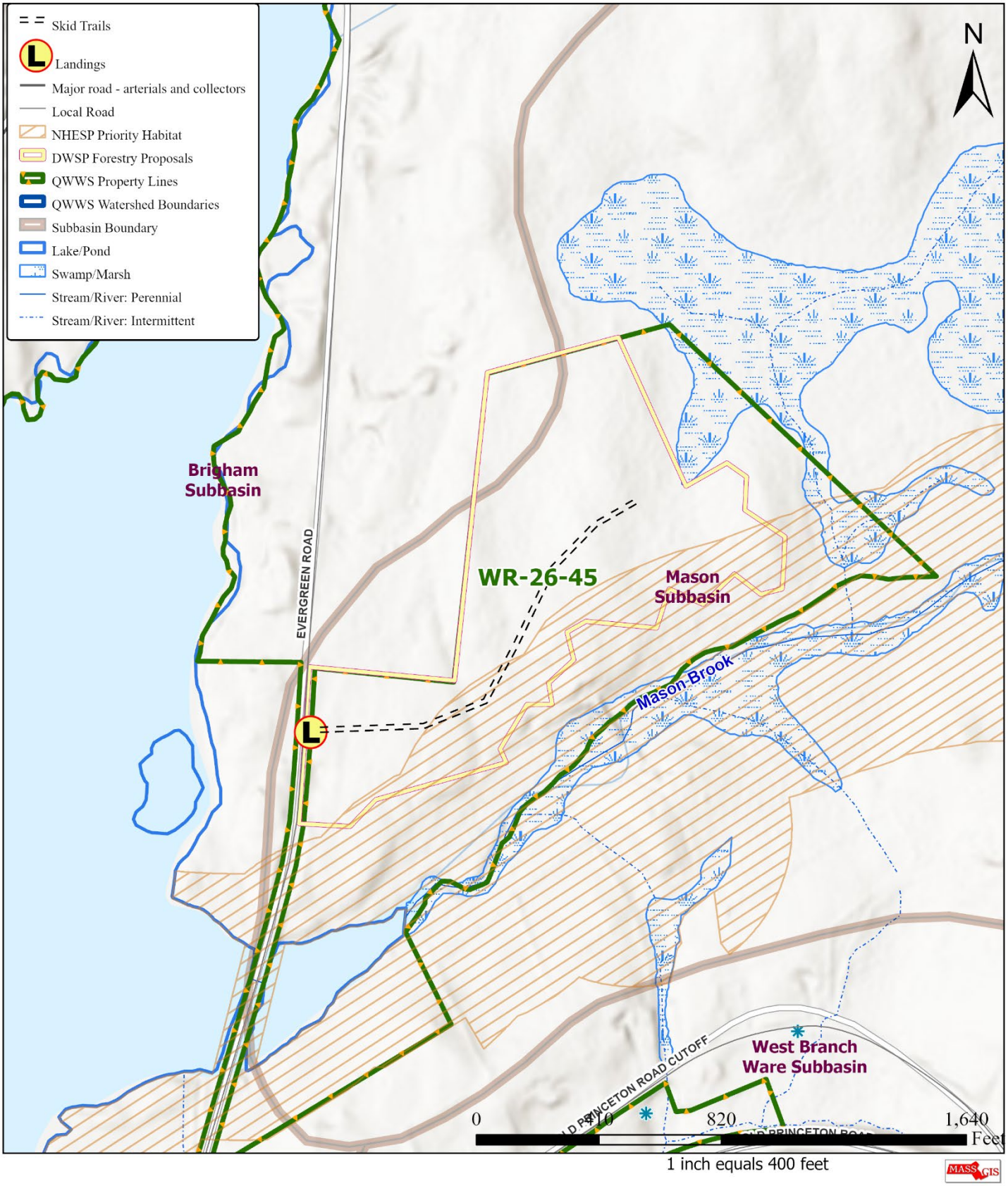
WR-26-45 -- Wetlands and Wildlife Resources



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WR-26-45 -- Cultural Resources and Landscape Characteristics