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	**PR-26-14-A**
Fiscal Year	2026
Watershed	Quabbin
Town(s)	New Salem
Forester	Derek Beard
Estimated Acres by Treatment Type	Approximately 10 acres of regeneration openings. Openings will range in size from 0.6 to 6 acres.
Total Proposal Acres	43
Block	Prescott
Compartment and/or Working Unit	14
Location and Boundary Description	Triangular in shape, the area is situated southeast of intersection 17-6 about 2.5 miles south of gate 17 (Cooleyville Road). Topographically it encompasses the foot of a north/northwest facing slope interrupted by a perennial and an ephemeral brook. The area is bounded to the north by Barnes Road, to the south by an unnamed abandoned town road and to the west by Cooleyville Road (aka Gate 17 Road).
Previous Proposal?	No
Project Goals and Summary Description	The project is intended to increase structural diversity of this even age, tall mixed species forest. Establishing openings while leaving forested areas in between relatively undisturbed will create more diverse vertical and age structure than currently exists. It will also provide the light conditions necessary to establish and grow young trees of diverse species that will someday replace the current canopy. In short order (5-10 years), these openings will be colonized by vigorous, hopefully diverse, young trees, bolstering forest resilience.

Forest Cover Types and Acreages

Overstory Forest Types	Acres
White Pine-Hardwood	26
White Pine-Oak	13
White Pine	4

Understory Cover Types and Relative Importance

Understory Cover Type	**Relative area covered** (Dominant, Secondary, Minor, None)
Tree seedlings and saplings	Dominant
Mountain laurel	None
Mesic site - witch hazel, highbush blueberry	Secondary
Dry site -Huckleberry, blueberry	Minor

Understory Cover Type	Relative area covered (Dominant, Secondary, Minor, None)
Mesic site - cinnamon fern, mixed hardwood	Minor
Hayscented fern	Minor
Invasive shrubs/vines	Secondary
Other	

Forest Vegetation Description

Vegetation Topic	Description
General Description, Forest Composition, Stand History, and Harvest History	Non-overlapping commercial thinning in 1981 and 1990 improved residual white pine quality, the area's predominant forest cover. Other species growing amongst the pine are pole and larger diameter black birch, red maple, white ash, red oak and sugar maple. Scattered harvest locales were thinned enough to exhibit a two aged structure composed of larger diameter white pine and mainly small diameter black birch stock. Most white ash exhibit bark blonding, indicative of woodpecker damage while preying upon Emerald Ash Borer (EAB) larva who are consuming the tree's cambium (just inside the bark); the widespread entrenched EAB infestation may mean the eventual demise of most the ash trees throughout New England.
Advance Regeneration description	Understory composition is evenly split between sapling/small pole size black birch and white pine. Much of the pine lacks vigor and/or is poorly formed. Some sugar maple seedling/saplings inhabit richer sites.
Terrestrial Invasive Plants description	Japanese barberry is the most common invasive present and is heaviest adjacent to the gate 17 road (south of intersection 17-6) and within the brook riparian areas. Early-stage bittersweet was also found along gate 17 road, as well as Japanese stiltgrass. An old farmstead on Barnes Road is inhabited by Asiatic bittersweet, multiflora rose and Japanese barberry. That site was used as a log landing for the 1981 harvest, leading to some translocation of barberry into the proposal area (primarily in the skid road).

Description of Wetland Resources Present

Resource Type	Description of resources present
Wetlands	Yes, a small shrub swamp
Streams	One perennial and one intermittent
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	0	
Well-drained Thin	30	Chatfield-Hollis complex, rocky
Well-drained thick	65	Canton-Chatfield-Hollis complex, rocky, Canton fine sandy loam
Moderately well-drained	0	
Poorly to very poorly drained	5	Freetown woody peat

Proposed Silvicultural Activities

Topic	Description
Site Selection and Silvicultural Objectives	The forest lacks structural diversity, most acutely a vigorous and diverse regeneration layer. Establishing openings will increase structure diversity by triggering vigorous regeneration development.
Silviculture Prescription	Openings placed on mainly well-drained soil provide the best opportunity to trigger a diverse free-to-grow young forest cohort. The goal will be to regenerate about 10 acres with one 6 acre opening and six more openings averaging 2/3 of an acre (0.66). Openings will be interspersed with high value wildlife trees and large/unique legacy trees to enhance future forest complexity.

General Climate Change Considerations:

This silvicultural approach will improve forest resilience by introducing structural and species diversity into an even-aged, white pine-dominated forest. This patch-based approach aligns with climate adaptation priorities by increasing structural heterogeneity across the landscape, and vigorous regeneration in a new age class, providing continuity of long-term forest function. When combined with a variety of opening sizes and areas of intact forest, the management proposed in this unit encourages a wider range of conditions that will stimulate more diverse regeneration and allow different age classes to respond to potential disturbance in varied ways. Increased age and structural diversity buffers against widespread loss from pests like EAB or extreme weather events.

DWSP has determined that the decision to implement this project is consistent with EEA climate goals and guidelines and agency land management objectives. 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
Patch Regeneration Harvest	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.
Additional Comments	

Equipment and Access Constraints and Considerations

Constraint Topic	Description and Considerations
Proposed Equipment requirements	Likely cut-to-length harvest system
Proposed wetland or stream crossings	One stream crossing over perennial brook using a temporary skid bridge is planned. No wetland crossings are planned.

Constraint Topic	Description and Considerations
Further wetland comments	
Vernal Pools	
Access improvements needed	May need gravel for 17 road landing stabilization.
Other EQ issues	
In-kind Services	
Other Access Concerns (parking, trails, etc.)	Terrestrial invasive plants in and around the Gate 17 road landing will be treated in advance of the harvest and any associated road improvement work to minimize spread into the forest.

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
57	2779	37	658	43

Additional comments on Subwatershed analysis:

Wildlife and Habitat Observations and Considerations

Wildlife/Habitat	Observations and Considerations
Natural Heritage Priority Habitats?	Yes
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	Live and dead high value snags (trees 16” dbh or larger) will be retained for habitat.

Cultural Resources Description and proposed protection measures

Cultural Resource	Description and proposed protection measures
Historical features present; comments regarding protection	The area contains many features pointing to rich early euro-American settlement such as cellar holes, stone wall and an intact field stone culvert stream crossing. Where needed, these resources will be flagging for their protection.

Cultural Resource	Description and proposed protection measures
Description of site characteristics in relation to Ancient sites modeling or other verified evidence	Relative to pre-reservoir topography, the area would be considered uplands. Surface stone and slope area light/mild. Microtopography is moderate.

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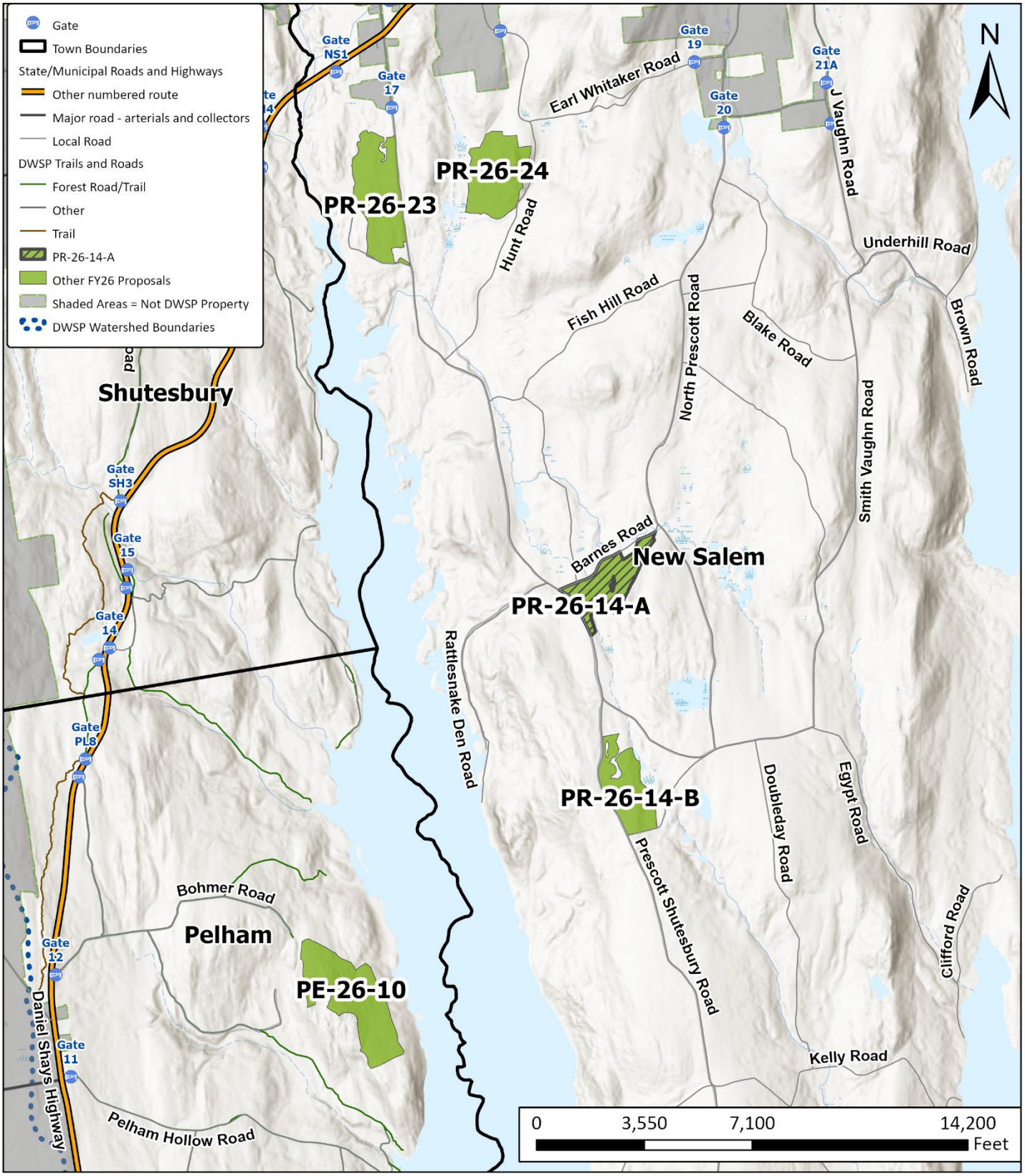
PR-26-14A -- Locus Map



1 inch equals 4,000 feet

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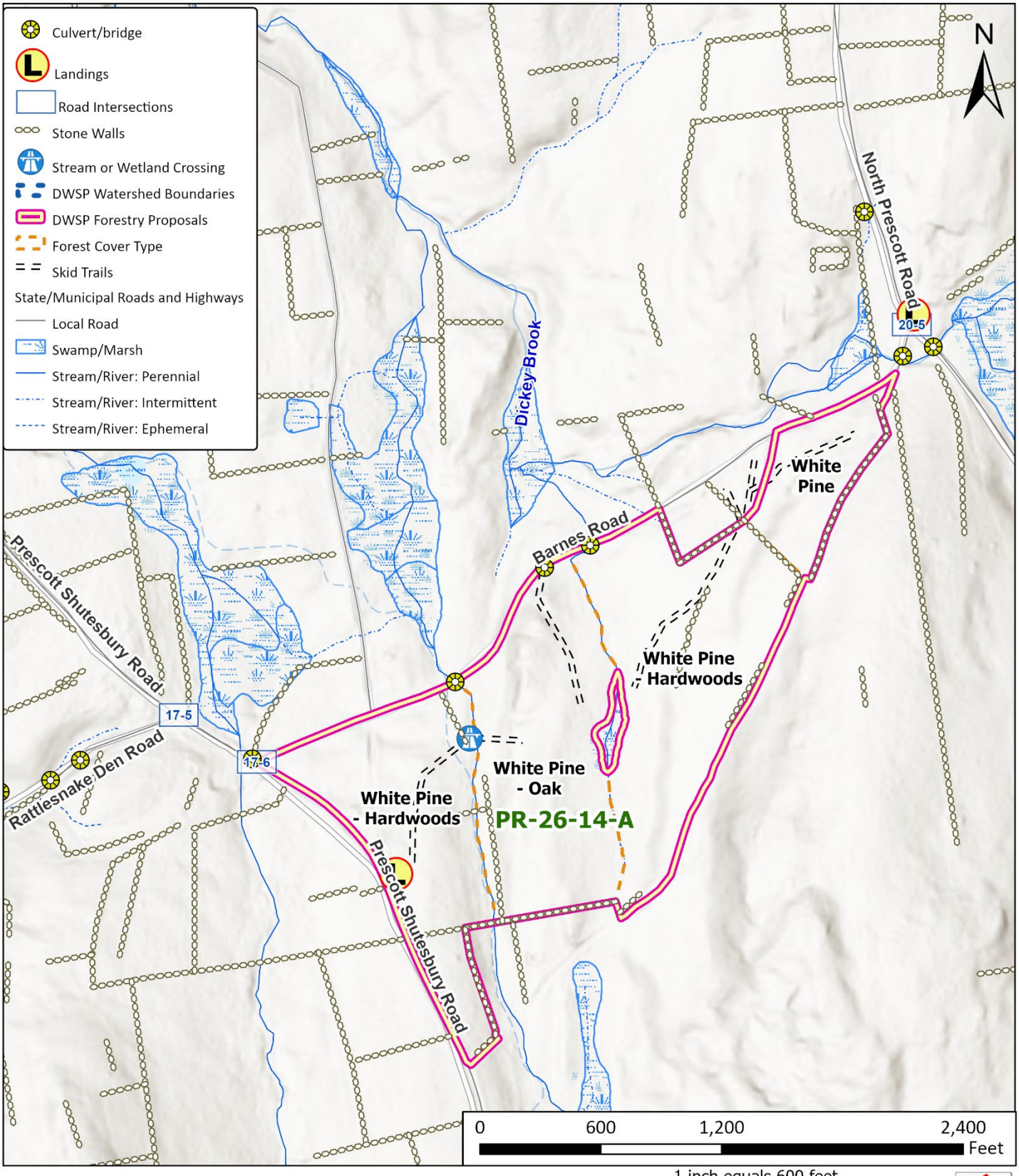
PR-26-14A -- Stand Map



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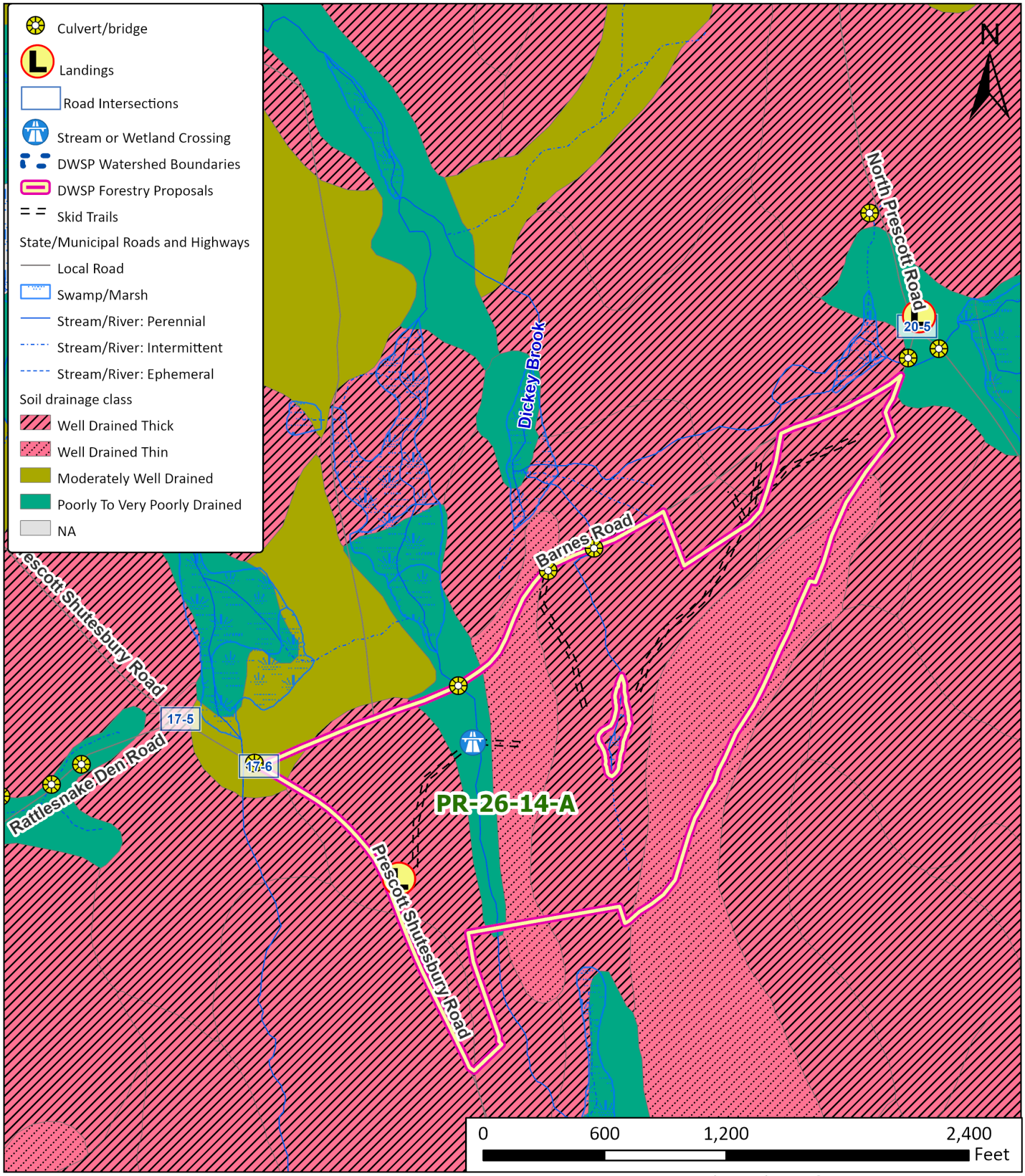
PR-26-14A -- Soil Drainage Classes



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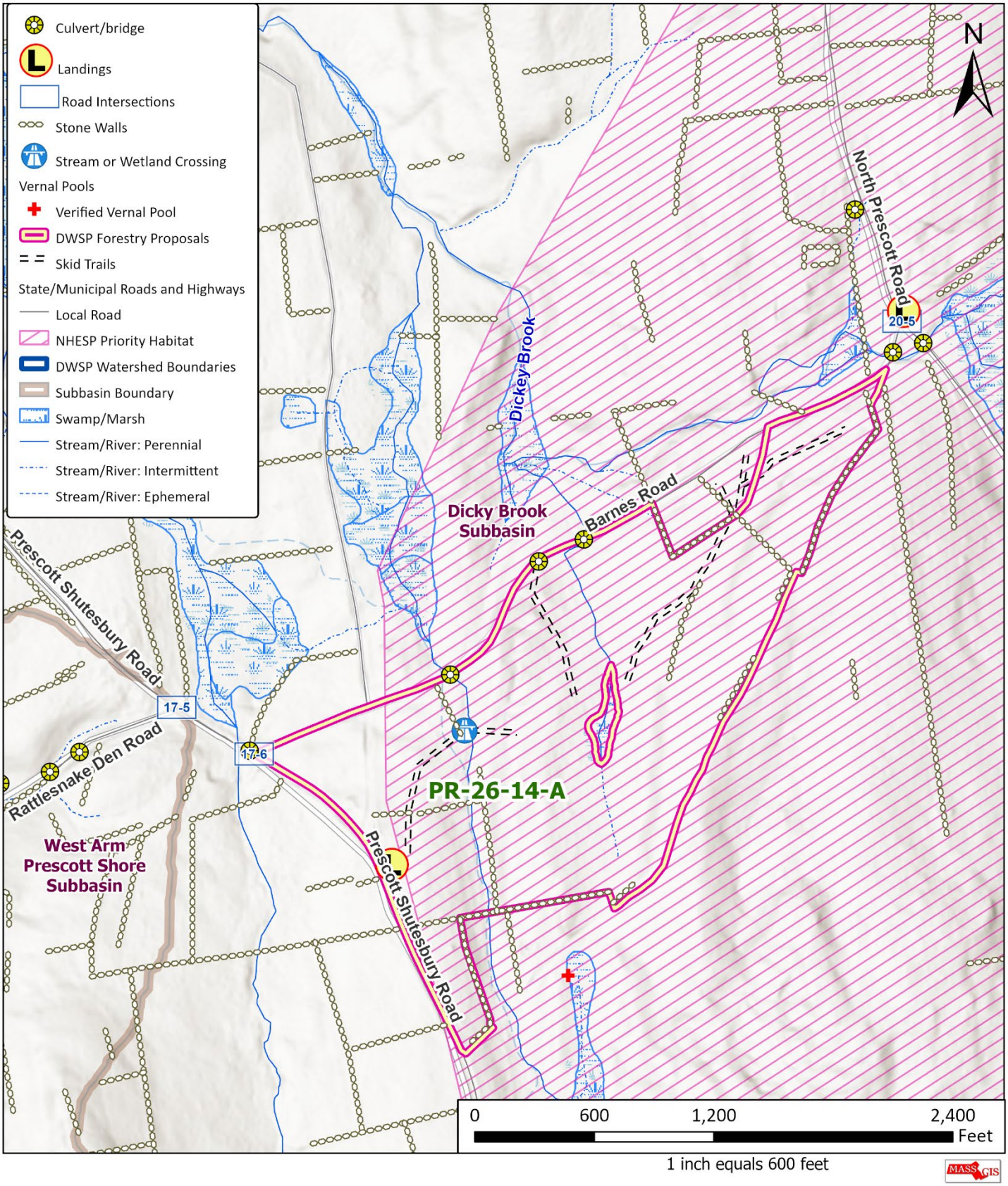
PR-26-14A -- Wetlands and Wildlife Resources



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PR-26-14A -- Cultural Resources and Landscape Characteristics