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	**HA-26-01-02**
Fiscal Year	2026
Watershed	Quabbin
Town(s)	Ware
Forester	Douglas Hutcheson
Estimated Acres by Treatment Type	25 acres of thinning 35 acres of regeneration openings ranging in size from 0.5 to 2 acre.
Total Proposal Acres	169
Block	Hardwick
Compartment and/or Working Unit	01
Location and Boundary Description	Route 9 bounds the project areas to the north, the Herm Covey WMA to the east and south, and private property to the west.
Previous Proposal?	HA-15-01
Project Goals and Summary Description	The goal of the harvest is to facilitate the growth of existing regeneration that resulted from the recent harvest and to create conditions for the establishment of new regeneration. The forest that results will be more diverse in vertical structure and species composition which will make it more resilient and resistant to disturbance.

Forest Cover Types and Acreages

Overstory Forest Types	Acres
Northern Red Oak	90
White pine/mixed oak	40
White pine	10

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	Minor
Dry site -Huckleberry, blueberry	Secondary
Mesic site - cinnamon fern, mixed hardwood	Minor
Hayscented fern	Minor
Invasive shrubs/vines	Minor
Other	

Forest Vegetation Description

Vegetation Topic	Description
General Description, Forest Composition, Stand History, and Harvest History	The numerous stonewalls indicate past agricultural usage. Farm abandonment began the transition to the forest cover now found on the property. The forest types present are Northern Red oak, Eastern White pine and mixed oak, (red and black with some white oak), and white pine. Associated species in all of the three stand types include red maple, black, white, and yellow birch, hickory, aspen and ash, with an occasional hemlock. The three stands are dominated by relatively even aged overstory trees with a closed canopy interspersed by small (less than one acre) openings created by the most recent harvest in 2017-2019. The overstory is dominated by small to large sawtimber sized trees of fair to good quality. In areas that were not thinned between the small openings the basal area is 90-120 square feet, except for in the white pine stand, where it exceeds 120 square feet. In thinned areas, the basal area is 40-80 square feet. The stands have been impacted dramatically by spongy moth, first in the early 1980s and again from 2015-2017. Past harvests include a thinning in 1968, thinning and salvage in 1980-1981, and thinning and small group establishment in 2017-2019.
Advance Regeneration description	The 2017-2019 harvest (Lot 1050) resulted in healthy sapling regeneration of diverse species in most of the openings that were created. Vigorous black birch, white pine, and red maple seedlings and saplings were observed in 100% of the regeneration survey plots. Healthy and encouragingly plentiful red and white oak seedlings were also present in all plots, but were consistently shorter than the birch, pine, and maple.
Terrestrial Invasive Plants description	Japanese barberry, oriental bittersweet, autumn olive, grape vine near CCC camp.

Description of Wetland Resources Present

Resource Type	Description of resources present
Wetlands	Yes
Streams	Yes
Vernal pools	Yes. Quabbin verified vernal pool # 726 is located in the southeast corner of the lot. MA NHESP certified vernal pool # 7936 is located along Route 9 across from the Quabbin main entrance.
Seeps	No

Description of Soils by Hydric Class

Soil Hydric Classes	% of area	Soil series and any further comments
Excessively Drained	5%	Scituate fine sandy loam
Well-drained Thin	80%	Charlton-Hollis Rock outcrop
Well-drained thick	0	
Moderately well-drained	0	
Poorly to very poorly drained	15%	Hydric soils in a wooded wetland along the southern boundary. This area will not be harvested.

Proposed Silvicultural Activities

Topic	Description
Site Selection and Silvicultural Objectives	The site was selected because of the potential to release the successful regeneration resulting from the 2017 harvest. This proposed harvest will expand the existing openings and create new openings for the dual purpose of releasing advanced regeneration and facilitating the establishment of a new cohort of seedlings. Maintaining species diversity and snags that provide wildlife habitat will be prioritized.
Silviculture Prescription	Thinning will occur along the southern edges of existing openings. Thinning will aim to encourage the best trees of all species while removing low vigor and poorly formed stems and allow more light to reach established regeneration. New openings 0.5-2.0 acres in size will be created targeting patches of low vigor and poorly formed trees and taking advantage of terrain and location of existing openings to expand those openings. Approximately 5 square feet of basal area per acre of healthy overstory trees of all species and trees with particular wildlife value traits such as cavities will be retained in new openings over 0.5 acres. Standing dead trees will be retained as much as possible throughout the entire proposal. Silvicultural burning may be implemented, potentially in collaboration with Mass Wildlife who abut to the east, to encourage oak regeneration.

General Climate Change Considerations:

Although this proposal is located just outside the watershed boundary, it still plays an important role in advancing regional forest climate resilience and the management supports broader landscape-level adaptation to climate change. The proposed treatment aligns well with climate resilience goals by building on previous management to create a more structurally and compositionally diverse forest better able to withstand and recover from future disturbances. A coordinated approach with DFW to incorporate the use of fire for oak regeneration supports landscape-level climate adaptation and strengthens ecological continuity across ownership boundaries.

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
Habitat restoration and maintenance prescribed fires -- heath, shrubland, woodland, or grassland. **(see page 3, Silviculture Prescription)**	Although most often used in Massachusetts for open habitat maintenance, prescribed burning is also used within **oak forests** in Massachusetts and elsewhere for silvicultural purposes. Fire rapidly converts a fraction of a forest's stored organic carbon into other forms including CO_2 but carefully applied use of **low intensity fire** offers great payback value in trade for this minor loss. Prescribed fire can: • prepare a site for **reforestation**, • discourage **invasive species**, • and encourage **native tree regeneration** better adapted to fire regimes, particularly oak and hickory. Forest stands treated with periodic light burning exhibit reduced biomass losses in the event of a wildfire, generally have **more resistance to pathogens**, and should be more **resilient under climate scenarios** that anticipate more frequent drought facilitated fires.

Proposed Activity	Alignment of Activity with Climate Oriented Strategies and Recommendations
Full overstory removal, partial stand, patch regeneration cut. **(see page 3, Silviculture Prescription)**	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.
Invasive plant control, including pre- and/or post-harvest and follow up treatments.	Strong consensus exists among land managers and climate science experts regarding the **threat to future forest health** posed by the introduction and spread of invasive plants. **Invasive plants** can: • aggressively **outcompete native plant species,** • dominate understory communities, and even climb, kill, and topple mature trees, • threaten overall **biodiversity**. • threaten **soil health** and long-term **carbon storage**. **Monitoring and controlling** invasive and interfering plant populations prior to and following forestry operations is a critical practice for **minimizing the risk of further impacts** inadvertently (though not unexpectedly) spread by harvesting-related activities.
Additional comments	

Equipment and Access Constraints and Considerations

Constraint Topic	Description and Considerations
Proposed Equipment requirements	Cut to length and forwarder required to protect regeneration and facilitate the use of small existing landings.

Constraint Topic	Description and Considerations
Proposed wetland or stream crossings	The existing stream crossing from harvest # 1050 will be utilized with portable bridges.
Further wetland comments	No wetland crossings.
Vernal Pools	Yes.
Access improvements needed	
Other EQ issues	
In-kind Services	
Other Access Concerns (parking, trails, etc.)	Log trucks will enter and exit the lot through the parking areas at Gates BL4 and BL6. Signage will be needed to alert the public as both gates are easily accessible by the public directly from Route 9.

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
Winsor West Shore	700			19
Off-Watershed				150

Additional comments on Subwatershed analysis: Analyses not conducted for lands outside the watershed boundary.

Wildlife and Habitat Observations and Considerations

Wildlife/Habitat	Observations and Considerations
Natural Heritage Priority Habitats?	No
State Listed species present:	None known
Rare Natural Communities:	None known
General Wildlife Comments	Deer, moose, turkey, and coyotes use the area. The area is hunted; deer browse pressure on hardwood regeneration is therefore less intense than where hunting is restricted.

Cultural Resources Description and proposed protection measures

Cultural Resource	Description and proposed protection measures
Historical features present; comments regarding protection	Numerous stonewalls are found throughout the interior and along the boundary of the project area. Existing barways will be utilized during the harvest to avoid creating new breaks in the walls. The remains of a CCC camp can be found near gate BL-4. The harvest will not impact the site.
Description of site characteristics in relation to Ancient sites modeling or other verified evidence	It is unlikely that there are any remnants of indigenous sites here. The landscape is steep and rocky with numerous outcrops.

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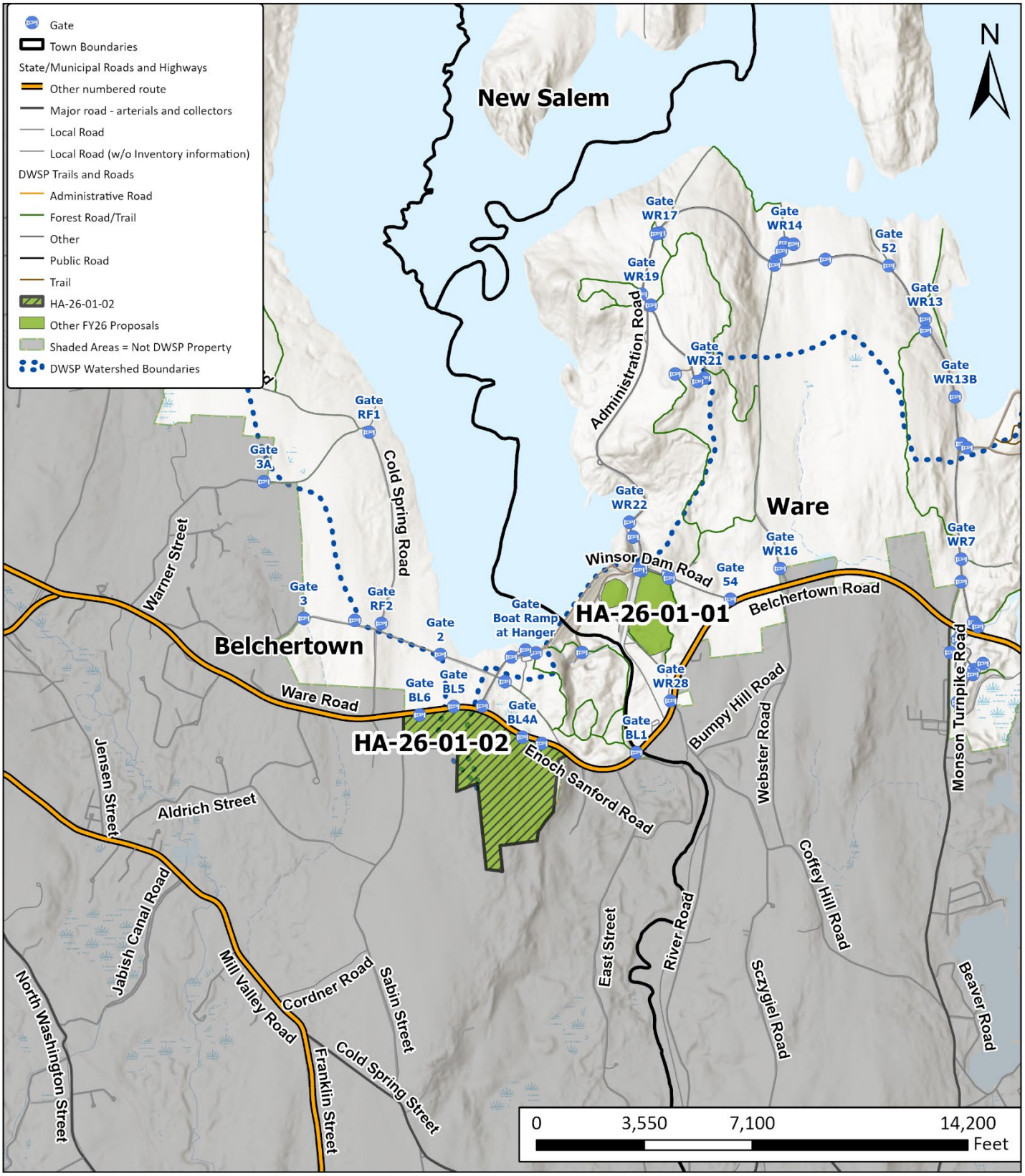
HA-26-01-02 -- Locus Map



1 inch equals 4,000 feet

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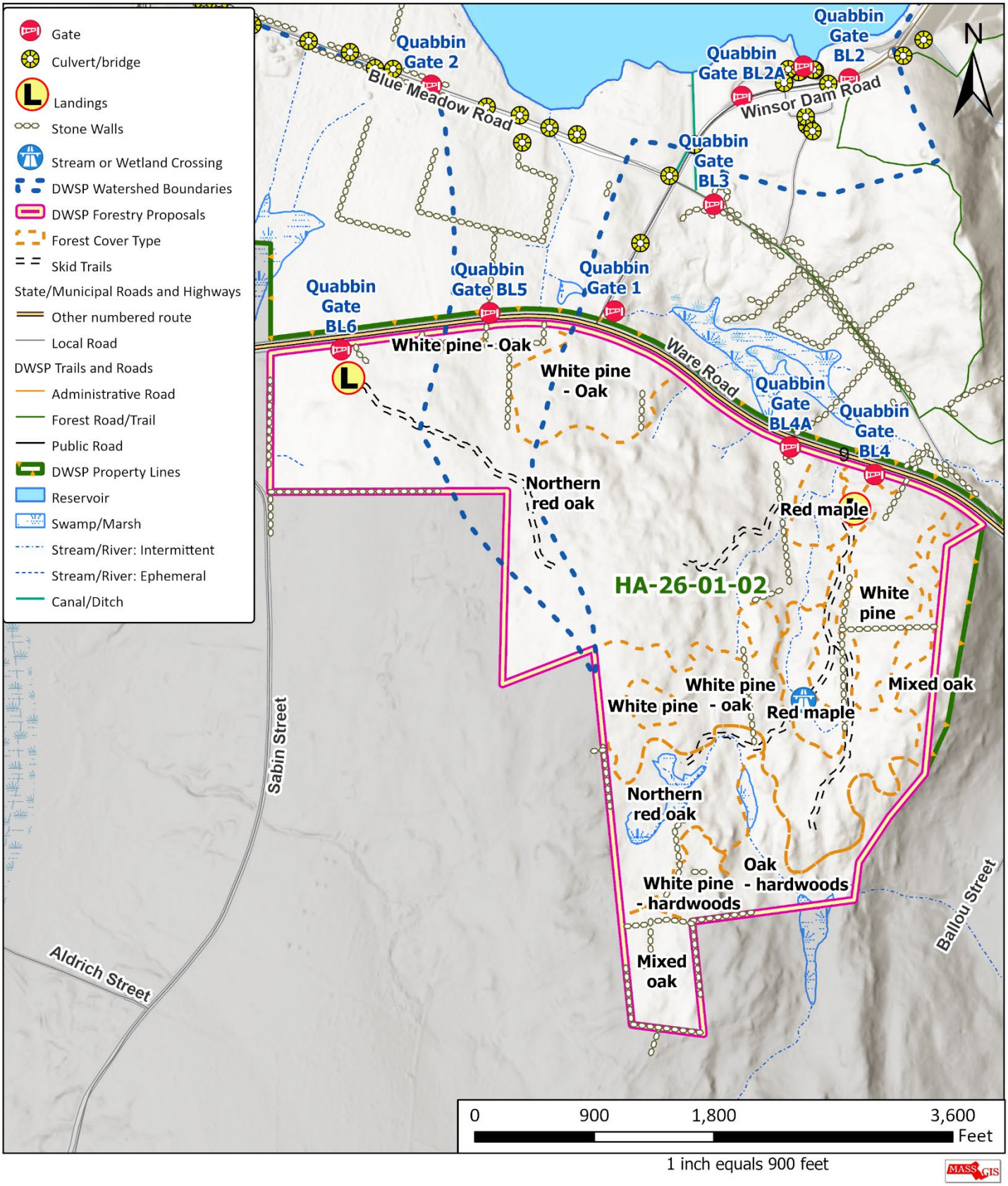
HA-26-01-02 -- Stand Map



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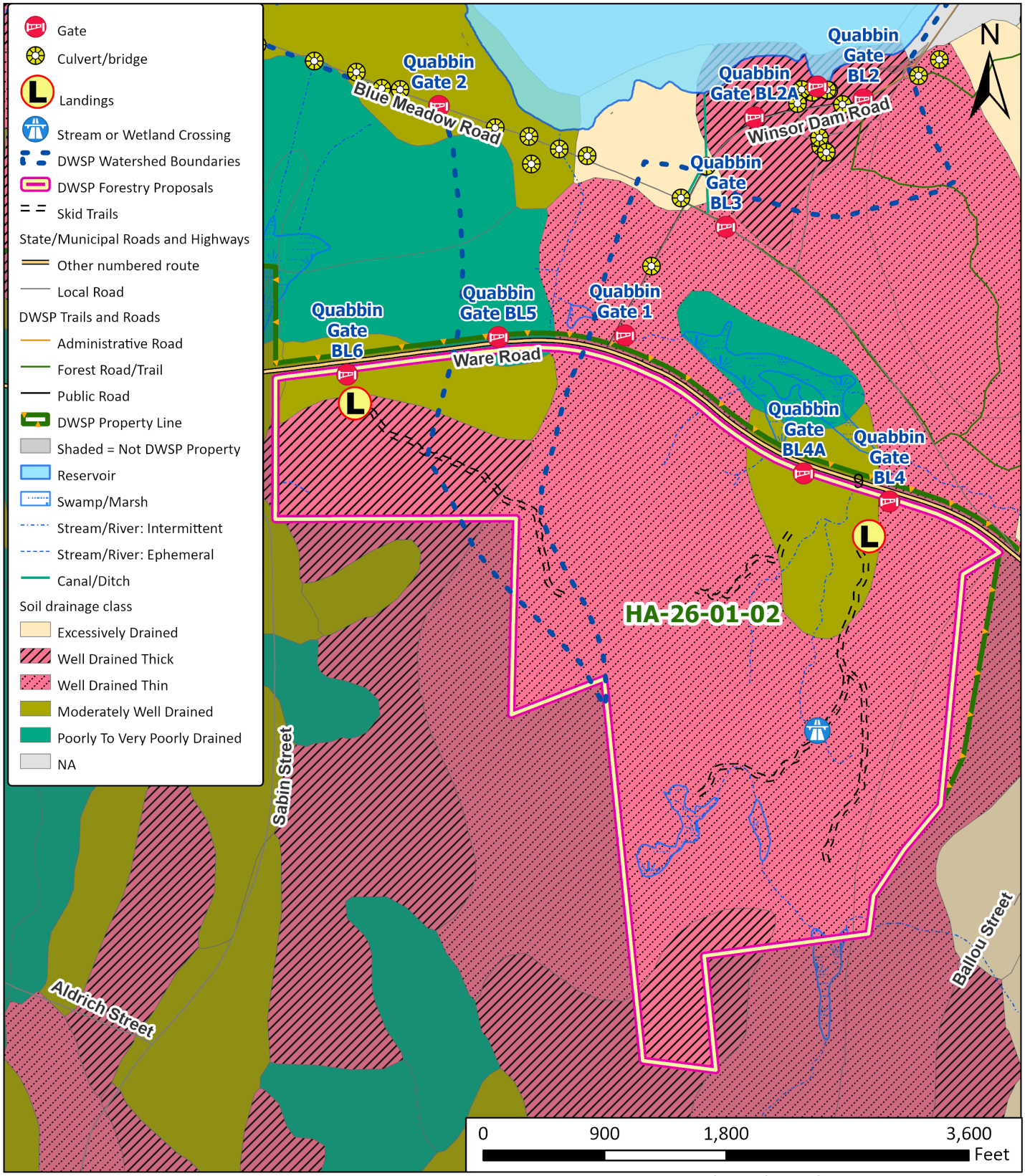
HA-26-01-02 -- Soil Drainage Classes



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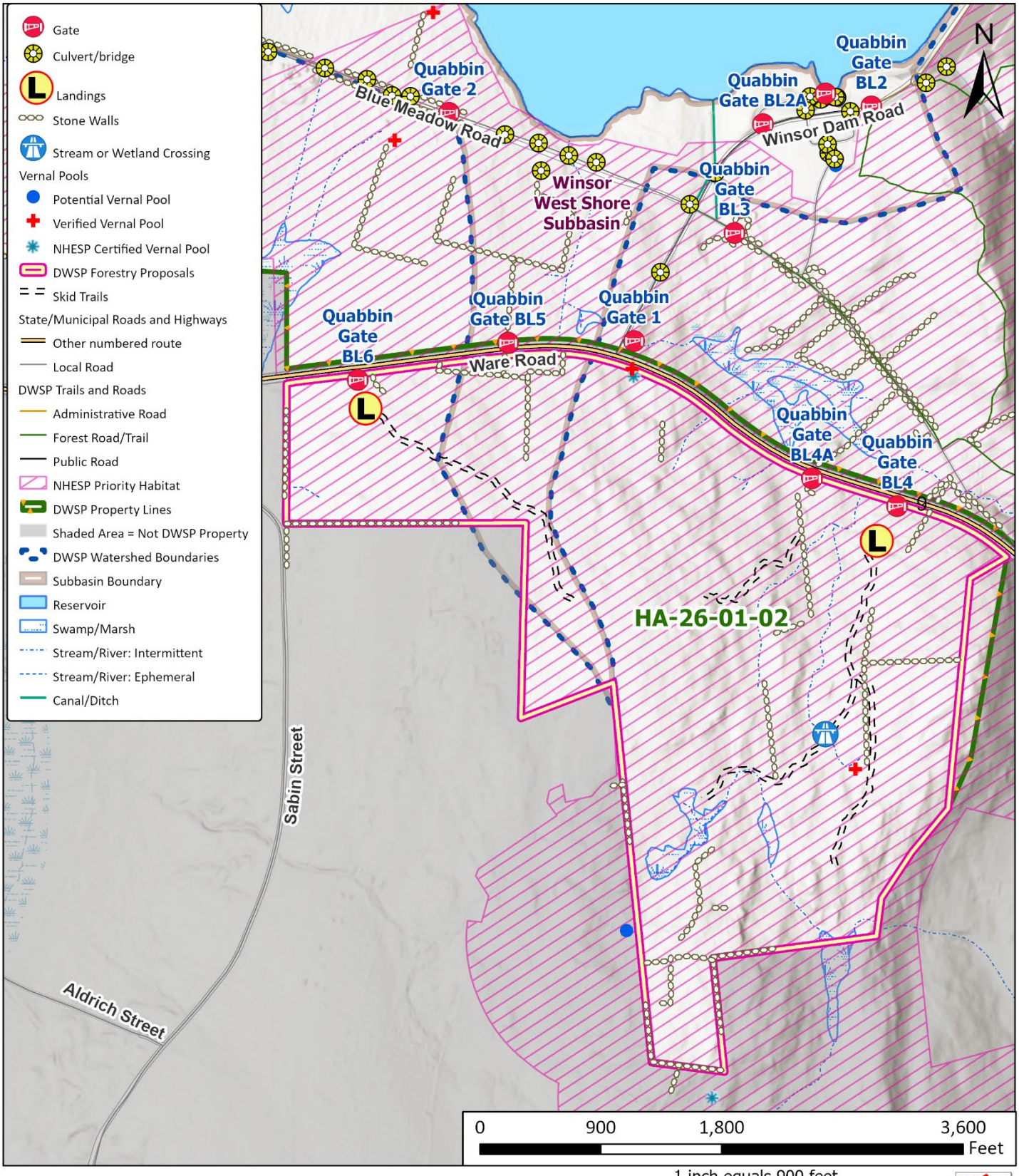
HA-26-01-02 -- Wetlands and Wildlife Resources



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HA-26-01-02 -- Cultural Resources and Landscape Characteristics