

Quabbin Harvest Proposal PR-19-18

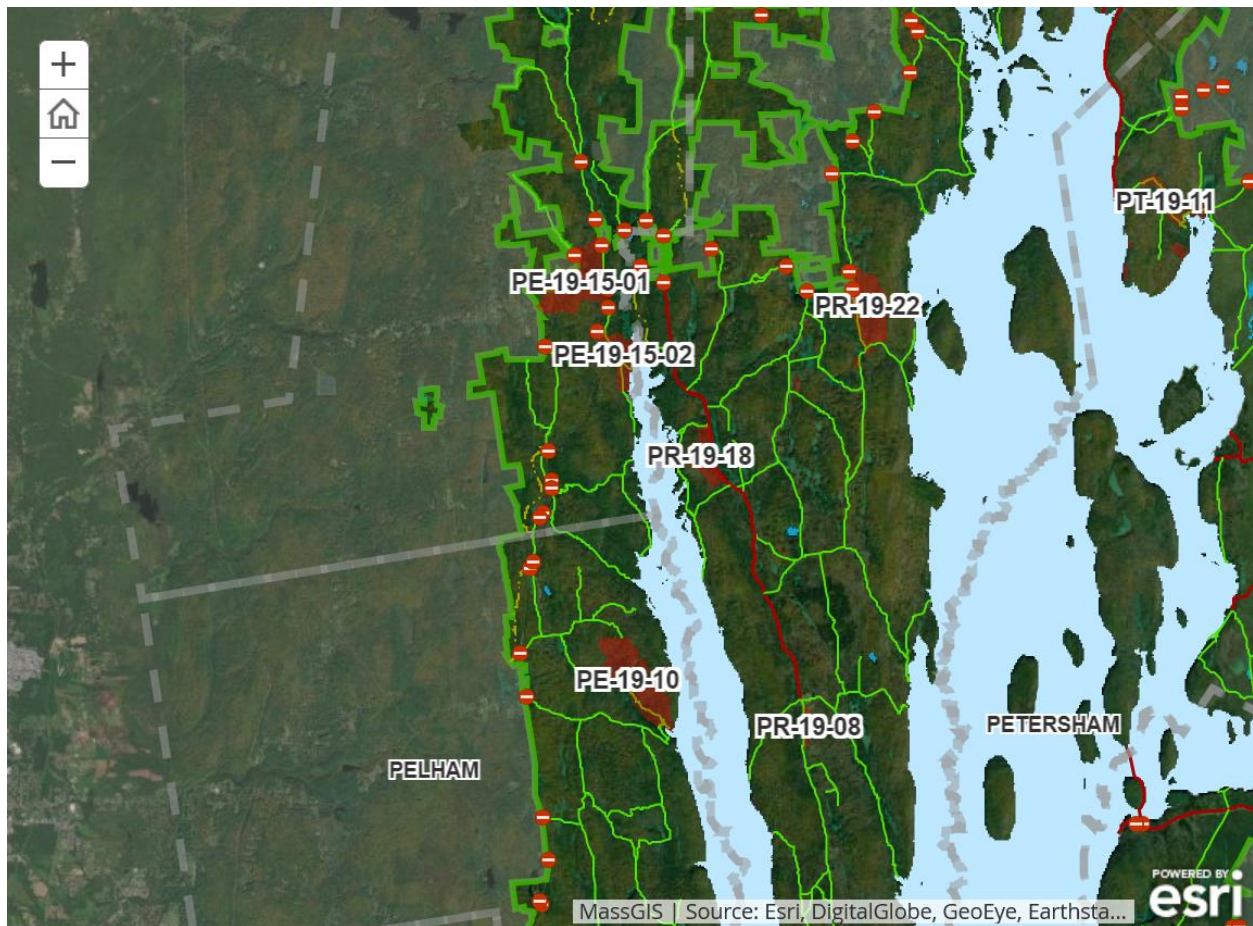
Proposal Goals

The purpose of the proposed project is to diversify forest structure and species. The majority of the area is fairly uniform high canopy forest. The proposed harvest will trigger a patchy young forest layer to develop.

Proposal Location

The proposal area is located on the west side of Prescott Rd. (gate 17) between intersections 17-4 and 17-5.

Total Acres: 74



General Description

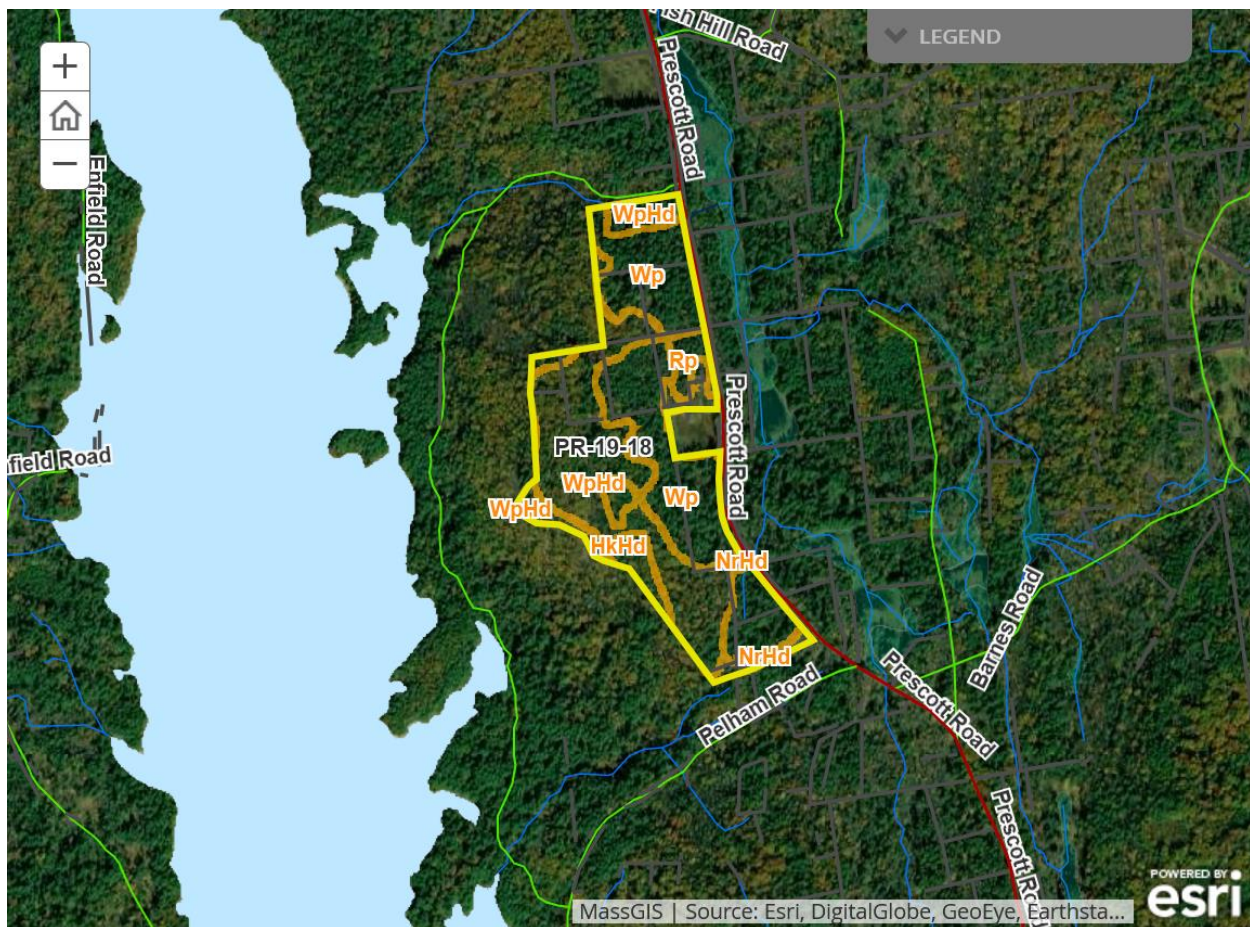
	Overstory Type(s)	Acres
Dominant	White pine/hardwood	69
Secondary	Red pine	4
Other	Northern hardwoods	1

	Understory Type(s)
Dominant	Tree seedlings/saplings dominate the site

Secondary	Hayscented fern prevalent
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Description of forest composition/condition:

Dominant forest cover throughout the proposal area is high canopy white pine. Mixed in with the white pine is oak (red, black and white), black birch, red maple, ash, sugar maple, hickory, and hemlock. Encompassed in the white pine is a 4 acre plantation of red pine originating around 1940. Mortality amid the red pine, first observed around 2005, has been steadily spreading radially; a pattern indicative of *Heterobasidion annosum*; commonly known as annosum root rot. South of the red pine is a grove of sugar maple also known as a sugarbush. These trees have been tapped for maple syrup production every march since the early 1980s. Amid the sugarbush is a small stand (.25 ac or less) of sawtimber aspen (aka poplar) with a dense carpet of sugar maple seedlings beneath. The understory is a diffuse mix of black birch, white pine, maple, ash and hemlock seedlings/saplings triggered by a 1997 shelterwood harvest. Regeneration was further released by a 2002 overstory removal of red pine at the south end of the proposal area (5 acres).



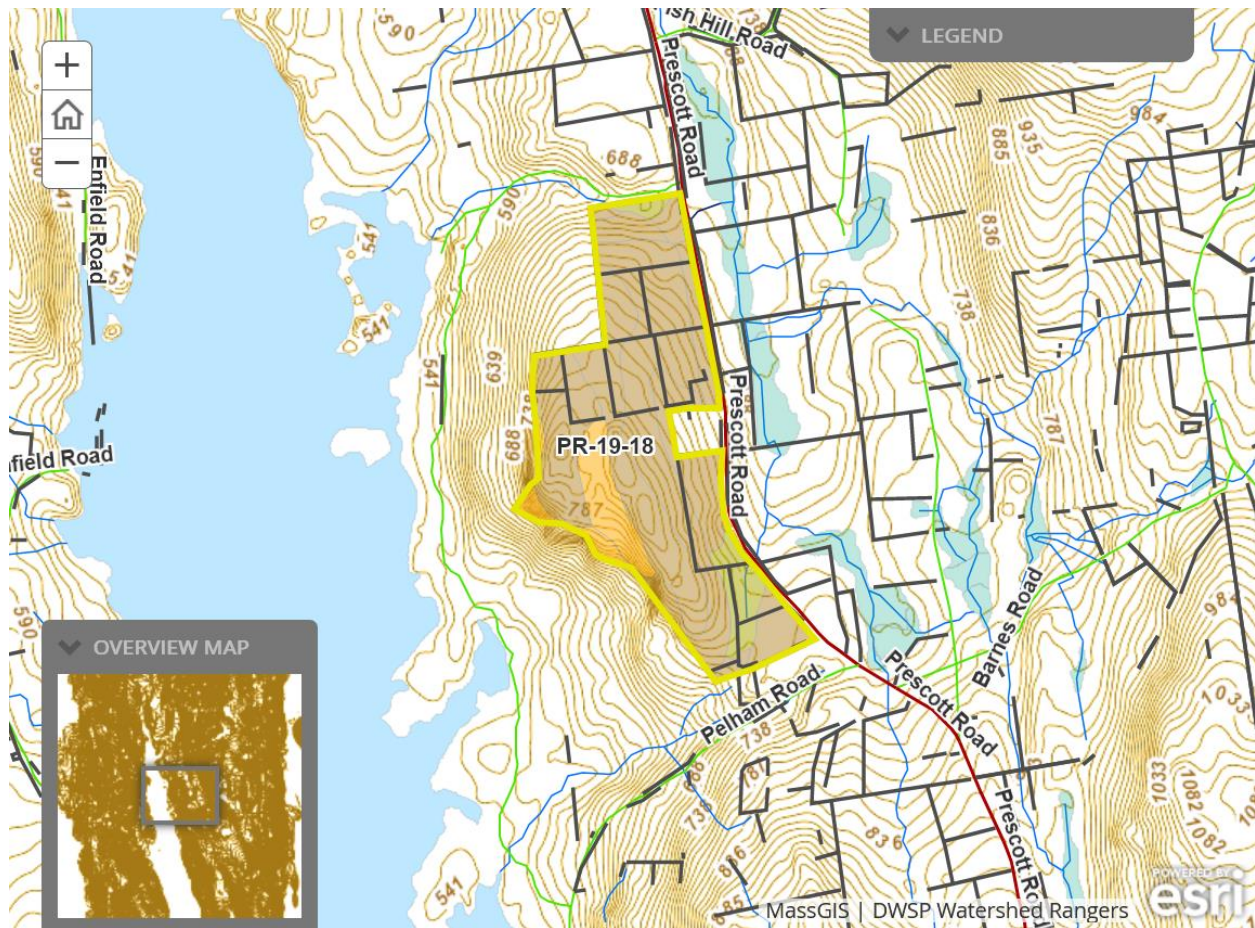
Soils

Drainage Class	%
Excessively Drained	0
Well Drained Thin	33
Well Drained Thick	41
Moderately Well Drained	26
Poorly to Very Poorly Drained	0

Montauk Fine Sandy Loam: Stony, well drained soil derived from gneiss.

Canton-Chatfield-Hollis complex: A well drained upland rocky gneiss/schist derived loamy till over a sandy till of the same parent material.

Scituate fine sandy loam: Moderately well drained loamy till over a lodgement till all derived from gneiss

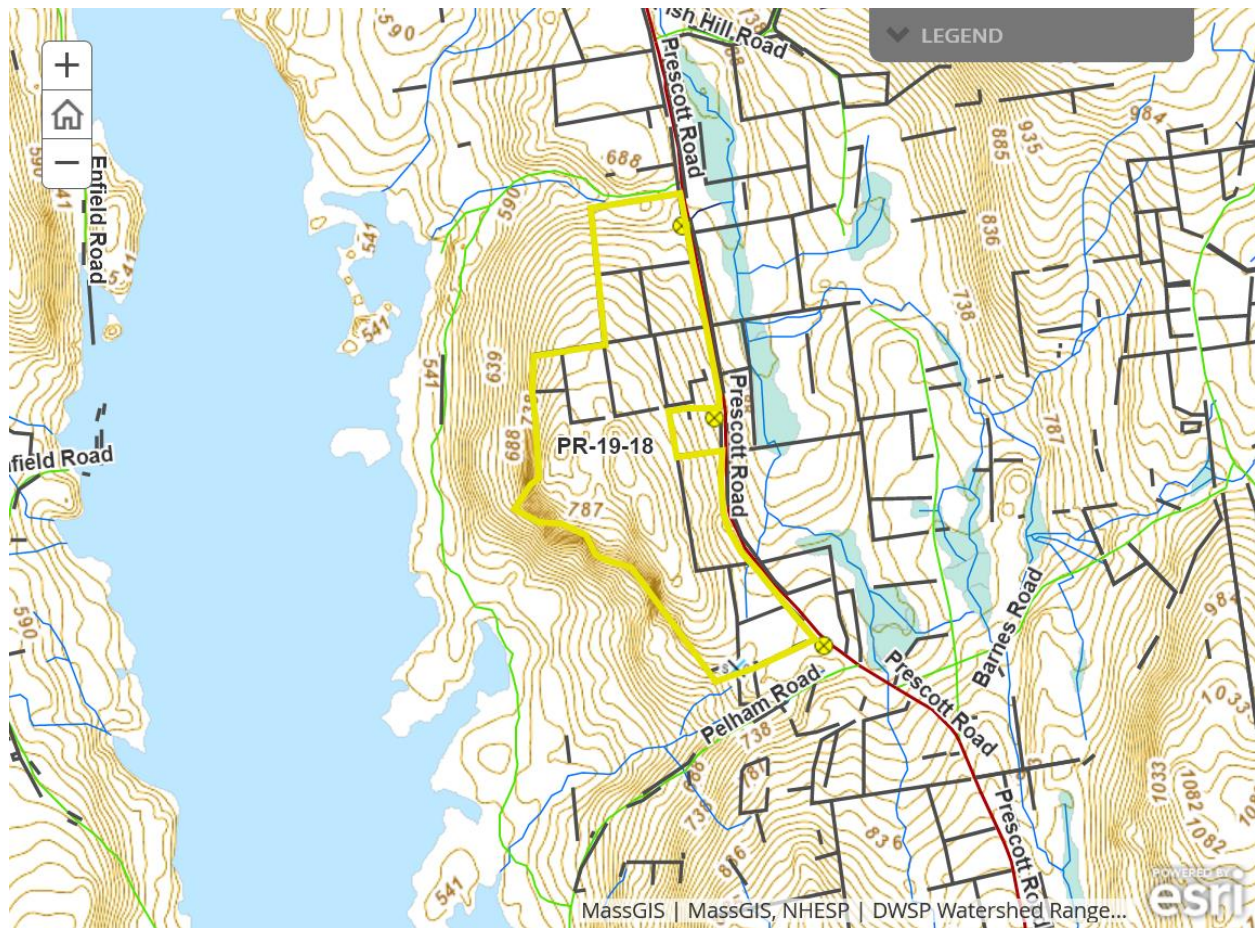


Wetlands

- Wetlands present? - **No**
- Streams present? - **Yes**
- Vernal pools present? - **None known**
- Seeps present? - **Yes**
- Are stream crossings required? - **Yes**
- Are wetland crossings required? - **No**
- Is logging in filter strips planned? - **Yes**
- Is logging in wetlands planned? - **No**

Further comments on wetlands:

Seep is located in the southern part of proposal. It drains both east and west. West flow will require a stream crossing.



Silviculture

Acres in Intermediate cuts: **0**

Acres in prep/establishment cuts: **10**

Acres in Regeneration cuts: **14**

Average regen opening size: **2**

Maximum regen opening size: **5**

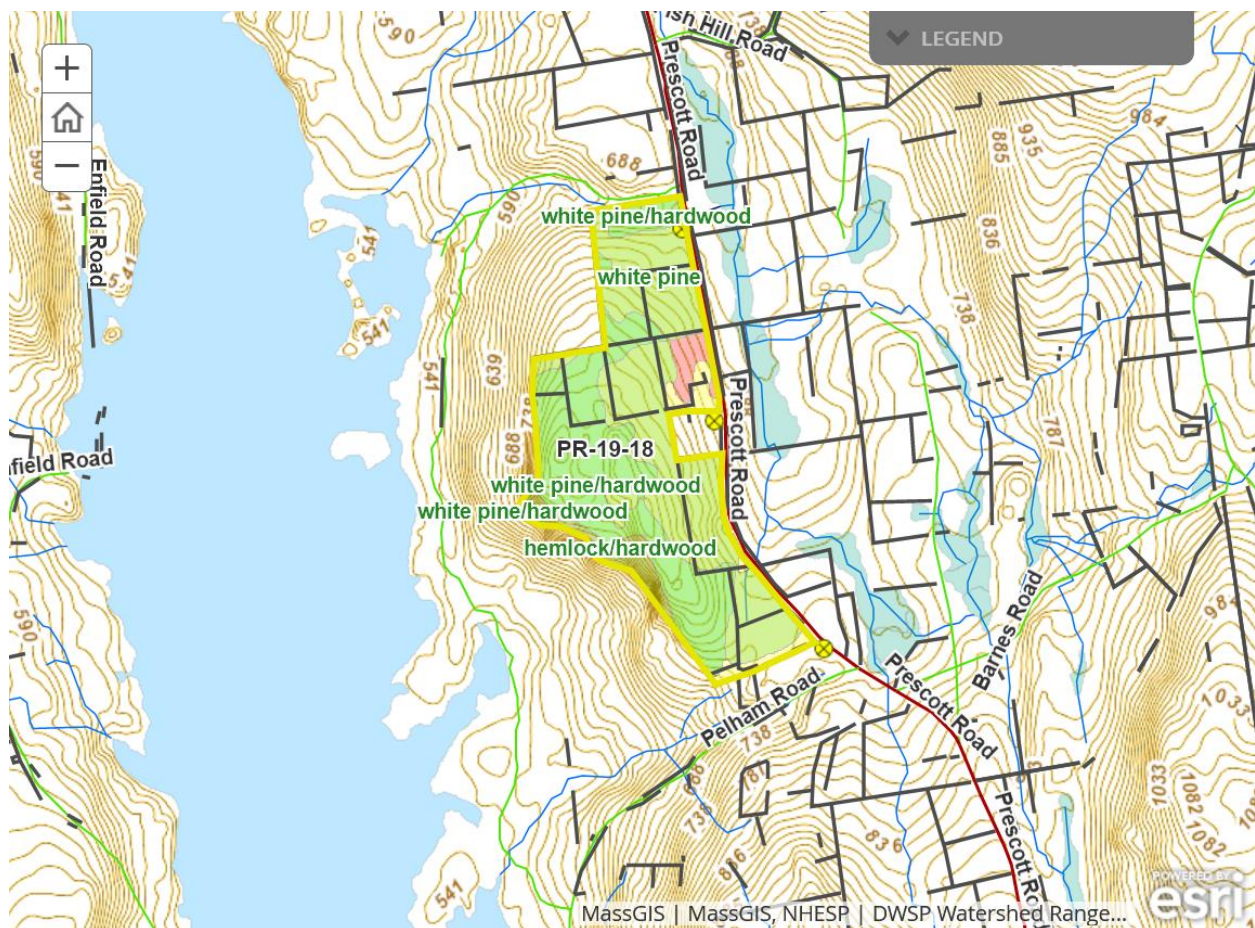
Description of advance regeneration in proposal area:

Generally speaking regeneration is abundant. Black birch and white pine have the greatest stocking followed by red maple, sugar maple, ash, hickory and hemlock. Quality and vigor of birch and pine are in decline. Browse is moderate to heavy on the hardwoods and severe on the hemlock.

General comments on silviculture proposed:

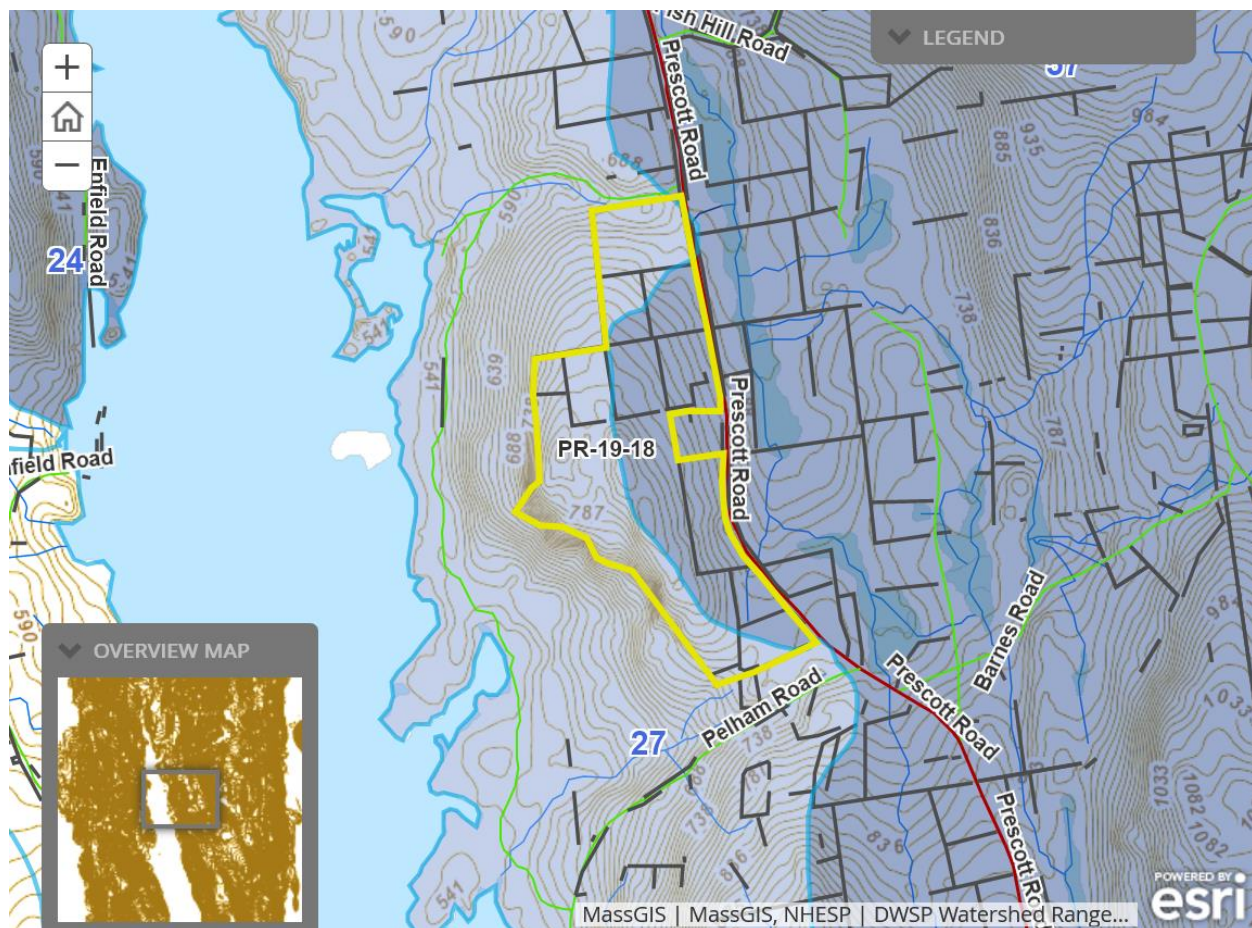
The primary goal of this harvest is to release and/or establish forest regeneration. This will be accomplished by creating openings or patch cuts in order to foster a free to grow/full sunlight environment for established understory and natural regeneration. There should also be opportunity to do some thinning in and around pockets of higher quality sawtimber. All red pine will be harvested. This should bolster long term expansion of the adjacent sugarbush (as long as invasives are controlled).

The harvest should set a course for greater structural and species diversity over the long term for this forest area.



Subwatershed Analysis

Sub-watershed number	Total DCR-owned Acres	Acres Regenerated on DCR Land in the last 10 years	Acres Remaining for Regenerating Up to the 25% / 10 Year	Acres part of this proposal
57	2571	95	2476	38
27	1052	4	1048	36



Harvesting Limitations

Forwarder required: **Yes**

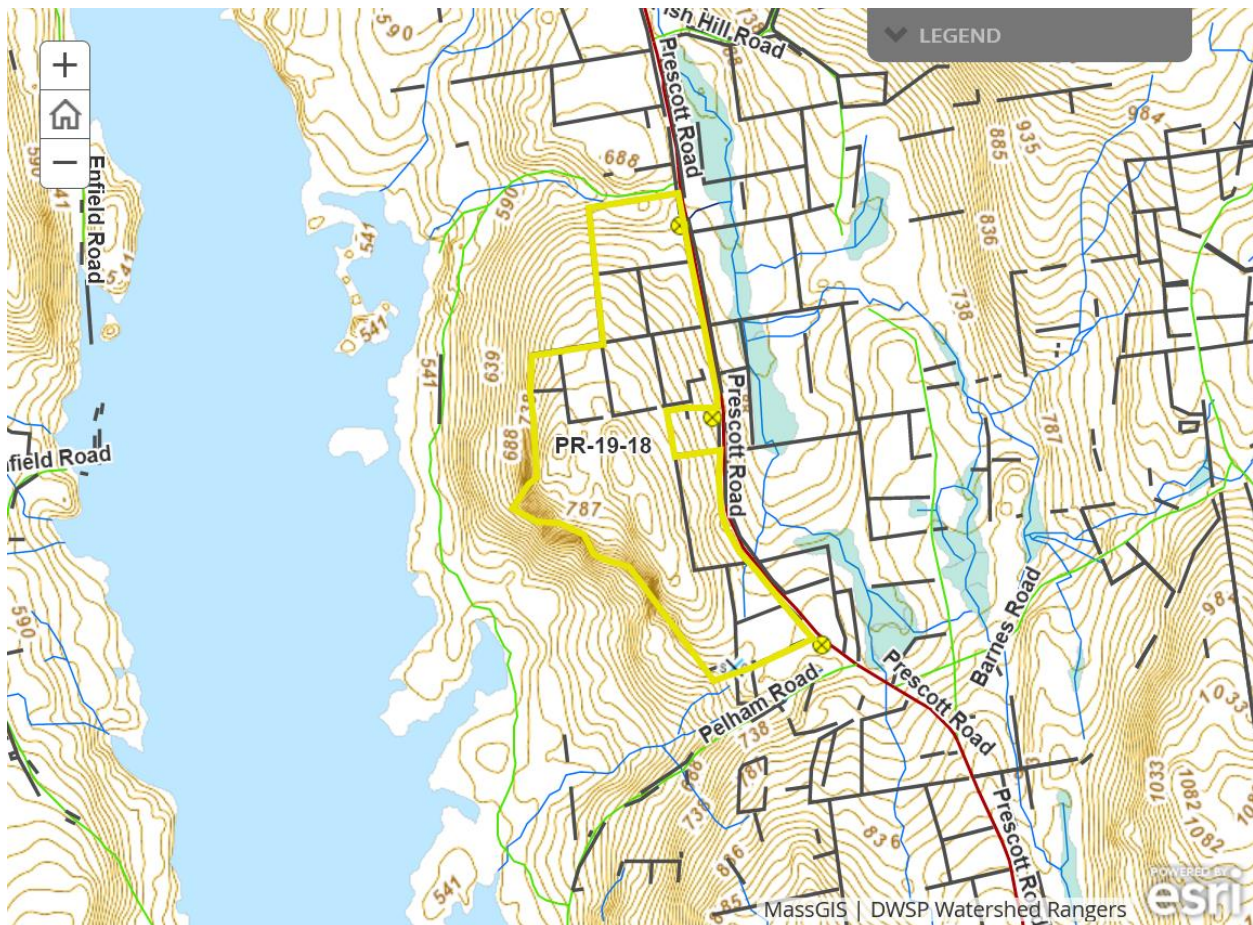
Feller/processor required: **No**

Steep slopes present: **No**

Comments on harvesting limitations:

The '97 and '02 harvests were done with a forwarder; so an existing logging road system for forwarding is in place. The area also has a lot of stone walls which tend to experience more damage/disturbance with a skidding (long wood) then with forwarding (short wood).

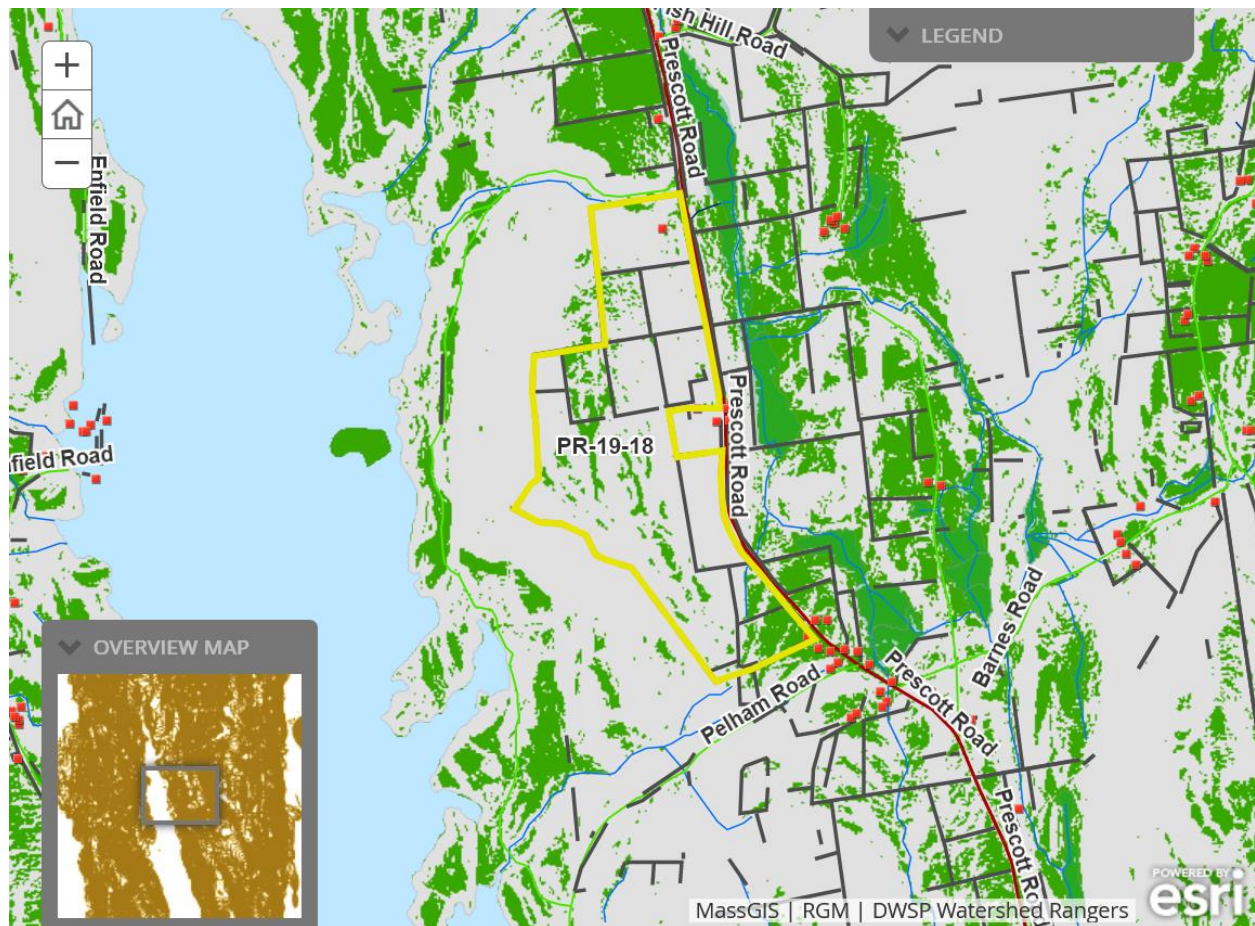
The western edge of the area has steep micro topography. However very little is over 200 feet in length.



Cultural Resources

Comments on Cultural Resources:

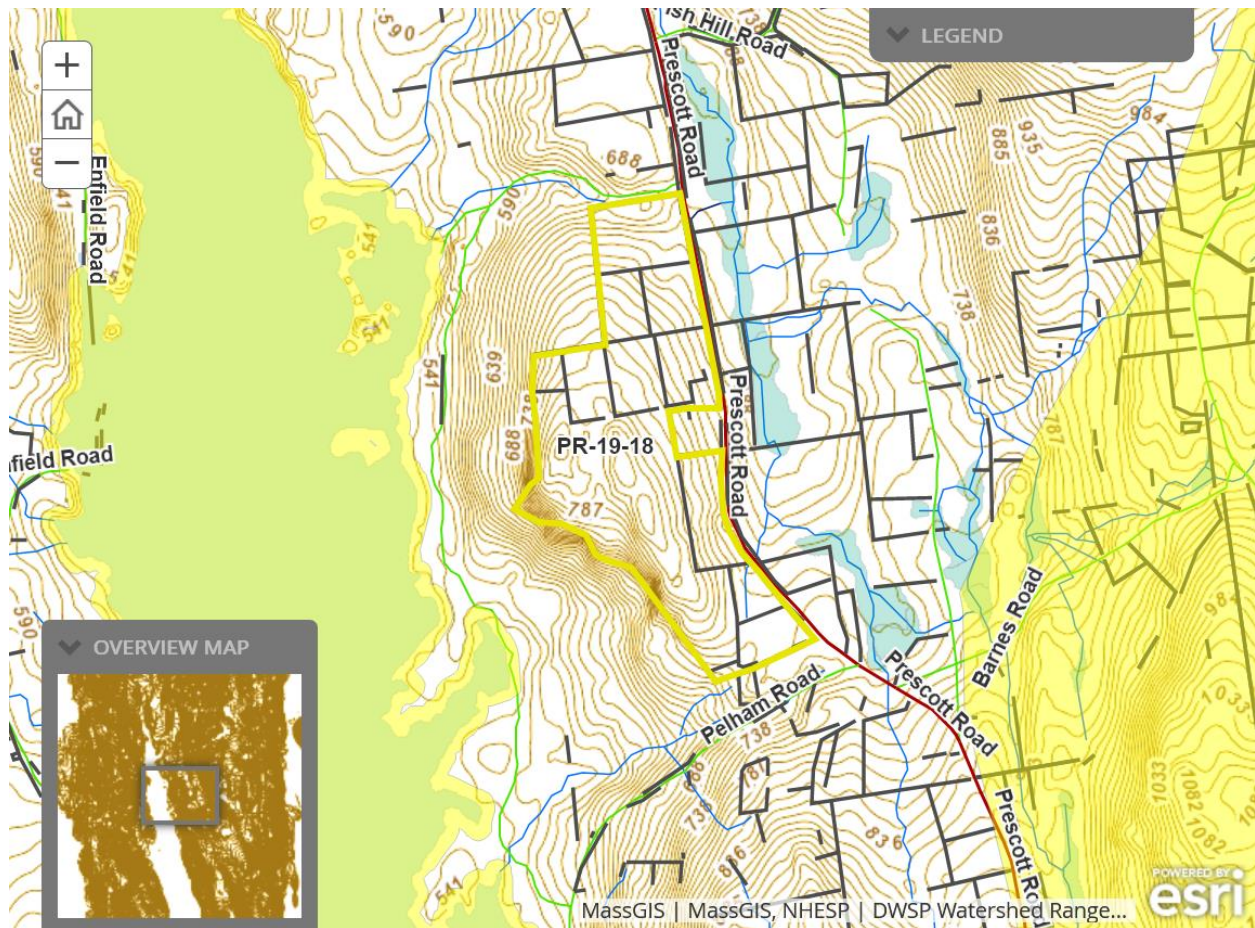
There are two old farmsteads along Prescott Rd. The field amid the proposal area has an uncovered field stone well. Stone walls exist throughout. Existing barways will be used where feasible and harvest layout will protect walls as much as possible. Wells and foundations will be flagged and avoided. If applicable DWSP will follow any additional recommendations from DCR's Archeologist regarding protection of sensitive sites.



Wildlife Resources & Rare and Endangered Species

Comments on Rare Species/Habitats:

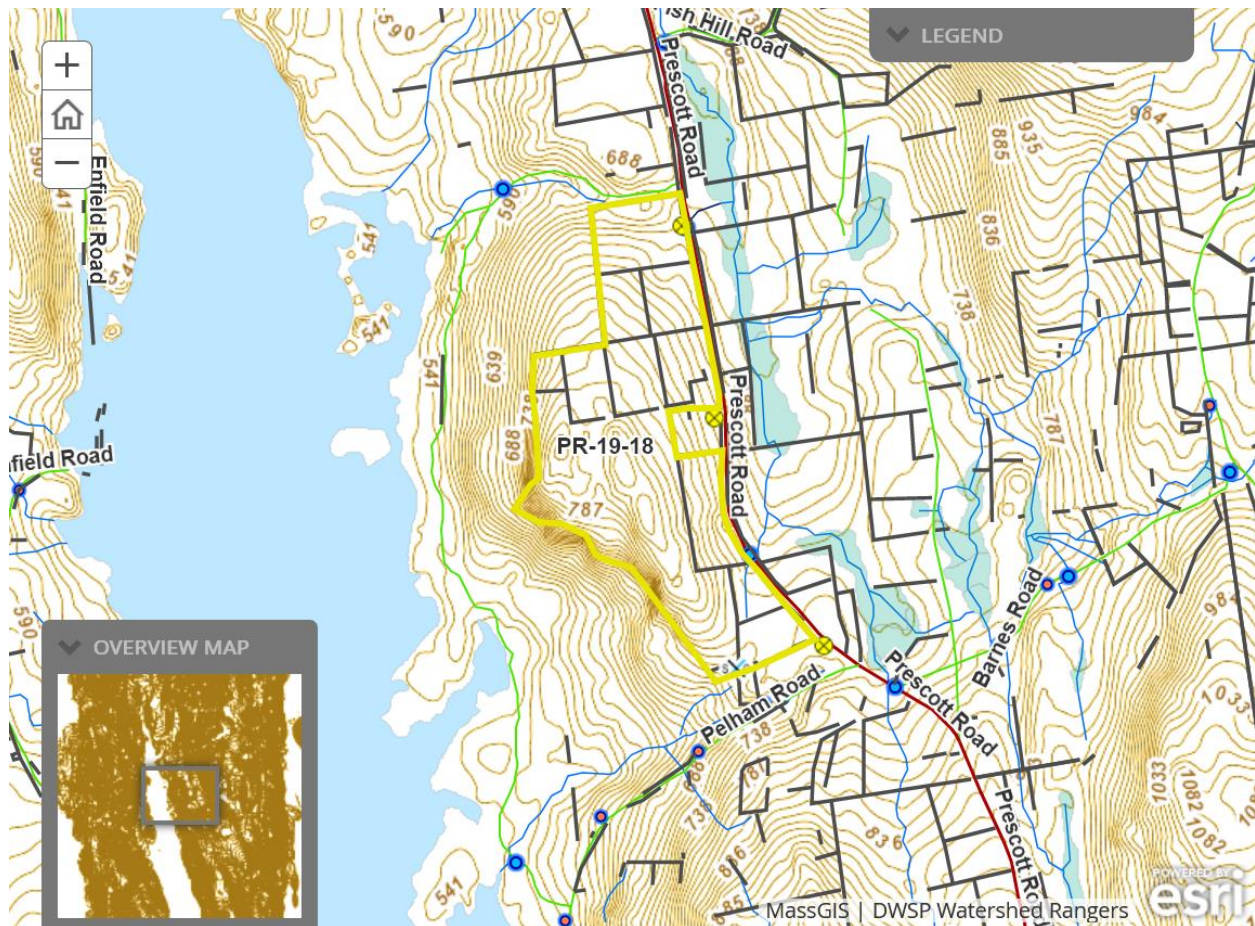
Cavity trees and potential/existing nest trees will be retained if possible. There are not any NHESP state-listed sensitive species or habitats within the lot proposal area. If any new information regarding sensitive species or habitats in the area is found DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed harvest.



Environmental Quality Engineering

Comments on EQ Issues:

No perennial stream crossings.



Forest Access Engineering

Gravel needed: Yes

Landing work needed: Yes

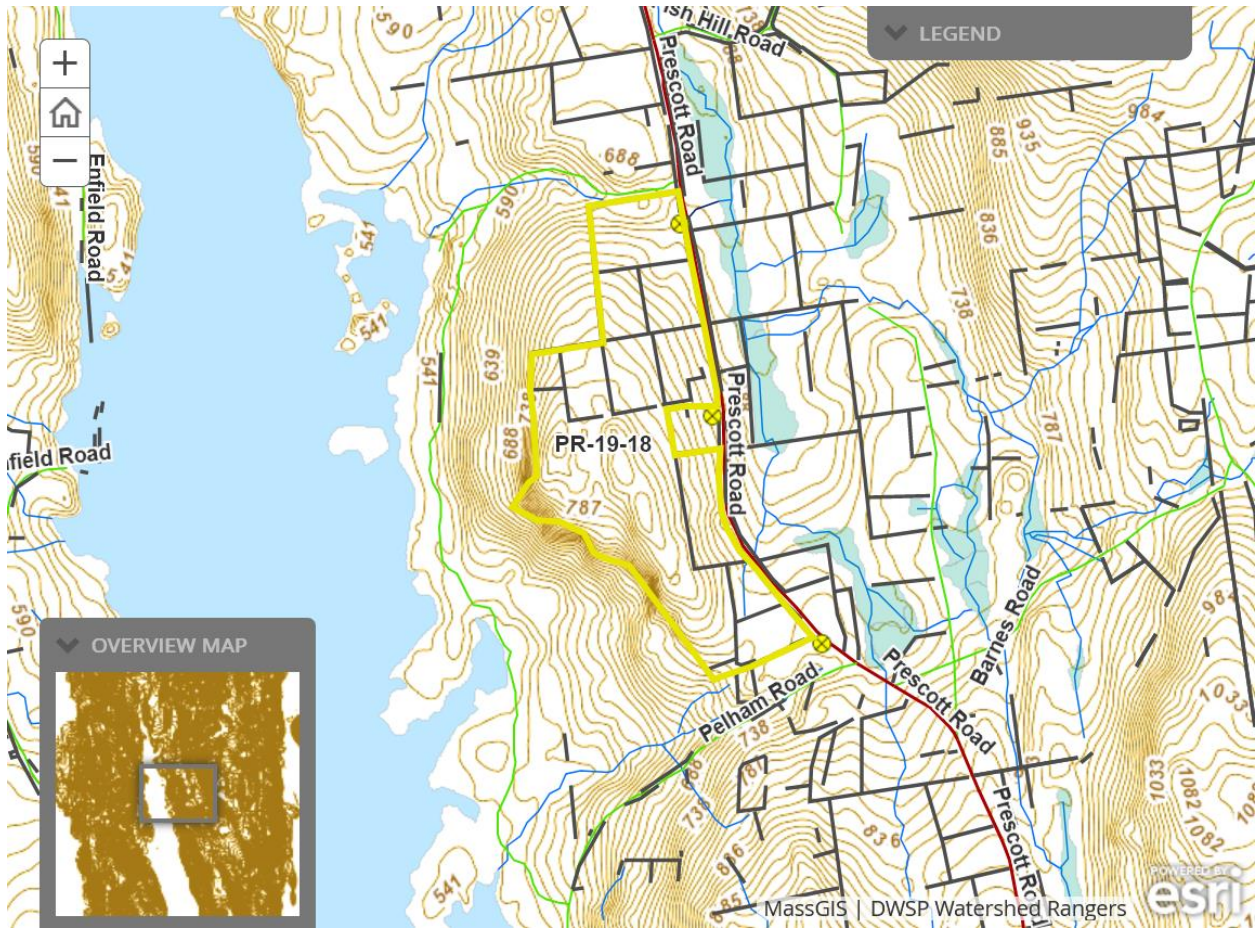
Culverts needed: No

Work needed on permanent bridges: No

Beaver issue: No

Further comment on access needs:

North Landing may need to be stumped followed by a few loads of gravel. Entrance to middle landing (Field) could use a load or two of gravel tailings to firm up some seepy ground.



DWSP FY 2019 Quabbin and Ware River Forestry Proposals – Master Legend for story maps

