

# Quabbin Harvest Proposal PT-19-05

## *Proposal Update, May 2024:*

*This forestry proposal was originally approved through the public process in 2018. The project was 'paused' along with most other state lands forestry projects as part of the EEA Forests as Climate Solutions Initiative. Following the close of the work of the Climate Forestry Committee, DWSP determined the activities in this proposal align with EEA climate considerations developed from the recommendations in the CFC report. The proposal language and mapping below are preserved unchanged from that presented to the public in 2018 in ArcGIS Online Story Map format.*

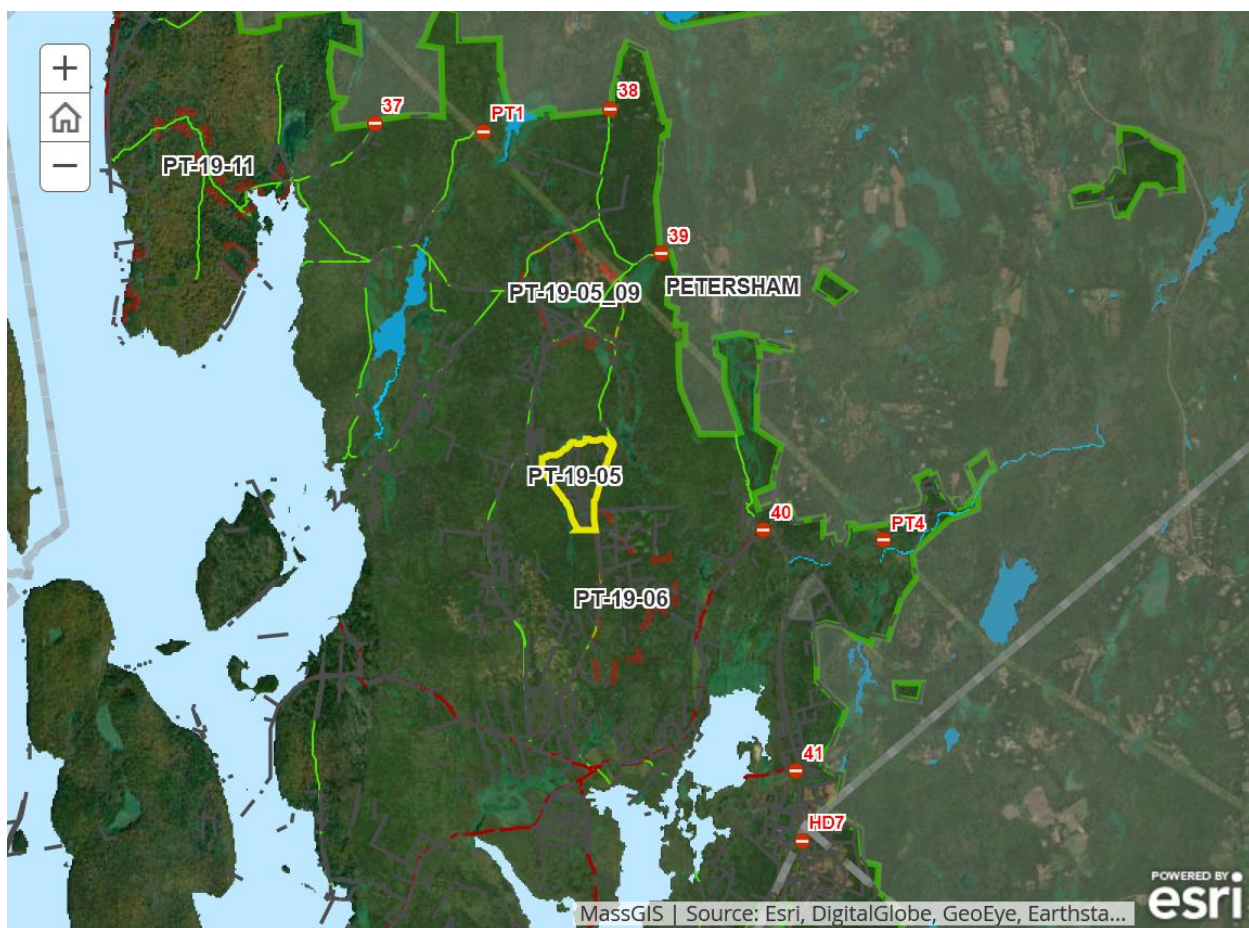
## Proposal Goals

The proposed area is dominated by low diversity, even-aged, poorly formed white pine overstory. Harvesting here will improve both age and species diversity of the forest.

## Proposal Location

This proposal is in Petersham, about half way up Mary Tamplin Road on the west side.

**Total Acres: 68**



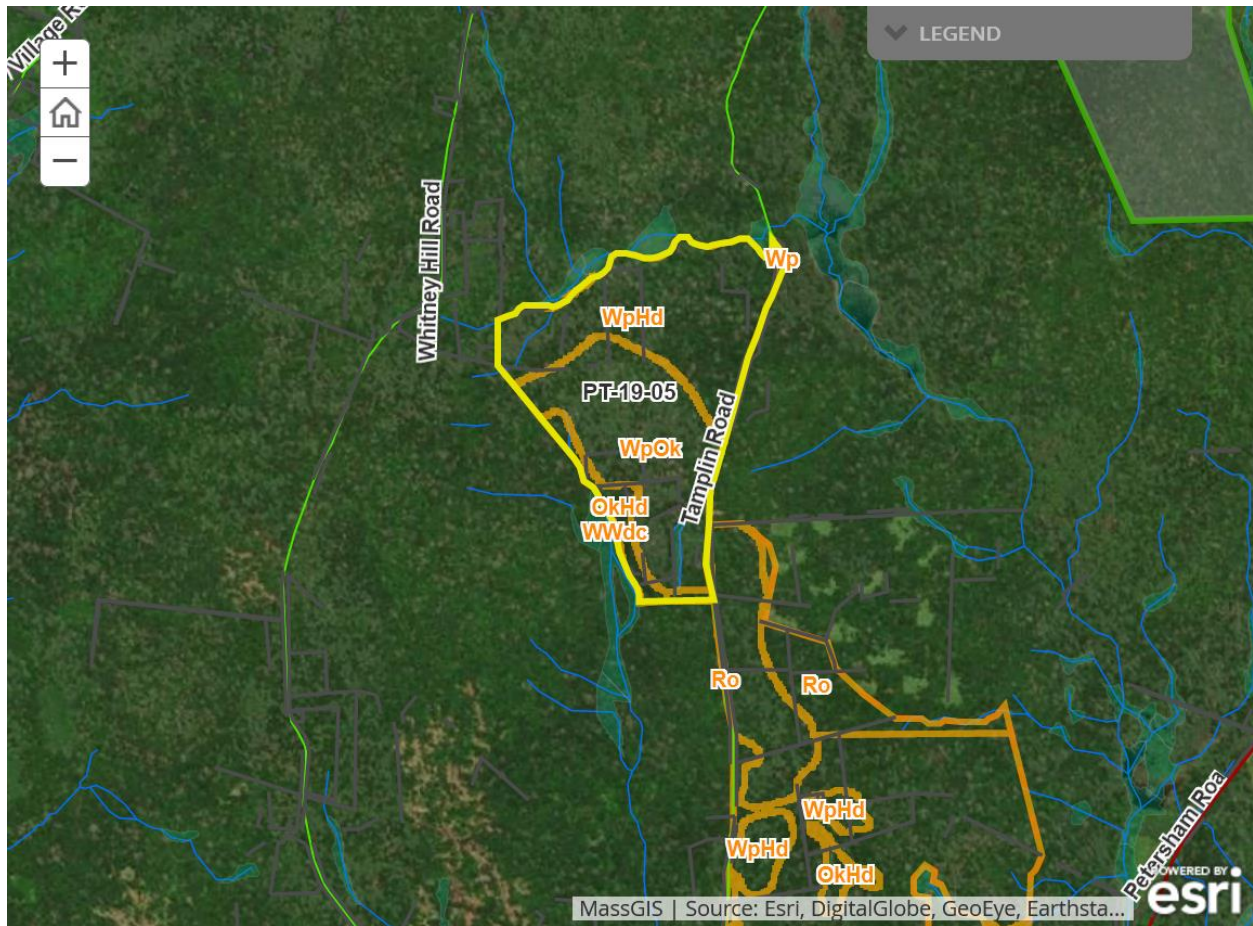
## General Description

	Overstory Type(s)	Acres
<b>Dominant</b>	White pine/hardwood	31.7
<b>Secondary</b>	White pine/oak	22.2
<b>Other</b>	White pine	8.7

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

### Description of forest composition/condition:

The only recorded harvest on this area was completed in January 1979 on the northeastern portion although there is evidence of thinning from around this time on most of the northern 2/3rds of the lot. White pine is by far the dominant species here and is generally not well formed especially on the northern edge and southern 1/3rd in the walled area. This latter area was probably pasture of some form in past and grew up in typical "old field" pine form. Around 8.5 acres in the south central part of this area now would be better typed as WP (currently typed WO). White pine is doing better than the oaks or hardwoods on most of the proposal and is becoming the dominant species. Oaks and some of the hardwoods were heavily impacted by gypsy moth in 2016, 2017 with all the oaks and most of the hardwoods 100% defoliated. Some oak mortality was noted last fall with 10-25% total mortality expected by end of this year. Fewer egg masses were noticed on bases of trees last year due mainly to fungus becoming active late in spring 2017. As long as that happens again this spring oak mortality should stay below 20%. Stand to the south contains old, larger red oak on a better site which was also heavily impacted and was originally proposed to be included but was withdraw by chief forester. Otherwise, the stands are healthy though most areas are overstocked. Other species present in overstory of WO type are red, black, scarlet and white oaks, red maple, black and white birch and scattered black cherry. WH type is generally wetter, with less oak and more of the other hardwood species. The western 1/2 of the central section north of the wall has more, and better formed, white pine and appears to be younger.

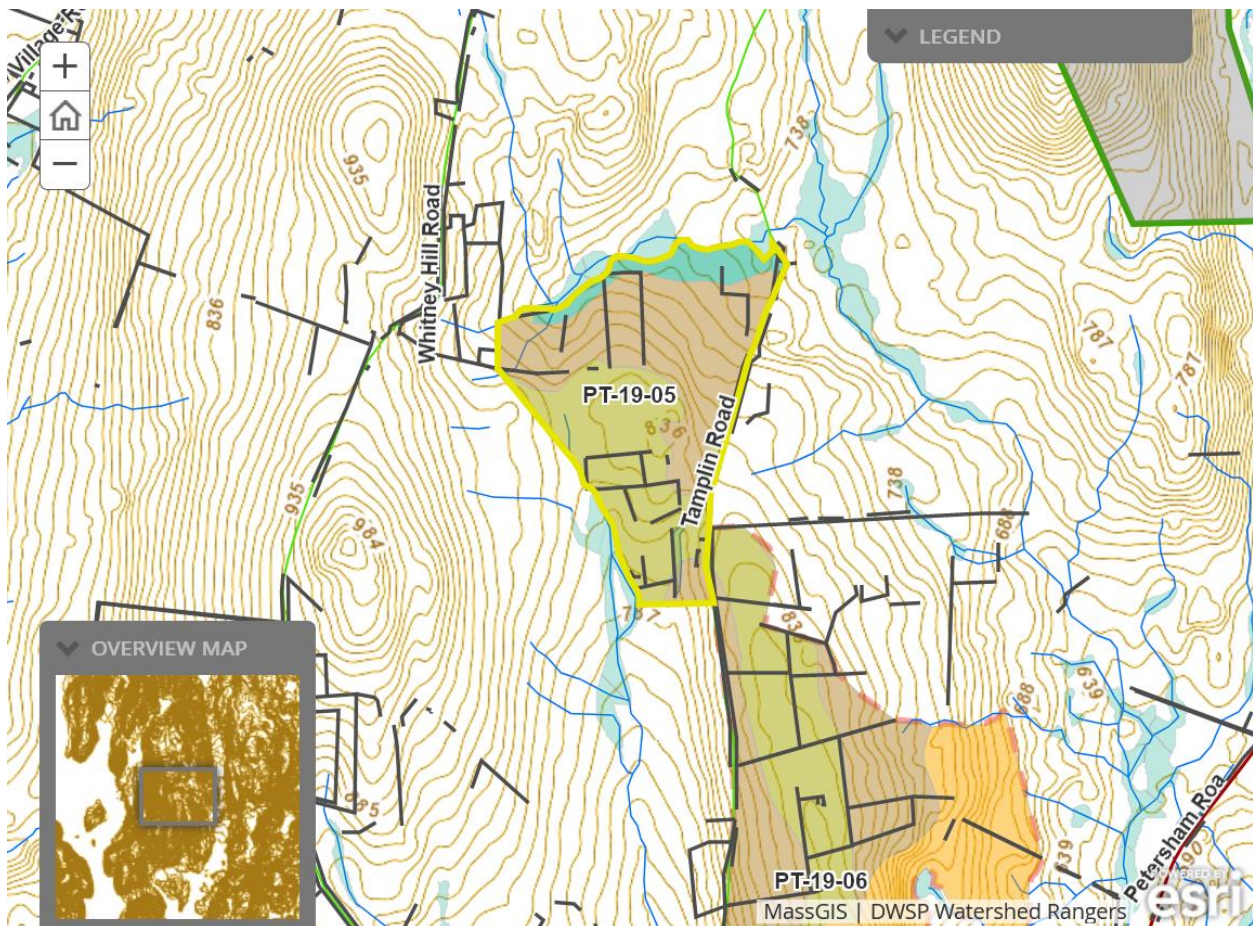


## Soils

Drainage Class	%
Excessively Drained	0
Well Drained Thin	0
Well Drained Thick	50
Moderately Well Drained	40
Poorly to Very Poorly Drained	10



Soils are almost exclusively Montauk-Scituate-Canton association around half of which are classified as well drained and thick, other half moderately well drained. Along the wetland on the north is Ridgebury-Whitman association poorly drained, if these in fact exist as mapped they will be avoided. Some of the eastern edge, along Tamplin Rd, is seasonally wet and might be poorly drained soils, these will also be avoided.



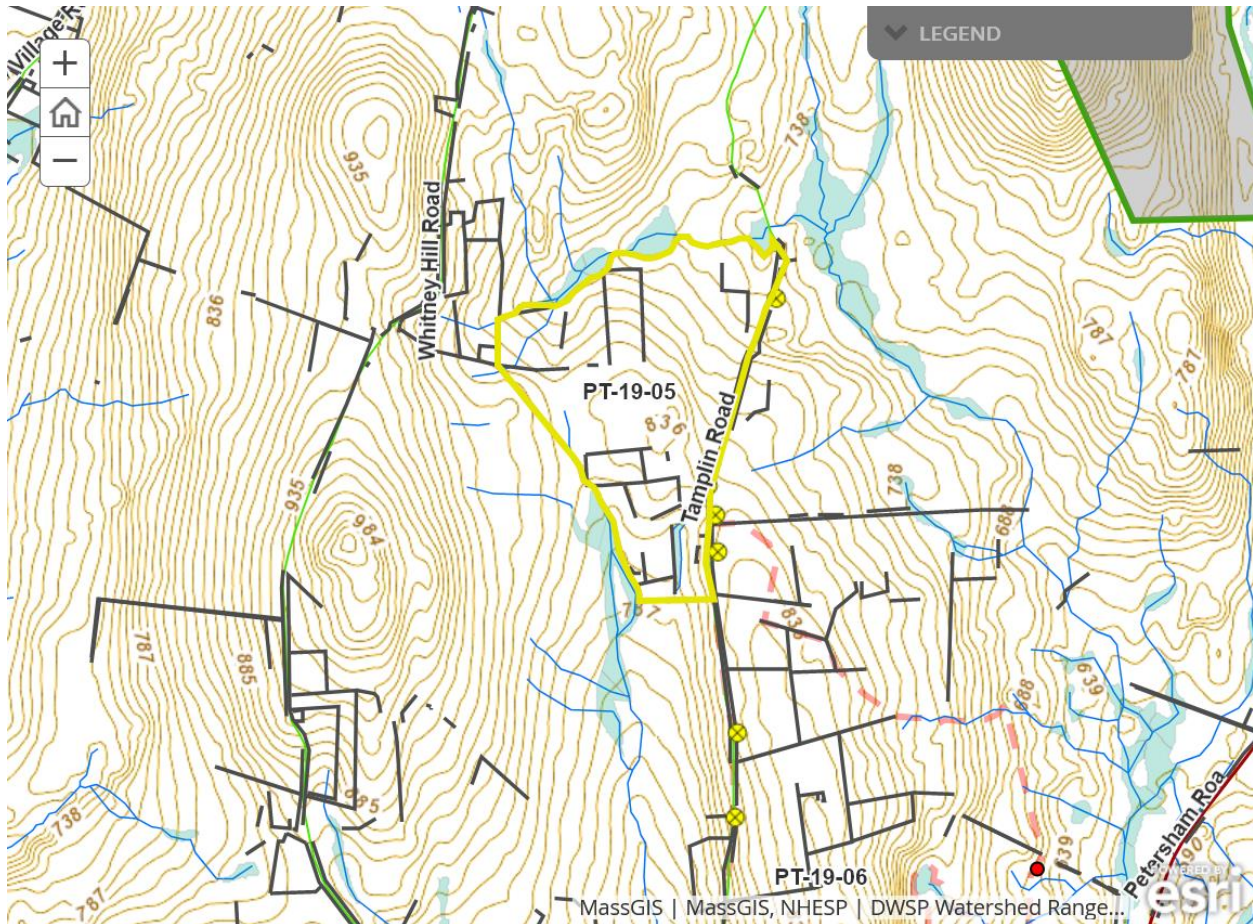
## Wetlands

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



**Further comments on wetlands:**

Proposal is bounded to north by a wetland/stream complex which drains east. Most of western edge is a small stream which drains south into a wetland.



## Silviculture

Acres in Intermediate cuts: **5**

Acres in prep/establishment cuts: **34**

Acres in Regeneration cuts: **17**

Average regen opening size: **1.5**

Maximum regen opening size: **5**

**Description of advance regeneration in proposal area:**

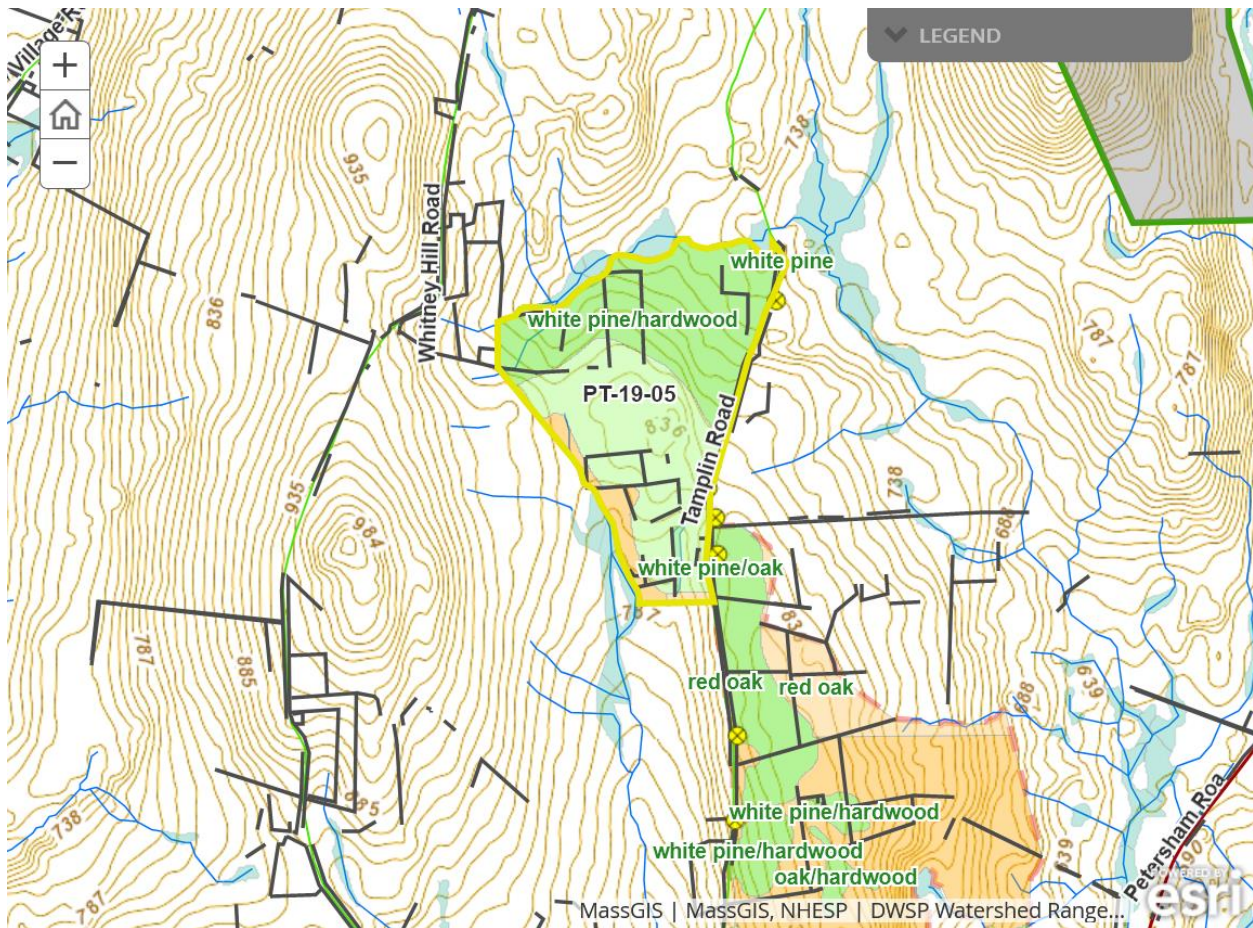
Moderate to thick white pine regeneration is present throughout but most is suppressed and stagnant. Many will be crushed during the whole tree operation anyway. Other species present are red maple, black birch, beech and scattered oak with some hemlock, mainly near the wet areas. Some of the poorly drained areas have mostly fern cover. Site should regenerate well but moose and deer will have an impact on the hardwoods. Also the bittersweet and upland areas with denser Japanese barberry need to be controlled before harvesting to avoid spreading them, a follow-up treatment will probably also be needed.

**General comments on silviculture proposed:**

Openings are planned on about  $\frac{1}{4}$  of the area concentrating on the areas of poorer formed WP mainly in the southern walled area and along the northern edge. Openings will range from  $\frac{1}{4}$ -2 acres with one larger opening of possibly 5 acres in the southern section. There is an unmapped intermittent stream and wetland there starting just south of walled lane and flowing south, bisecting the low quality pine area. This will limit the size of that opening, might not be able to fit one much larger than 3.5 acres. Intent here will be to remove as much of the poorly formed white pine as possible, leaving a few for seed and a couple of coarse legacy trees along with any active or potential den trees. There are very few hardwoods in this section but attempt will be made to retain some particularly RO, WO, hickory and WB. Edge of openings and skid trails will be thinned or have prep cuts to help establish additional regeneration while removing trees that would potentially damage regeneration during future harvests. Spacing and retained basal area will follow guidelines in current CLMP. Shape and size will be somewhat restricted due to abundant walls and considering filter strips.

Central section has generally better formed white pine along with more red oak and some white oak and appears younger so is better suited to smaller openings and more of a prep shelterwood type cut. Openings here will be in the  $\frac{1}{4}$ - $\frac{3}{4}$  ac size range with more areas thinned. Whole tree skidding may be restricted in areas here to minimize damage to retained stems. Fortunately there are few walls and ground is level for part so a herring bone pattern to skid trails should be possible. Healthy, vigorous specimens of all species present will be retained for seed and diversity with WP, RO, WO, WB, HI and BC favored. Den and active wildlife trees will be retained where possible.

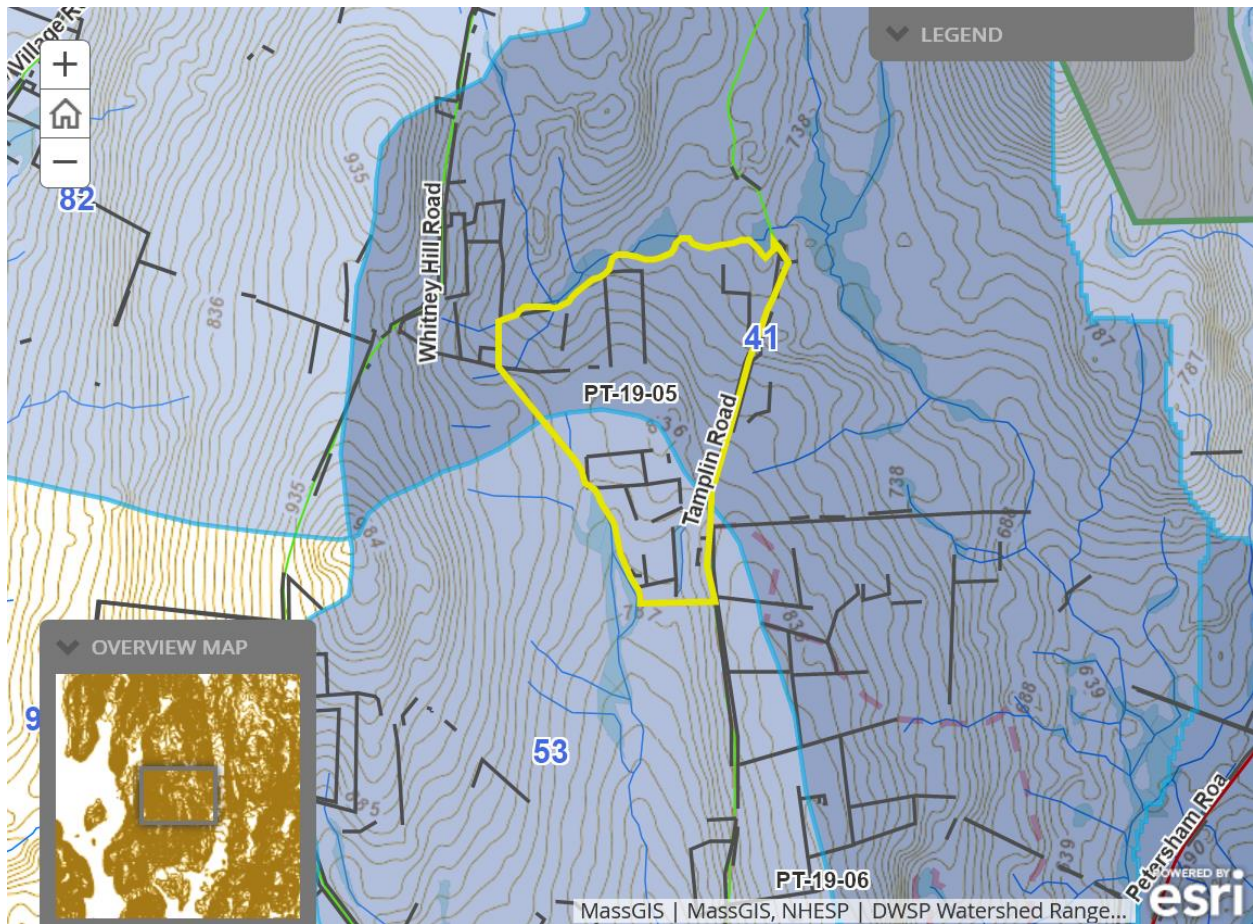




## Subwatershed Analysis

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
41	745.9	5.7	180.8	46.7
53	1082.4	0	270.6	21.2

None of the sub-watersheds are approaching their 25% limit although 41 and 53 also are on one of this year's proposals (PT-19-6) which adjoins this lot to the southeast but is on the other side of Tamplin Rd. It is not expected that regeneration acreage will exceed 1/4 of lot acreage for either proposal (35 and 17 acres) so still, less than half of allowed acreage will be regenerated. On this proposal, openings will mainly be in the southern part and northern edge so mainly within s-ws53. On PT-19-6 openings will most likely be evenly spaced throughout.



## Harvesting Limitations

Forwarder required: **No**

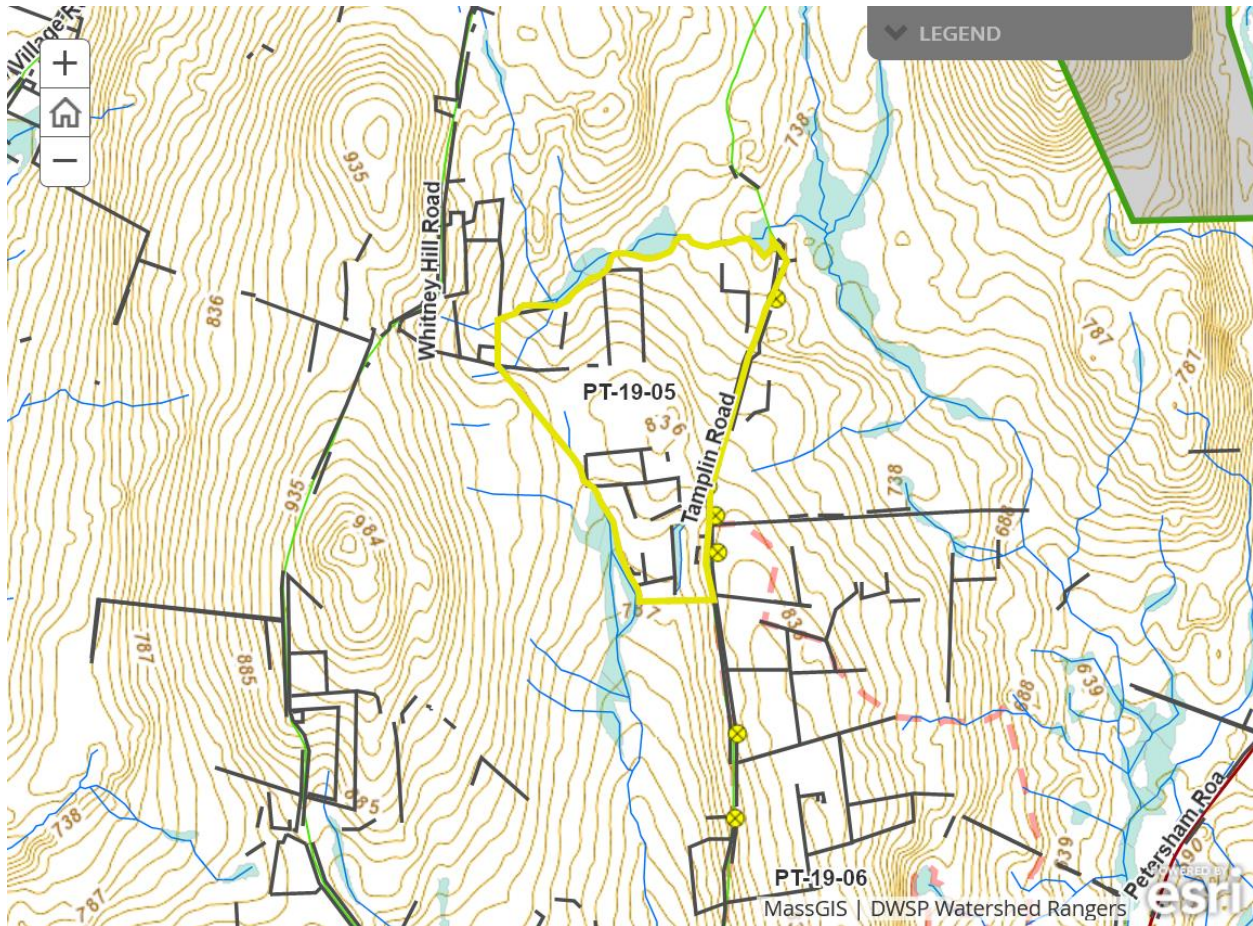
Feller/processor required: **No**

Steep slopes present: **No**

### Comments on harvesting limitations:

Much of the white pine is low quality so a chipper or very good pulp markets will be needed. Road improvements will need to be made to allow trailer access to make the timber sale of interest to anyone. Grapple skidders will be allowed.

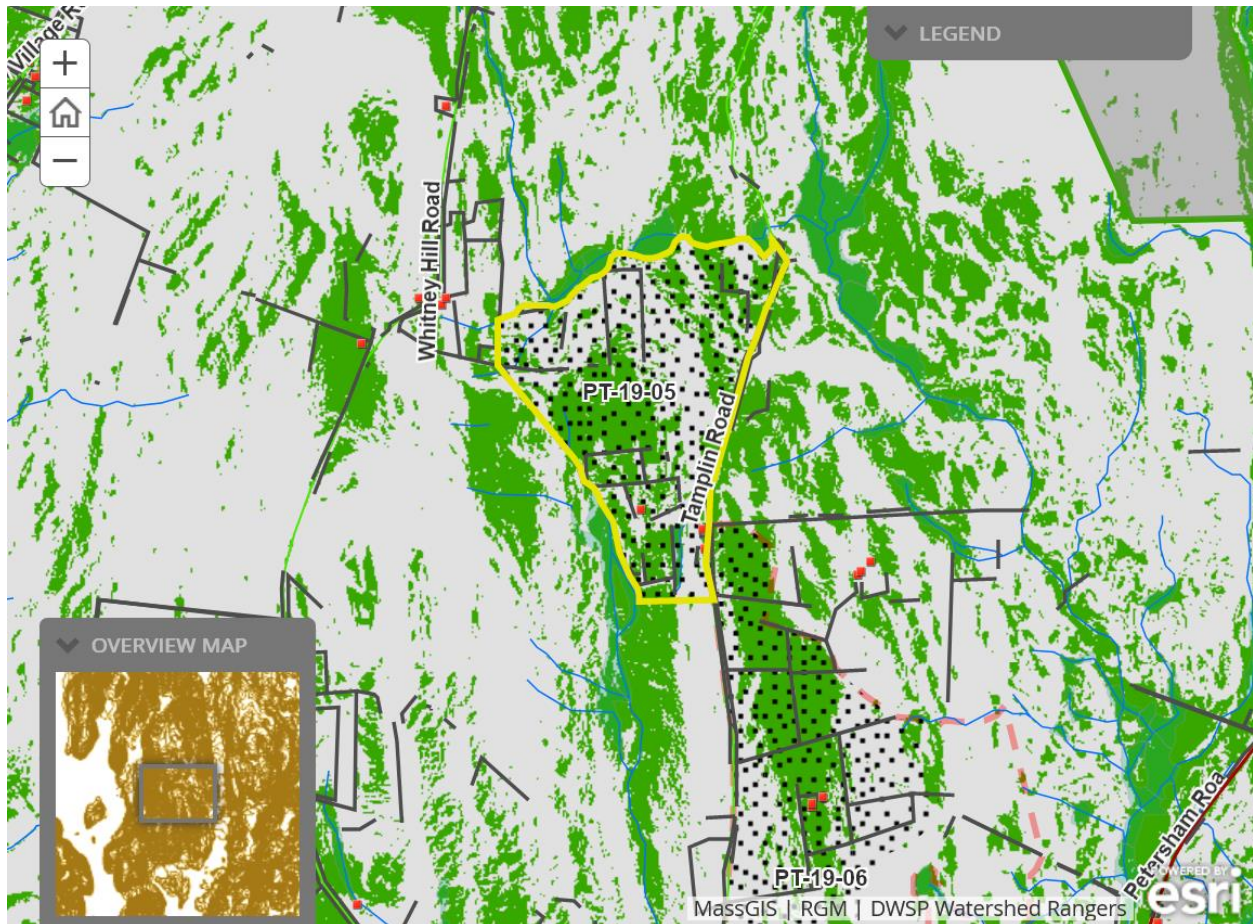




## Cultural Resources

### Comments on Cultural Resources:

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

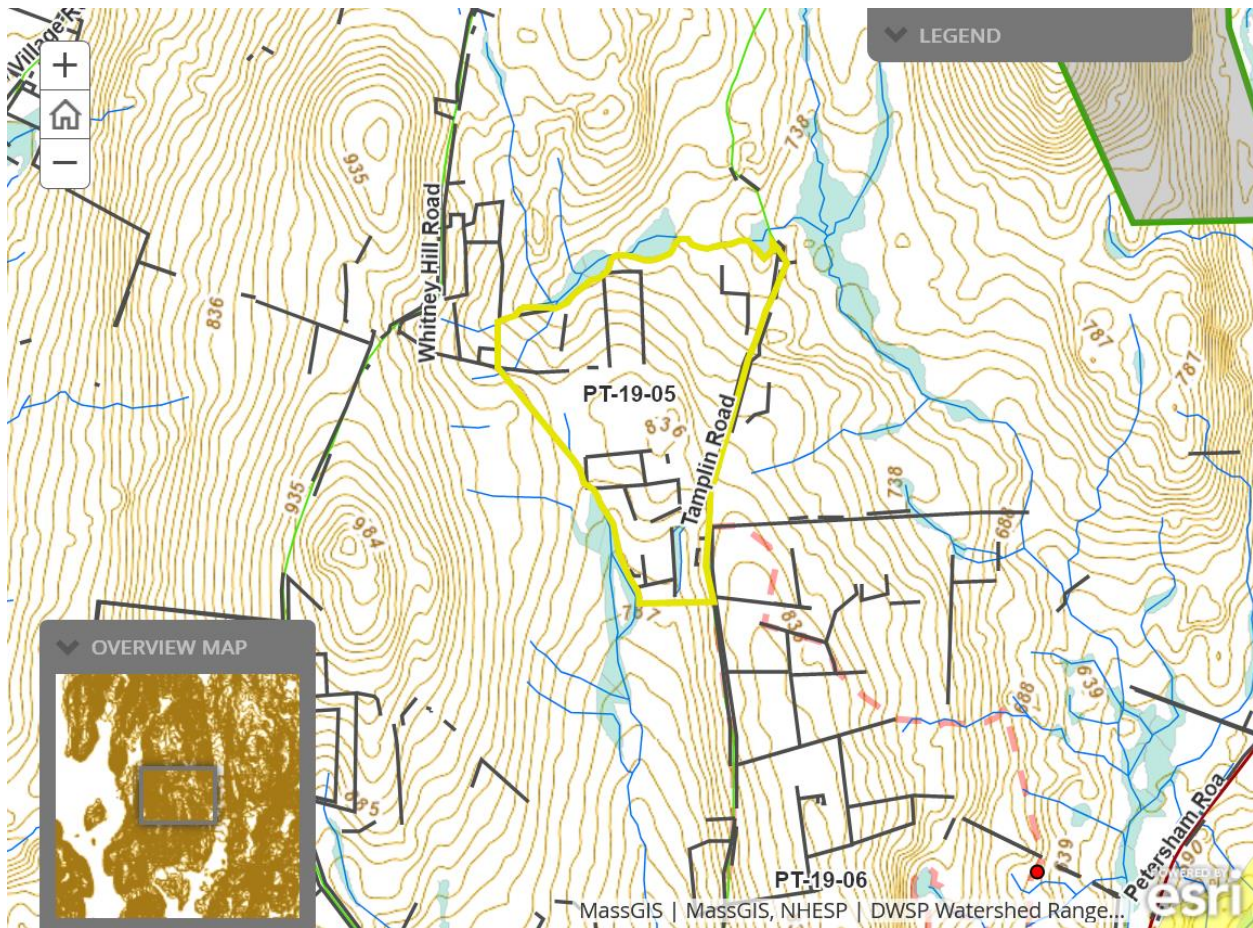
### General Wildlife Comments:

Deer, moose, coyote and turkeys are known to frequent this area. Beavers have been active in past in wetland complex on the northern edge though no recent activity was noted.

### 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.

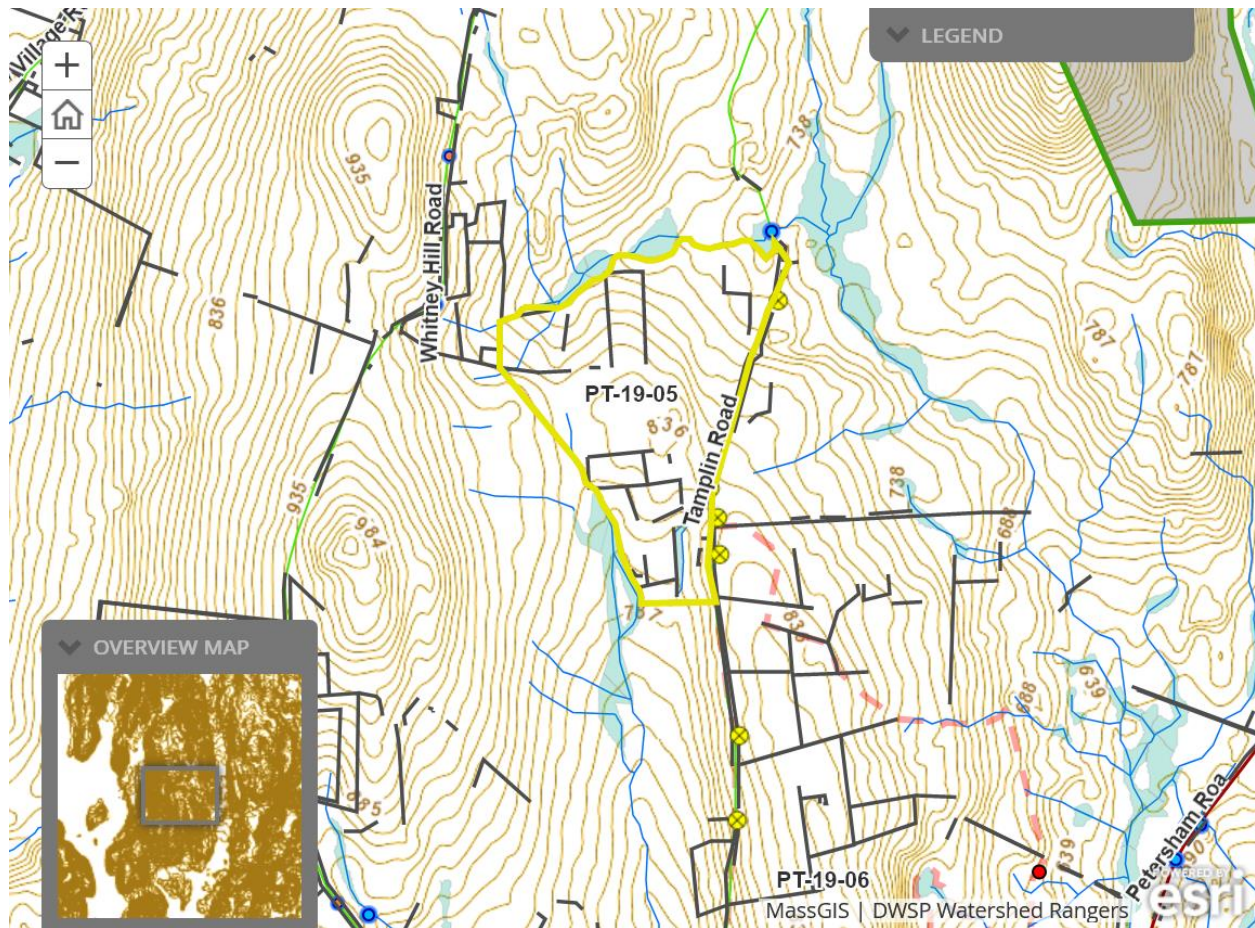




## Environmental Quality Engineering

### Comments on EQ Issues:

There are no perennial stream crossings.



## Forest Access Engineering

**Gravel needed:** Yes

**Landing work needed:** Yes

**Culverts needed:** Yes

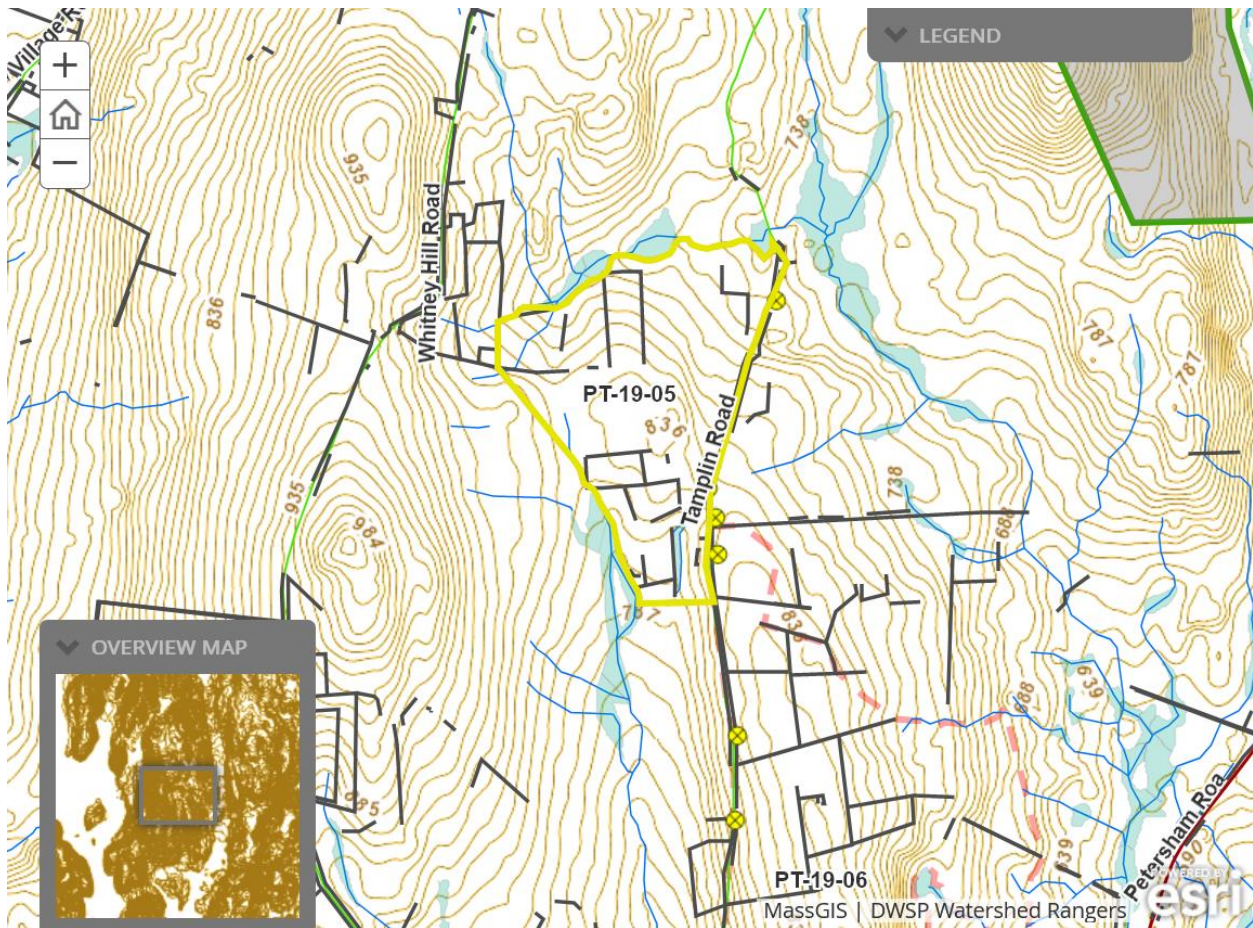
**Work needed on permanent bridges:** No

**Beaver issue:** No

### Further comment on access needs:

Road needs to be improved to allow trailer access to last landing proposed on west side. Trailer turn around needs to be created, probably in area Allards used for landing a few years ago. At least 3 culverts need to be replaced, one is partially blocked, others are degrading.





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

