

# Quabbin Harvest Proposal PT-19-06

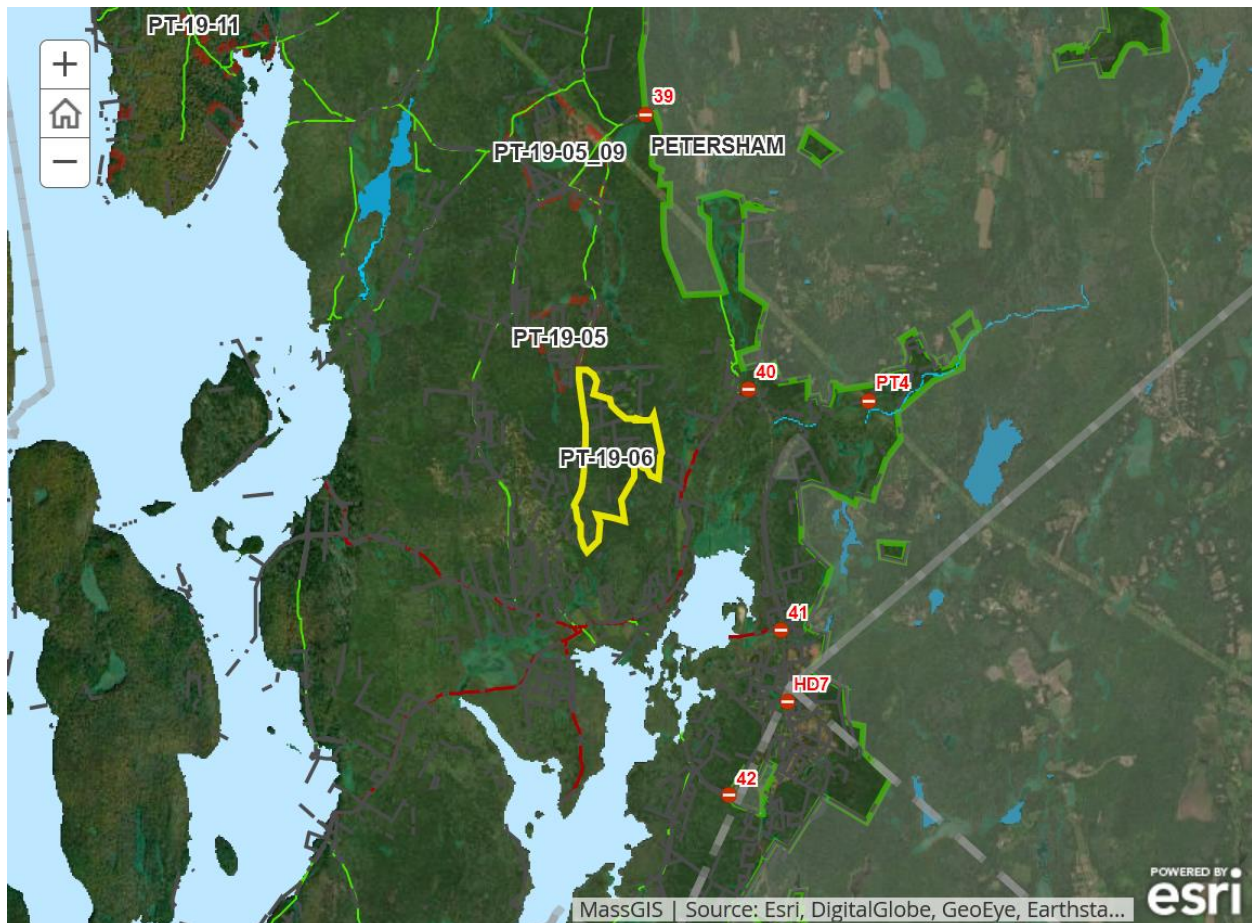
## Proposal Goals

The proposed harvest will further release healthy regeneration created by harvests in the 1980's, improve forest health (by treating gypsy moth related damage/mortality), and further diversify stand structure and species composition.

## Proposal Location

This proposal is in Petersham, on the eastern side of Mary Tamplin Rd.

**Total Acres: 141**



## General Description

	Overstory Type(s)	Acres
<b>Dominant</b>	Oak/hardwood	86
<b>Secondary</b>	White pine/oak	55

	Understory Type(s)
<b>Dominant</b>	Tree seedlings/saplings dominate the site
<b>Secondary</b>	Dry site - blueberry/huckleberry

### Description of forest composition/condition:

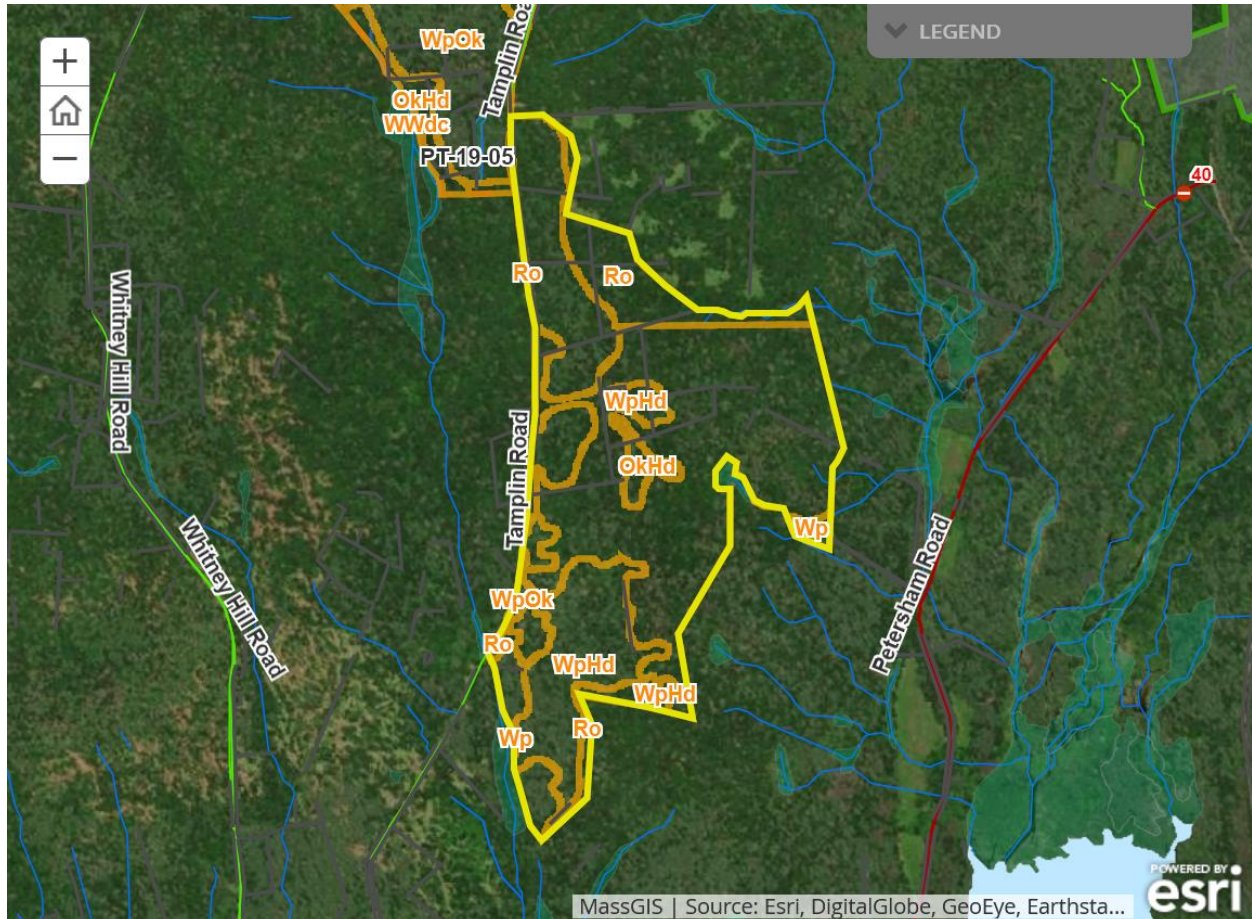
Main type is comprised of a couple of stands (OH4/5, OR4) on an upland site. Most of area had been cut at least once over the last 30 years and stands have tended to develop with more red, black and scarlet oak, hickory, and black birch as dominate hardwoods along with some red maple, white birch and black cherry. Scattered white pine is also present in overstory on about half of the type. Scattered white oak and white ash also present.

Rest of lot is now several stands of what would be better described as white pine/oak with a couple of the stands having dominate crowns approaching 100' in height. Red oak is the most common hardwood with black, scarlet and white also present along with black and white birch, hickory and red maple.

Stand was heavily impacted (total defoliation 2017) by gypsy moth in 2016 and '17 with some mortality of oak being observed in fall of 2017. Not many egg masses were observed on base of trees in fall 2017 so somewhat optimistic that GM population has crashed but that will be dependent on a wet spring in 2018 allowing the fungus to be active. Other than that both stands appear to be fairly healthy though there are still numerous poorly formed and/or less vigorous trees. Quit a few emergent, course white pine are present along with cavity trees of both hardwood and softwoods. Most areas are fully to over stocked. Part of the southern section had small (under 1/4 acre) openings created by one of the previous cuts and the regeneration (mostly

black birch and white pine) is now over topped and stagnant. Rest of lot, where previously cut, appears to have just had firewood thinning or a light prep cut.

Regeneration is mainly black birch and/or white pine and pine in particular has gotten stunted and stagnant. Red maple and beech are also common with scattered oak though more oak regeneration was noted along some of the lower slopes on east side. There is also some hemlock near the wet areas here and to the south where there is a small stand of WK.



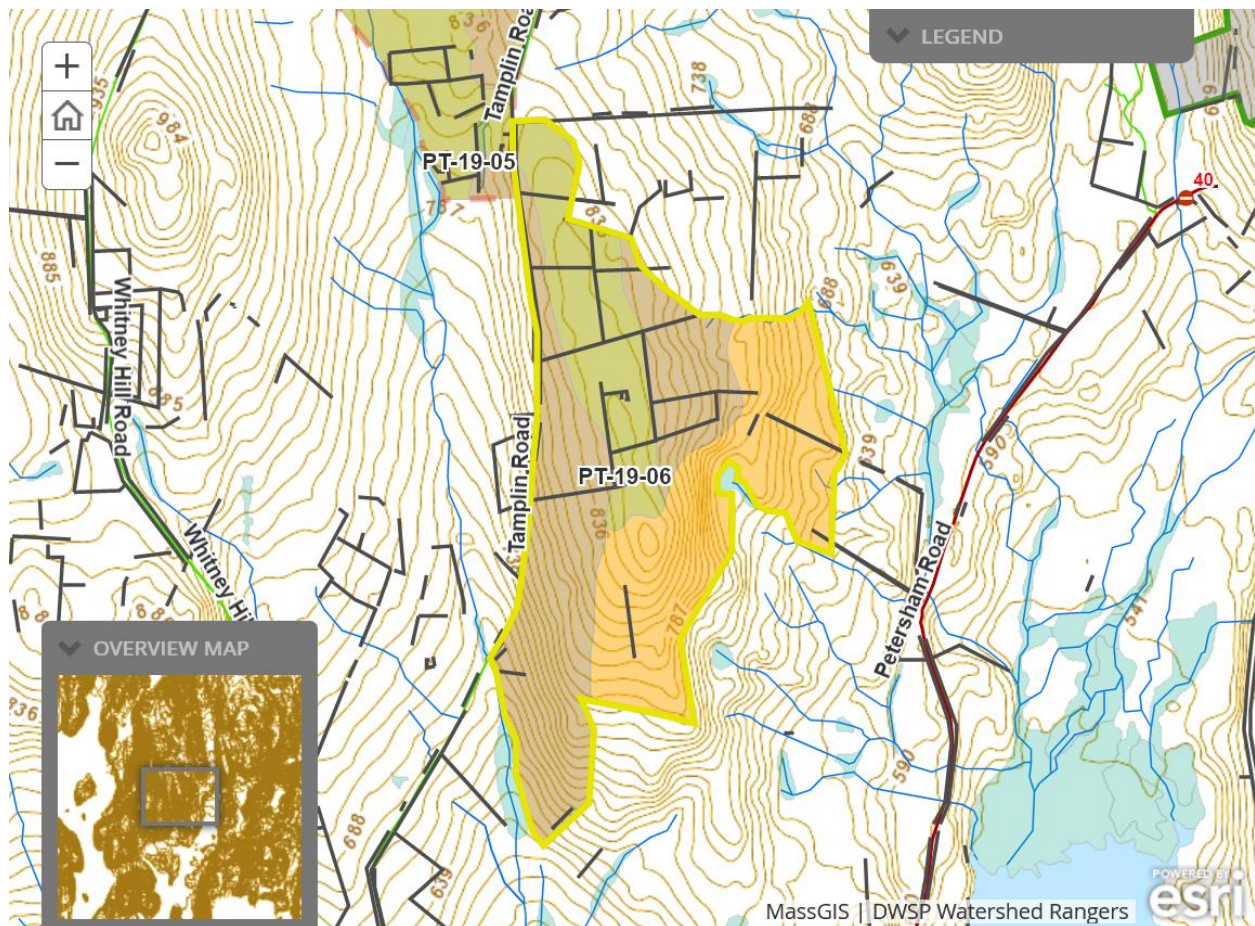
## Soils

Drainage Class	%
Excessively Drained	0



Well Drained Thin	37
Well Drained Thick	42
Moderately Well Drained	21
Poorly to Very Poorly Drained	0

Soils are mainly well drained Montauk-Canton association and Charlton-Chatfield-Hollis association with an area north central part of lot with moderately well drained Montauk-Scituate-Canton association.



## Wetlands

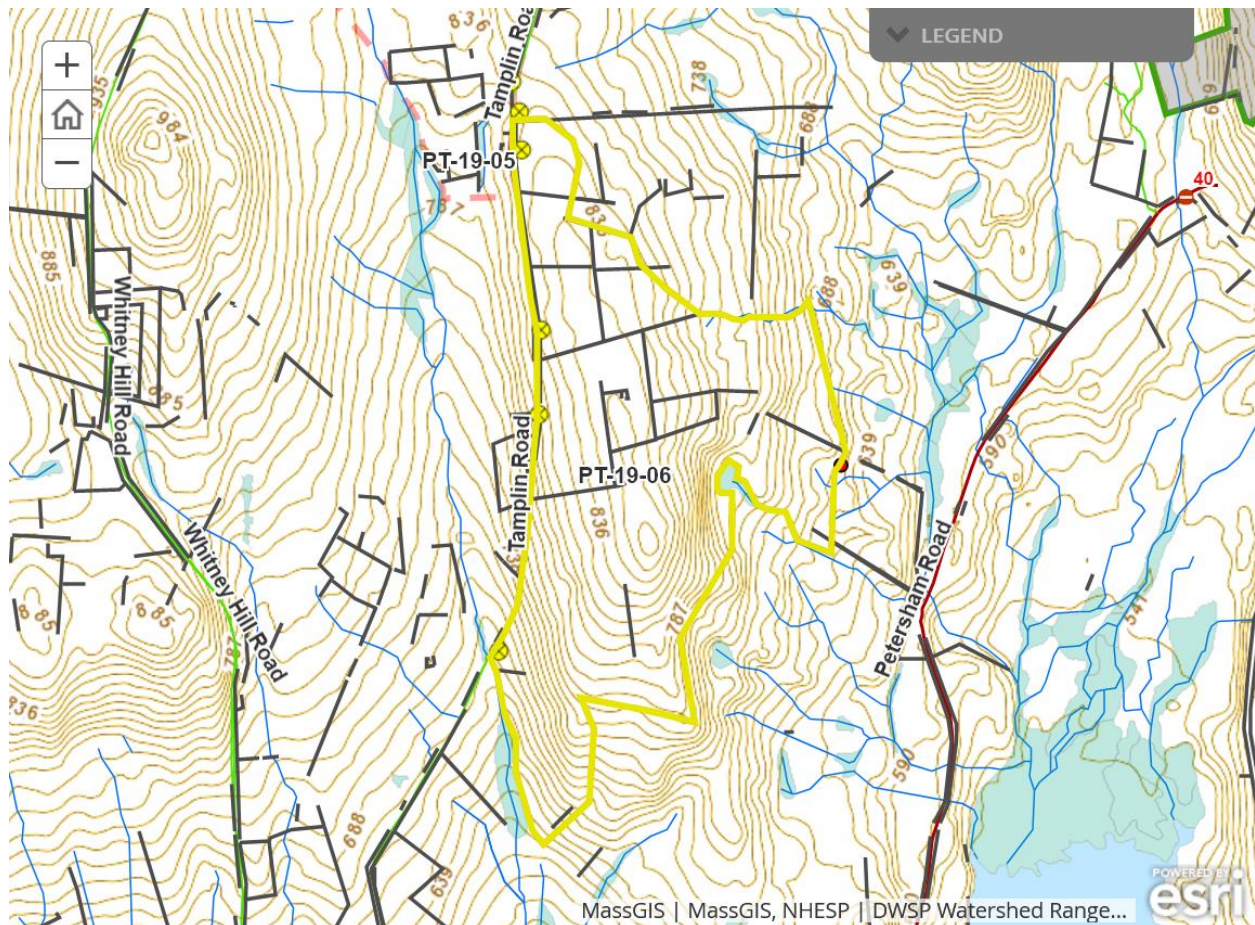
- Wetlands present? - **Yes**



- Streams present? - **Yes**
- Vernal pools present? - **None known**
- Seeps present? - **Yes**
- 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:

Interior of lot is mostly dry. Southwest edge of lot is a stream which crosses Tamplin Rd and flows SE into a wetland and eventually drains into Pottapaug Pond. There are also 2 small stream complexes which originate out of base of hill along the eastern edge of proposal. There are 2 potential vernal pools to the east of the lot, one may be within 200' of area to be cut.



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

Acres in Regeneration cuts: **35**

Average regen opening size: **1**

Maximum regen opening size: **2**

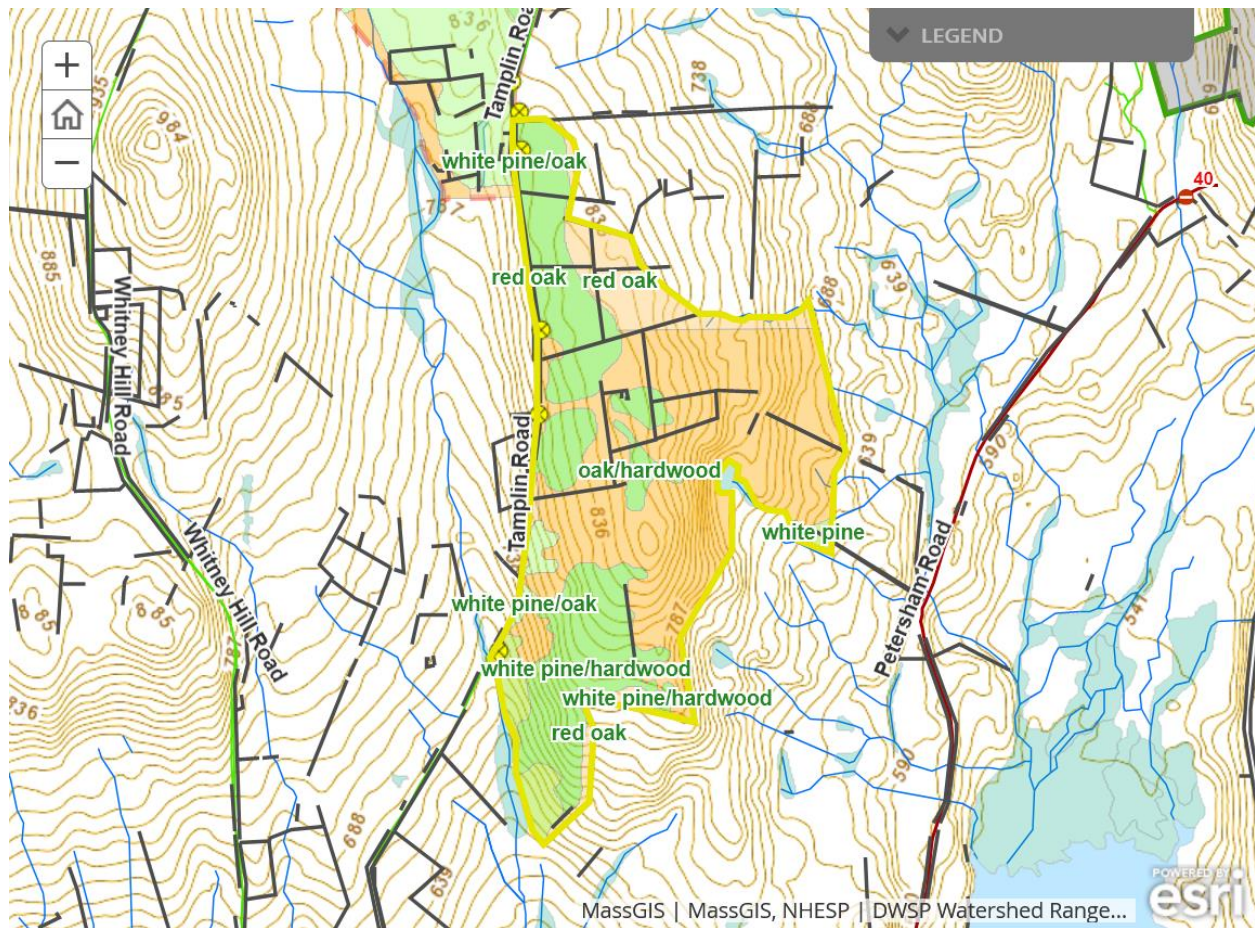
### **Description of advance regeneration in proposal area:**

Most of the lot is moderately stocked with mainly sapling size black birch and/or white pine and pine, in particular, has become stunted and stagnant. Red maple and beech are also common with scattered oak though more oak regeneration was noted along some of the lower slopes on the east side. There is also some hemlock near the wet areas here and to the south where there is a small stand of WK. There is some larger sapling to pole sized black birch in a few of the larger openings created in the past.

### **General comments on silviculture proposed:**

The intent is to regenerate about  $\frac{1}{4}$  of this lot with our standard regeneration opening silviculture. Openings will be spaced and stocked as required and will range from about  $\frac{1}{4}$  - 2 acres. Openings will be placed abutting older openings to further release existing regeneration where viable. Other areas to be targeted for harvest include sections with more poorly formed or less vigorous or diseased stems including stems severely impacted by gypsy moth. Additional openings will be created where more diverse hardwood seedling to pole size currently exists with the intent of releasing or coppicing them. Areas with younger, better formed, vigorous stems will be avoided or thinned if overstocked. Edges of openings and along skid trails will also be thinned to allow more light into openings and lessen future damage to regeneration when next harvest occurs. Exceptional individuals of all species present will be retained for diversity, as will active den trees and additional trees for habitat as deemed desirable. Additional large legacy trees will be retained.



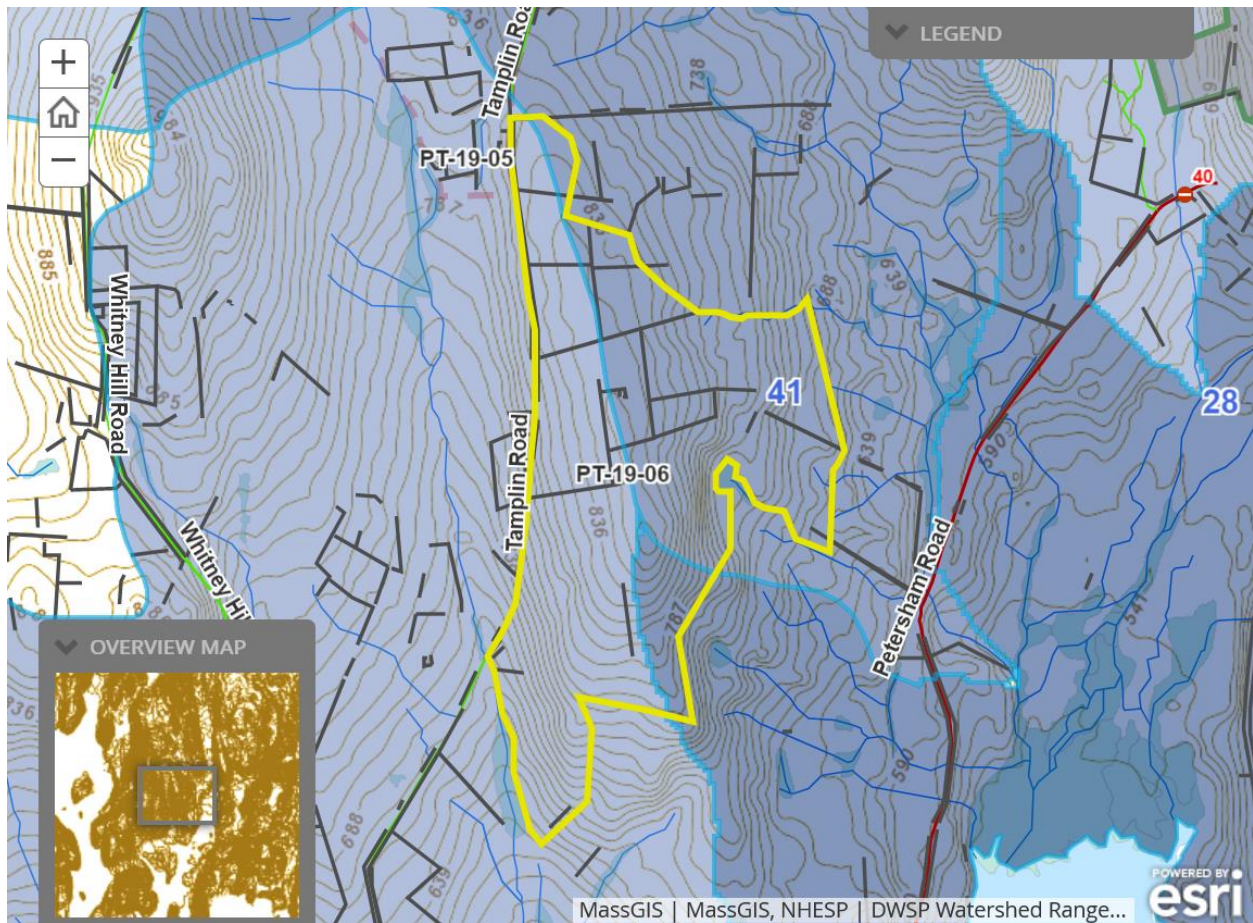


## Subwatershed Analysis

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
28	24463.8	2.9	613.1	9.2
41	745.9	5.7	180.8	63.2
53	1082.4	0	270.6	21.2

None of the subwatersheds are approaching their 25% limit although 41 and 53 also are on one of this years proposals (PT-19-5) which is adjoining this lot to the northwest but is on 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 most likely be evenly spaced throughout. On PT-19-5 openings will mainly be in the southern part and northern edge so mainly within subwatershed 53 which has higher acreage remaining.



## Harvesting Limitations

Forwarder required: **No**

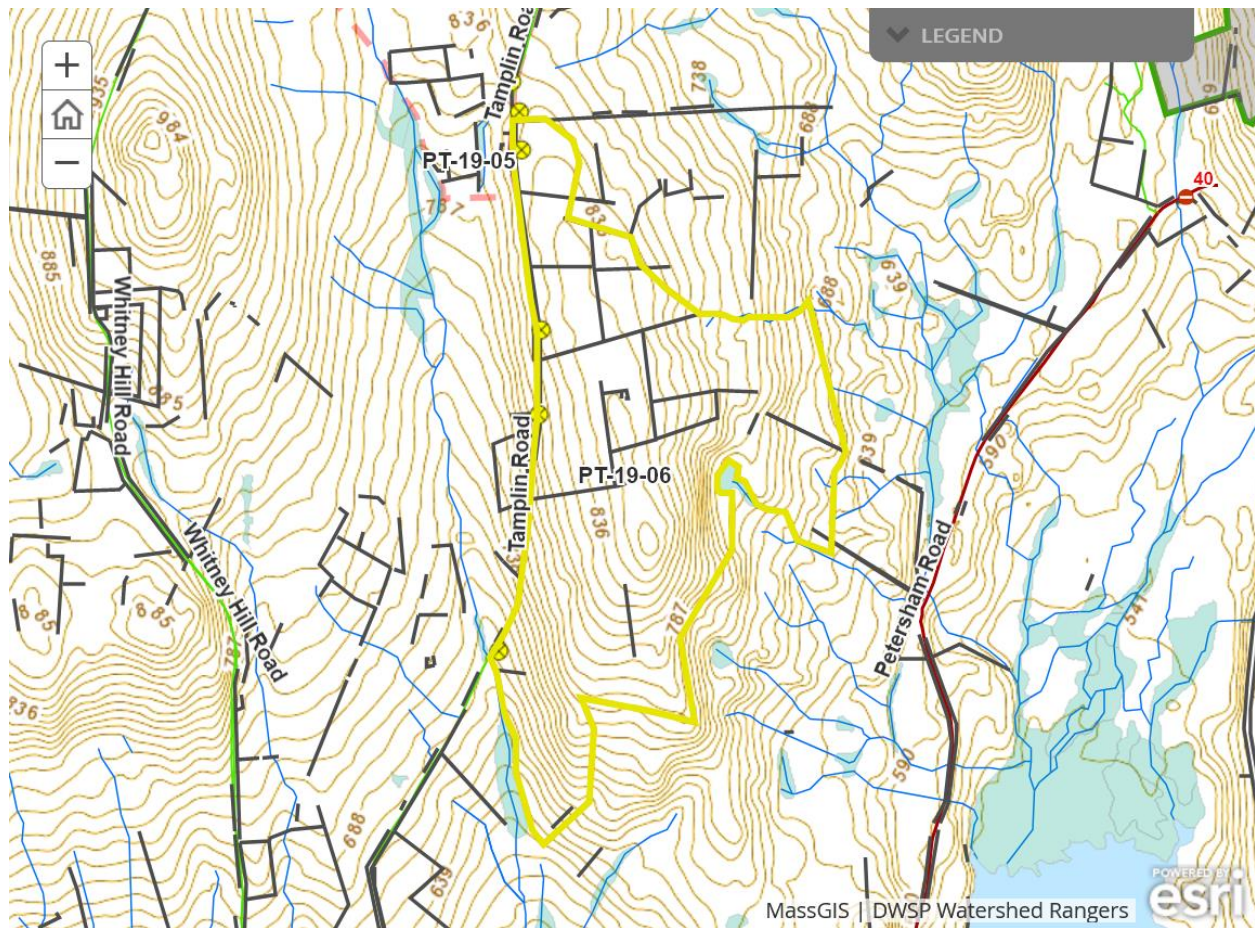
Feller/processor required: **No**

Steep slopes present: **No**

### Comments on harvesting limitations:

There are a couple of steep sections on the lot but these will be mostly avoided, not expecting to need to put a skid trail on them. The 5 landings are all smaller road side type landings so a forwarder would be useful for loading trailers. Road needs to be improved to allow trailers which will be necessary for lot to the north.



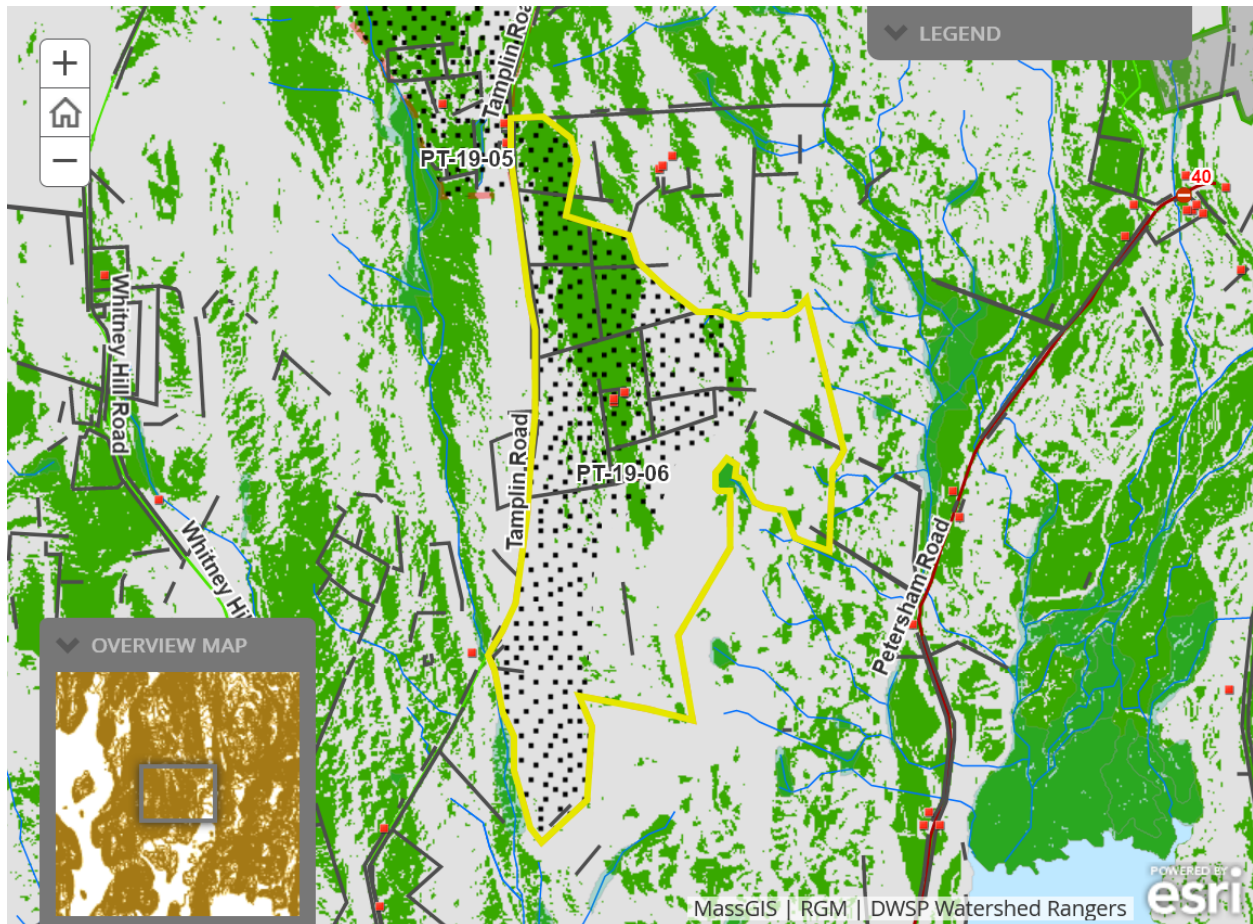


## Cultural Resources

### Comments on Cultural Resources:

Numerous stonewalls present, mainly on the northern half of the lot. Barways are frequent with most being used for logging access in past but some will need to be widened for current equipment. As long as the landings proposed (all have been used in past) can be utilized few if any new barways will be needed. Most of the walls, other than right around the area of foundations, are of the low, tossed variety. There is at least one area that appears to have had surface stone mined from a ledge outcrop. Surface stone is somewhat variable but generally prevalent 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 Archaeologist regarding protection of sensitive sites.



## Wildlife Resources & Rare and Endangered Species

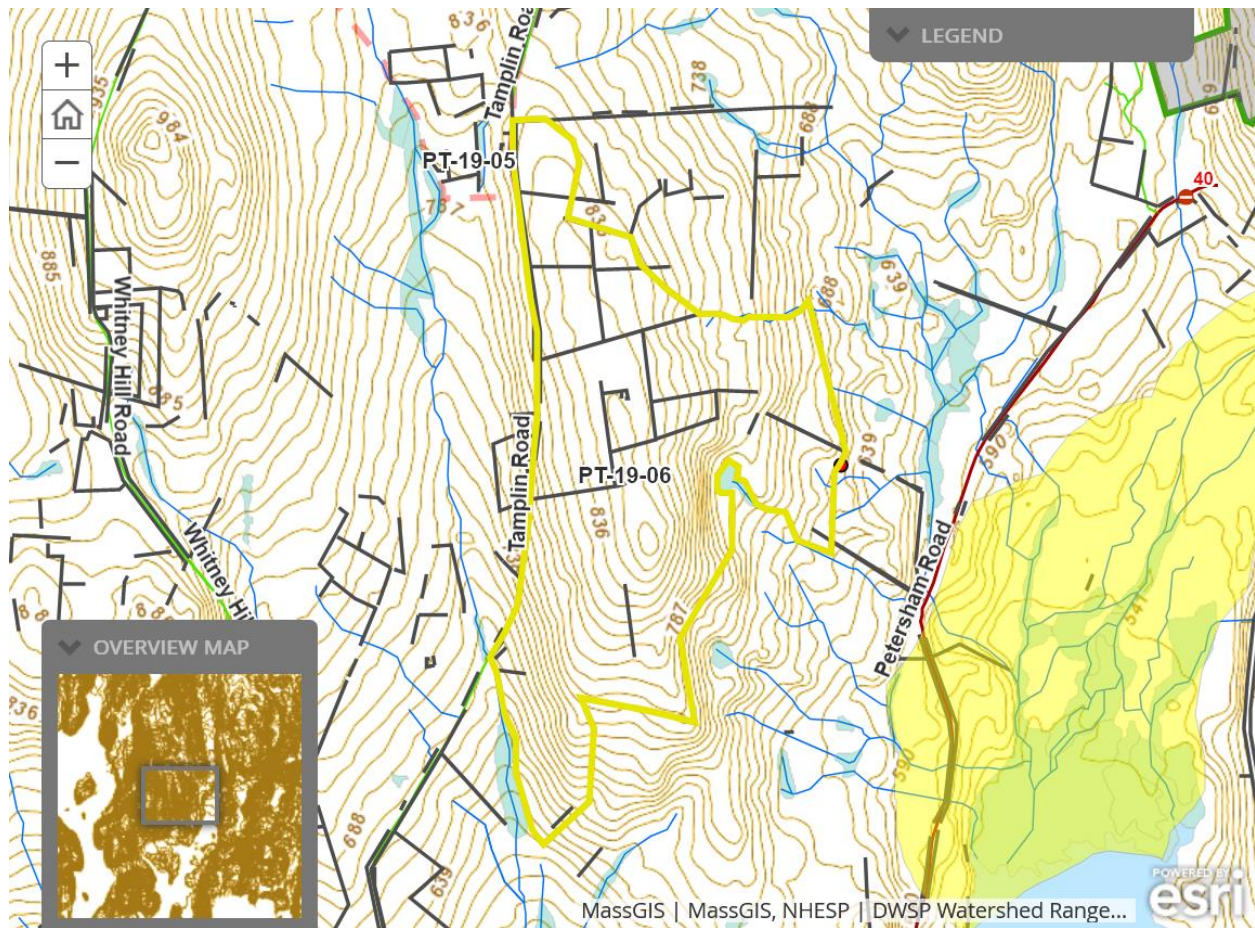
### General Wildlife Comments:

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.

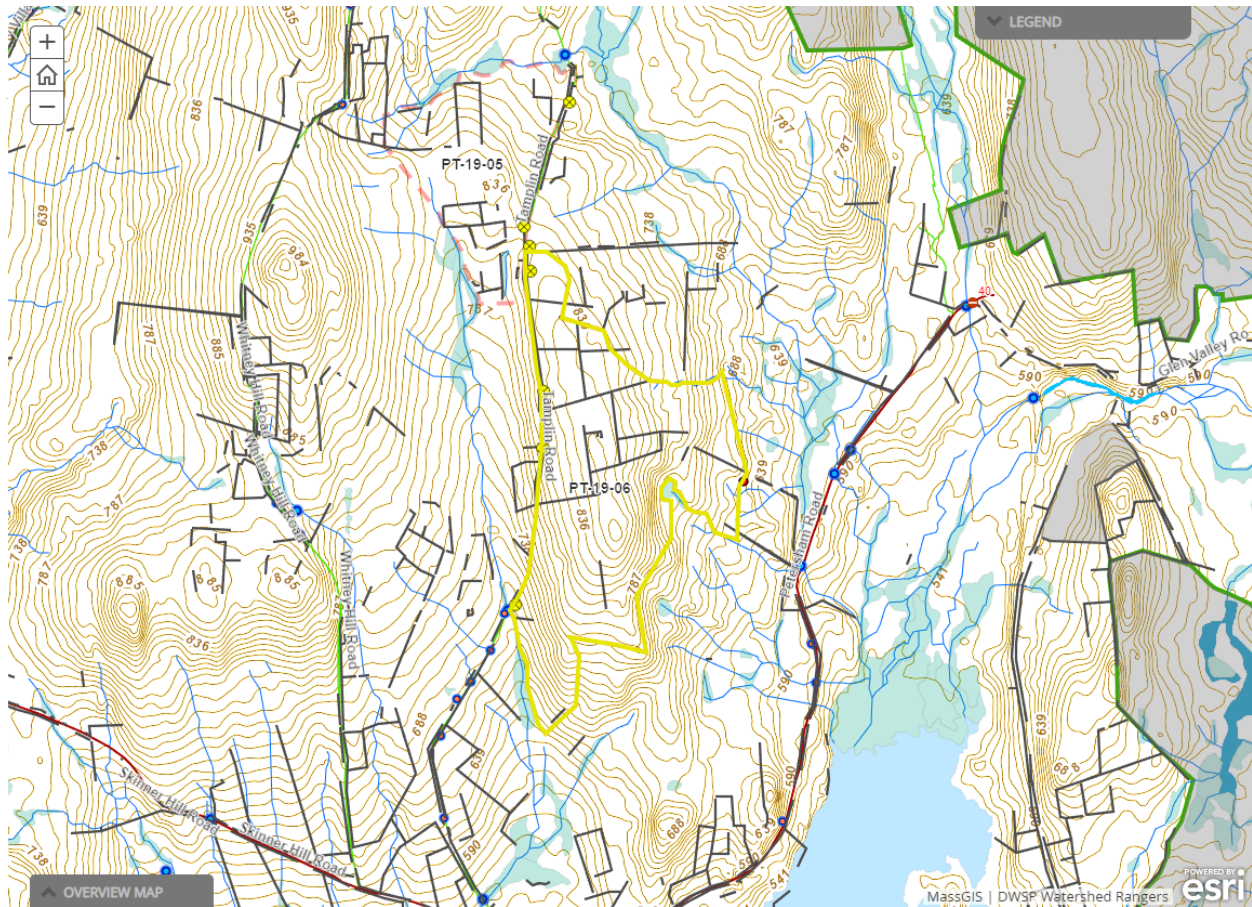




## Environmental Quality Engineering

### Comments on EQ Issues:

There are no perennial stream crossings.



## Forest Access Engineering

**Gravel needed:** Yes

**Landing work needed:** Yes

**Culverts needed:** Yes

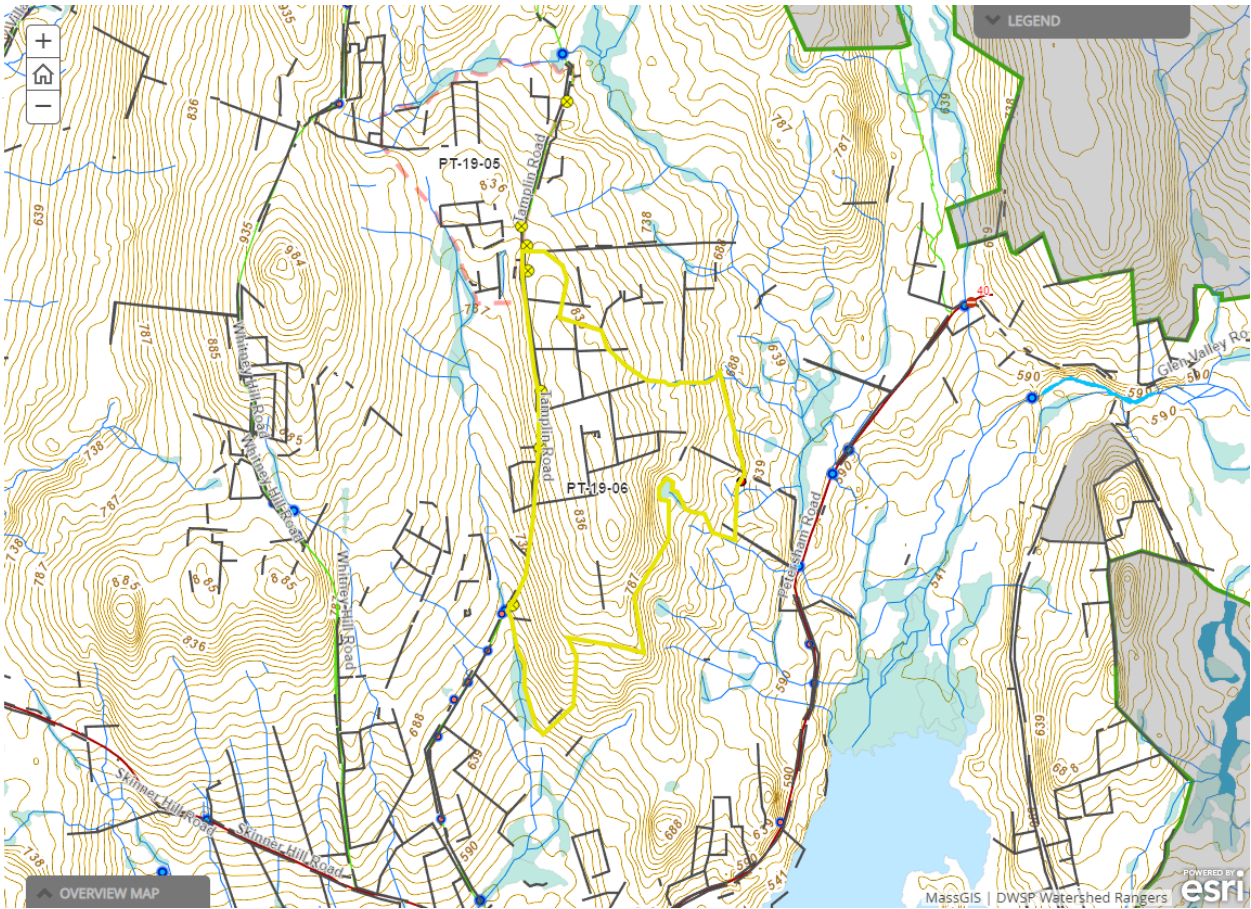
**Work needed on permanent bridges:** No

**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

