

Quabbin Harvest Proposal NS-19-24YFFA

Proposal Goals

The goal of this proposal is to create a 10-14 acre patch of young forest, which will provide early successional habitat for species that are undergoing regional population declines due to loss of this kind of habitat. This area is designated in the [2017 DCR-DWSP Land Management Plan](#) as a Young Forest Focus Area.

Proposal Location

On the north side of Route 122, between Blackington Road and Blackington Swamp in New Salem.

Total Acres: 22.7



General Description

	Overstory Type(s)	Acres
Dominant	Oak, mixed - dry site	13.7
Secondary	White pine	5.5
Secondary	White pine/oak	3.5

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

Description of forest composition/condition:

The north-central area is dominated by pole sized black and white oak. Oak form and vigor are poor to fair. Associated species include red pine, usually in clumps, and scattered pitch pine. Both red and pitch pine appear to be healthy at this time, but red pine is expected to be killed by red pine scale. There are widely scattered small patches of mountain laurel. Regeneration is patchy and, where it exists, dominated by white pine seedlings. The understory is dominated by blueberry, huckleberry, and wintergreen, with some clubmoss and bracken fern.

As one moves south through the center of the lot, sawlog size white pine becomes increasingly prevalent, as does sawlog size red oak. The form of both oak and white pine is fair, with forks and large dead stubs on many of the oaks, and weevil damage and low branches on many of the pines. White pine dominance increases toward the east and west boundaries of the lot.

Past DWSP harvests in this area include:

- 1 acre of shelterwood prep cutting around the wetland in the southeast corner in 1975 (Quabbin harvest #114)
- 17 acres of thinning in 1985 (Quabbin harvest #441)
- 1¼ acres of shelterwood prep cutting along the east and west borders in 1985 (Quabbin harvest #489)

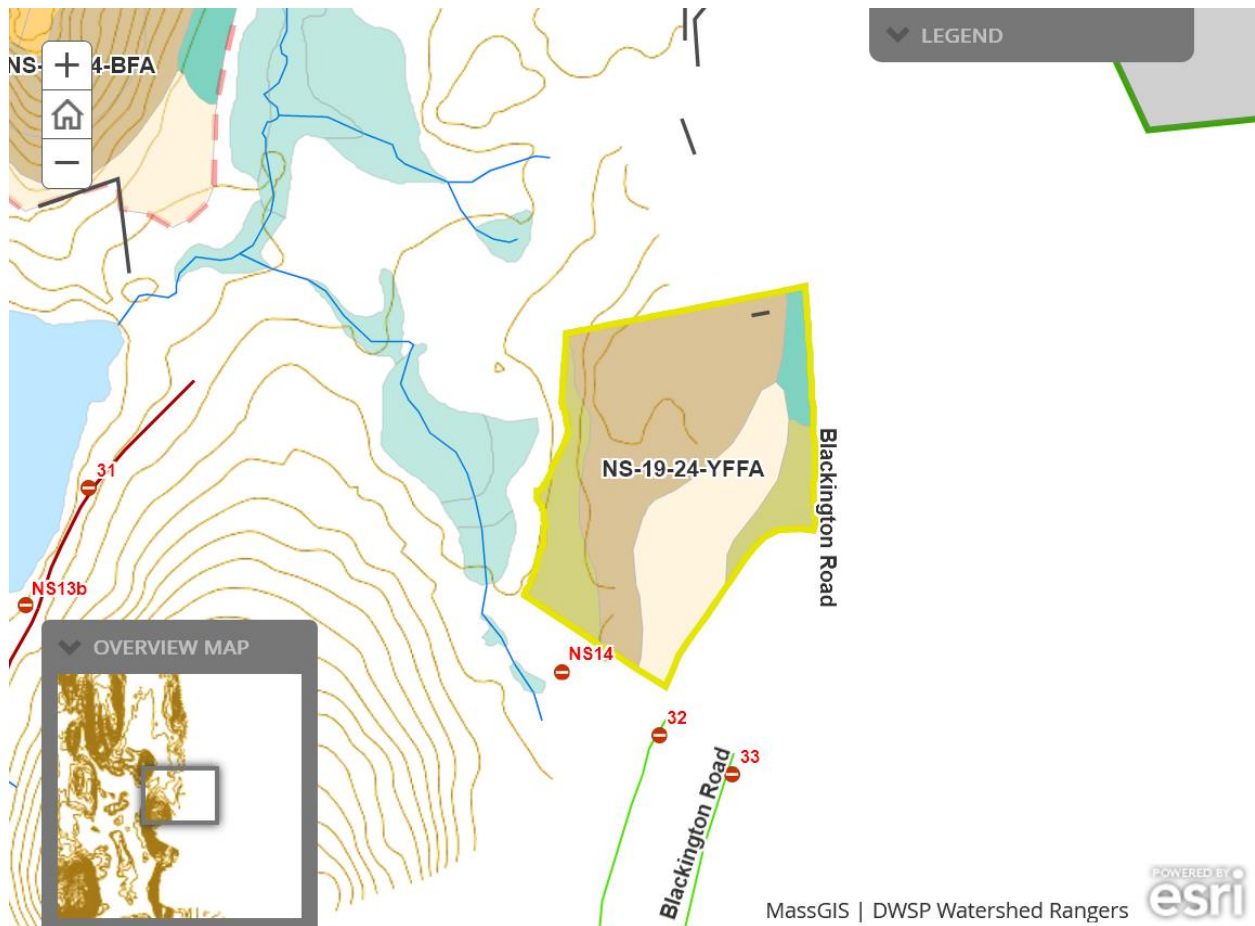
About 13 acres in the northern part of the proposed area has never been harvested by DWSP.



Soils

Drainage Class	%
Excessively Drained	26
Well Drained Thin	0
Well Drained Thick	50
Moderately Well Drained	20
Poorly to Very Poorly Drained	4

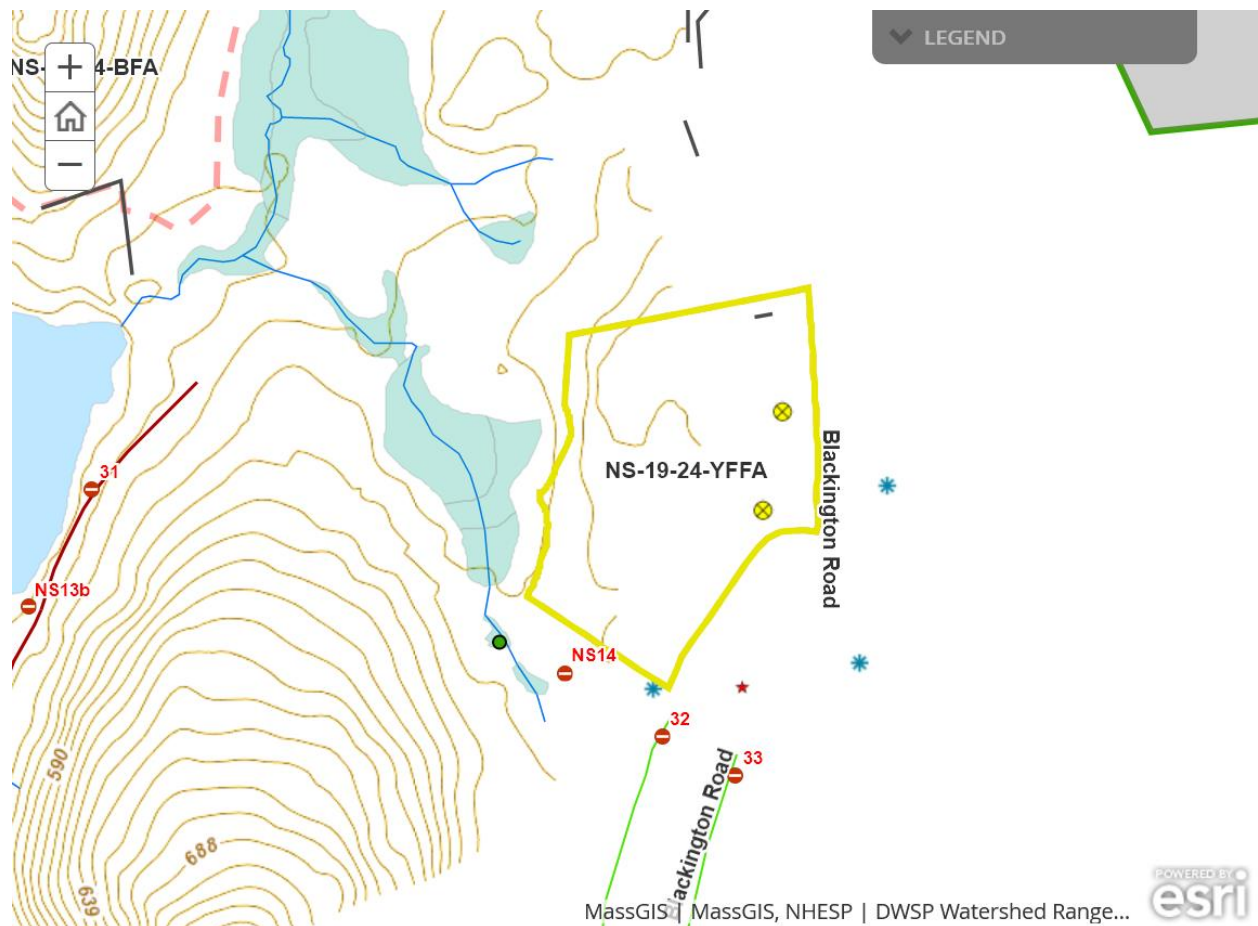
Soil types include Windsor loamy sand, Deerfield loamy sand, , Walpole sandy loam, Newfields fine sandy loam, and Canton fine sandy loam, very stony. Slopes are gentle, under 10%, with low risk of erosion.



Wetlands

- Wetlands present? - **Yes**
- Streams present? - **No**
- 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? - **No**
- Is logging in wetlands planned? - **No**

There is an NHESP Certified Vernal Pool in the old borrow pit at the south end of Blackington Road. This vernal pool will be protected in accordance with M.G.L. Chapter 132 and the 2017 DWSP Land Management Plan. The lot boundary is 100 feet away from the pool in order to maintain a filter strip/shade zone; actual cutting may be still farther away. In addition, there will be a 200 foot low ground disturbance zone in which ruts will be kept under 6" so that they do not impede salamander migration.



Silviculture

Acres in Intermediate cuts: **0**

Acres in prep/establishment cuts: **0**

Acres in Regeneration cuts: **14**

Average regen opening size: **14**

Maximum regen opening size: **14**

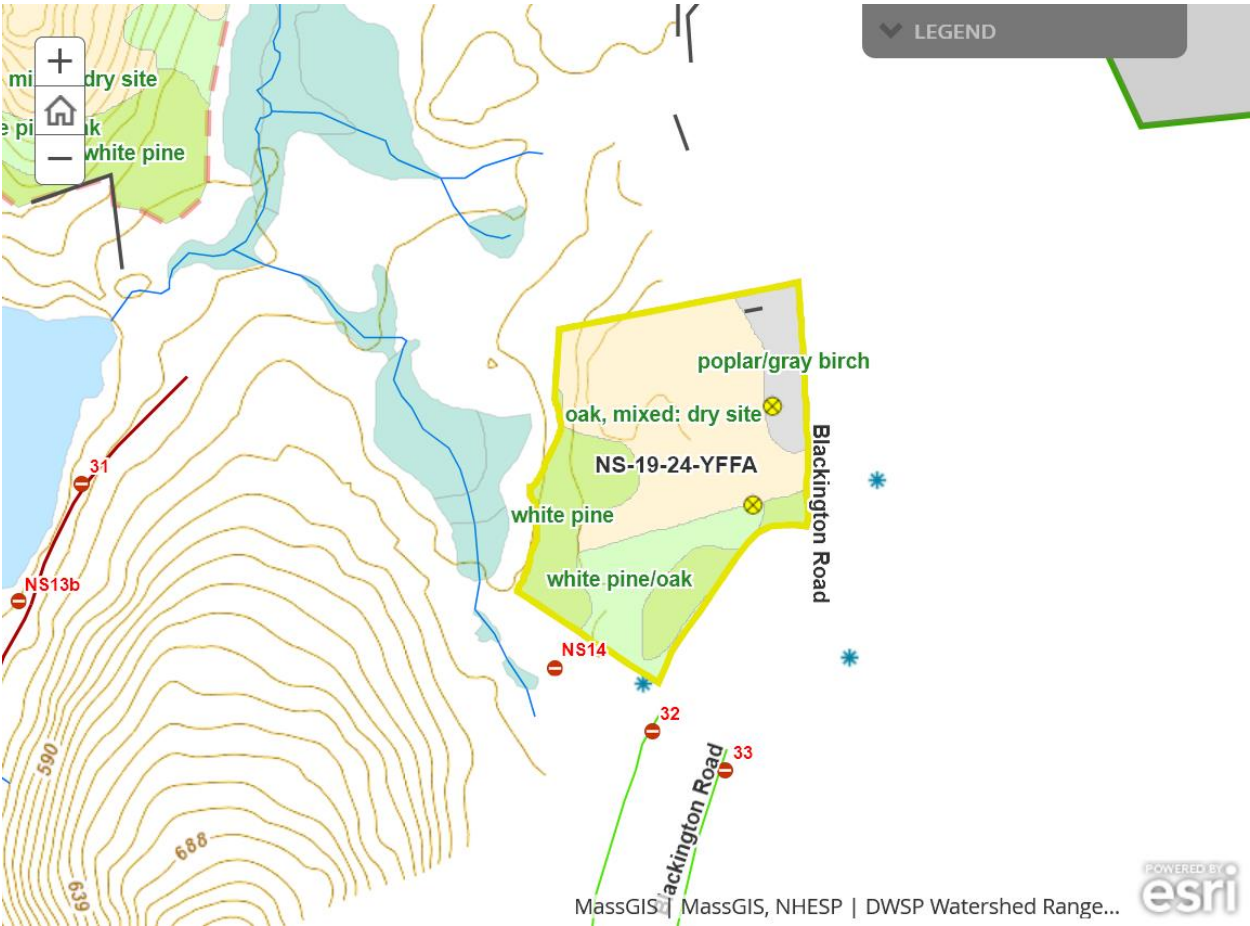
Description of advance regeneration in proposal area:

Regeneration is patchy, present in some areas but not in others. Along roads and where past harvesting has created small openings there are mixed saplings, mostly white pine, red maple and other hardwoods, and some hemlock. In lightly harvested or unharvested areas in the center of the lot, regeneration is dominated by white pine seedlings or completely absent.

General comments on silviculture proposed:

This proposal will create early successional habitat for species that are undergoing regional population declines due to loss of this kind of habitat, as described on pages [117-127 of the 2017 DCR-DWSP Land Management Plan](#). The Blackington Road Young Forest Focus Area is shown in Figure 4-8 on page 122 of the Management Plan.

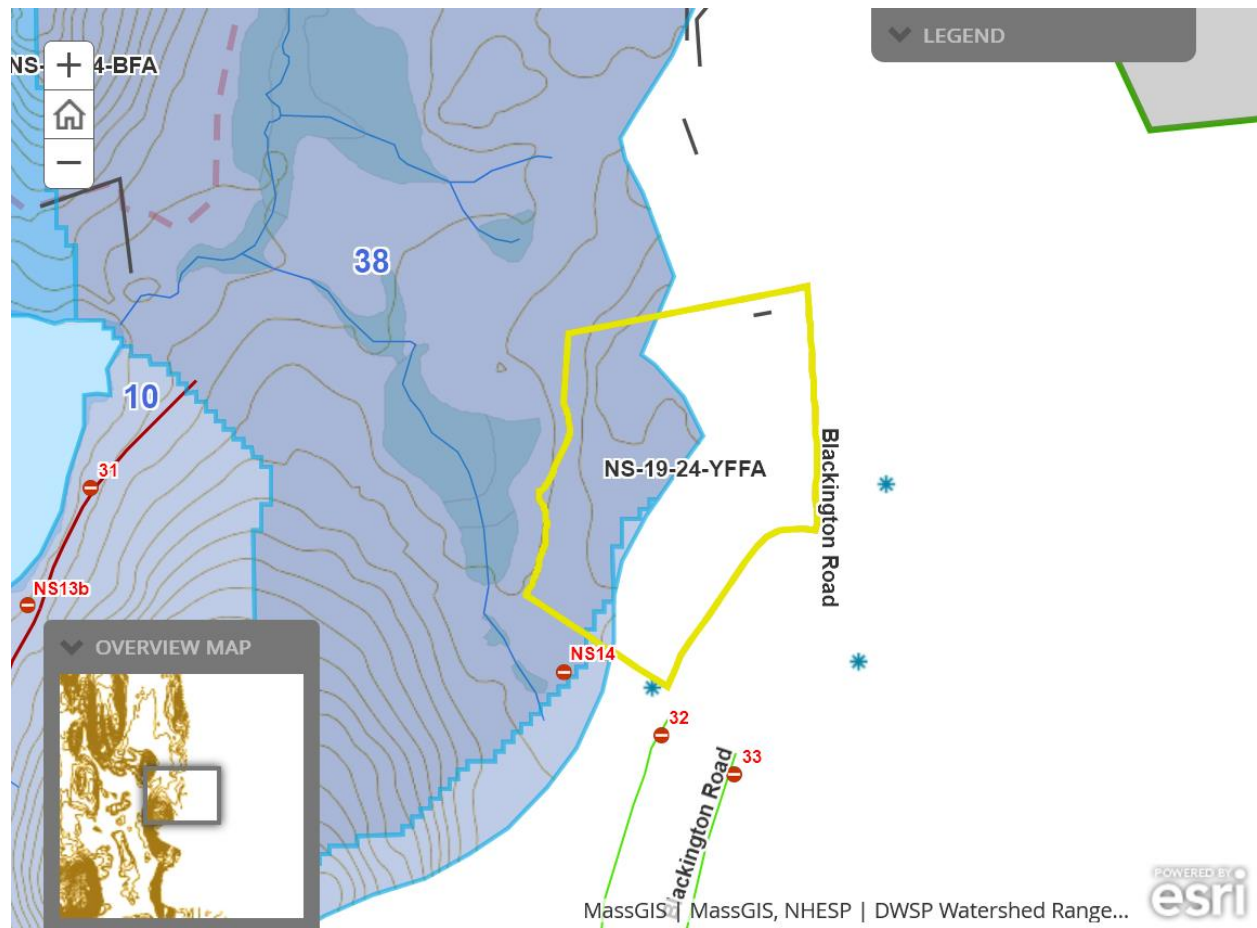
This harvest will create a 10 to 14 acre opening at the southern end of the Blackington Road Young Forest Focus Area. In order to retain filter strips and road buffers, the opening will be at least 100 feet away from Blackington Swamp, the wetland/vernal pool in the borrow pit, and Route 122, and at least 50 feet away from Blackington Road. Basal area retention in the opening will be minimal, in order to achieve maximum benefit for early successional wildlife. However, unique or high value wildlife trees may 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
38	402.2	7.7	92.9	8.4
10	796.8	7.1	192.1	0.5

13.7 acres are outside the Quabbin Reservoir watershed.



Harvesting Limitations

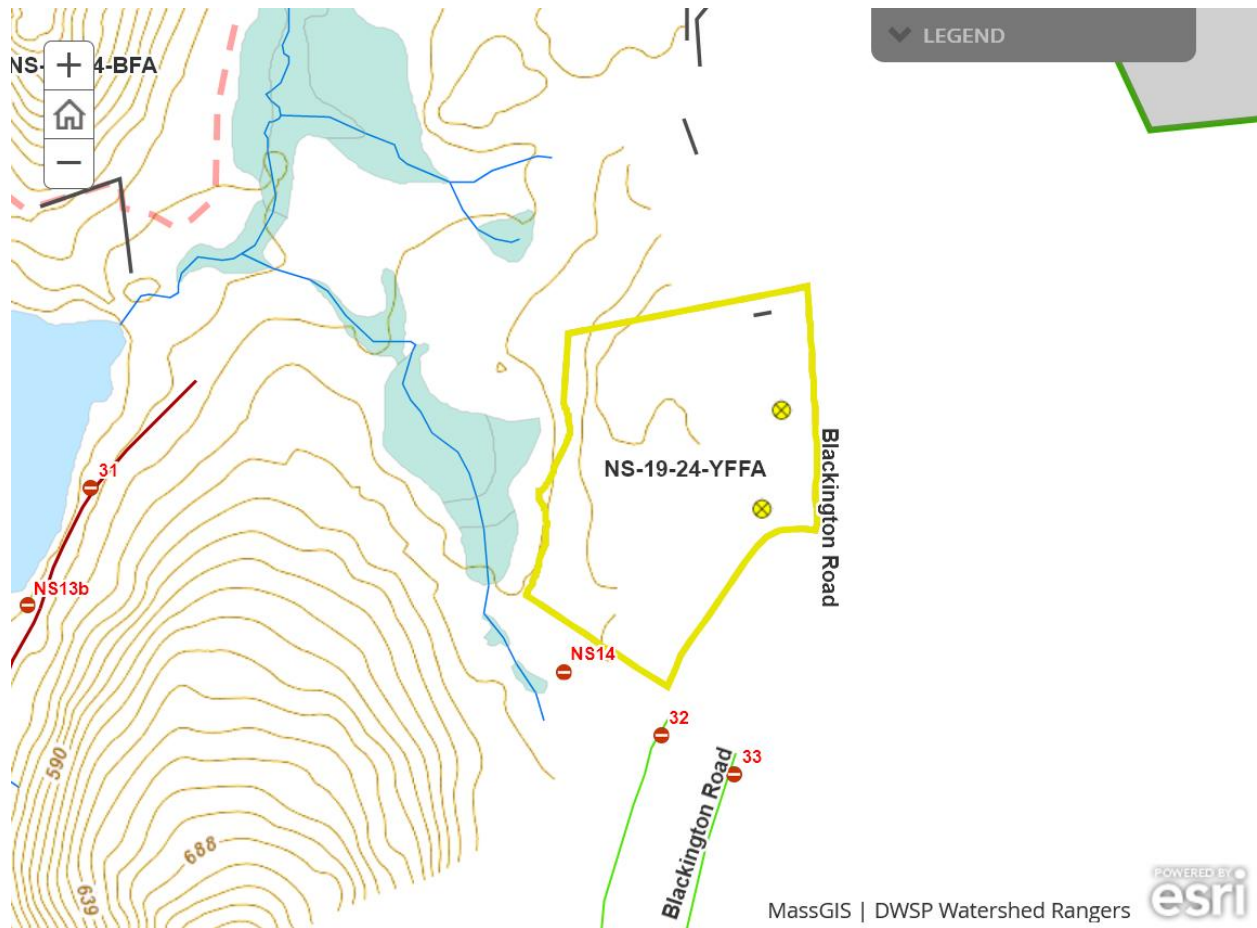
Forwarder required: **No**

Feller/processor required: **No**

Steep slopes present: **No**

Comments on harvesting limitations:

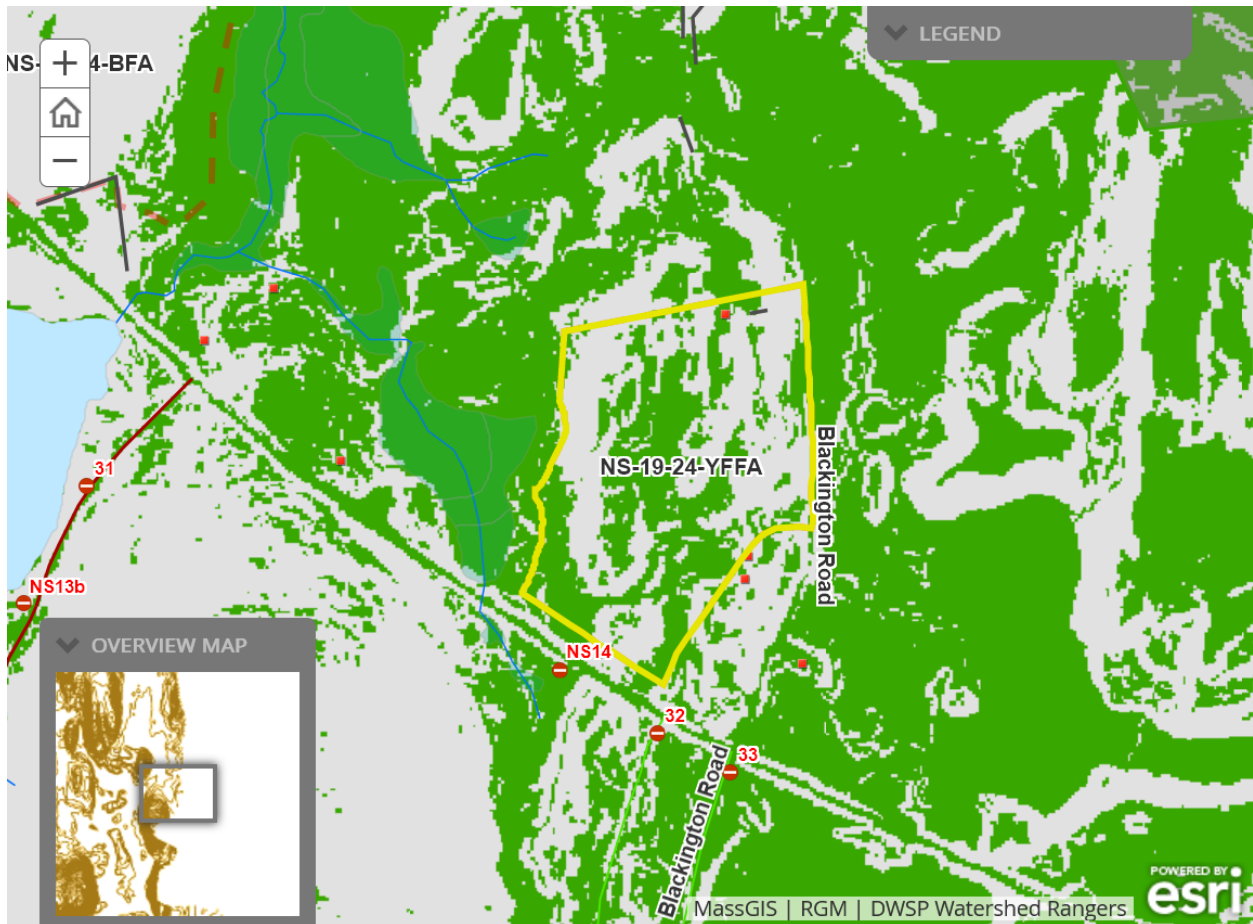
None.



Cultural Resources

Comments on Cultural Resources:

There are two cellar holes in or near this lot, as well as some stone walls. Existing barways will be used where feasible and harvest layout will protect walls as much as possible. Cellar holes 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 Unique or Unusual Sites or Habitat:

As noted in the Wetlands section, the wetland in the old borrow pit near the junction of Routes 122 and Blackington Road is the probable location of the Certified Vernal Pool that is mapped slightly to the west. This needs to be checked and verified by DWSP and NHESP wildlife biologists. In any case, this wetland will be protected as a certified vernal pool, in accordance with M.G.L. Chapter 132 and the 2017 DWSP Land Management Plan. The lot boundary has been drawn 100 feet away from the pool in order to maintain a filter strip and shade zone; actual cutting may be still farther away. In addition, there will be a 200 foot low ground disturbance zone in which ruts will be kept under 6" so that they do not impeded salamander migration.

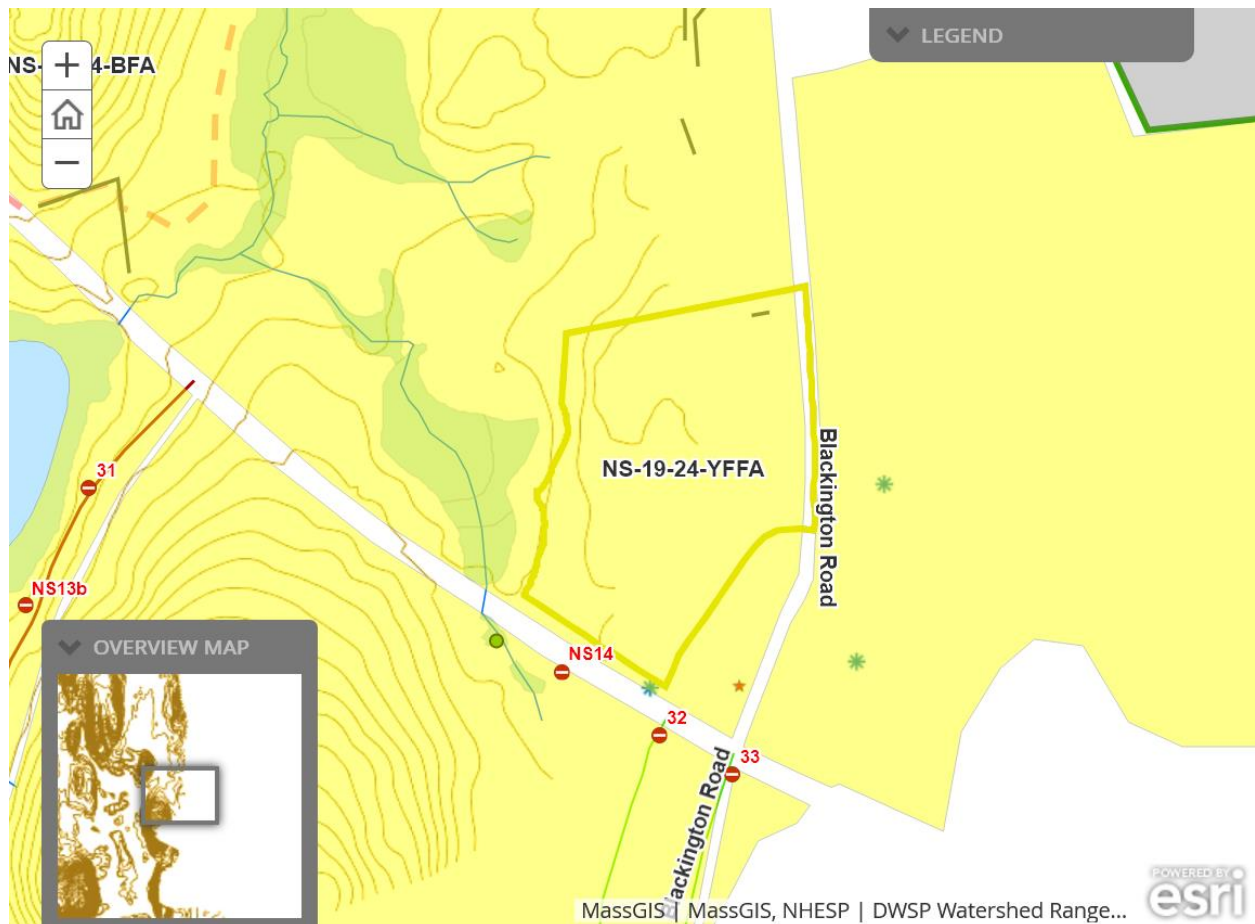
Blackington Swamp, particularly the east edge where it parallels this lot, is mapped as a rare, unique and exemplary natural community, containing both blackgum (*Nyssa sylvatica*) and black spruce (*Picea mariana*). These communities are described as “marginal” and “scattered,” but will be protected if found. Again, the lot boundary has been drawn 100 feet away from the swamp in order to provide a o-cut filter strip.

General Wildlife Comments:

The purpose of this harvest is to create early successional habitat for rare and endangered species of wildlife.

Comments on Rare Species/Habitats:

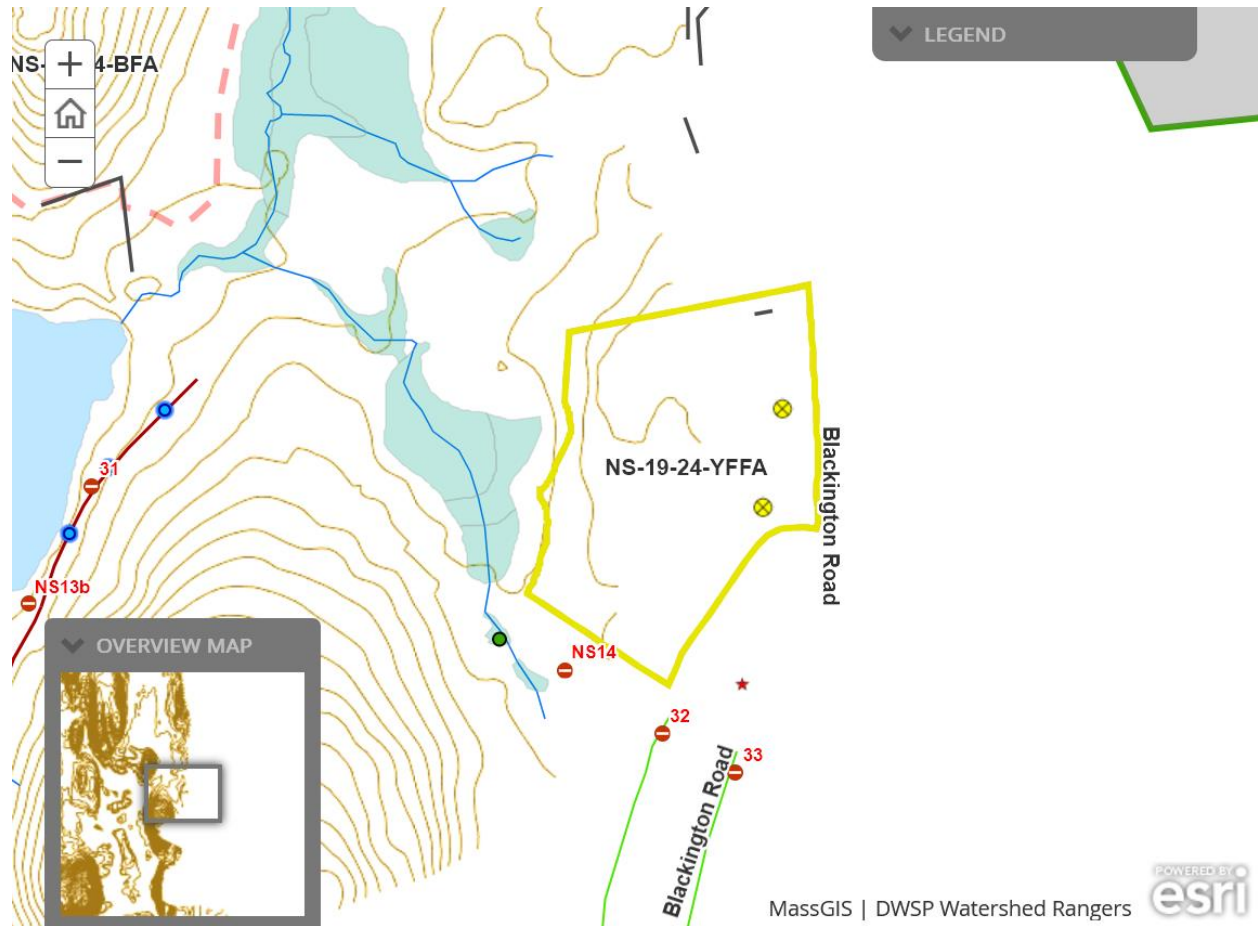
Cavity trees and potential/existing nest trees will be retained if possible. NHESP has determined that certain state-listed sensitive species or habitats may exist within the northern section of the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected 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 harvest.



Environmental Quality Engineering

Comments on EQ Issues:

No perennial stream crossings.



Forest Access Engineering

Gravel needed: No

Landing work needed: No

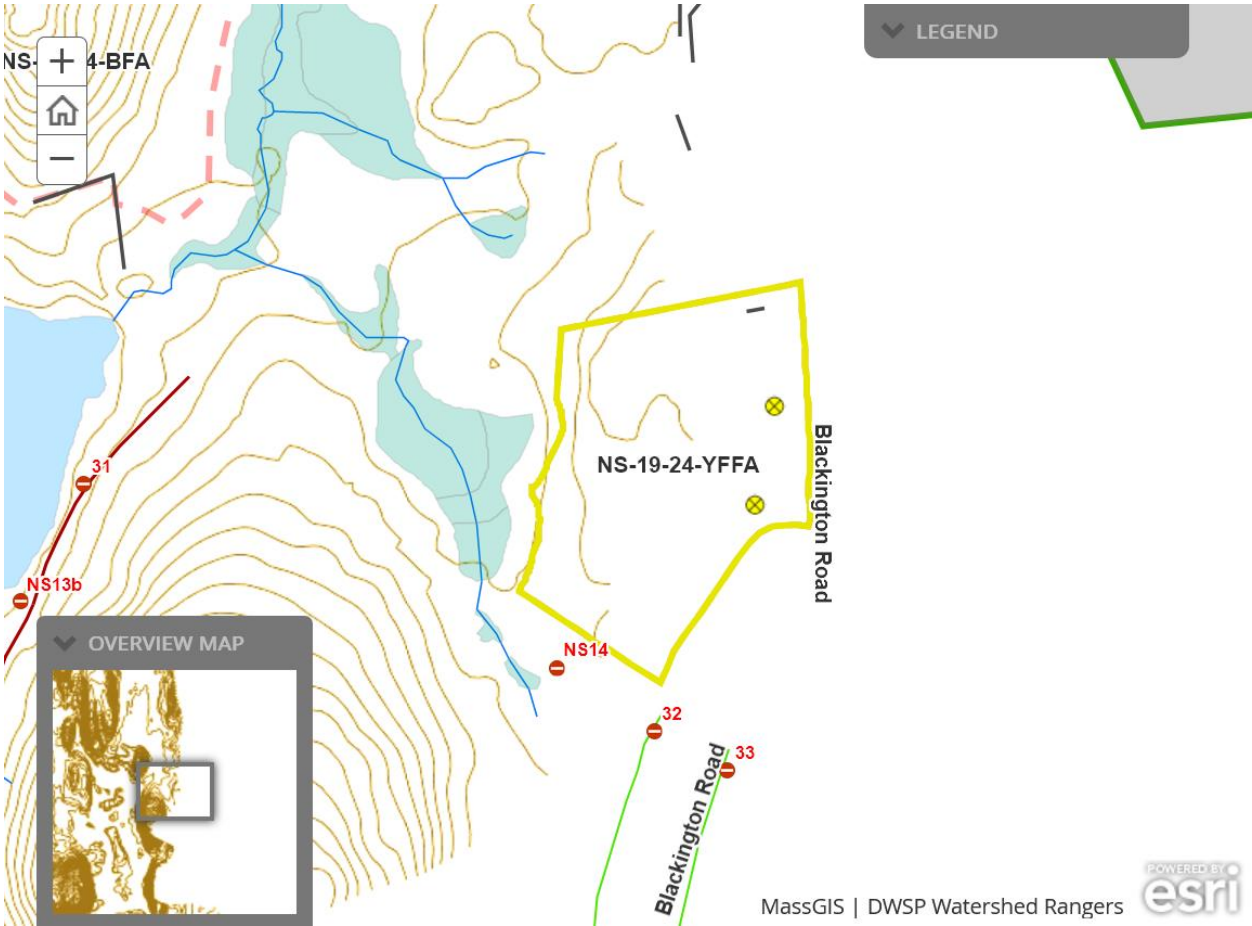
Culverts needed: No

Work needed on permanent bridges: No

Beaver issue: No

Further comment on access needs:

None.



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

