Quabbin Harvest Proposal NS-22-17-YFFA

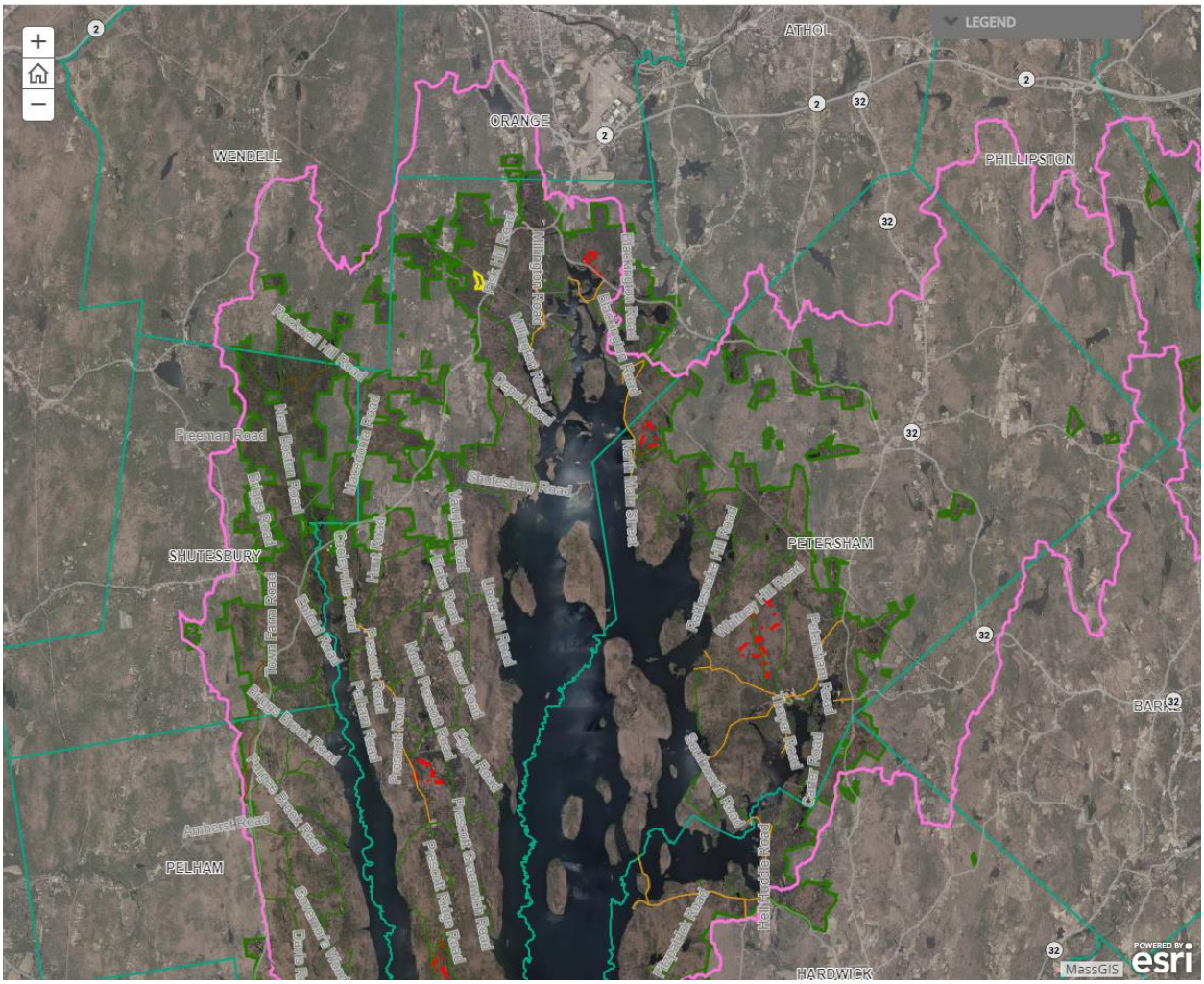
Proposal Goals

The main goal for this proposal is to initiate a large patch of young forest as part of a greater agency-wide effort to provide suitable, dependable local habitats for a suite of species impacted by regionally declining levels of shrubland and young forest.

Proposal Location

This lot is on the eastern slope of Fisk Hill in New Salem, in the southeast corner of the Young Forest Focus Area (YFFA) as shown in Figure 4-8 on page 123 of the DWSP 2017 Land Management Plan. This first entry is bordered to the north by the power line and to the west by the summit of Fisk Hill. The south and east borders of the lot are the edges of the YFFA.

Total Acres: 17



General Description

	Overstory Type(s)	Acres
Dominant	White pine - hemlock	11
Secondary	Oak - hardwoods	6
Other		

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

Description of forest composition/condition:

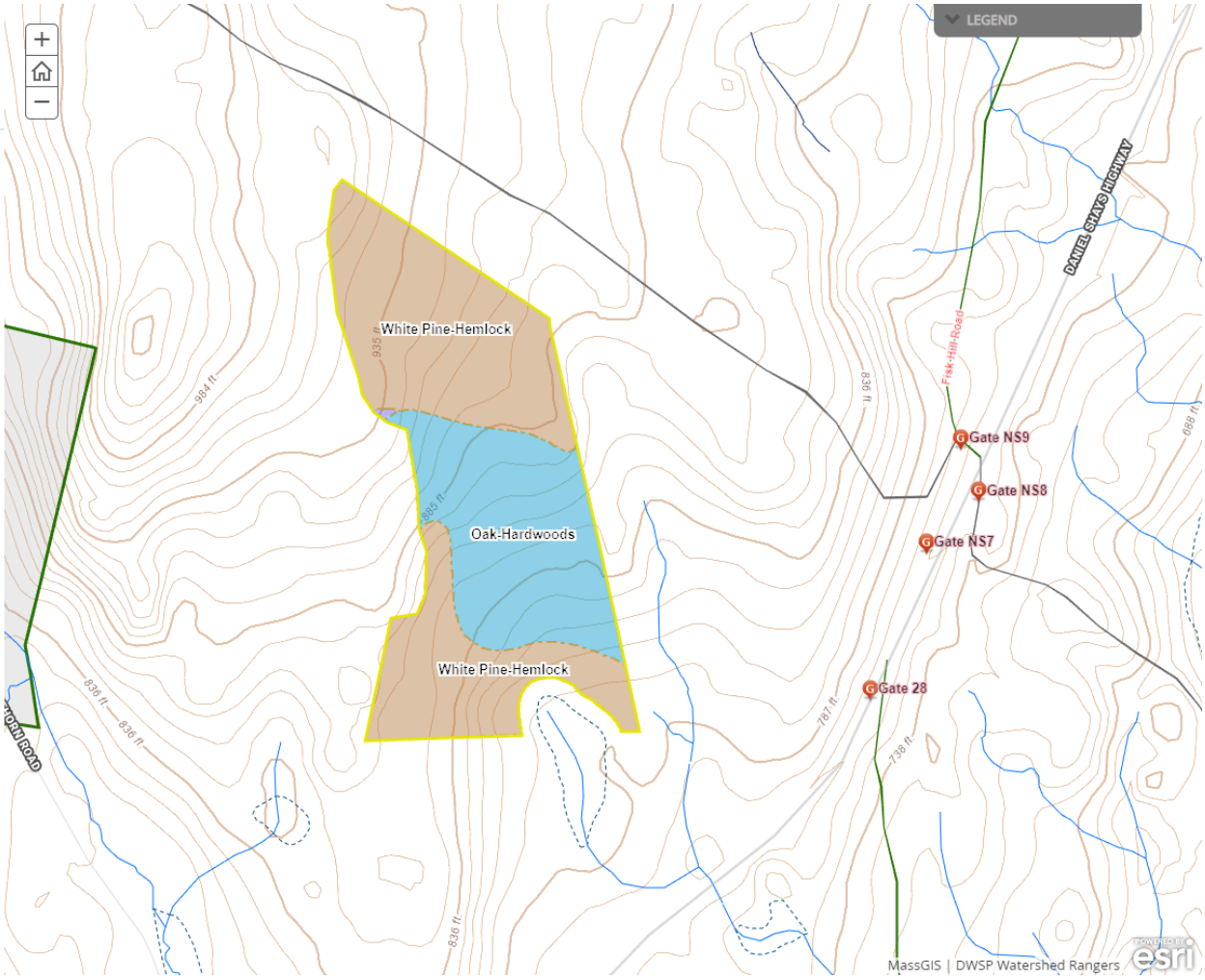
This area has a two-aged structure, with an overstory of sawtimber-sized black, white and red oak and scattered white pine. Oak form is poor to fair across species and vigor is generally good. There are a few recently killed oak snags, but overall gypsy moth damage was light. White pine has good vigor but variable form, ranging from poor (weevilled with many large branches) to good.

The midstory is dominated by black birch and red maple poles, with associates of hemlock, white pine, sugar maple and beech, and occasional dying paper birch and white ash. Notably, both hemlock and beech have widely variable form and vigor; it appears that some beech on this site are resistant to beech bark disease.

Hemlock, white pine, black birch and occasional oak saplings are present but patchy, located most commonly in old skid roads. Chestnut stump sprouts persist as well. Numerous deer pellets were observed, and heavy browse on young hemlock indicates the likely presence of moose and/or porcupine.

Assessment of Terrestrial Invasive Species:

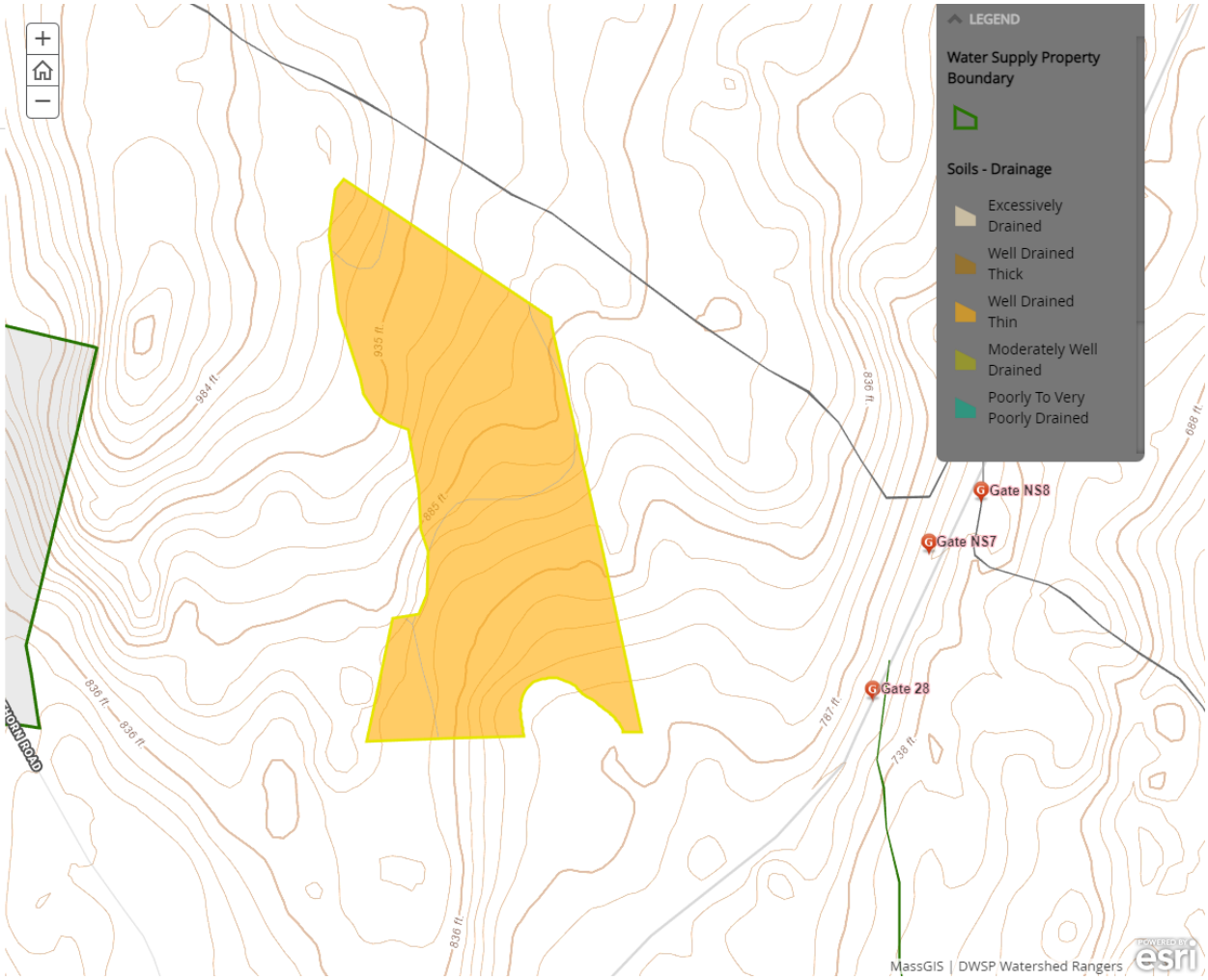
None noted.



Soils

Drainage Class	%
Excessively Drained	0
Well Drained Thin	100
Well Drained Thick	0
Moderately Well Drained	0
Poorly to Very Poorly Drained	0

The single soil type in the proposed area is Chatfield-Hollis complex, rocky, with slopes ranging from 3 to 25 percent. Harvesting on steep slopes will be avoided in order to minimize erosion.

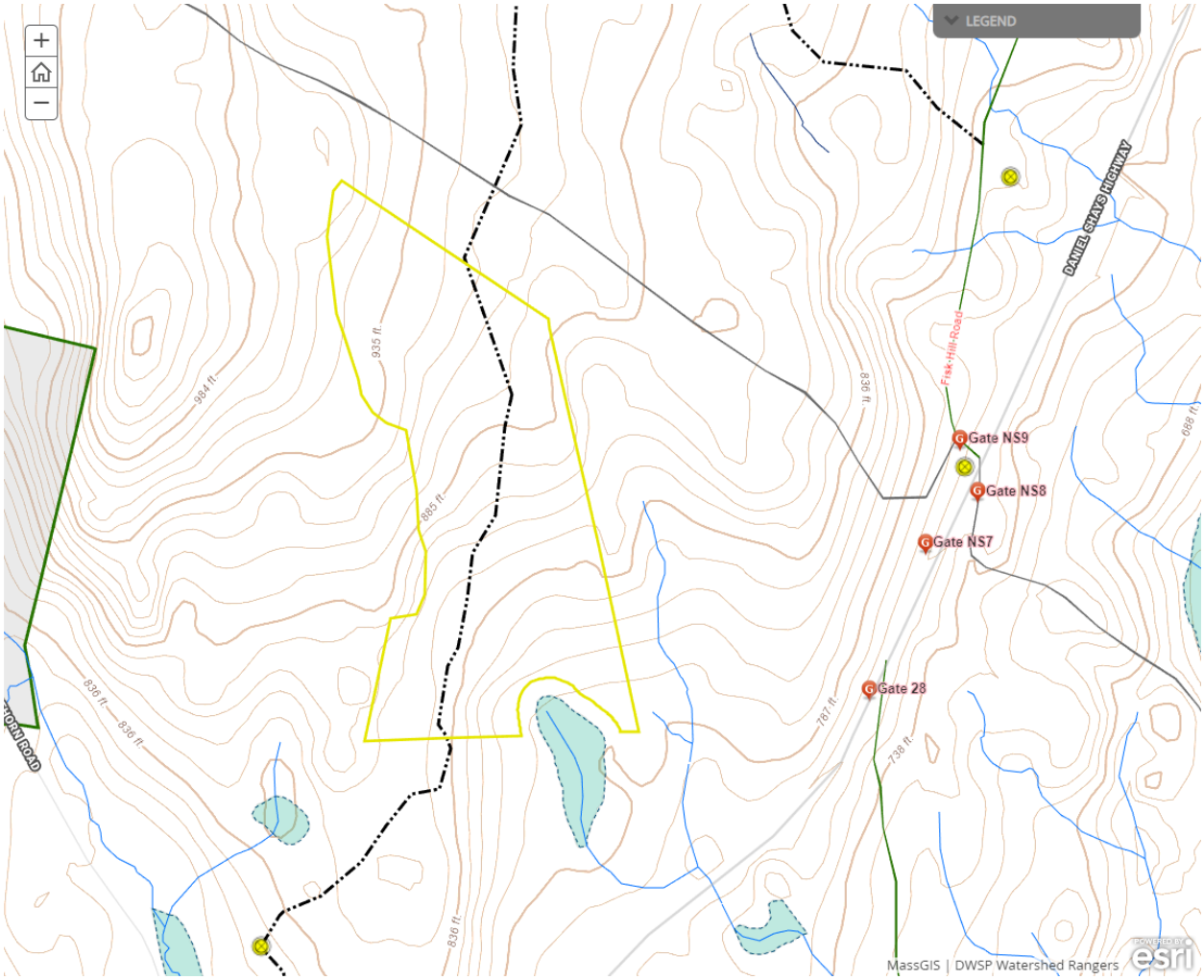


Wetlands

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

There are no wetland resource areas within or adjacent to the cutting area. Streams and wetlands near the harvest will be protected by filter strips.

Outside the harvest area, Fisk Hill Road has three existing culvert crossings on intermittent streams, which may need to be crossed by log trucks or other vehicles. Quabbin potential vernal pool #783, near Moosehorn Road, is well outside of the harvest area and will not be impacted by skid roads.



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 spotty, and consists primarily of hemlock, white pine, black birch and occasional oak saplings, particularly in old skid roads.

General comments on silviculture proposed:

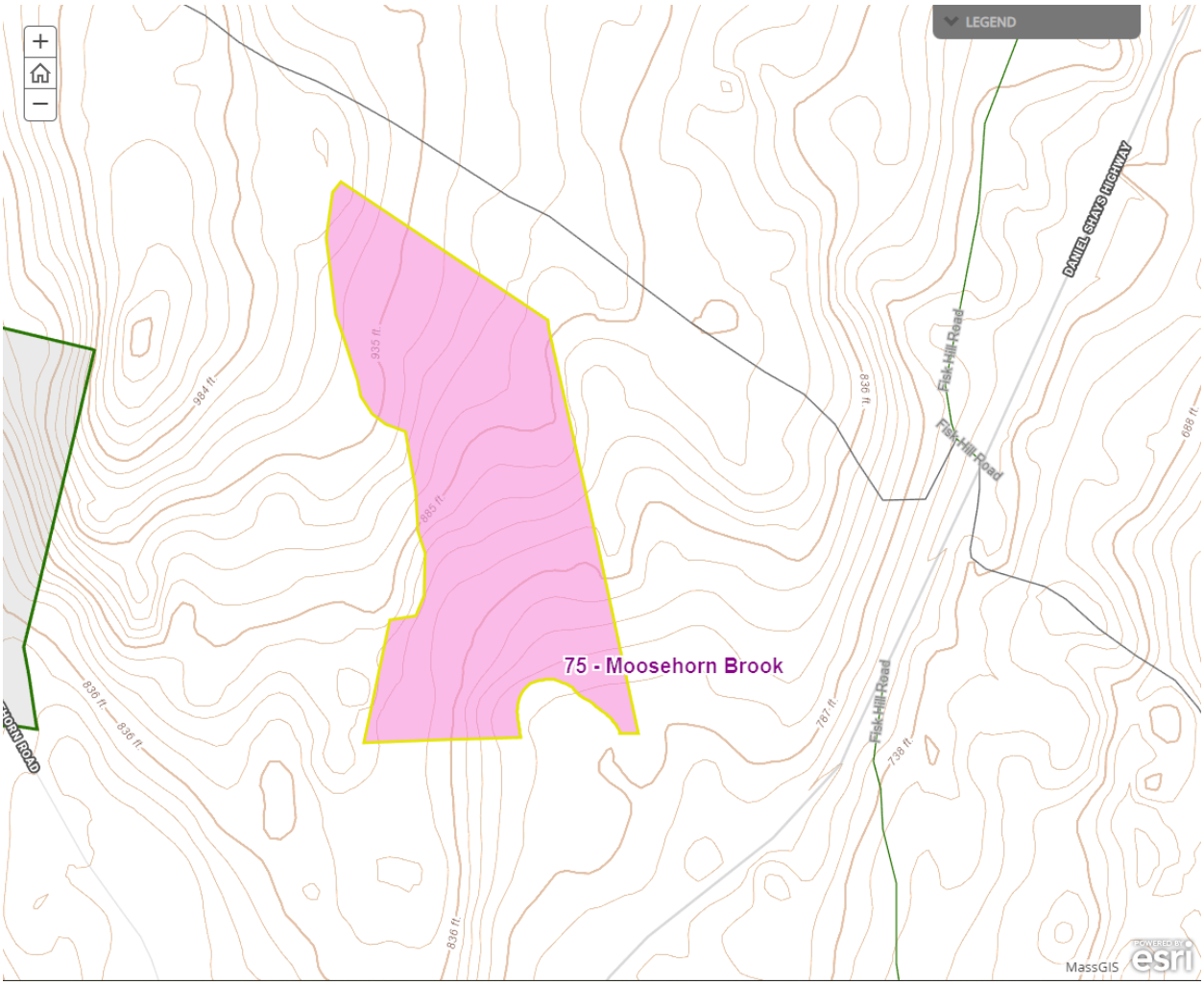
This area was designated as a Young Forest Focus Area in the DWSP 2017 Land Management Plan (pp. 120-123). This first entry will create early successional habitat adjacent to the power line, with the intention of expanding on existing habitat.

Eleven to fourteen (11-14) acres of the proposal area will be clearcut with minimal reserves. (Note: the upper value has been entered in order to be conservative at this proposal stage.) The reserve trees will be widely scattered oaks with large crowns and sound form, to provide seed for the future stand. The exact footprint of the cut will be based on conditions on the ground, avoiding steep slopes and dense mountain laurel.

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
75 (Moosehorn Brook)	1094	21	253	17

Proposed harvesting will not exceed the 25% threshold.



Harvesting Limitations

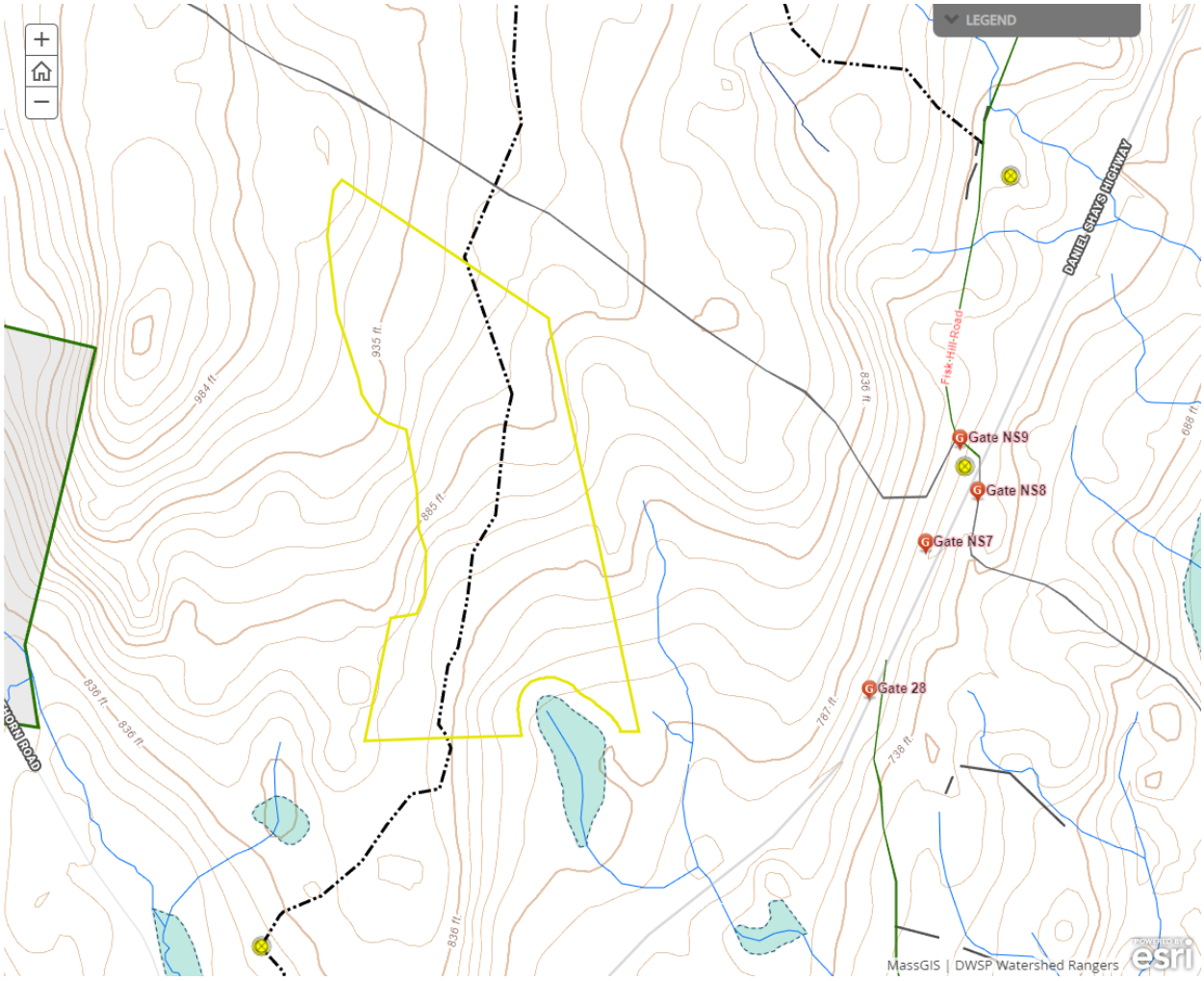
Forwarder required: **No**

Feller/processor required: **No**

Steep slopes present: **Yes**

Comments on harvesting limitations:

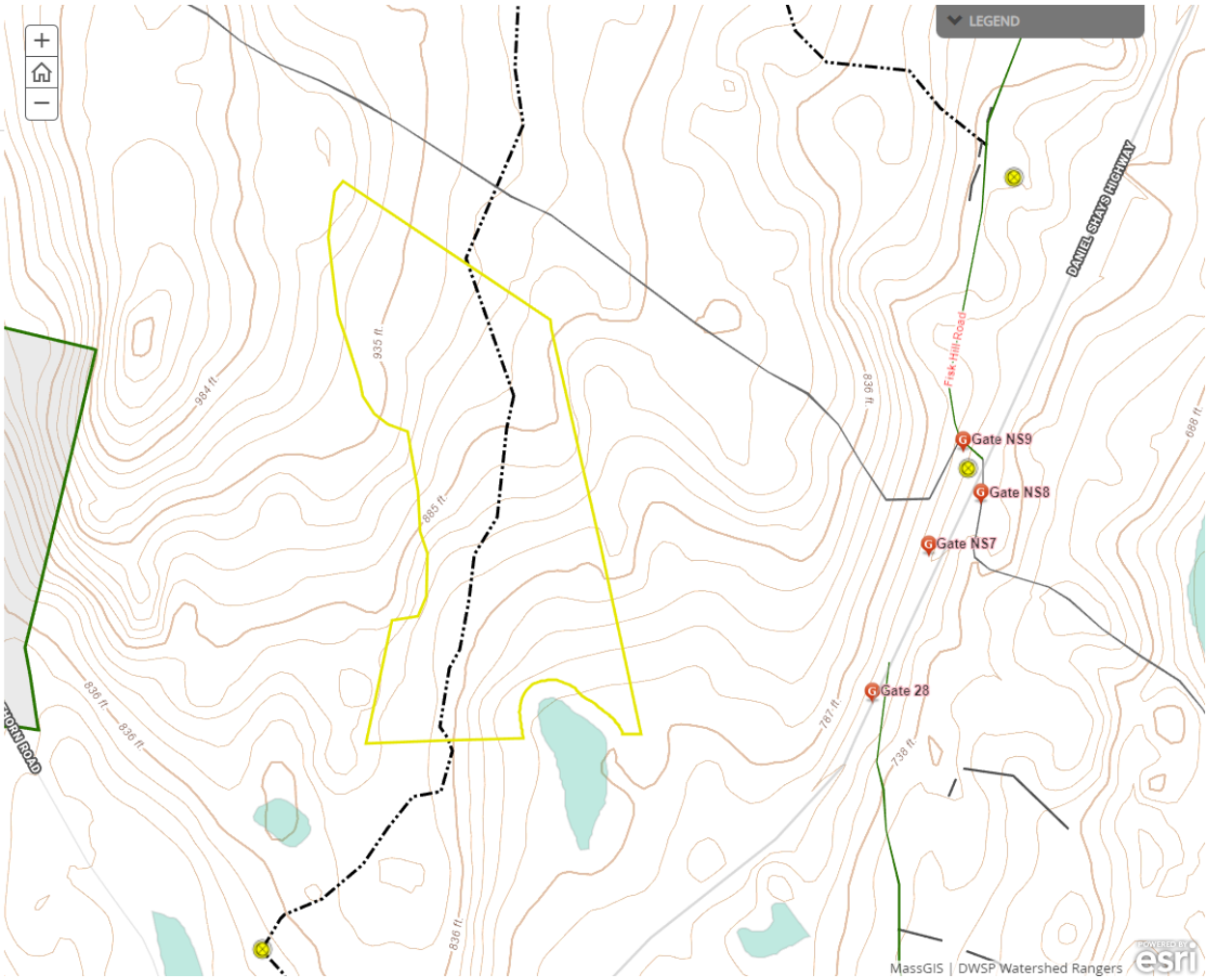
The main skid road(s) will traverse steep slopes between the harvest area and the landing. There will be no steep slopes (>20%) within the harvest area.



Cultural Resources

Comments on Cultural Resources:

None known. Loggers will be instructed to protect and report cultural features if they find them.



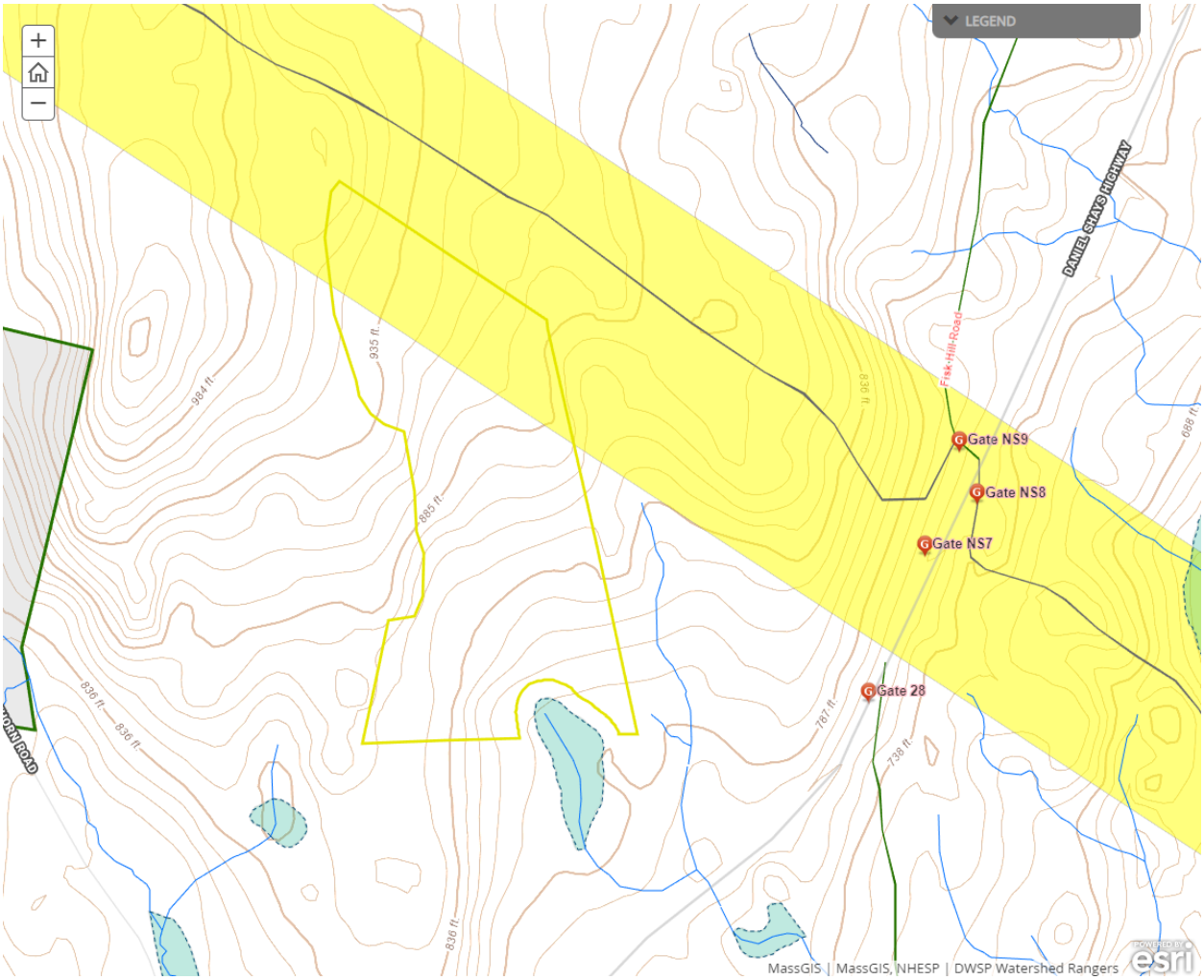
Wildlife Resources & Rare and Endangered Species

General Wildlife Comments:

The purpose of this harvest is to create early successional habitat for wildlife.

Comments on Rare Species/Habitats:

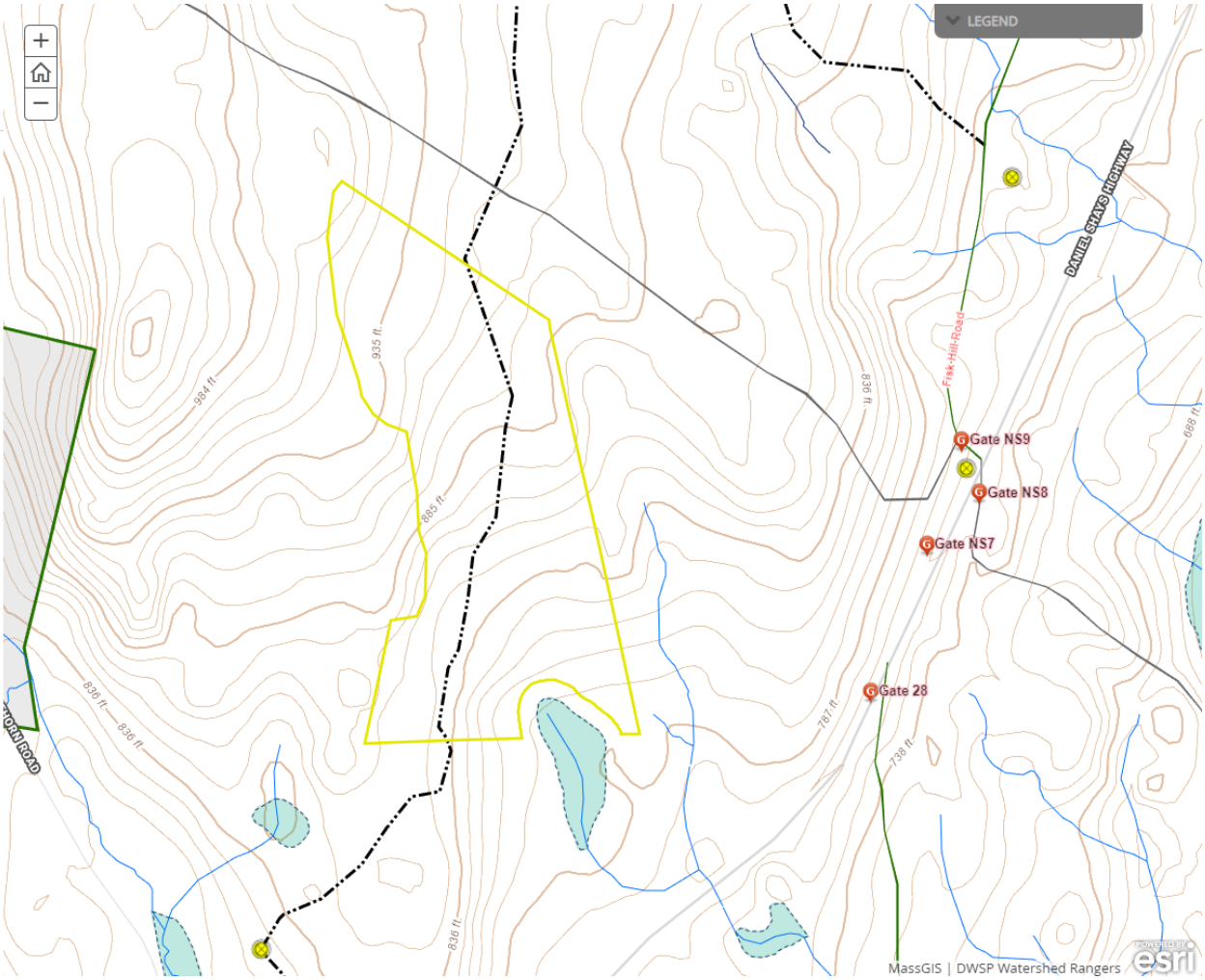
NHESP has determined that certain state-listed sensitive species or habitats may exist within the lot proposal area. To protect them from any necessary disturbance, detailed information regarding affected species and their locations is not included in this report. DWSP will coordinate with NHESP and follow recommendations to protect these species during the proposed activity.



Environmental Quality Engineering

Comments on EQ Issues:

There are no perennial streams within the proposed area. Intermittent stream crossings outside the proposal area are culverted under Fisk Hill Road.



Forest Access Engineering

Gravel needed: Yes

Landing work needed: Yes

Culverts needed: No

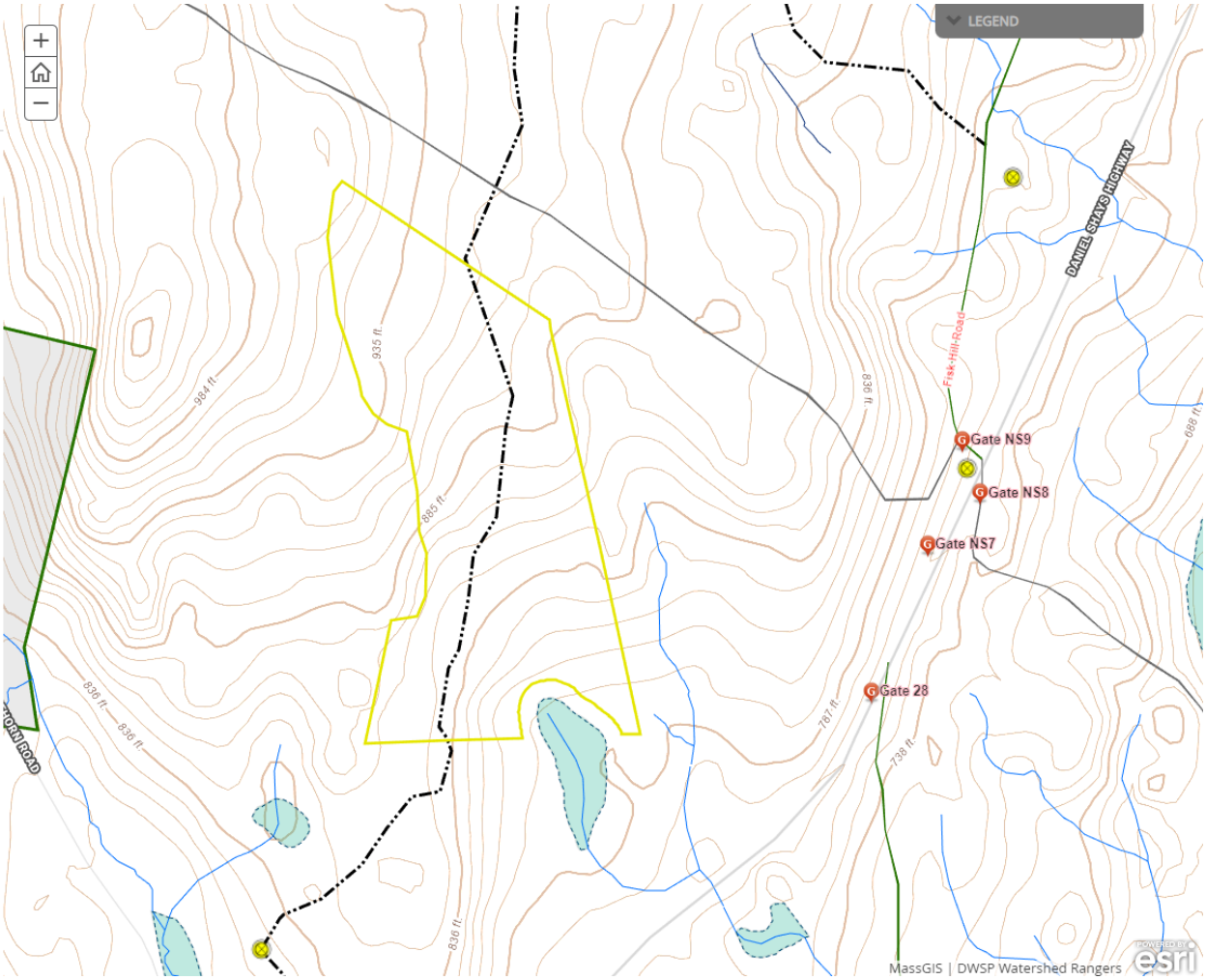
Work needed on permanent bridges: No

Beaver issue: No

Further comment on access needs:

Gravel and other landing/access work may be needed at Gate NS9 or on Fisk Hill Road.

Possible landing sites include: just outside or inside Gate NS9; a few hundred feet north of Gate NS9 on Fisk Hill Road; and (less likely) on the north side of Moosehorn Road at the intersection with Route 202. Access to the cut area from Gate NS9/Fisk Hill Road could be via the existing power access road (avoiding or improving the deteriorating part of the road at the base of the slope), and/or via skid roads established for Lot 3102.



DWSP FY 2022 Forestry Proposals – Master Legend for story maps

DWSP Gates

Landings

Crossings
Xng
- Stream Crossing

QWR Culverts
Purpose
- Stream Crossing-B
- Stream Crossing-C
- Drainage Relief-D
- Unknown

Quabbin Road Intersections

DCR/DWSP Trail/Road Data (Public View)
Type
- Public Road
- Administrative Road
- Forest Road/Trail
- Trail
- Other

DCR-DWSP Trails and Roads
Type
- Administrative Road
- Forest Road/Trail
- Other
- Public Road
- Trail

Wachusett/Sudbury Road Infrastructure
Infrastructure_Type
- Bridge
- Broad Based Dip
- Checkdam
- Culvert
- Ditch
- Ford
- Waterbar
- Other

Wachusett Internal Roads
Priority:
- Access Road, unmaintained
- Access Road

QWWS Watershed Boundaries

Vernal Pools
Status
- Not a vernal pool
- Potential vernal pool
- DCR verified vernal pool

Streams - Quabbin
FType
- Coastline/Shoreline
- Stream/River
- Swamp/Marsh
- Submerged Stream
- Artificial Path
- Canal/Ditch
- Pipeline
- Dam/Weir
- Connector
- Unknown
- Other

Water Bodies - Quabbin
FType
- Reservoir
- Lake/Pond
- Stream/River
- Swamp/Marsh

Streams - Ware River
FTYPE
- Stream/River
- Canal/Ditch

Water Bodies - Ware River
FTYPE
- Reservoir
- Lake/Pond
- Stream/River
- Swamp/Marsh
- Other

Streams - Wachusett
EQ_Stream_Type
- Aqueduct
- Ditch/Canal
- Intermittent Stream
- Perennial Stream

Waterbodies - Wachusett
EQ_Wetland_Type
- Reservoir
- Lake, Pond, Wide River, Impoundment
- Wetland, Marsh, Swamp, Bog

NHESP Priority Habitats

NHESP Certified Vernal Pools
NHESP Certified Vernal Pools

Forest Cover Type - Filled
CoverTypeFull
- White Pine-Hardwoods
- Oak-Hardwoods
- White Pine-Oak
- WetHard
- Mixed Hardwood
- White Pine
- Grasses and Forbs
- White Pine-Hemlock
- Mixed Oak
- Northern Red Oak
- Red Maple
- Powerline
- WetMixed
- Error - Not DWSP
- Red Pine
- Shrub Swamp
- Upland Brush
- Northern Hardwood
- Road
- Beaver Pond
- Hemlock
- Hemlock-Hardwoods
- Mixed-Oak
- Norway Spruce
- Pitch Pine
- WetCon
- Abandoned Orchard
- Black Birch-Hardwoods
- Gravel Pit
- Northern Hardwoods
- Pitch Pine-Oak
- Water
- Oak, Mixed
- White pine - oak
- Mixed hardwoods
- Hemlock - hardwoods
- White pine - hardwoods
- Black Birch-Hardwood
- Field, mowed
- Oak - hardwoods
- Abandoned Field
- Beaver Meadow
- Chestnut Oak Heath
- Mixed hardwood
- White pine/hardwoods

Forest Cover Type - Outline

SubWatersheds (QWWS-filled)
Subwatershed Name
- ASNEBUMSKIT BROOK
- Barre Falls
- Belchertown Shoreline
- Blackington Swamp
- Cadwell Creek
- Cunningham
- East Br. Fever Brook
- East Prescott North
- Fed. Forest Stream
- Gate 20 Rd. Stream
- Gate 52 Shoreline
- Gates Brook
- Gibbs Brook
- Josslin
- Juckett Hill East
- MIDDLE STILLWATER/ROCKY/WILDER BROOK
- Mary Tamplin Drainage
- Middle Br. Swift Lower
- Moosehorn Brook
- NORTH STILLWATER/KEYES BROOK
- Northeast Shoreline
- Parker
- Prescott Brook
- Quabbin Park East
- RES. SHORELINE EAST
- Sherer Rd. North
- TROUT BROOK
- Thurston Brook
- Underhill Brook
- WACHUSETT BROOK
- Ware
- West Prescott Middle
- West Prescott North
- West Prescott South
- Whitney Hill Southeast
- Whitney Hill West
- Other

Subwatersheds (WA-outline)

SubWatersheds (QWR-outline)

Subwatersheds

Forestry Proposal Boundaries

Towns

Water Supply Property Boundary

Proposed Skid Trails

Stone Walls - WA

StoneWalls - QWR

Stony Soils
Stoniness
- extremely stony
- very stony

Soils - Drainage
Drainage Class
- Excessively Drained
- Well Drained Thick
- Well Drained Thin
- Moderately Well Drained
- Poorly To Very Poorly Drained

Quabbin and Ware River Cultural Resources Inventory (Public view)
Type
- No Value/Blank
- Agrarian
- Cellar Hole
- Civic
- Commercial
- Industrial
- Military
- Other
- Residential
- Shed
- Unknown

QWWS Percent Slope
- 0 - 7
- > 7