Wachusett Harvest Proposal WA-22-115

Proposal Update, May 2024:

This forestry proposal was originally approved through the public process in 2021. 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 2021 in ArcGIS Online Story Map format.

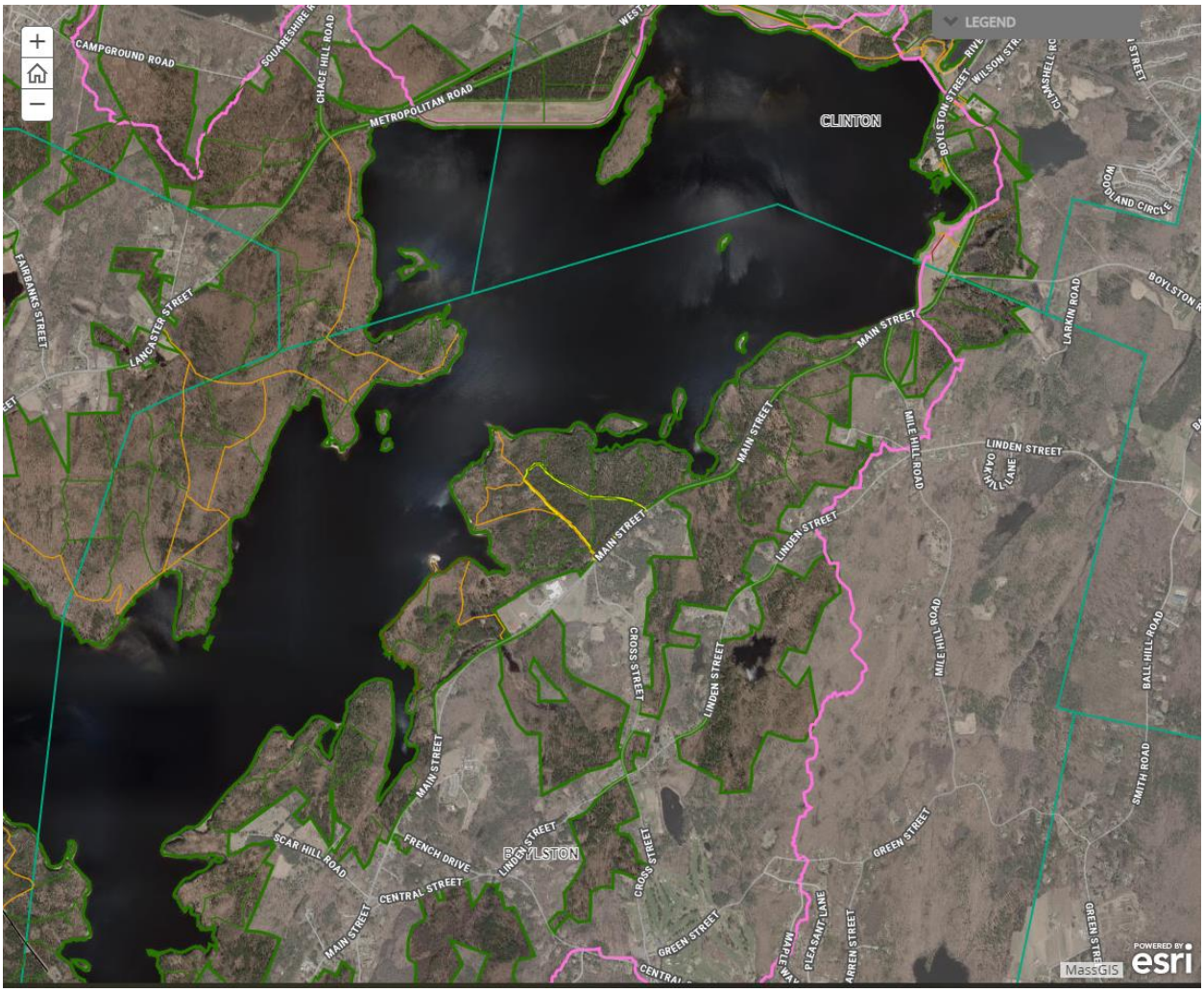
Proposal Goals

The primary goal is to promote a resilient, diverse and vigorously growing forest by creating openings throughout the lot to release areas of abundant advance regeneration from canopy competition.

Proposal Location

Beginning at gate 8 heading north easterly to gate 7 thence northwesterly along a forest road about 2,800 feet to a forest road intersection. Thence, south easterly along a forest road 2,300 feet to gate 8.

Total Acres: 43



General Description

	Overstory Type(s)	Acres
Dominant	White pine - oak	24
Secondary	Oak, mixed - dry site	11
Other	White pine	7

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

Description of forest composition/condition:

All of this working unit is original watershed property that was taken from Levi Flagg and several smaller landowners on July 23, 1900 when the Wachusett Dam was being built. The land within this working unit at the time of taking was designated as woodland. Prior to the taking, an old highway ran through the southern portion of this working unit and was decommissioned in 1860. Today, the highway is still noted by the stonewall that ran along it. In 1905 the roadside of Route 70 was planted/improved and Flagg nursery was in the middle of this working unit. The map of the 1938 hurricane shows a scattering of damage in the area. In 1939 the MDC cleared 100% of the route 70 road frontage in this working unit. The 1951 cover type map shows white pine in the southern portion, scotch pine/hardwoods in the north, white pine/hardwood to the northwest and Austrian pine/hardwood in the area where Flagg's nursery was. The first timber harvest was in 1982 when a thinning occurred in the southern portion of the working unit. Then, the next year (1983) 24 acres were thinned in the northern section. In 1984 the Route 70 roadside was thinned. In 1995, a small thinning occurred in the working unit. The last time this lot was worked was a salvage that occurred along Route 70 in 2005 which resulted in a new young stand.

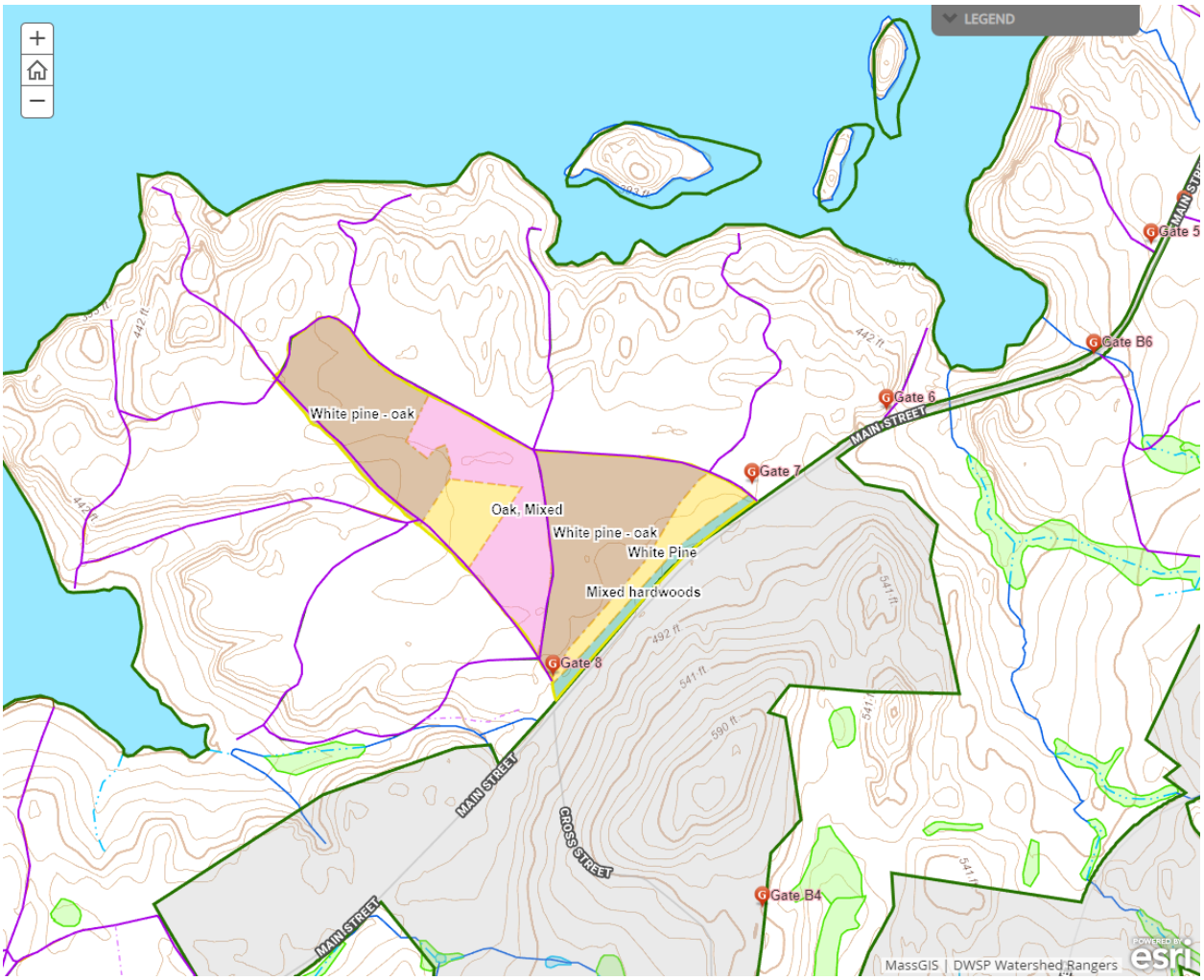
All of those harvests have resulted in thick regeneration throughout the working unit. The current forest structure is dominated by white pine, red oak, black oak, white oak, red maple, American beech and paper birch. The pine is of better health and vigor than the hardwoods currently. There is evidence of past pine cutting throughout the unit and some hardwoods. There is no current gypsy moth evidence, but infestations have occurred in similar areas nearby in recent years. Regeneration is uniformly good with some small pockets of heavy mountain laurel in the northern area. There is also some low bush blueberry and sheep laurel mixed in the understory. The area is fairly flat with some scattered small kettle bowls.

A section of this unit was also part of a Clark University professor's research project with the numbered aluminum tree tags still remaining in the field. The working unit falls within the Asian Longhorned Beetle Quarantine zone. There is a very small amount of host material within the working unit. With the recent deer hunts, there is now little current deer browse evident.

The age structure of the working unit is as follows: 4% (0-20 years old) 0% (21-40 years old) 0% (41-60 years old) 0% (61-80 years old) 66% (81-100 years old) 30% (>100 years old).

Assessment of Terrestrial Invasive Species:

Sampling found no invasives present in 108 plots taken. It is a dry site. There was some significant gypsy moth defoliation nearby, but none noted here. The area is also in the ALB zone but no infestations have been found within the quarantine zone for a while and there is little host species within the unit.

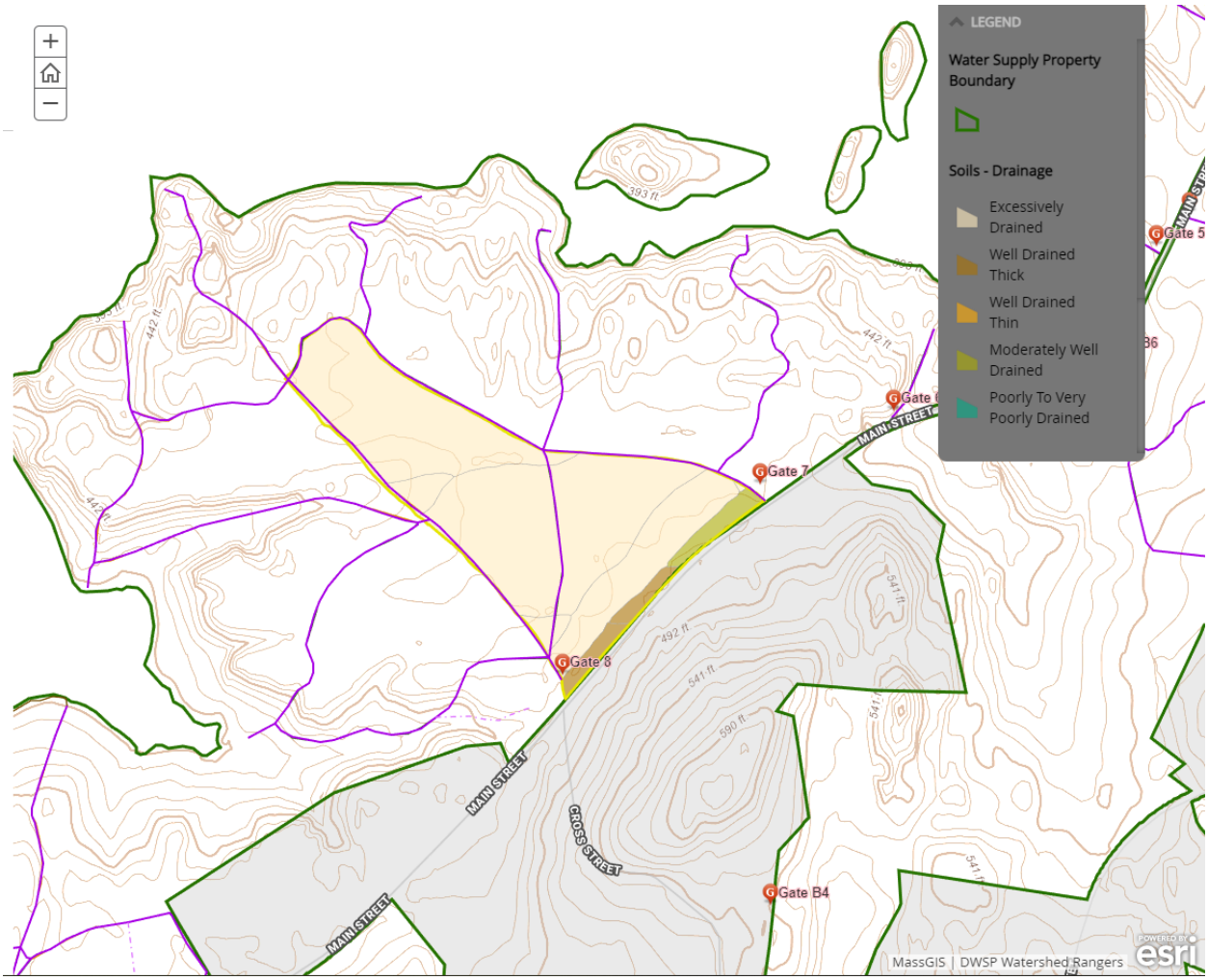


Soils

Drainage Class	%
Excessively Drained	93
Well Drained Thin	0
Well Drained Thick	4

Moderately Well Drained	3
Poorly to Very Poorly Drained	0

Almost the entire site is composed of excessively drained Merrimac or Hinckley soils.

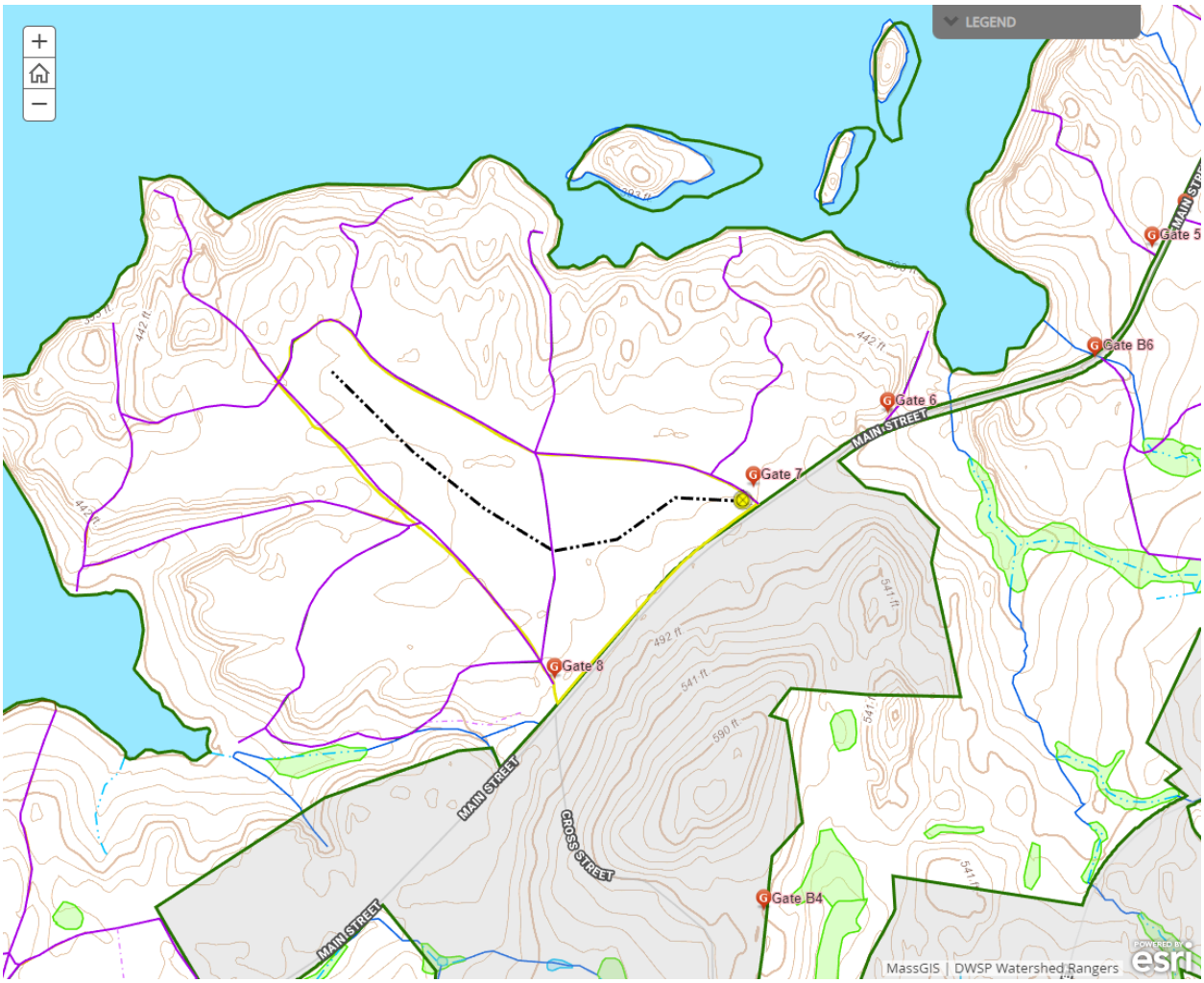


Wetlands

- Wetlands present? - **No**
- 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** **(Riparian Zone Mgt)**

- Is logging in wetlands planned? - **No**

No wetland resources within this proposal area.



Silviculture

Acres in Intermediate cuts: **0**

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

Acres in Regeneration cuts: **15**

Average regen opening size: **1**

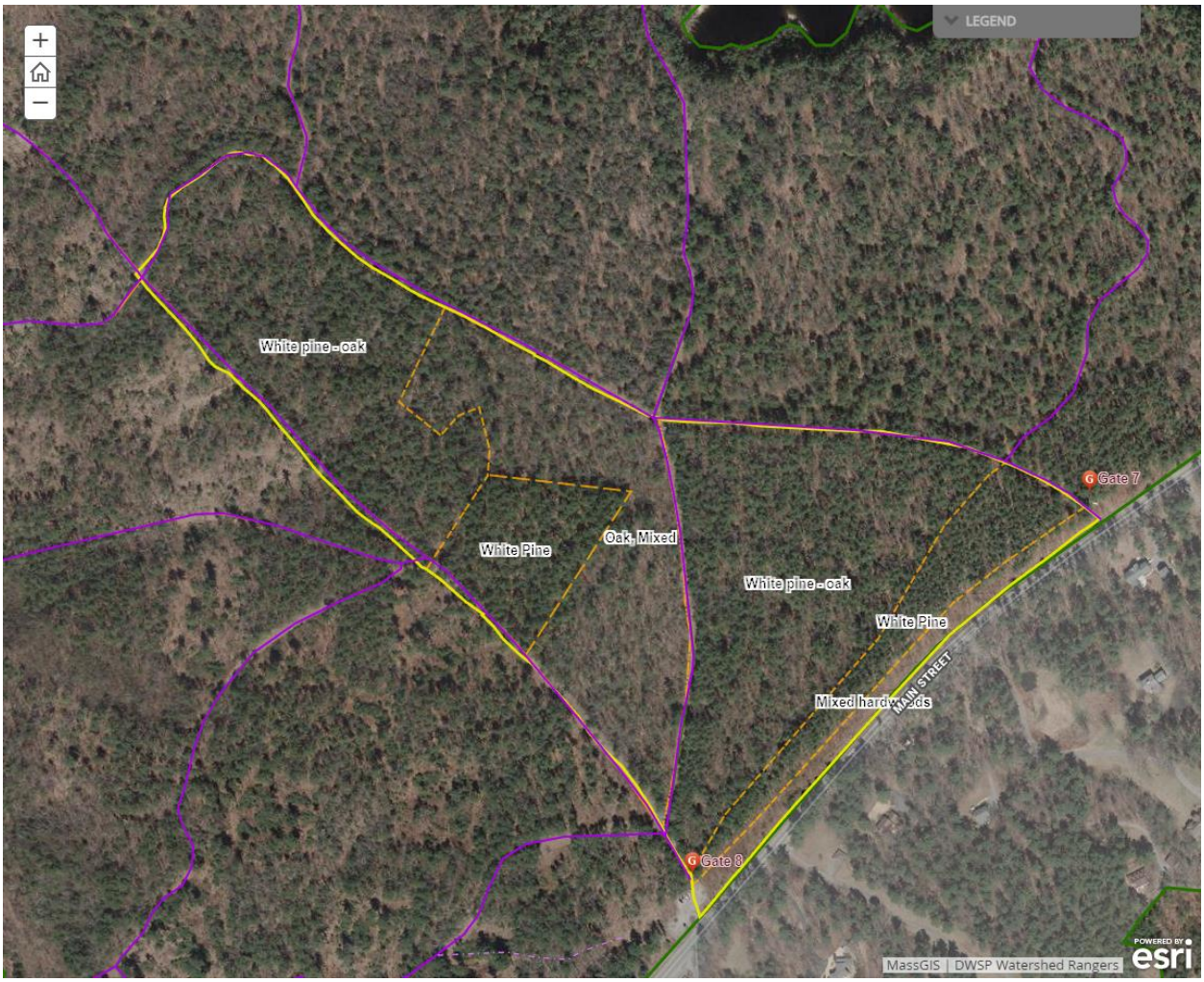
Maximum regen opening size: **2**

Description of advance regeneration in proposal area:

Regeneration sampling found adequate regeneration present in 85% of the plots, with marginal regeneration in another 10% of the plots. Oak was present in 83% of the plots. The advance regeneration is comprised of red oak, black oak, white oak, white pine, red maple, black birch, hickory and beech.

General comments on silviculture proposed:

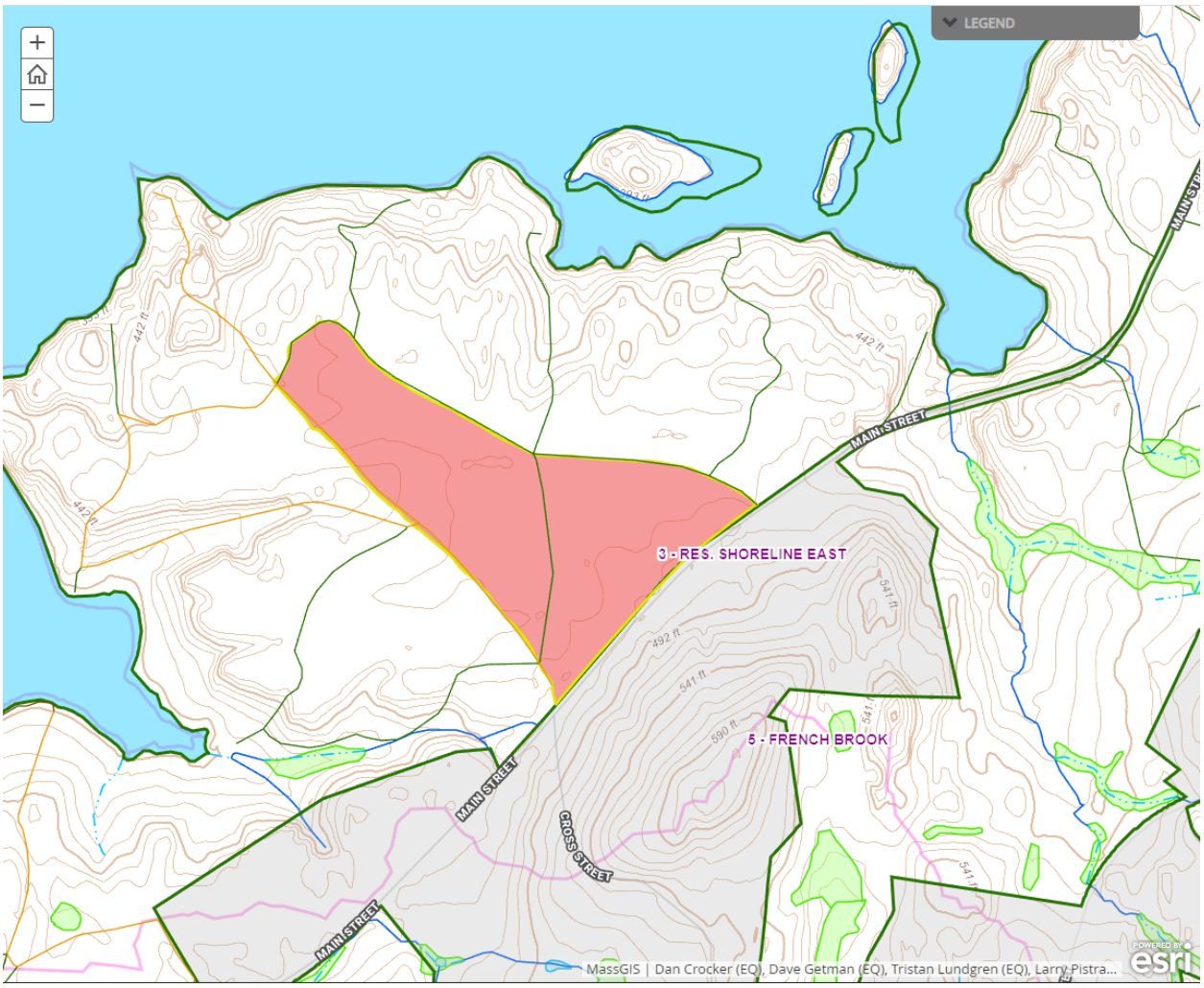
With good amounts of advance regeneration present throughout the working unit, openings will be made on about 15 acres which achieves the goal of creating a new age class on 1/3 of the working unit. This will be done by the removal of the overstory in patches averaging an acre in size with a maximum size of about 2 acres. The openings will be distributed throughout the working unit taking advantage of the best advance regeneration within the unit.



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
3 (Reservoir Shoreline East)	1105	112	993	43

The proposed level of cutting falls below the 25% threshold.



Harvesting Limitations

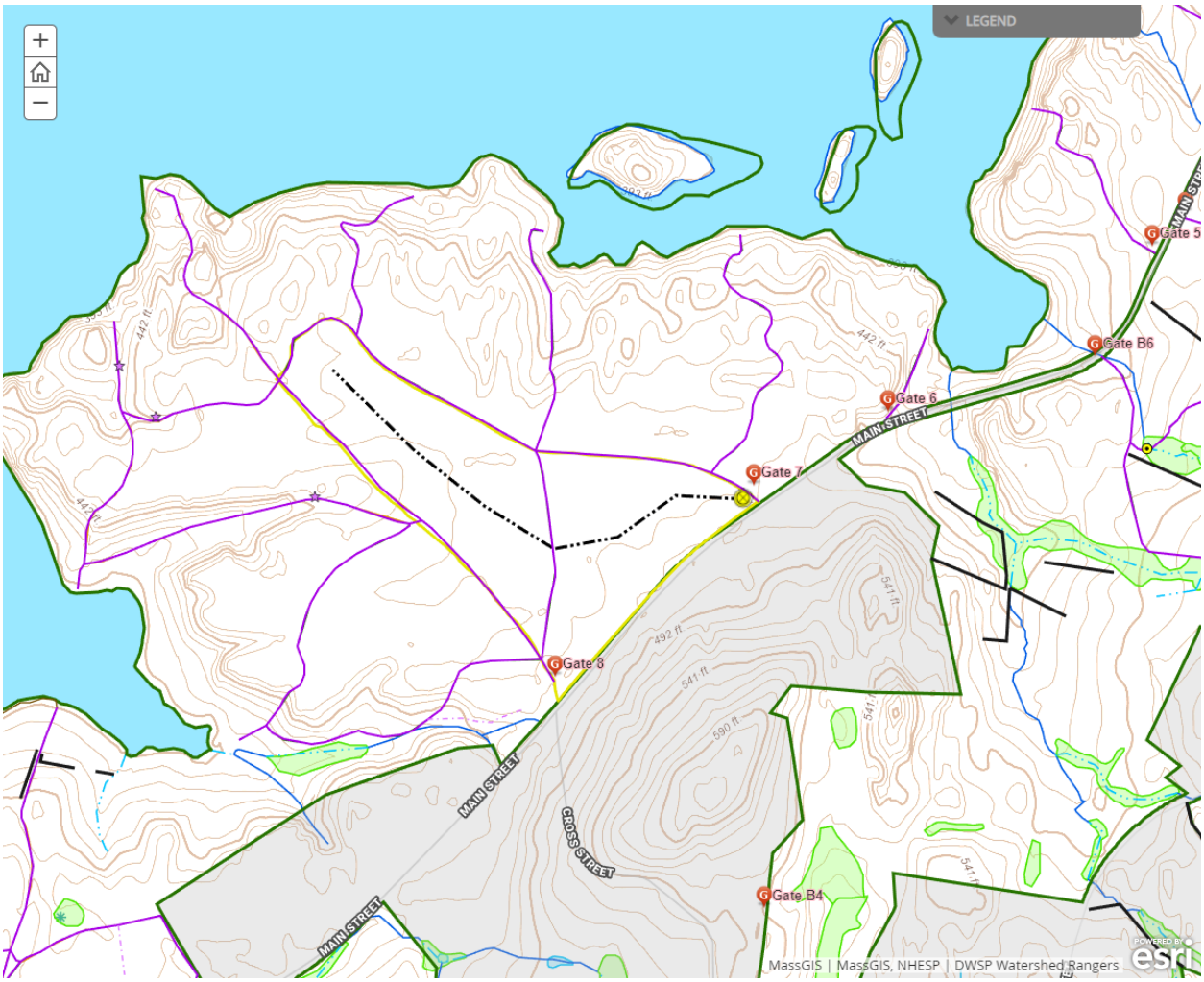
Forwarder required: **Yes**

Feller/processor required: **Yes**

Steep slopes present: **No**

Comments on harvesting limitations:

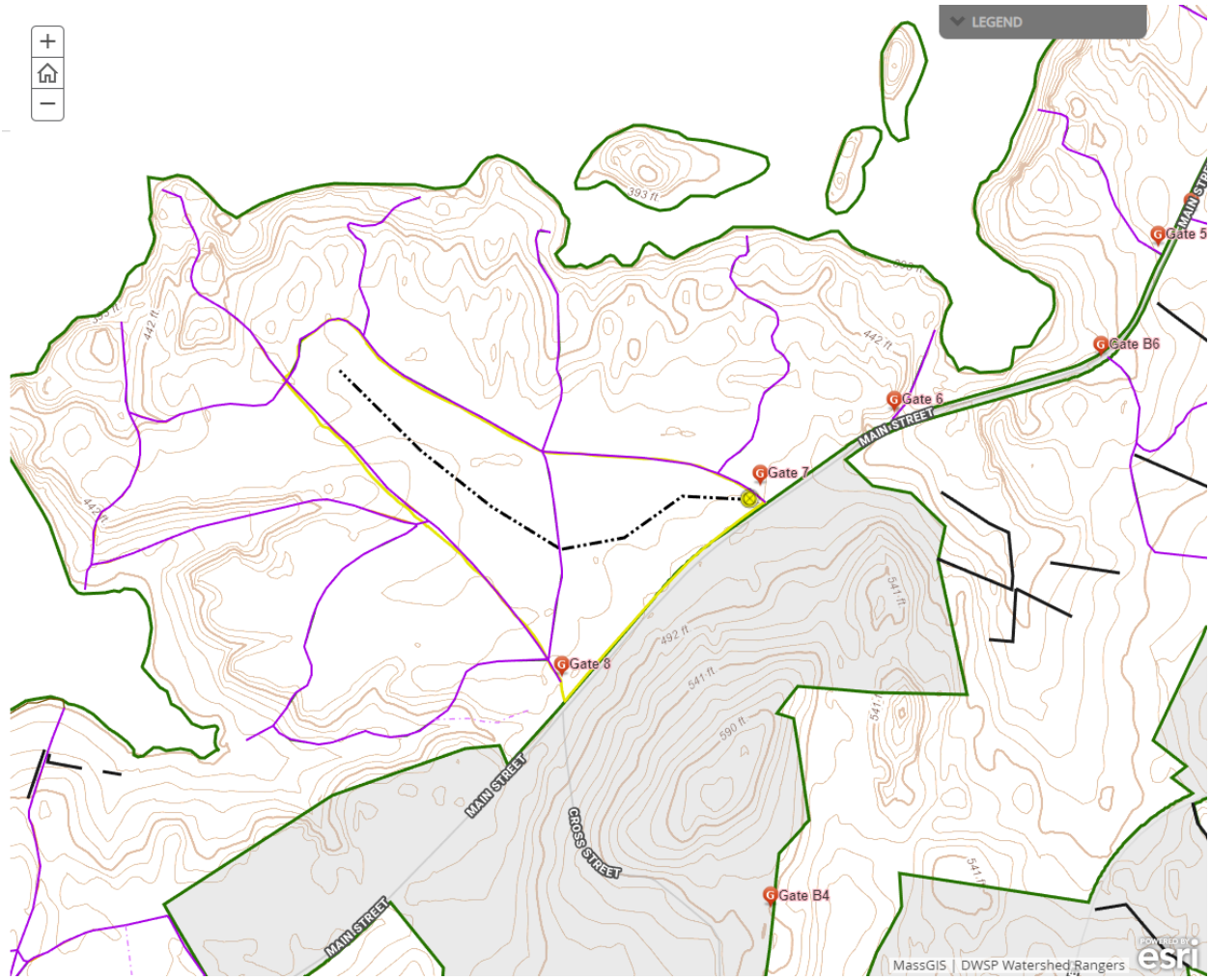
With advance regeneration present throughout the working unit, a cut-to-length harvesting system will be used to protect the regeneration as much as possible.



Cultural Resources

Comments on Cultural Resources:

An old (discontinued in 1860) highway ran through the working unit is evidenced by a stonewall.



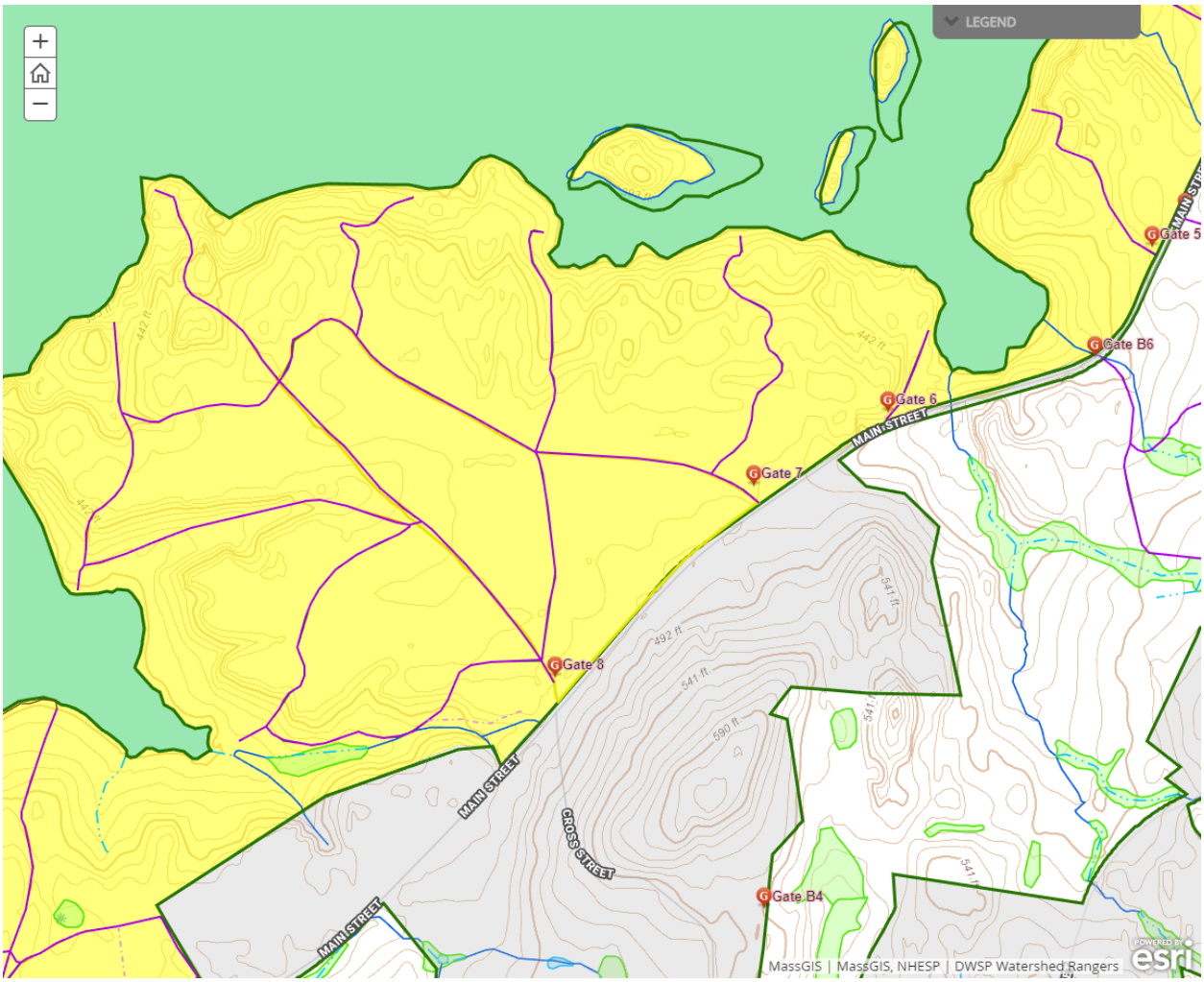
Wildlife Resources & Rare and Endangered Species

General Wildlife Comments:

The recent deer hunts appear to be helping preserve the advance regeneration within this working unit, as browse is less of an issue currently. A goshawk was known to be nesting in this general area in 2019.

Comments on Rare Species/Habitats:

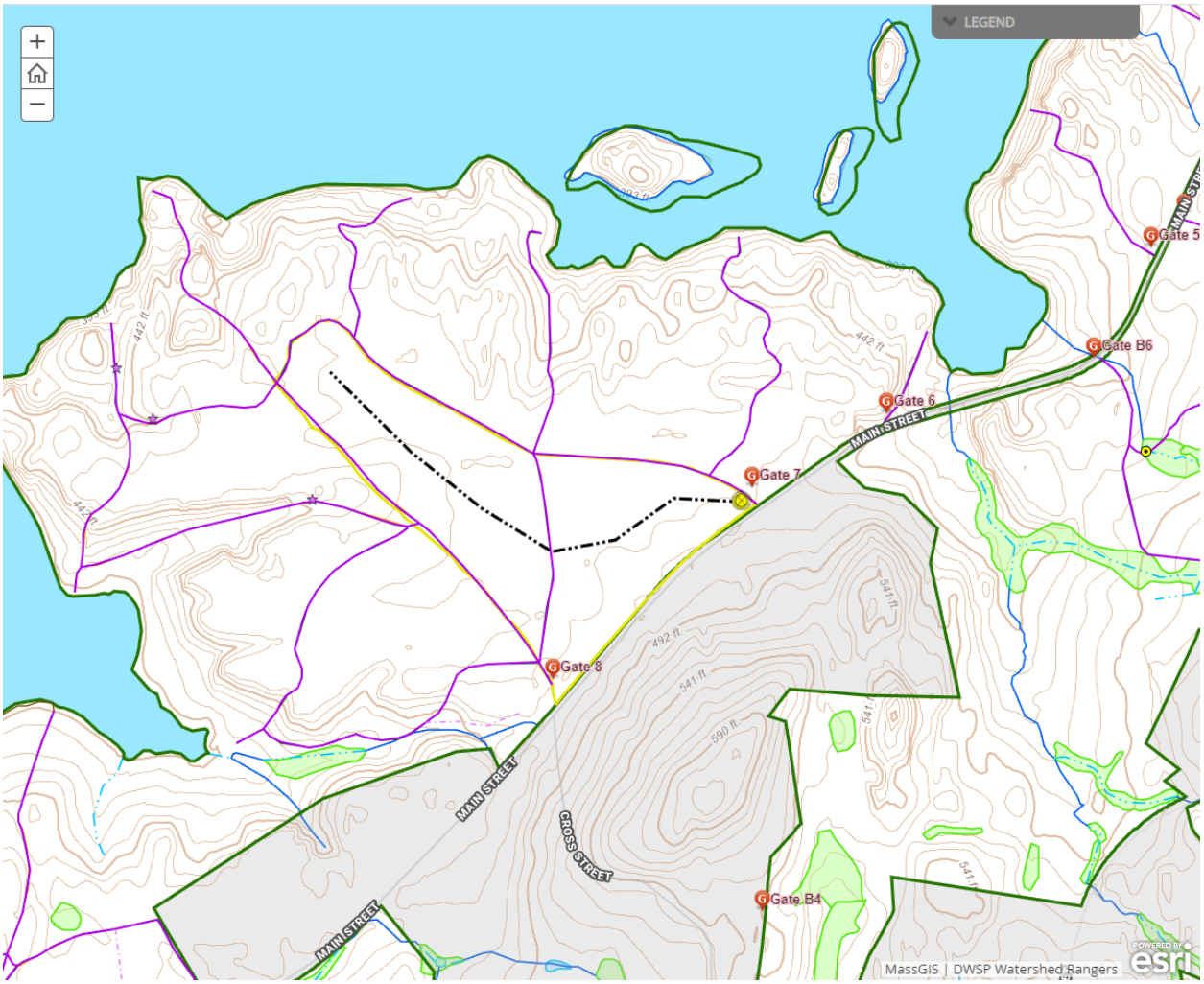
None known; no NHESP Priority Habitats fall within the proposal area.



Environmental Quality Engineering

Comments on EQ Issues:

There are no stream crossings.



Forest Access Engineering

Gravel needed: Yes

Landing work needed: No

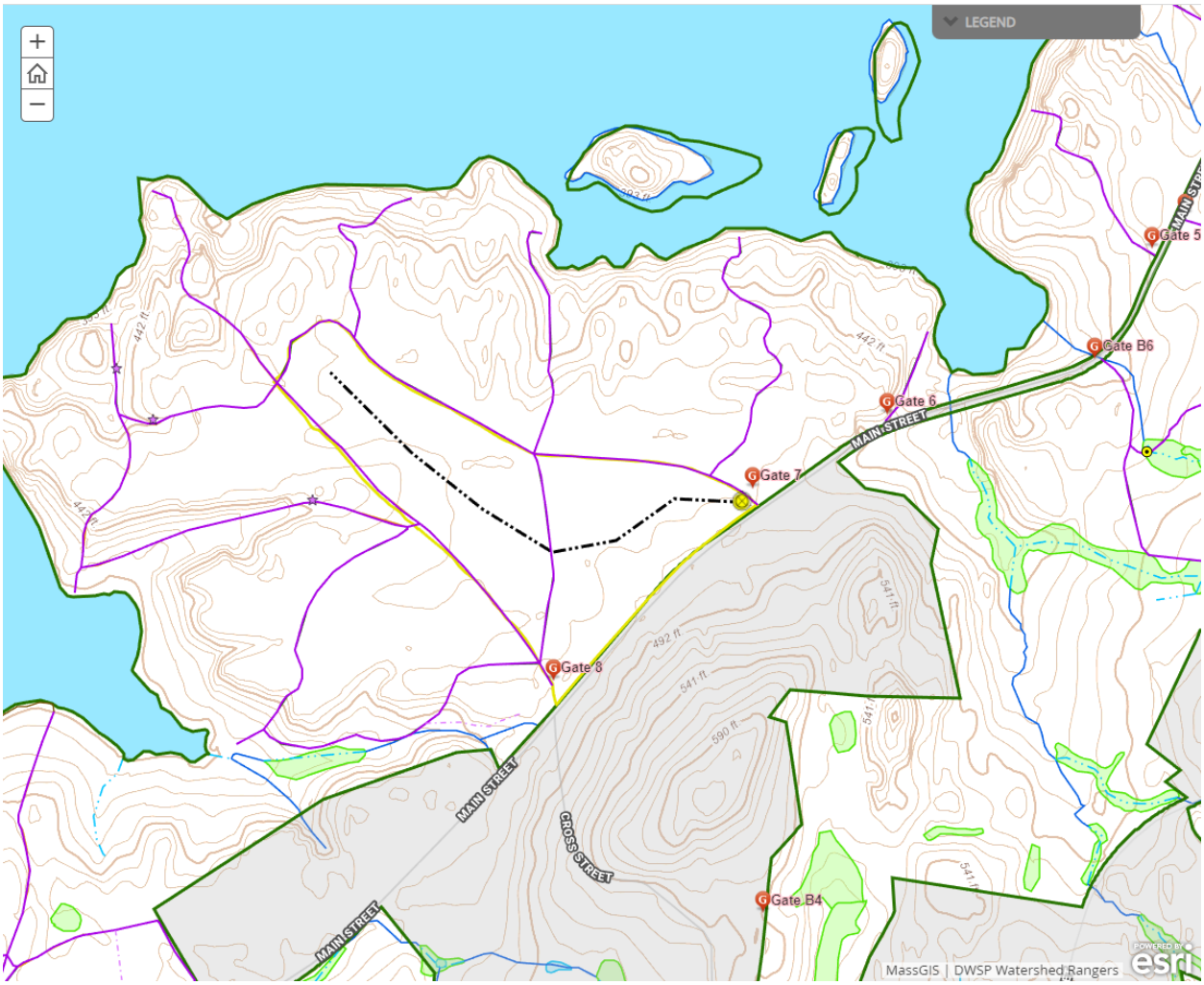
Culverts needed: No

Work needed on permanent bridges: No

Beaver issue: No

Further comment on access needs:

Trailer access to the landing through Gate 7 likely to be improved by leveling the section of forest road from route 70 to gate 7 with some gravel. Currently there is a severe dip before gaining elevation to the gate. At most, about 20’ of the road needs gravel.



DWSP FY 2022 Forestry Proposals – Master Legend for story maps