# Quabbin Harvest Proposal

# WR-19-19-1

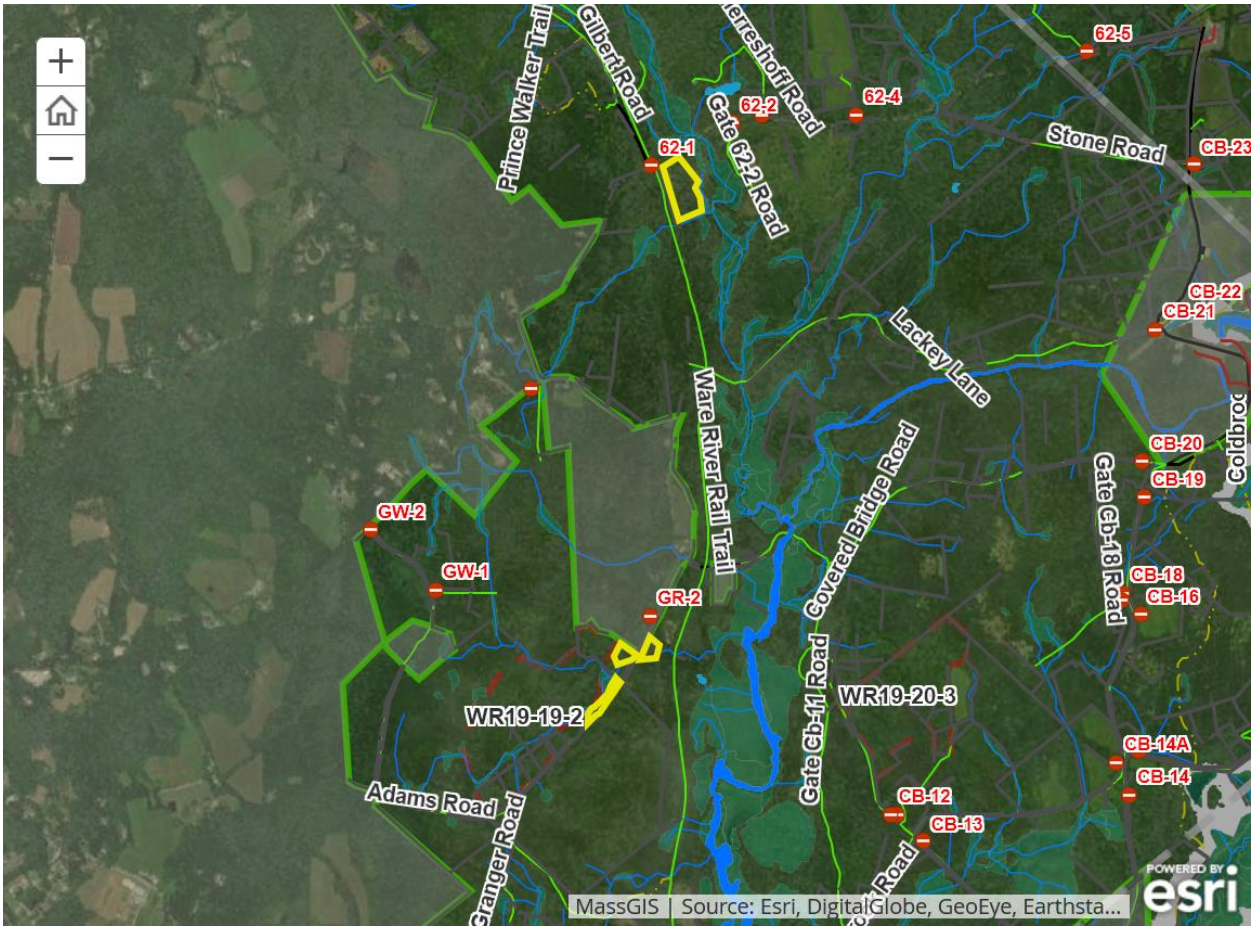
## Proposal Goals

This proposal targets several patches of red pine plantation that are succumbing to an invasive insect. Removal and salvage of red pine in order to increase native species diversity has been a goal of DWSP for many years. Most of the large patches in the Ware River Watershed have already been harvested.

## Proposal Location

The largest patch is east of Granger Rd at Rt. 62. The rest of the patches are scattered south down Granger Road and Old Worcester Road.

## **Total Acres:** 10.3




# General Description

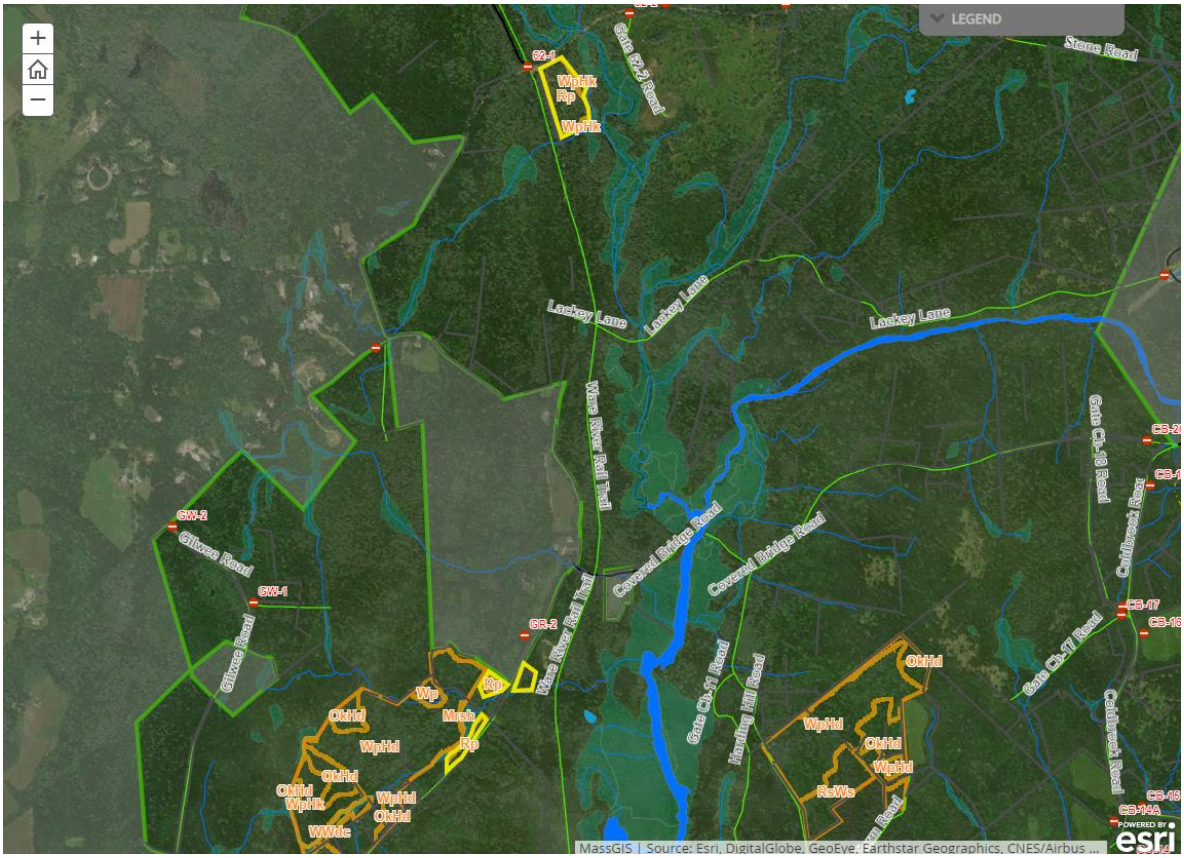
| | Overstory Type(s) | Acres |
|---|---|---|
| **Dominant** | Red Pine | 10.3 |

| | Understory Type(s) |
|---|---|
| **Dominant** | Tree seedlings/saplings dominate site |

**Description of forest composition/condition:**

The 6.7 acre patch was thinned for the first and last time in 1996 as part of lot 232. The stand is well stocked with approximately 150 square feet of basal area per acre of predominantly good to poor quality sawlog size red pine. Poor quality sawlog size white pine is also present throughout the stand and on the edges of the stand. Poor quality red maple and fair quality red oak sawlog size trees are also sporadically present in the overstory. The understory is dominated by sapling and pole sized trees of many species. Red and white oak, white pine, hemlock, black birch, red maple, and black cherry were all observed.

The other patches are all similar to the large patch in terms of species composition and quality.

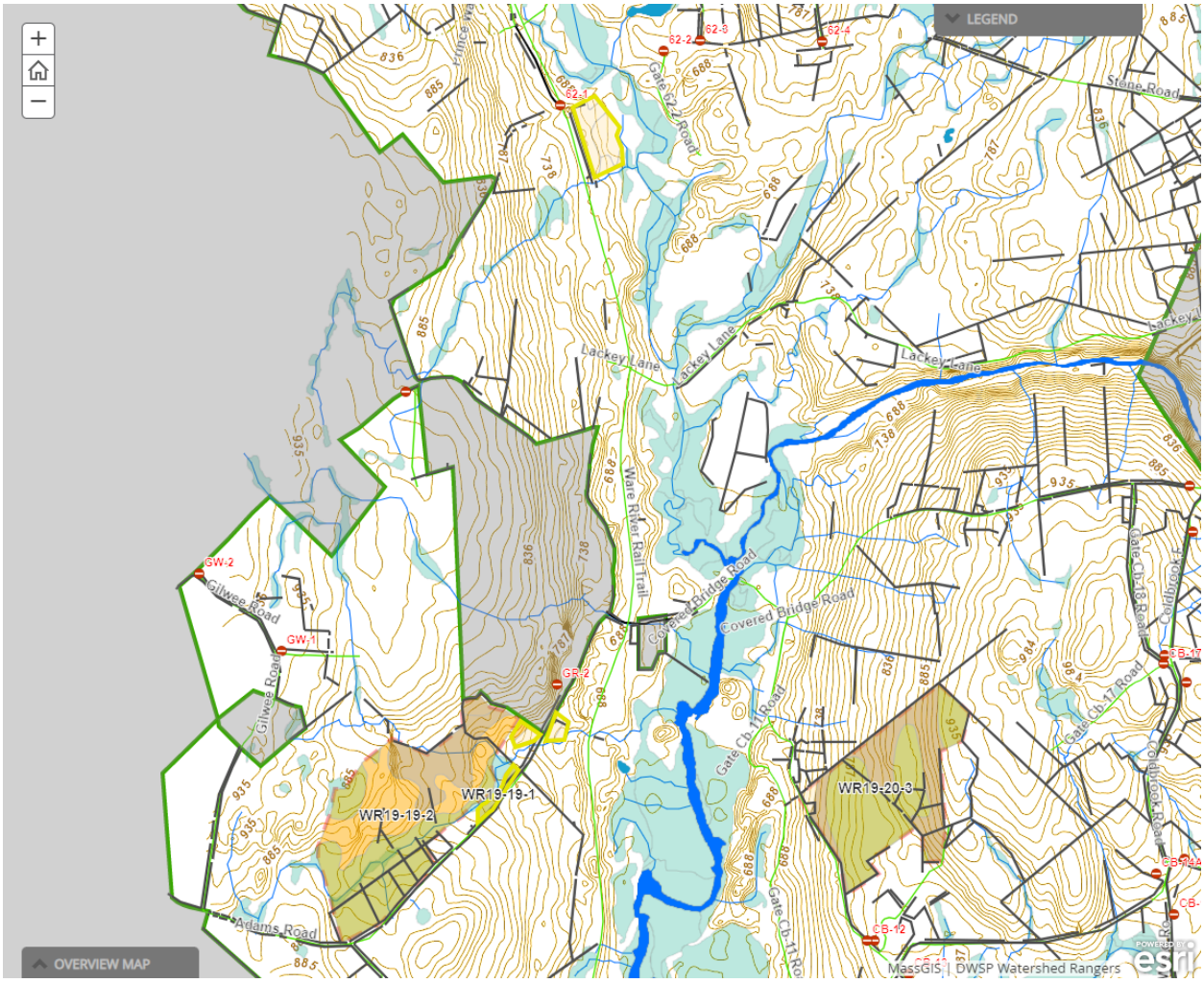



## Soils

| Drainage Class | % |
|---|---|
| **Excessively Drained** | 83 |
| **Well Drained Thin** | 0 |

| | |
|---|---|
| **Well Drained Thick** | 5 |
| **Moderately Well Drained** | 12 |
| **Poorly to Very Poorly Drained** | 0 |

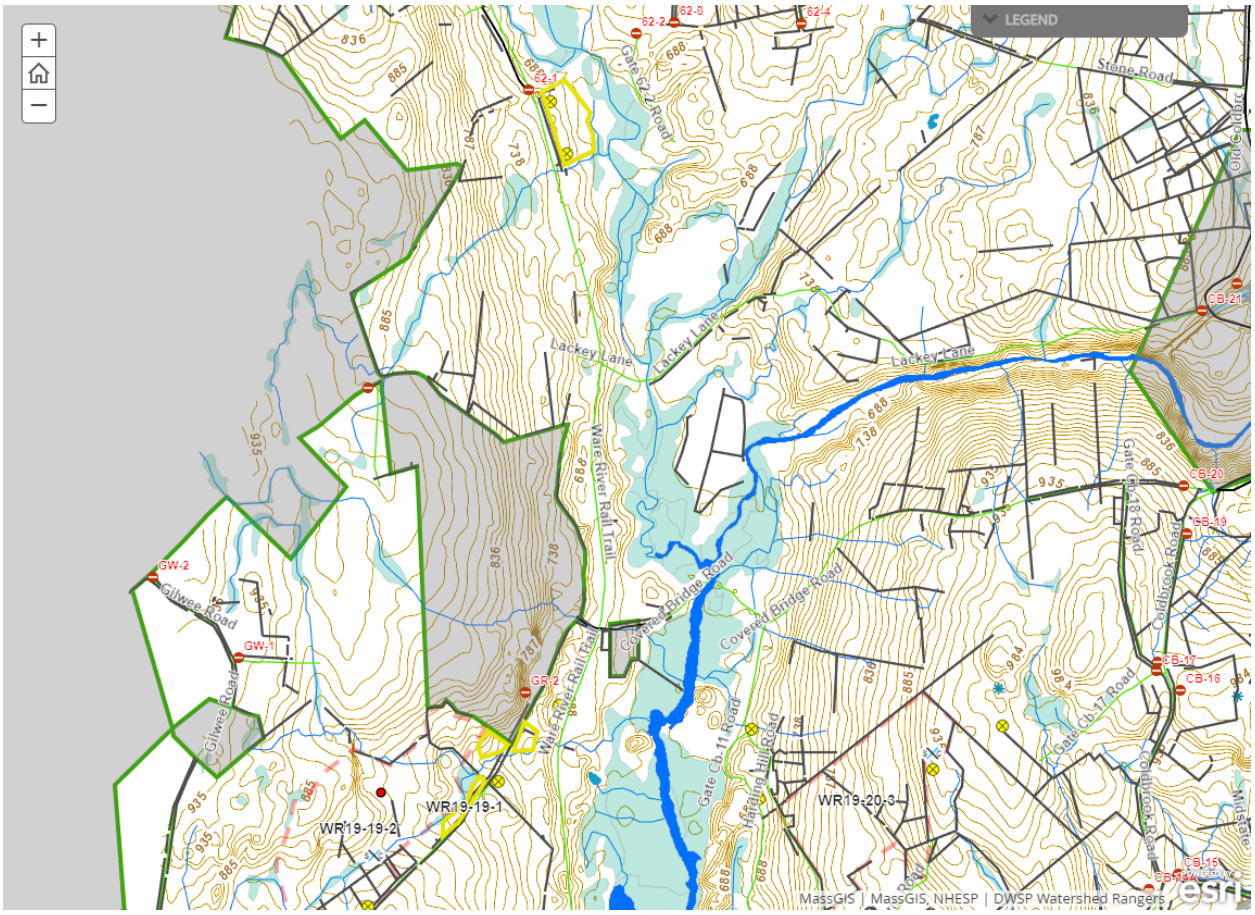
Soils present include: 253B and E Hinckley loamy sand (6.4 acres) and 254 A and C Merrimac fine sandy loam (2.1 acres) which are excessively or somewhat excessively well drained, 925E Charlton-Chatfield-Hollis (0.5 acres) which is well drained, and 910 C Woodbridge-Paxton (1.2 acres) which is moderately well drained.



# 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**

Most of these units are adjacent to streams or wetlands.




# Silviculture

Acres in Intermediate cuts: **0**

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

Acres in Regeneration cuts: **10.3**

Average regen opening size: **1.7**

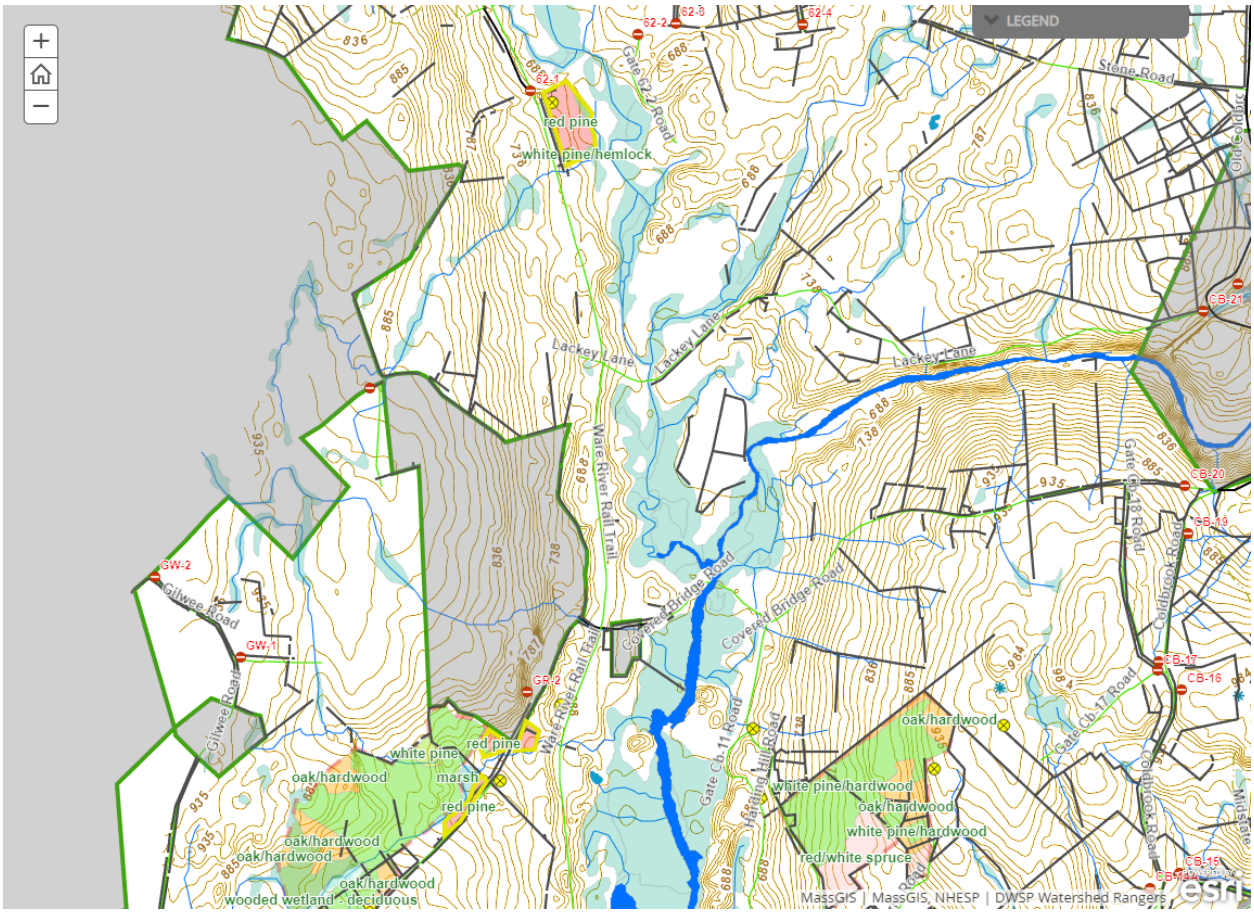
Maximum regen opening size: **6.7**

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

The understory is dominated by sapling and pole sized trees of many species. Red and white oak, white pine, hemlock, black birch, red maple, and black cherry were all observed. The regeneration is distributed throughout the stands. Browse was present but light, as these stands are all adjacent to frequently travelled roads.

**General comments on silviculture proposed:**

These will be red pine removal regeneration cuts. The larger patch will be a clearcut, and may require commissioner approval if the cut is to be over 5 acres. The other stands will be patch cuts of less than 2 acres. This 10.3 acres will be added to the 7 acres of red pine stands that were approved under proposal WR 18-18-2 to make a red pine sale. In stands where hardwood exists in the overstory, hardwood will be retained for aesthetic purposes up to 5 to 10 square feet of basal area per acre.

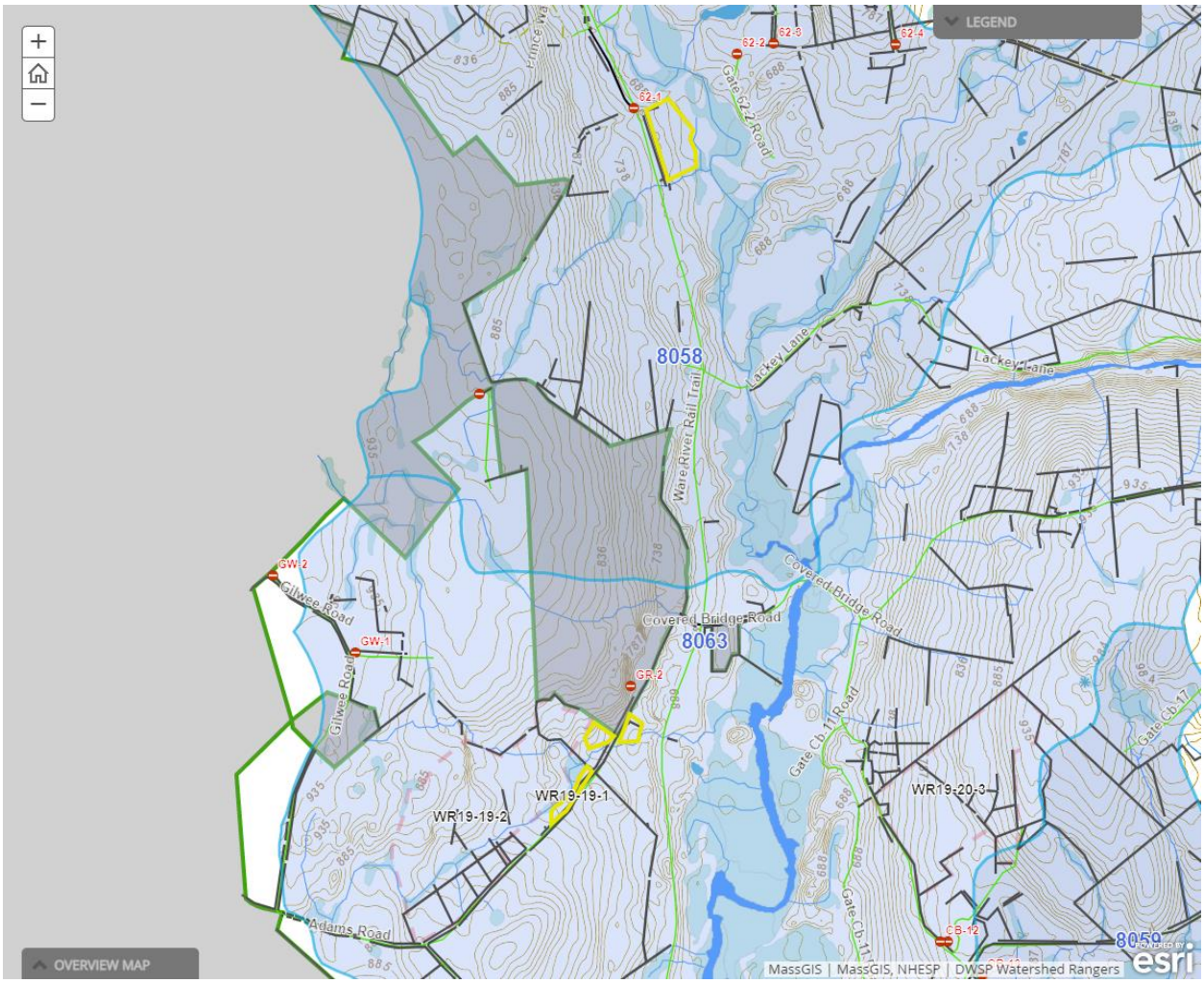



# Subwatershed Analysis

| 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 |
|---|---|---|---|---|
| 8058 | 2158 | 102 | 438 | 6.7 |
| 8063 | 2816 | 80 | 624 | 3.6 |

8058 - Lower Burnshirt - Proposal WR18-28-4 approved with 20 acres of regeneration cuts proposed. Proposal WR18-28-05 approved with 10 acres of regeneration cuts proposed.

8063 - Ware - Proposal WR18-18-2 out to bid as lot 4396 in 3/18, 13.1 acres. Proposal WR18-28-03 approved with 20 acres of regeneration cuts proposed. Proposal WR16-3-1 approved with 17 acres of regeneration cuts proposed. Proposals WR 19-19-2 and WR 19-20-3 submitted this year.




## Harvesting Limitations

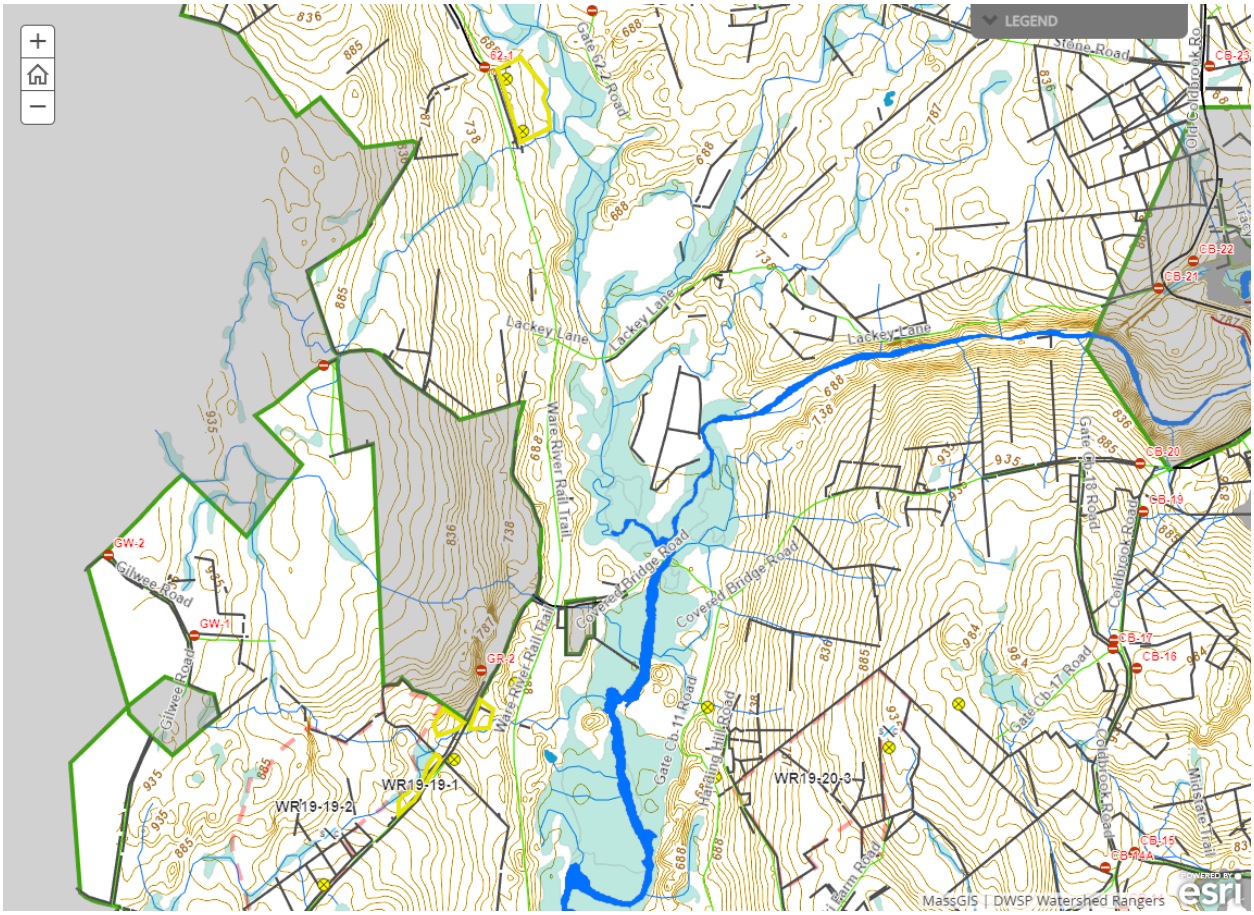
**Forwarder required:** No

**Feller/processor required:** No

**Steep slopes present:** No

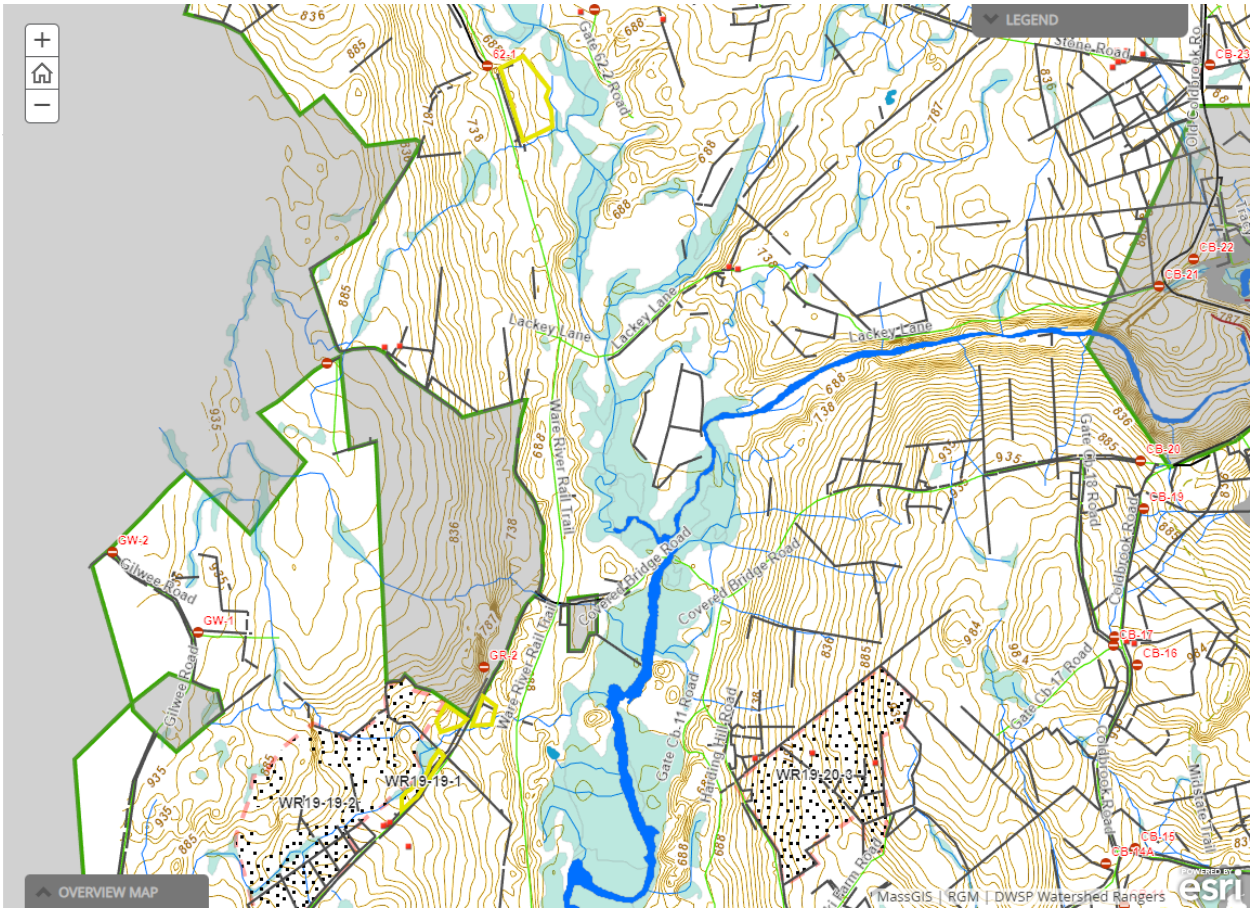
**Comments on harvesting limitations:**

A cut to length harvest system will be needed to facilitate roadside landings at the smaller patches. A skidder and feller buncher will be allowed where feasible if the harvester wants to produce poles.



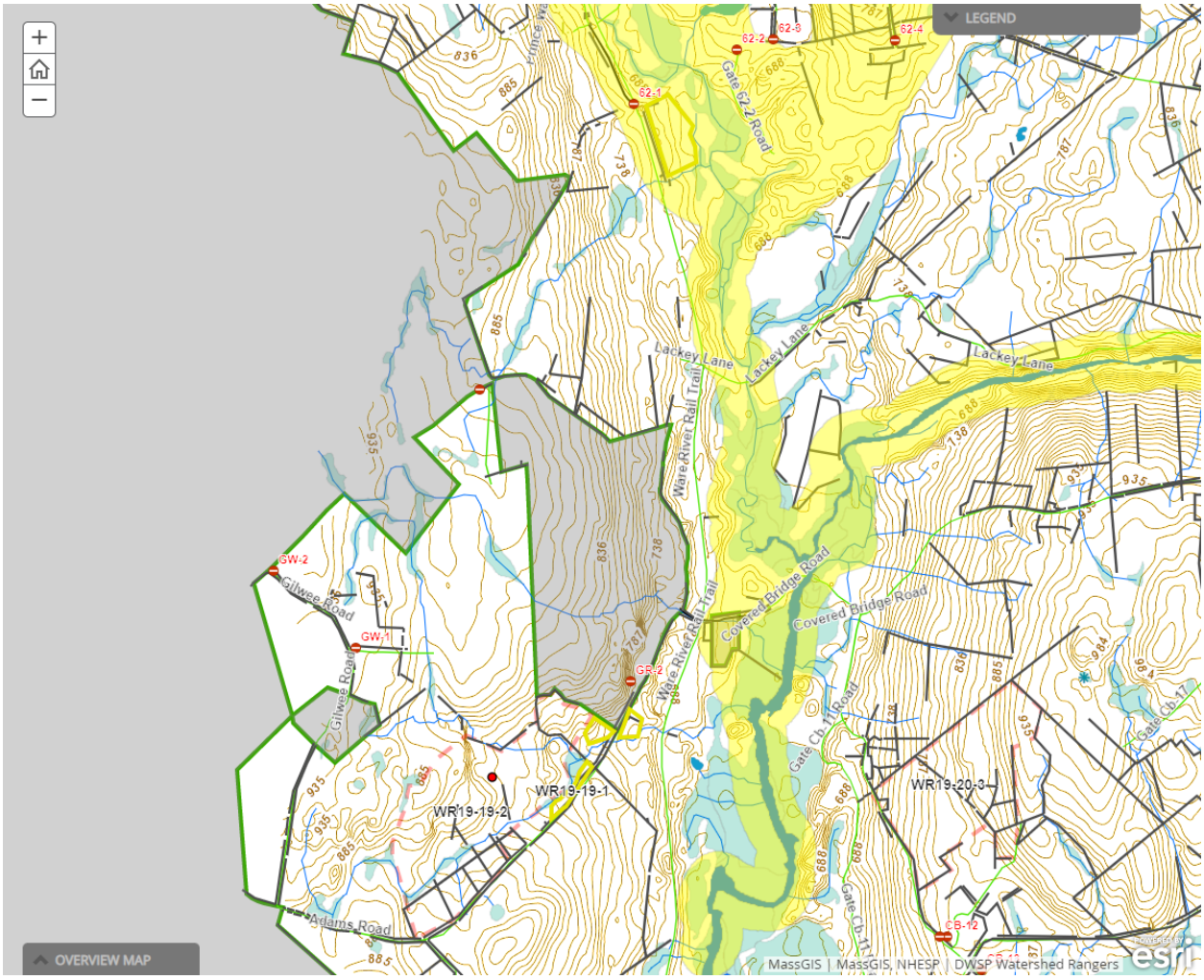

## Cultural Resources

Stone walls are present within the lot, but no foundations or cellar holes are known. Existing barways will be used where feasible and harvest layout will protect walls as much as possible. If applicable, DWSP will follow any additional recommendations from DCR's Archeologist regarding protection of sensitive sites.




# Wildlife Resources & Rare and Endangered Species

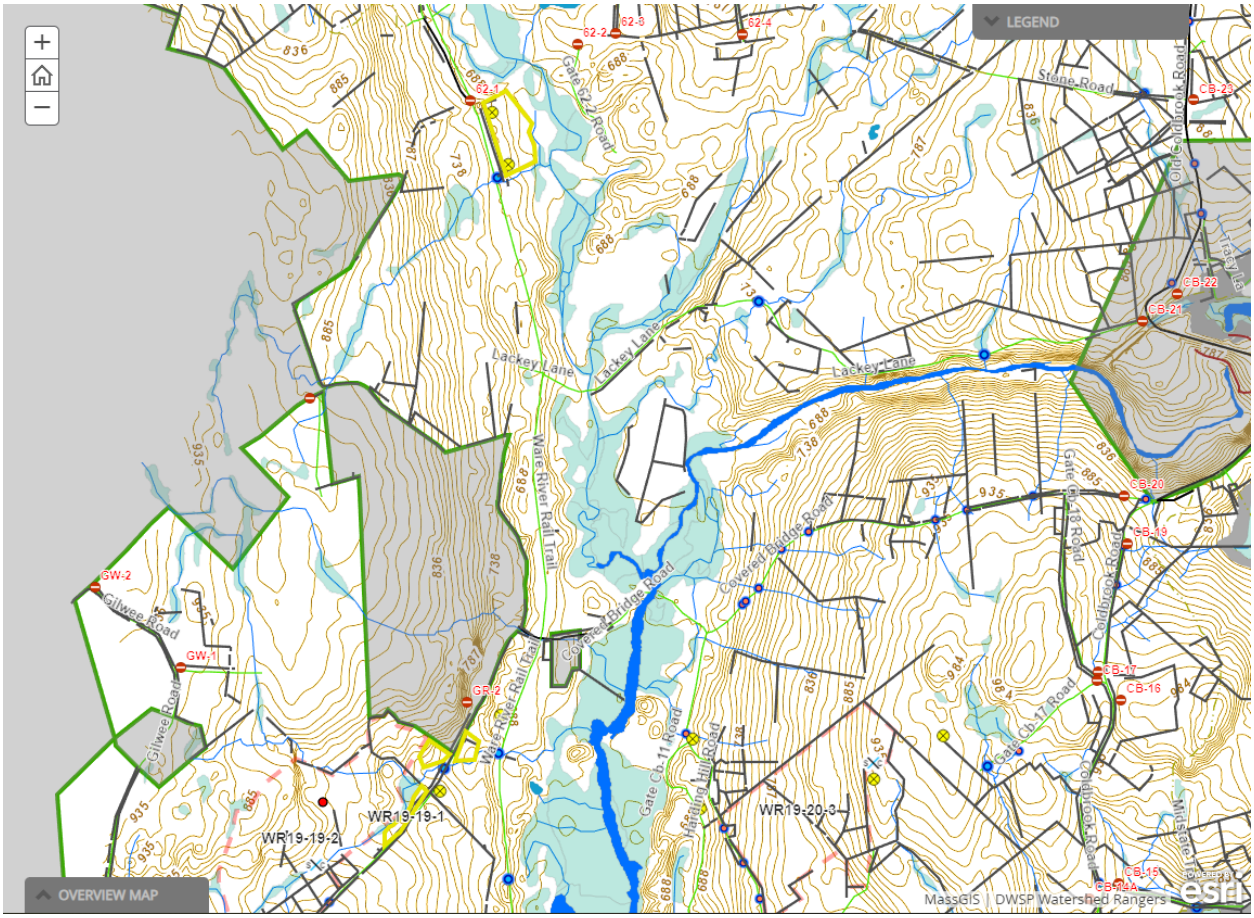
Cavity trees and potential/existing nest trees will be retained if possible. NHESP has determined that certain state-listed sensitive species or habitats may exist within the northern section of the lot proposal area. To protect them from unnecessary disturbance, detailed information regarding affected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

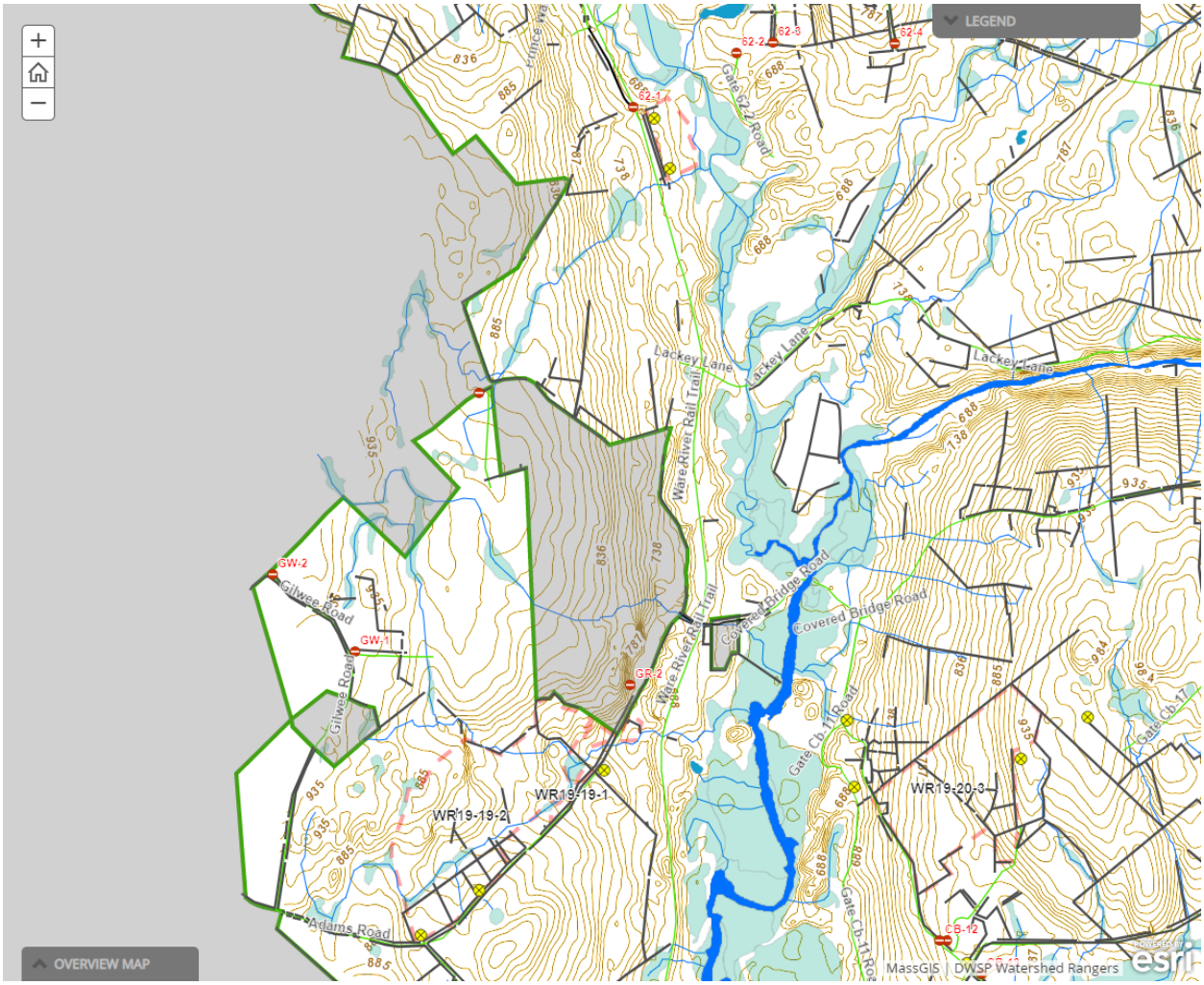
**Culverts needed:** No

**Work needed on permanent bridges:** No

**Beaver issue:** No

**Further comment on access needs:**

None.


LEGEND
OVERVIEW MAP
WR19-19-1
WR19-19-2
WR19-20-3
GW-2
GW-1
GR-2
CB-12
62-1
62-2
62-3
62-4
Gilwee Road
Adams Road
Lackey Lane
Ware River Rail Trail
Covered Bridge Road
Gate 62-2 Road
Gate Cb-11 Road
MassGIS | DWSP Watershed Rangers
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DWSP FY 2019 Quabbin and Ware River Forestry Proposals – Master Legend for story maps