Massachusetts Department of Conservation and Recreation
Division of Water Supply Protection, Office of Watershed Management
Forest Management Project Proposal Summary

Site Information

Proposal Summary Item	Item Information/Description
Lot Proposal ID	**WA-19-127**
Fiscal Year	2019
Watershed	**Wachusett**
Town(s)	**Holden**
Acres	43
Nearest Road	River Street
Natural Heritage Atlas overlap?	Yes
Public Drinking Water Supply Watershed?:	Yes
Forest Types	Oak, mixed – dry site, white pine/oak
Soils	The manageable area for this site is made up of excessively drained Windsor, Hinckley and Merrimac soils.
Wetland Resources	The Quinapoxet River flows along the western bound of the working unit and has a good sized wetland along a portion of it.
Vernal Pools	There is a vernal pool just north of the road that crosses the northeast part of the property.

NARRATIVES

General Description/Forest Composition/History:

This working unit was part of the original takings and was previously owned by the Linus M. Harris Manufacturing Company. Linus ran a cotton mill and then later on it turned into a shoddy mill which was demolished in 1902. The 1938 hurricane survey showed "scattering damage" on this parcel. This lot was first cover typed in 1951 as hardwoods. Interestingly, this land was mapped by surveyors in 1830 as woodland and thus it has the potential to be a primary woodland. This property is characterized by its highly variable topography and its steep slopes along the Quinapoxet River. Several timber sales have occurred over the years that have resulted in good regeneration and a small component of young forest. The first work was conducted in 1983 in the central area of the working unit targeting low quality oaks in the over story. At that time it was noted that while some white pine regeneration is present - it is of inadequate quantities and should be planted. In 1997 a small area of cordwood was cut in the western section. The most recent activity was in 2007 focusing on the eastern section where three openings were made and one thinned area. The working unit has a decent quality mix of oaks and the white pine is of a better health and vigor. An ice storm has damaged the oaks which are still in the process of rebuilding their crowns. The understory is a nice mix of hardwood and softwood regeneration with patches and veins of mountain laurel and/or low bush blueberry.

There is good advanced regeneration throughout the working unit and is comprised of white pine, red maple, white oak, red oak, hemlock, American chestnut, blue beech, and black oak. 50% of the plots taken on this site are regenerated and 12% of the plots show marginal regeneration. Oak is present on 40 percent of the plots taken.

Site Selection:

The ideal watershed protection forest is one which best serves the function of the land as a producer of high quality drinking water in both short- and long-term. This forest must be vigorous and diverse in tree species and ages, be actively accumulating biomass and actively regenerating. Such a forest will be ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes. This area was selected for management because of the lack of age diversity both in these 43 acres as well as in the 2,462 DCR-owned acres from which

water flows into the Quinapoxet River and ultimately into the Wachusett Reservoir. This harvest will contribute as much as 14 acres or 33% of young forest towards the ideal protection forest which would have at least 3 distinct age classes of trees distributed throughout this sale area.

Silvicultural Objectives:

Because there is good advanced regeneration spread throughout this working unit, openings will be made accordingly in order to release the advance regeneration. Given that ~93% of the working unit is at a mature age class and ~6% of the working unit is under twenty years old, about 14 acres of openings will occur. After the harvest is complete, the result will be closer to the watersheds ultimate goal of having three distinct age cohorts within each working unit. The operation will focus on creating openings where they are suitable to the topography and have good regeneration. Active den/nest trees and exceptional individuals of all species present will be retained for habitat and/or diversity.

Cultural Resources:

This area will be assessed by the DCR Archeologist for both known sites of cultural or archeological importance as well as for potential use by pre-Contact Native Americans.

Wildlife/Rare or Endangered Species:

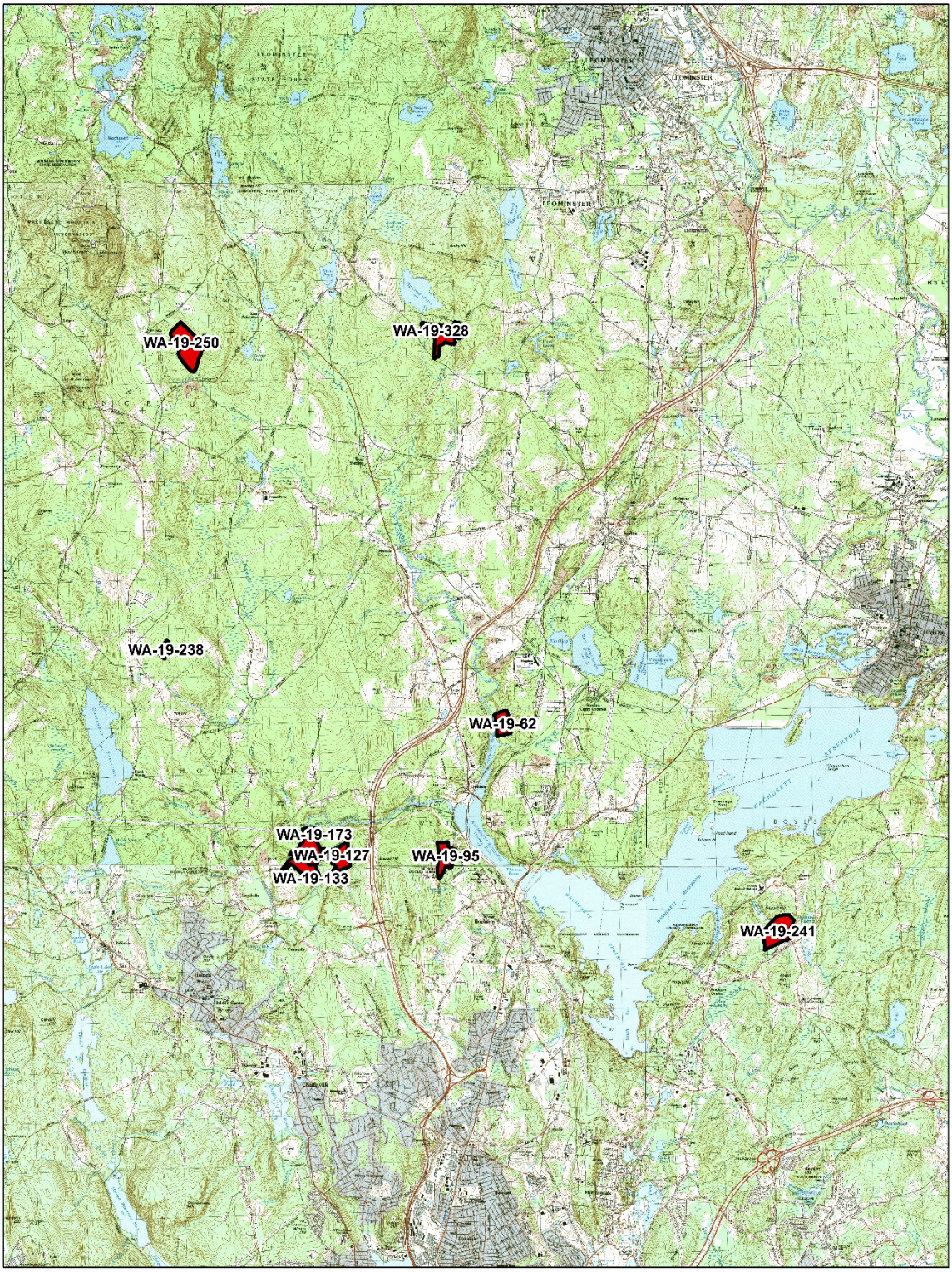
All DWSP Best Management Practices for wildlife management such as the protection and enhancement of wildlife habitat features will be an integral part of the silviculture and job layout. Diverse hard and soft mast species will be retained and the healthiest trees will be released to improve seed production, which will promote tree seedlings and food for wildlife. Large snags, den trees, logs and nest trees will be retained whenever possible as valuable habitat. No stick nests were observed, but if they are identified in the further steps of this process they will be protected. Where they occur; streams, wetlands, seeps and vernal pools will be protected for water quality and wildlife habitat. All vernal pools, whether verified or potential, will be protected using the appropriate Best Management Practices.

The Natural Heritage and Endangered Species Program have determined that certain state-listed sensitive species or habitats may exist within the lot proposal area associated with the Quinapoxet River. 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 activity.

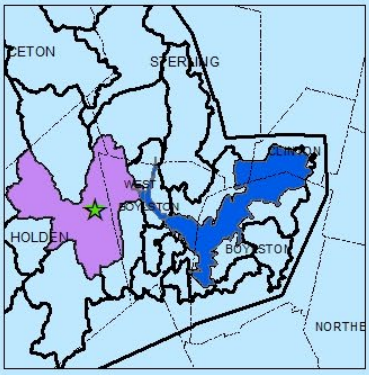
DCR - Wachusett Reservoir

Proposed Timber Sales FY 2019

Locus Map (Scale 1:72,000 - 1 inch =6,000 feet)



DCR - Wachusett Reservoir
Timber Lot Proposal WA-19-127



N
W E
S

1 inch = 200 feet

Outline of Proposed Area (Working Unit)
DCR Property Lines w/wo walls
Stone walls
Streams
Wetlands
Vernal Pools-Verified
Vernal Pools-Potential
Landing/s
NHESP Priority Habitats (semi-transparent)
DCR Gate/s

0 120 240 480 Feet