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-19-238**
Fiscal Year	2019
Watershed	**Wachusett**
Town(s)	**Princeton**
Acres	16.7
Nearest Road	Worcester Rd. (Rt 31)
Natural Heritage Atlas overlap?	No
Public Drinking Water Supply Watershed?:	Yes
Forest Types	White pine\oak, Mixed oak
Soils	Woodbridge-Paxton fine sandy loam, extremely stony. This is a thick, well-drained till soil.
Wetland Resources	The bordering vegetated wetland of a small tributary to Cold Brook forms the southwestern border of this area.
Vernal Pools	There's a potential vernal pool in the above mentioned wetland.

NARRATIVES

General Description/Forest Composition/History:

This property was purchased by the MDC in 1996. This former pasture is dominated by white pine, red oak, white oak and black oak with lesser numbers of red maple, black birch, hickory, yellow birch and sassafras. The white pine is of generally good quality with few of the multi-stemmed individuals common to abandoned pastures. The yellow birch is present almost exclusively on the flat area near the wetland and on the adjacent southwest facing slope. The understory is dominated by seedlings and saplings.

Regeneration sampling found adequate numbers and diversity of young trees present on 76% of the plots with marginal regeneration on the remaining 24% of the plots. This regeneration is comprised of white pine, white oak, red oak, black birch, red maple, black oak, yellow birch and sassafras. What little there is of a shrub layer is comprised primarily of lowbush blueberry.

The age structure for this area is as follows; 0% 0-20 years old, 0% 21-40 years, 0% 41-60 years, 4% 61-80 years, 0% 81-100 years, 96% >100 years old.

Systematic sampling for terrestrial invasive species did not find any present in the proposed area. However, Japanese barberry is present in the adjacent wetland.

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 chosen because it is within the young forest focus area that was chosen for the Wachusett Watershed in the 2017 Comprehensive Land Management Plan (see the CLMP for a full discussion of this topic). This area was chosen because of the relatively large contiguous block of DCR land; the presence of DCR-maintained fields in the area and a timber sale that was conducted in 2006 that included a 12.6 acre early successional habitat overstory removal cut.

Silvicultural Objectives:

The majority of the overstory will be removed in this operation in order to provide regionally important early successional forested habitat. Some live trees will be retained in this area, however. The adjacent 12.6 acre cut serves as a good guide to the level of retention. Trees both singly and in small groups of a variety of species and sizes will be retained throughout the cut area.

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:

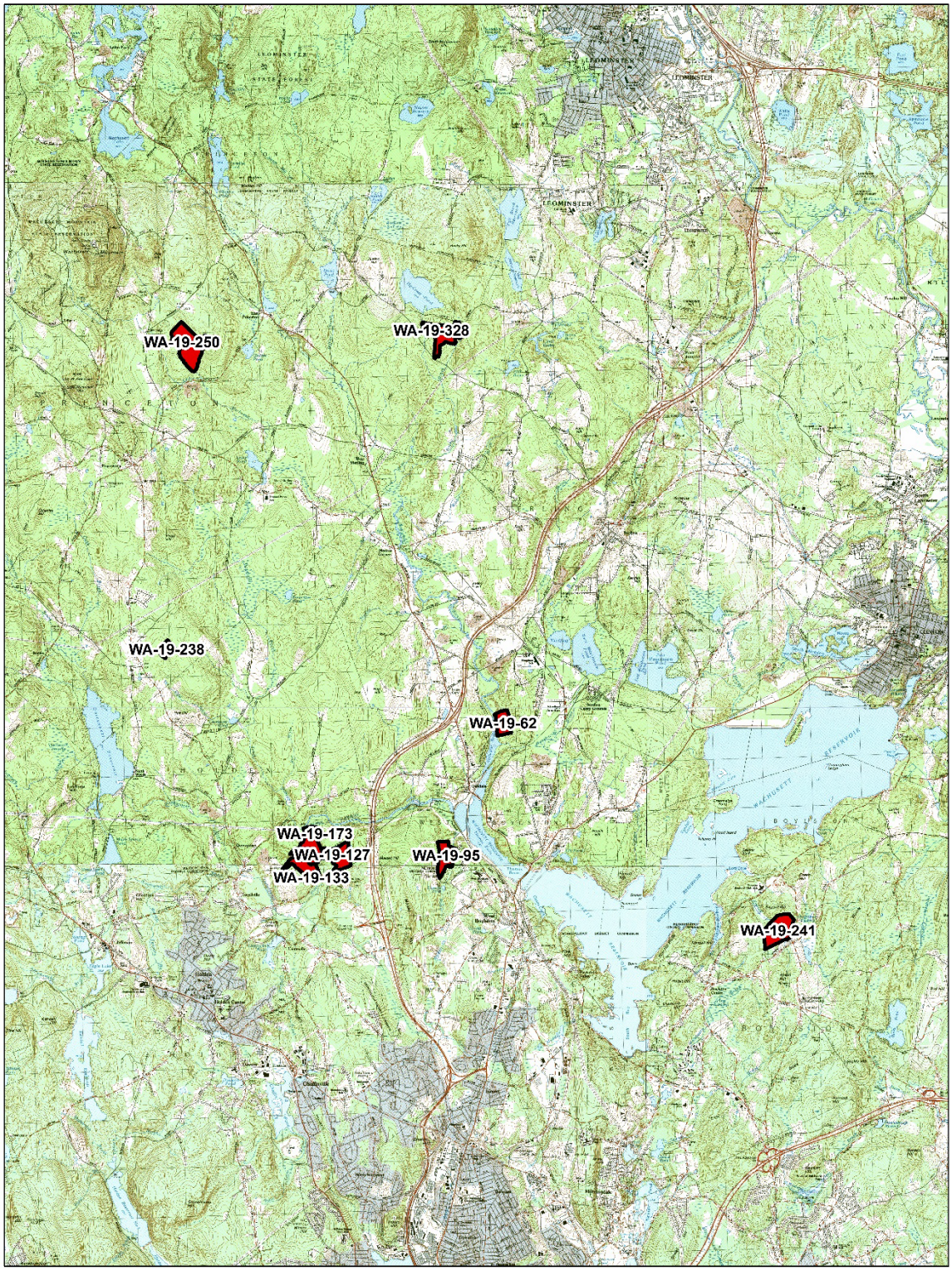
All DWSP Best Management Practices for wildlife management such as the protection and enhancement of wildlife habitat features will be an integral part of the silviculture and job layout. Diverse hard and soft mast species will be retained and the healthiest trees will be released to improve seed production, 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.

There is one vernal pool in the wetland to the south of this proposed area. It will be protected using the appropriate Best Management Practices.

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-19-238

1 inch = 300 feet

Outline of Proposed Area (Working Unit)
DCR property lines w/wo stonewalls
Stone walls
Landing/s
Streams
Vernal Pool (NR-Confirmed)
Wetlands
Vernal Pool (Potential)
Priority Habitat (semi-transparent)

0 250 500 1,000 Feet