# Massachusetts Department of Conservation and Recreation Bureau of Forest Fire Control and Forestry Forest Management Proposal

Name: OMSF Day Use Area

**Date Posted:** 

March 2, 2020

**End of Comment Period:** 

April 16, 2020

Region:

West

**Recreation District:** 

Lakes

**Forest Management District:** 

Central Berkshires

**State Forest:** 

October Mountain State Forest

**Closest Road:** 

West Branch Road Ext

Town

Washington

**Contact Information:** 

Kristopher Massini 740 South Street P.O. Box 1433

Pittsfield, MA 01202 (413) 442-8928 ext.121 Kris.Massini@state.ma.us

#### Overview:

The OMSF Day Use Area Forest Management project is a 37 acre project on October Mountain State Forest (see Locus Map) encompassing the October Mountain Reservoir Day Use Area (picnic area and boat launch), portions of the Washington Mountain Marsh Trail, trail head parking, historic cemetery, and frontage of West Branch Road Extension. This proposal includes 4 acres of picnic/boat launch area, 21 acres of Norway Spruce, 4 acres of red pine plantation, 0.5 acres of cemetery, and 7.5 acres of roadside hazard trees along a half mile of West Branch Road Extension.

DCR Operations staff have requested a remediation project to remove all or portions of these plantations due to safety and maintenance concerns from blowdown trees caused by wind and ice events. The increasing frequency of downed trees coupled with the inability of DCR staff to expeditiously deal with damaged trees led to this request. Due to the scale of this project, utilizing a traditional style forestry operation is the preferred method to achieving the goals in a safe, efficient, and economically responsible manner.

The OMSF Day Use Area Project contains 26.6 acres of Parkland and 10.4 acres of Woodland Designations. Because of the significant day use activity, the entire project will be treated as Parklands regarding safety, aesthetics and silvicultural guidelines. While the commercial production of wood products is not an intended goal for Parkland designated properties, silvicultural treatments are permitted for the following purposes (Commonwealth of Massachusetts, 2012):

- Vegetation management necessary to protect public health and safety, public interests, public assets and/or restore or maintain recreation sites following significant natural disturbances or destructive insects or disease.
- Removal of plantations to restore more natural and diverse vegetative communities if public health and safety are at risk, or to restore ecologically significant communities such as pitch pine barrens.
- Vegetation management necessary for the development or maintenance of trails, recreation area aesthetics, and existing roads.

# The conditions that led to selecting this project for forest management are:

- The project area has been affected by abiotic factors (ice, wind, root damage) causing overstory trees to break and fall leaving behind trees more suspectable to wind throw.
- The plantations within this project area are beginning to decline due to age and competition causing high levels of mortality.
- A request from DCR Operations staff to efficiently remove the hazardous plantation trees in an effort to protect infrastructure and human safety within the Day Use Area and surrounding recreational features.

# The OMSF Day Use Area Forest Restoration Management Project proposes to:

- Remove/reduce public safety concerns related to weather damage and mortality, within and adjacent to, recreational areas and along West Branch Road Extension
- In the remainder of the project area, where possible, use forest management (silviculture) to slowly convert plantations to a mixed native forest.
- Provide substantial cost savings to the DCR by removing hazard trees that currently have economic value.
- Demonstrate harvesting techniques and best management practices that protect forest productivity, soil, water resources, and recreational assets.
- Provide ecosystem services for Woodlands and Parklands as directed by the Forest Futures Visioning Process (2010) and subsequent Management Guidelines (2012) including the restoration of a native ecosystem.

Project Area: Prior to the establishment of these plantations this area was cleared agricultural land populated by several farms, a one room schoolhouse (located in existing field), and a cemetery. The plantations were established in 1925, 1932 and 1936 by the Commonwealth and have received thinning treatments in the 1960's to promote tree health and vigor. During the 1980's harvesting was conducted to establish regeneration under the monoculture stands. The October Mountain Reservoir Day Use Area was constructed in the 1990's along the shoreline of the reservoir under dense Norway spruce. In recent years these stands have been shaped by overcrowding, soil compaction/root damage, wind events, and ice storms. These events have led to a variable understory of native hardwoods, Norway spruce, and native red spruce (seeded from adjoining stands).

The remaining 7.5 acres consists of a buffer of 100' along each side of West Branch Road Extension where dead and hazardous trees will be removed. This corridor consists of remnant Norway spruce, red spruce and red pine plantations with pioneered hardwoods including white ash (Fraxinus americana) and black cherry (Prunus serontina). This area also has numerous invasive species including bittersweet, multi flora rose, and phragmites.

**Topography:** The project area is generally flat with a gentle slope to the west.

**Soil:** There are several soil types mapped within the salvage portion of this project area; PmC, PoB. These types can be considered the same for forestry use. The soils are loamy, moderately deep, well drained, considered moderate to excellent for forest growth, low risk for erosion, and have few equipment limitations. (Excerpts from "Soil Survey of Berkshire County Massachusetts", NRCS 1995)

## Aesthetic, Recreation, Wetlands, Cultural, Rare Species and Wildlife Considerations:

**Recreation and Aesthetics**: Outside of the October Mountain State Forest campground in Lee, this is the most visited and used portion of the state forest. As mentioned above, this is the location of the October Mountain Reservoir Day Use Area, a boat launch, The Washington Mountain Marsh Trail, and a historic cemetery. These features are all within the area affected by these plantations.

Norway spruce, within and surrounding, the day use area and boat launch will be removed to prevent further maintenance and safety issues. Within the remaining portions of the project area the amount of Norway spruce and red pine to be retained will be determined based on tree/stand health, wind exposure, and proximity to public use features. All slash from the harvest will be dealt with according to Ch. 48 of MGL, the Massachusetts Slash Law.

Streams and Wetlands: Within the red pine plantation there may be a small .5-acre wetland, which will be verified and delineated as needed during prescription field work. The remainder of the project area is free of streams and wetlands. However, the Washington Mountain Marsh and October Mountain Reservoir are adjacent to the project area as well as an associated wetland. A filter strip where harvesting comes within 50' of these features will be observed outside of the Day Use Area and boat launch. These, as well as any additional wetland/water features found, will be mapped and flagged on the ground for protection during the harvest. Harvesting in and near these areas will follow the guidelines of the "Massachusetts Forestry Best Management Practices Manual".

Due to existing access and topography there is no anticipated stream or wetland crossings within this project area. Every effort will be made to avoid creating stream and wetland crossings if additional water features are found. All operations within regulated water features found in the area will at minimum follow the guidelines of the "Massachusetts Forestry Best Management Practices Manual 2<sup>nd</sup> Edition".

There are no mapped certified or potential vernal pools by NHESP.

**Cultural Resources:** There are no known pre-contact sites or identified cultural resources within the proposed project. There are several old building sites located within the project area such as

cellar holes and stone walls and several mapped locations of past features which are no longer visible due to land use changes. There is also a cemetery maintained by the Town of Washington located within the project area. All known and found features within the project area will be protected from disturbance during the operation and will be treated according to guidelines set forth in the "Bureau of Forestry – Cultural Resource Management Protection Standards & Guidelines". Due to the agricultural history of this area many stonewalls occur in and around the harvest area. These walls will be protected from damage during harvesting.

Rare and Endangered Species: According to the NHESP "Massachusetts Natural Heritage Atlas 13<sup>th</sup> Edition" there is a polygon of priority and estimated habitats located in and immediately surrounding the Washington Mountain Marsh. This encompasses 1.3 acres of the proposed project area and will require coordination with NHESP to ensure protection of the listed species present in the area.

**Wildlife:** No rare animals or critical habitats were noted upon the initial site visit within the project area. Wildlife common to the area is abundant. It has been observed in previous forestry operations nearby that large herbivore pressure is a minor concern. Due to the deteriorating nature of the forest types in this project area there is an abundance of large diameter coarse woody debris (CWD) and both live and dead wildlife trees (snags). These snags may be retained where no public safety hazard occurs.

## Sale Layout and Harvesting Limitations:

**Project Access:** Access to the proposed project area is from Washington Mountain Road in the Town of Washington to West Branch Road. The project area begins after crossing Lenox Whitney Road onto West Branch Road Extension. This project will attempt to utilize existing maintained fields for both forwarder and truck landings. It is anticipated that this project will be primarily a cut-to-length harvester and forwarder operation, allowing for smaller more organized landings.

**Skid Road and Trails:** Forwarder trail locations will placed to reduce damage to existing regeneration. They will be designated by the forester during the timber marking stage of the project preparation. Any existing trails found will be utilized when possible and new trails will be laid out as directed in the "Massachusetts Forestry Best Management Practices Manual 2<sup>nd</sup> Edition" and "Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines 2012".

**Wetland & Stream Crossing:** As noted above, there are no anticipated wetland or stream crossings within this project area and every effort will be made to avoid stream and wetland crossings. All resource areas found in the area will at minimum follow the guidelines of the "Massachusetts Forestry Best Management Practices Manual 2<sup>nd</sup> Edition".

**Road and Trail Buffers:** Residual tree stocking along portions of West Branch Road Extension will be low due to the density of dead and hazardous trees that must be removed. The DCR will seek an exemption to the Chapter 132 regulatory requirement which states that no more than 50% of the basal area may be cut at any one time. Coordination with the Town of Washington will also be

sought. As directed in the Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines 2012" a 50-foot buffer where slash will be light and natural in appearance will be in place along these roads.

**Equipment Limitations:** This project will require a cut-to-length harvester and forwarder for the protection of understory regeneration in the red pine and Norway spruce stands.

**Excluded Areas:** Wetlands identified within the project area will be clearly marked and follow the guidelines of the "Massachusetts Forestry Best Management Practices Manual 2<sup>nd</sup> Edition". The extent of the 100-foot hazard tree removal zone will be clearly marked along West Branch Road Extension.

**Erosion and Sedimentation:** Unwanted movement of soil will be controlled by following recommendations in the "Massachusetts Forestry Best Management Practices Manual 2<sup>nd</sup> Edition". All work will be limited to dry or frozen soil conditions.

**Site Restoration:** Upon completion of activity in the project area all roads, forwarder roads and forwarder trails will be left in a stable state by grading and installing water bars as needed. All landings will be clear of debris, graded, and seeded with a conservation mix and straw.

**Proximity to Designated Forest Reserves:** There are no designated large-scale forest reserves located adjacent or near this project area.

**In-kind Services:** Proposed in-kind services to be attached to this project to date.

- Invasive species control
- Planting of native shade trees within the day use picnic area as needed.
- Maintenance and/or restoration within the cemetery.
- Road and trail work as well as lumber for trail projects within the forest.
- Maintenance/repair of existing fields (7.5 acres) with possible reclamation of abandoned fields (4.5 acres) adjacent to the project area.

Work Plan: Public safety is the primary reason for management of this area. Due to the size of the project area and number of trees involved, harvesting using forestry methods provides a safe and economical means to achieve the goals of this project. The treatments outside of the Day Use Area will create the conditions (stem density, species composition, and tree size) to achieve the desired results in each forest type though traditional forest management. The primary goal of treatment in these stands is to increase public safety; remove the diseased, infected or otherwise hazardous trees; minimize future hazards; and protecting and releasing the advanced regeneration currently in place. Treatment of invasive vegetation will occur throughout the project area, these are concentrated along West Branch Road Extension.

This project will seek the approval from the DCR Commissioner as required in the "Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines 2012" for harvest openings larger than 1/3 acre.

Day Use Area & Boat Launch: All Norway spruce located within and immediately surrounding the 4-acre recreation area will be removed, healthy trees of other species will be retained and protected. Individual Norway spruce may be left if there is minimal future maintenance or public safety concern. Upon completion of field marking trees for removal, determine if the planting of native trees is necessary to provide shade and aesthetics.

- Desired Future Conditions: Removing the remaining Norway spruce will provide a safe visitor experience, prevent property damage, and reduce maintenance costs. By retaining and protecting the existing sapling and pole sized trees which have naturally seeded in previously, this recreation area will have a tree canopy for shade soon. Supplemental planting of desirable tree species suited for this location can add diversity and resiliency to the area.
- Anticipated Future Work: Monitoring, stem thinning, and maintenance pruning of young trees should occur biannually until stems have become established as pole sized trees providing a canopy over the picnic area.

**Red Pine Plantations:** The primary goal of public safety will be met by removing the 4 acres of declining red pine while retaining, protecting and releasing the associated native trees and advanced regeneration currently in place. Due to the varied density of existing native trees in the overstory openings larger than 1/3-acre will occur. The understory is anticipated to remain fully stocked with small 1-5-inch diameter native hardwood trees.

- Desired Future Conditions: Removing the aged and declining red pine plantation will reduce the hazard along West Branch Road Extension, and within the cemetery and access trail. Releasing the existing understory of sapling sized hardwoods will result in a future stand that provides habitat diversity in size and structure in the larger forest ecosystem for years to come.
- **Anticipated Future Work:** Due to the density of recreational activities in the area no further treatment is expected.

Norway Spruce Plantations: The remaining 21 acres of Norway spruce will be treated using an irregular shelterwood method with patch openings up to 1/3 acre in size. This technique will build upon openings created in the previous harvest, fostering existing natural regeneration and promoting the establishment of new regeneration in sparse areas. Healthy native trees within the plantation will be retained and Norway spruce remaining in the stand will be clustered for wind firmness allowing for varied amounts of light to penetrate the ground. This combination of silvicultural techniques will allow for some protection from wind events to extend the Norway spruce component. The understory is anticipated to be fully stocked with native hardwood trees seedling and saplings within 5 years.

- **Desired Future Conditions:** Ten years after this treatment it is anticipated that these stands will have greater diversity in size and structure. Regeneration within the small openings and areas of heavier cutting should have a diverse mix of native tree species.
- Anticipated Future Treatments: This stand should be examined in approximately 5 years to
  ensure the advanced regeneration has survived and additional regeneration is of desired
  species. If continued windthrow of the residual Norway spruce occurs, further harvests

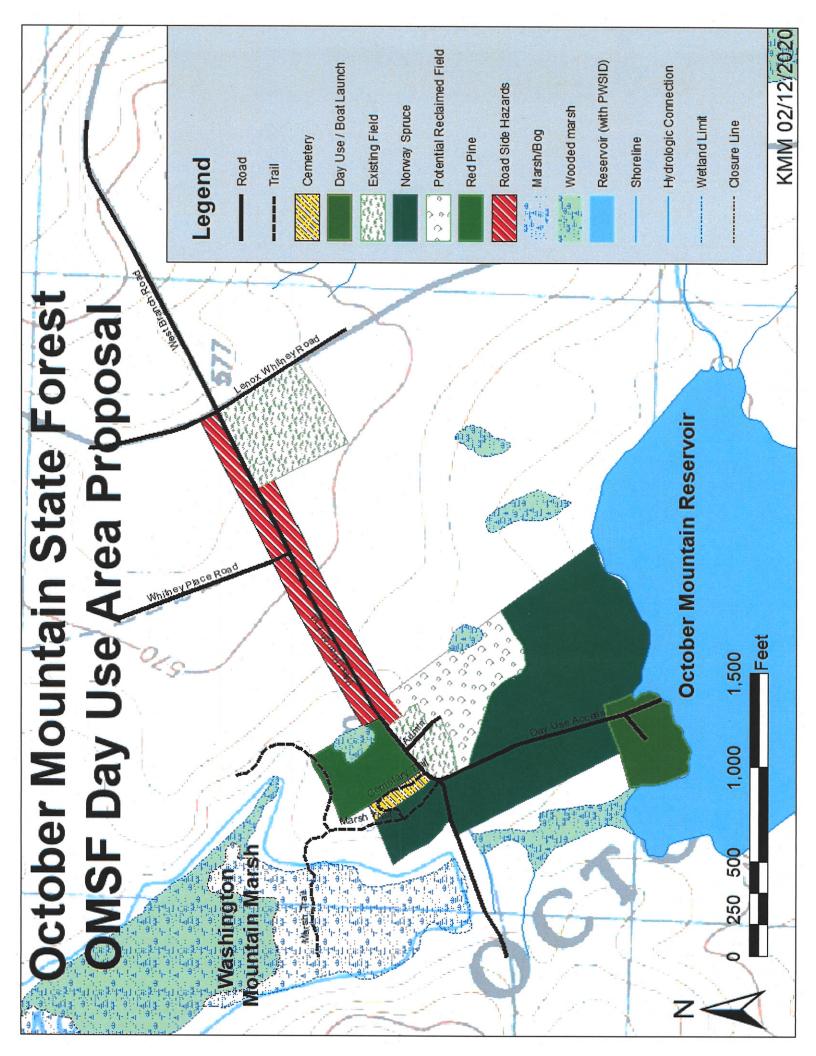
may be necessary. Otherwise, due to the current recreational use in the area no further treatment is expected.

**Roadside and Cemetery Hazard Removal:** Within 100' from the road edge of West Branch Road Extension (approximately 7.5 acres) and within and surrounding area of the cemetery (0.5 acres) all dead and current/anticipated hazard trees will be removed. This area will receive extensive invasive control to prevent the spread throughout the remainder of the project area.

- **Desired Future Condition:** A roadside buffer and cemetery safe from excessive hazard trees, with minimal invasive species.
- **Anticipated Future Treatments**: This area should be examined in 2-3 years to ensure the successful control of invasive species.

District Forester:	Date: Z/	26120
Field Operations Team Leader	Date: 2/6	7/20
Or Park Supervisor:	Date: 3/6	1/20
Regional Director:	Date: 2/	25/20
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Program Supervisor:	Date: $-/2$	7/2020
Trogram supervisor.	Dutc	

Attached: Topographic map showing project details. Locus map showing project location within regional context.



# October Mountain State Forest OMSF Day Use Area - Locus Map

