



*Silviculture Prescription  
OMSF Day Use Area*

*Massachusetts Department of Conservation and Recreation  
Bureau of Forestry*

*Central Berkshire District  
October Mountain State Forest  
Washington, MA*

*Prepared by:*

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Approved by:

Management Forestry  
Program Supervisor

William N. Hill, CF

Date: August 6, 2020

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 will include approximately 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 staff shortages has led to needing a long-term solution to this issue. 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 Forest Futures Visioning Process and associated DCR Management Guidelines, published in March 2012, show the OMSF Day Use Area Project as both Parkland (26.6 ac) and Woodland (10.4 ac) 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 with residual trees more susceptible to wind throw.
- The plantations within this project area are beginning to decline due to age and cohort competition causing high levels of mortality.
- This project will provide an opportunity to remove hazards to infrastructure and human safety within the Day Use Area and surrounding recreational features.

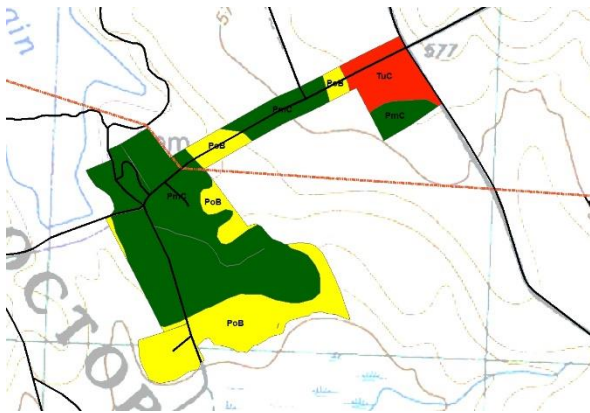
**The OMSF Day Use Area Forest Restoration Management Project will:**

- Address concerns over public related to tree 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.

**Site Data:**

**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 1960s to promote tree health and vigor. During the 1980s strip harvesting was conducted to establish regeneration under the monoculture stands. The October Mountain Reservoir Day Use Area ( 2.4 acres) was constructed in the late 1990s along the shoreline of the reservoir under the dense Norway spruce overstory. 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).

An additional 7.5 acres of the project 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 serotina*). 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. The Washington Mountain Marsh (a failed reservoir) is along the north and north-western edge and the October Mountain Reservoir is along the southern edge. The remainder of the area is surrounded by other forested stands.

**Soil:** There are several soil types mapped within the salvage portion of this project area; PmC, PoB, and TuC. 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)

<http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=MA>

**Climate:** The project location lies in an area of mild summers and moderate winters with year-round precipitation possible. Winds generally come from the west. Although major weather events can happen in any given year, the chances of hurricanes, tornadoes, ice storms or other forest changing events are seldom but do occur. The figures below (Table 1) are excerpt from the National Weather Service 2012 Climatological Report for Pittsfield, MA. The climate period used to determine normal value is 1981 through 2010.

Table 1:

|                                | 2012 Annual | 2011 Annual | Normal Annual Value | Normal Winter | Normal Spring | Normal Summer | Normal Fall |
|--------------------------------|-------------|-------------|---------------------|---------------|---------------|---------------|-------------|
| Annual Maximum Temp            | 58.4        | 56.5        | 55.3                | 31.7          | 54.3          | 76.7          | 57.9        |
| Annual Minimum Temp            | 39.2        | 37.4        | 35.4                | 15.4          | 32.9          | 55            | 38          |
| Annual Mean Temp               | 50          | 50.2        | 48.3                | 23.6          | 43.6          | 65.8          | 48          |
| Total Precipitation (in)       | 36.36       | 59.46       | 45.38               | 8.6           | 11.44         | 12.74         | 12.6        |
| Days with >= .01 Precipitation | 144         |             |                     |               |               |               |             |
| Average Wind Speed             | 6.1         |             |                     |               |               |               |             |

**Hydrology and Watershed:** This project area is in the Housatonic River Watershed which covers much of the western portion of this State Forest. Drainage from the project area flows into both Washington Mountain Marsh (failed reservoir) and October Mountain Lake. Both water bodies drain into Washington Mountain Brook which flows west out of the state forest into the Housatonic River in Lee.

There are two small wetlands just outside of the work area, and one within the roadside hazard tree removal portion, these are depicted on the attached map. The remainder of the project area is free of streams and wetlands, however as mentioned above, the Washington Mountain Marsh and October Mountain Reservoir are adjacent to the project area as well as associated wetlands. A filter strip where harvesting comes within 50' of these features will be observed outside 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 2<sup>nd</sup> Edition".

<https://www.mass.gov/doc/massachusetts-forestry-best-management-practices-manual-0/download>

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 2<sup>nd</sup> Edition".

There are no mapped certified or potential vernal pools by NHESP within the project area.

**Roads, Trails and Recreation:** Second to the campground in Lee, this is the most visited and used portion of October Mountain 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.

**Cultural and Archaeological Features:** There are no known pre-contact sites within the proposed project. There are several old building sites located within the project area as seen by cellar holes and stone walls, several previously mapped locations of past features are no longer visible due to land use changes. There is 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. Coordination has occurred with the DCR Archaeologist and the Town of Washington to protect these features, work to prevent further damage to the cemetery is discussed below.

**Rare and Endangered Species:** According to the NHESP "Massachusetts Natural Heritage Atlas 13<sup>th</sup> Edition" and the currently distributed shape file, 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. A review by NHESP has determined that there will be no impact to the species of concern and no restrictions/changes to the project will be necessary.

**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.

### **Evaluation of Data, Silviculture and Projected Results:**

**Work Plan / Silviculture:** 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 economically responsible means to achieve the goals of this project. The treatments outside the Day Use Area will create the conditions (stem density, species composition, and tree size) to achieve the desired results in each forest type through traditional forest management. The primary goals of treatment in these stands is to increase public safety and minimize future hazards by removing the diseased, infected or otherwise hazardous trees; and protect and release the advanced regeneration currently in place by using appropriate harvesting techniques and equipment. 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 2.5 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. Restoration work will include stump grinding, top soil replacement, seeding with Berkshire Conservation mix, and gravel replacement within existing walkways to restore access to picnic tables. Upon completion of field marking trees for removal, Forestry and Operations staff will 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 regenerated, 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.

**Roadside:** Within 100’ from the edge of West Branch Road Extension all dead and hazardous trees will be felled. Debris from felled trees will be cut to lie 2 feet or lower or be removed and disposed of in a designated portion of the project area. This area will receive extensive invasive control to prevent the spread throughout the remainder of the project area. This portion of the project is 7.7 acres.

- **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.

**Cemetery:** By the request of the Town of Washington this project will remove hazard trees and vegetation from within the town cemetery to prevent further damage to the grounds and to provide a safer environment for visitors. The cemetery is 1.1 acre in size. This portion of the project has been coordinated with the DCR Archaeologist and the Town of Washington Highway Department and Sexton. The following work will occur:

- Removing plantation trees from adjacent DCR property

- Felling dead trees along the entry path Cutting and removing all trees within the stonewalls of the cemetery open portion (leaving the flagged sugar maple saplings)
- Spot treatment of invasive species along West Branch Extension
- Equipment will remain outside of the cemetery and reach in over the stone walls to cut the trees.
- Hand cutting may occur within the cemetery
- The operator will immediately stop work and report any items found to DCR and the Town of Washington

**Norway Spruce Plantations:** This 24.4 acre stand currently has an average basal area/acre of 213 and an average of 178 live trees/acre. There are on average 52.3 dead trees/acre. Norway spruce makes up 90% of the stand, with black cherry, white ash, and yellow birch. Others over story species observed in the stand but not recorded on plot include sugar maple, red maple, white birch, and beech. The overstory quadratic mean diameter is 14.3 with measured trees reaching 30” diameter at breast height (dbh).

The understory of the stand is a mosaic ranging from dense regeneration to thick duff with no vegetation. The regeneration is dominated by Norway spruce, black cherry, and white ash with an average of 3274 stems/acre (Table 3). Shrub and understory species found in the stand were sparse and consist of mostly ferns and grasses.

Throughout the stand there is an average of 52.3 snags per acre with 40.7 being Norway spruce. On average there was 2472 cu ft/acre of coarse woody debris (CWD). Most of this CWD is a result of the mortality from wind events and root rot. This figure is well above the recommended minimum of 256 cu ft/acre of CWD as required in the Landscape Designation Guidelines, this amount is expected to increase post-harvest.

The Norway spruce outside the Day Use Area 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. Most of the understory is currently stocked with desirable species, remaining portions are 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 diversity 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 wind throw 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.

Table 2: Norway Spruce (Live trees greater than 5" dbh)

|                                      | All species | Norway spruce | Black Cherry | White Ash | Yellow Birch |
|--------------------------------------|-------------|---------------|--------------|-----------|--------------|
| Basal area (square feet/ac)          | 213         | 193           | 13           | 3         | 3            |
| Percentage of stand                  | 90          | 90            | 6            | 2         | 2            |
| Stems per unit area (stems per acre) | 178         | 144           | 16           | 1         | 17           |
| Quadratic Mean Diameter              | 14.3        | 15            | 12.3         | 17.9      | 6            |
| Relative Density                     | 113         | 104           | 6            | 1         | 3            |
| Sawlog Gross Total (bf/ac)           | 42740       | 40366         | 1394         | 981       | 0            |
| Cords Gross Total (cfs/ac)           | 93.8        | 84.4          | 6.6          | 2.3       | 0.4          |

Table 3: Norway Spruce (Live trees less than 5" dbh) Total stems/acre

| SPECIES       | 1            | 2             | 3            | 4            | TOTAL         |
|---------------|--------------|---------------|--------------|--------------|---------------|
| Norway Spruce | 513.5        | 641.9         | 256.8        | 0            | 1412.2        |
| Black Cherry  | 0            | 192.6         | 0            | 128.4        | 321           |
| White Ash     | 0            | 770.3         | 64.2         | 64.2         | 0             |
| Yellow Birch  | 0            | 0             | 0            | 0            | 898.7         |
| Striped Maple | 128.4        | 0             | 128.4        | 0            | 256.8         |
| Beech         | 128.4        | 0             | 0            | 0            | 128.4         |
| Sugar Maple   | 0            | 0             | 182.4        | 0            | 128.4         |
| Red Maple     | 64.2         | 0             | 0            | 64.2         | 64.2          |
| <b>TOTAL</b>  | <b>834.5</b> | <b>1604.8</b> | <b>577.7</b> | <b>253.8</b> | <b>3273.8</b> |

**Red Pine Plantations:** This 2.3 acre stand currently has an average basal area/acre of 184 and an average of 398 trees/acre. There are on average 31.4 dead trees/acre. Red pine makes up 59% of the living trees in the stand, filling the dominant and co-dominant levels of the canopy. An additional 32% of the stand consists of black cherry, white ash, and red maple in the co-dominant, intermediate and suppressed levels are black cherry, white ash, and red maple. There are small amounts of balsam fir, Norway spruce, sugar maple, and striped maple as well. The overstory quadratic mean diameter is 9.5" for all species and 13.8" for red pine. Individual trees were measured up to 18" dbh.

The understory of the stand is populated with an acceptable amount of advanced regeneration. This regeneration is dominated by striped maple, beech, red maple, black cherry, sugar maple and Norway spruce with an average of 924 stems/acre (Table 3). Shrub and understory species found in the stand were raspberry, ferns, grasses, and maple leaf viburnum.

Throughout the stand there is an average of 31.4 red pine snags per acre. On average there was 1133 cu ft./acre of coarse woody debris (CWD). Most of this CWD is a result of the mortality from wind events and root rot. This figure is well above the recommended minimum of 256 cu ft./acre of CWD as required in the Landscape Designation Guidelines, this amount is expected to increase post-harvest.

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 may occur. Retention of the native species as well as the well-stocked understory will leave the remaining stand fully stocked.

- **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.

Table 4: Red Pine (Live trees greater than 5" dbh)

|                            | All species | Red Pine | Black Cherry | White Ash | Red Maple | Stripe Maple | Fir | Sugar Maple | Norway Spruce |
|----------------------------|-------------|----------|--------------|-----------|-----------|--------------|-----|-------------|---------------|
| Basal area (square feet)   | 184         | 108      | 24           | 16        | 12        | 12           | 4   | 4           | 4             |
| Percentage of stand        | 100         | 59       | 14           | 9         | 6         | 6            | 2   | 2           | 2             |
| Stems per acre             | 394         | 95.7     | 82.5         | 72.6      | 43.3      | 52.2         | 20  | 7.3         | 20.4          |
| Quadratic Mean Diameter    | 9.5         | 13.8     | 7.3          | 6.4       | 7.1       | 6.5          | 6   | 10          | 6             |
| Relative Density           | 120         | 61       | 15           | 12        | 10        | 12           | 4   | 4           | 4             |
| Sawlog Gross Total (bd/ac) | 18850       | 18850    | 0            | 0         | 0         | 0            | 0   | 0           | 0             |
| Cords Gross Total (cbs/ac) | 54.3        | 41.3     | 5.4          | 2.7       | 2.5       | 0            | 0.6 | 1.1         | 0.6           |

Table 5: Red Pine (Live trees less than 5" dbh) Total stems/acre

| SPECIES       | <1'        | 1'-4.5'  | 4.5' – 1" dbh | 1" - 5" dbh | TOTAL      |
|---------------|------------|----------|---------------|-------------|------------|
| Red Pine      | 0          | 0        | 0             | 0           | 0          |
| Black Cherry  | 0          | 0        | 0             | 154         | 154        |
| White Ash     | 0          | 0        | 0             | 0           | 0          |
| Striped Maple | 0          | 0        | 0             | 231         | 231        |
| Red Maple     | 154        | 0        | 0             | 0           | 154        |
| Fir           | 0          | 0        | 0             | 0           | 0          |
| Norway Spruce | 77         | 0        | 0             | 0           | 77         |
| Sugar Maple   | 0          | 0        | 0             | 77          | 77         |
| Beech         | 231        | 0        | 0             | 0           | 231        |
| <b>TOTAL</b>  | <b>462</b> | <b>0</b> | <b>0</b>      | <b>462</b>  | <b>924</b> |

**Sale Layout and Harvesting Limitations:**

Within the Day Use Area and Town of Washington Cemetery all tree material (logs, pulp, and branches) must be removed. Non-merchantable portions may either be chipped and left on site for DCR use or removed and scattered throughout other portions of the project area at the Foresters discretion. In the remaining work areas, all trees felled will be processed or limbed outside the roadside buffer strip and within the stand leaving slash dispersed and under 2' in height.

**Project Access:** There are two options to access to the proposed project area. The first is from County Road in town of Becket, continuing on to Lenox Whitney Road the turning left onto West Branch Road Extension. The second option is from Washington Mountain Road in the town of Washington to West Branch Road then 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.



**Logging System Requirements:** The harvesting of these stands will be primarily accomplished with a cut-to-length harvester and forwarder to ensure protection of all advanced regeneration present in the stand. Red pine may be harvested in pole length with coordination between Forester and Operator to ensure regeneration is protected.

**Skid Road and Trails:** Main forwarder trails will be designated during the timber marking of the project area by the forester to reduce damage to existing regeneration. 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”. Restoration work within the Day Use Area will be submitted to the Washington Conservation Commission for review. These activities will include stump grinding, repair of accessible paths to picnic tables, and repair of lawn areas.

**Road and Trail Buffers:** Residual Basal area 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 that no more than 50% of the basal area may be cut at any one time. Coordination with the Town of Washington Tree Warden and Highway Department 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.

**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. The existing and abandoned fields labeled on the attached prescription map will only be traveled through on existing wood roads.

**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.

- Stump Grinding and lawn restoration within Day Use Area.
- Planting of native shade trees within the day use picnic area as needed.
- Invasive species control.

- Maintenance and/or restoration within the cemetery.

**Prescription Documentation:**

**Project Marking Guidelines:** Follow the directions below for marking instructions of sale and stand level features.

**Sale Level:**

1. Locate, flag (pink wetlands) and paint with red diagonal stripes the buffers and filter strips along all wetland and associated streams.
2. Locate, flag and paint with red diagonal stripes the remaining wooded project boundary line. This will not be done where the project boundary is a road.
3. Flag temporary layout of the primary skid trail network with orange flagging. Using orange paint mark small noncommercial stems or stems already marked for removal located along adjusted skid trails upon completion of marking (Orange).
4. Flag temporary layout of any unavoidable wetland and stream crossing with labeled orange flagging. Using Red paint mark and label each crossing upon completion of marking and any final adjustment to location.
5. Locate and mark perimeter of landing and group openings with one red diagonal stripes.
6. General tree marking guide:

| Marking type | Type of Tree       | Tally Method                  | Mark Type            |
|--------------|--------------------|-------------------------------|----------------------|
| Leave Tree   | Leave Tree         | As needed                     | Red Horizontal Line  |
| Cut Tree     | Cut Saw Log        | Individual tally DBH & height | Blue Horizontal Line |
| Cut Tree     | Cut Pulp/Cord Wood | Individual tally DBH          | Blue Dot             |
| Cut Tree     | Cut Live Cull Tree | No tally                      | Blue X               |
| Cut Tree     | Dead Tree Warning  | No tally                      | Blue X               |

**Day Use Area:** Remove all live and dead Norway spruce as well as other hazard trees within the stand.

1. All Norway spruce
2. Other trees with crown damage greater than 50%

All remaining trees will be protected from harvest to provide future shade trees within the picnic area.

**Roadside Strips:** Remove hazardous and/or dead trees within 100' of West Branch Road Extension.

The area within the road buffer may be reduced below the 50% basal area restriction for removal of trees with greater than 50% crown damage.

1. All dead trees
2. Other trees with crown damage greater than 50%
3. White ash greater than 10" dbh

**Norway Spruce:** Remove 30 to 80% of basal area within remaining project area based on existing ground conditions, including tree health, form and vigor using the following prioritized guide below. Residual density should remain higher in areas with wind firm acceptable growing stock. In areas of advanced regeneration 1/3 acre opening may be marked, these may not exceed a cumulative 5 acres in the stand. All other softwood species should be retained.

1. Norway spruce
2. Unacceptable \ Diseased white ash
3. Other unacceptable hardwood species
4. Other hazard trees along Day Use Area Access Road

Advanced regeneration of all species will be avoided and protected as much as possible to ensure a healthy new forest stand. Retention of mature seed producing red oak, small diameter white ash, red spruce and hemlock within the stand is desirable.

**Red Pine:** Remove all live standing red pine within the stand, retain all native trees which are not hazardous or contain structural defects. Road buffer may be reduced below the 50% basal area restriction for removal of red pine and other hazard trees. All other softwood species should be retained.

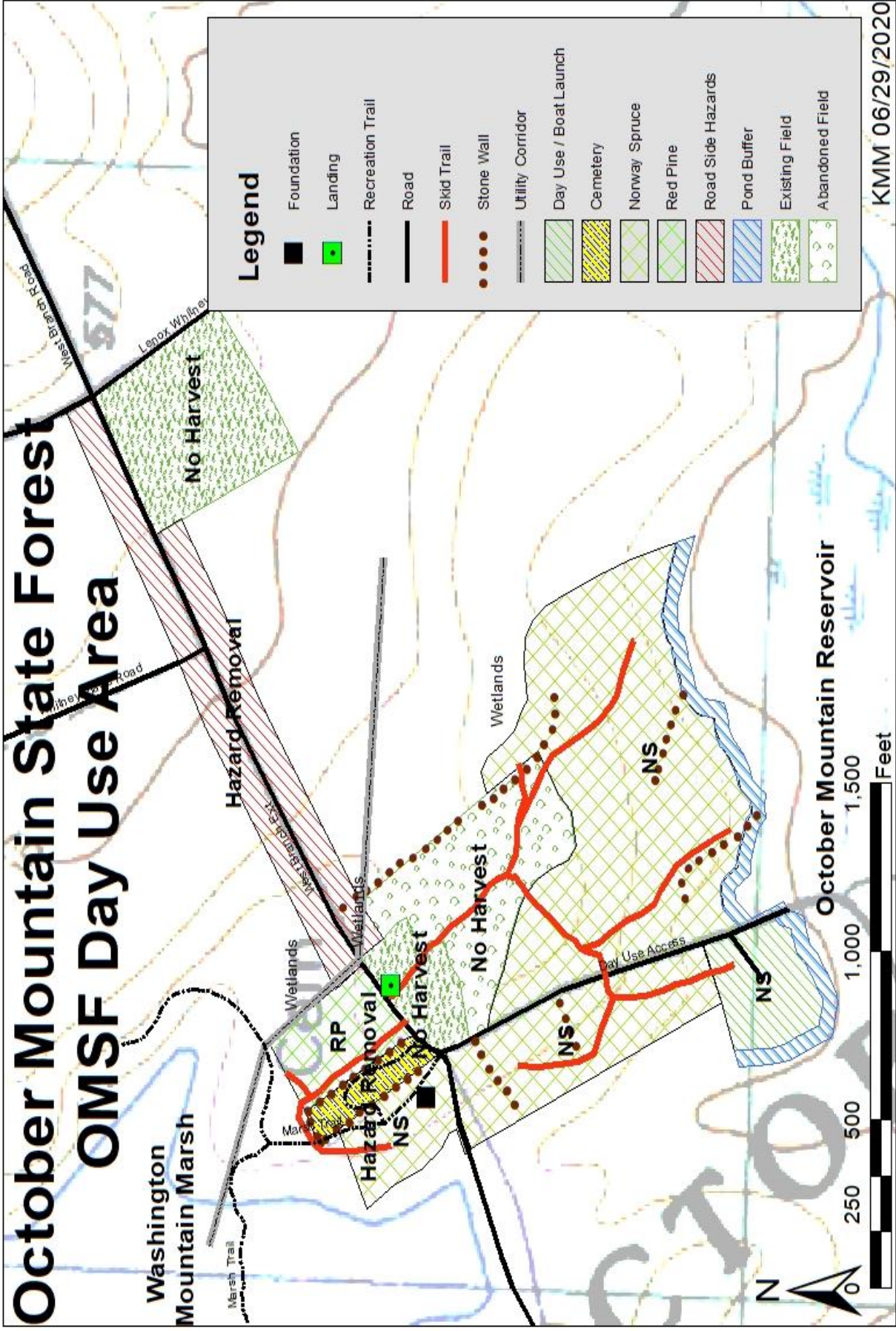
1. All red pine
2. Unacceptable \ Diseased white ash
3. Other unacceptable hardwood species
4. Other hazard trees along West Branch Rod Extension.

Advanced regeneration of all species will be avoided and protected as much as possible to ensure a healthy new forest stand. Retention of mature seed producing red oak, small diameter white ash, red spruce and hemlock within the stand is desirable.

Attached:

- Stand Map
- Locust Map

# October Mountain State Forest OMSF Day Use Area



### Legend

|  |                  |  |                       |
|--|------------------|--|-----------------------|
|  | Foundation       |  | Landing               |
|  | Recreation Trail |  | Road                  |
|  | Skid Trail       |  | Stone Wall            |
|  | Utility Corridor |  | Day Use / Boat Launch |
|  | Cemetery         |  | Norway Spruce         |
|  | Red Pine         |  | Road Side Hazards     |
|  | Pond Buffer      |  | Existing Field        |
|  | Abandoned Field  |  |                       |



October Mountain Reservoir

KMM 06/29/2020



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

