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| Project Name: Savoy Mountain State Forest Landscape Resiliency Project | Date Proposed: 3/1/2022 |
| Property Name: Savoy Mountain State Forest | Town(s): Savoy |
| Acres: 629 over 3 Years | Landscape Designation: Woodland |
| Forestry District: North Berkshire | Rec Complex/District: Mountain |
| Forester: Kevin Podkowka | FOTL/F&P Supervisor: Luke Labendz |

GENERAL LOT DESCRIPTION

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| **Acres** | **Forest Type** | | **Stand Description** |
| 225 | Overstory: Beech-Birch-Maple | Understory: Red Maple and Beech | Mature stands that have declined in health and vigor. Regeneration and herbaceous ground cover are minimal in both density and diversity. The most common species occurring include yellow birch, beech, red maple, sugar maple, and black cherry. White ash and red oak are scattered within various stands across the area. Minor components include white pine, hemlock, and white birch. |
| 302 | Overstory: Spruce-Fir | Understory: Norway Spruce and Mixed Northern Hardwoods | Most of this component occurs in declining Norway spruce plantations. In many places gaps have formed due to mortality and are being colonized by Norway spruce, white pine, hemlock, and mixed northern hardwoods. Other regeneration components that are occurring at much lower frequencies include red spruce and balsam fir. |
| 102 | Overstory: Other Minor Stand Types – Hemlock, Gray Birch – Red Maple, Wetlands, Red/White Pine | Understory: Variable and dependent | Stands are not larger than 15 acres and are generally 2 – 5 acres in size. None of these stand types will occur as a stand-alone project and will be incorporated into larger projects. |

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| Description of Project Area: Primarily mature forest with very little understory. Beech-Birch-Maple and other hardwood stands have extensive ice damage. Norway spruce plantations are declining and dying. Minimal species, age, or structural diversity in all project areas. Most of the area is recently abandoned subsistence agriculture, and the properties were purchased for habitat, biodiversity, and sustainable forestry. The higher elevations are prone to wind and ice damage |

# SOILS AND TOPOGRAPHIC FEATURES

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| Acres | Soil Type | Drainage Characteristic |
| 70 | Pillsbury Fine Sandy Loam | Poorly Drained |
| 60 | Berkshire-Marlow Association | Well Drained |
| 69 | Lyman-Tunbridge Association | Somewhat Excessively Drained |
| 48 | Tunbridge-Lyman Association | Somewhat Excessively Driained |
| 382 | Peru-Marlow Association | Moderately Well Drained |

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| Average Slope Percent:11-20% | Terrain Consistency: Variable |
| General Aspect: Varied | Terrain Position: Multiple |
| Description of Soils and Topographic Features: Approximately 80% of the project area has a moderate to severe rutting hazard and will require strict adherence to BMP’s and timing harvesting activities with stable soil conditions. | |

# WETLAND FEATURES

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|  | Present | Crossing | Work within Filter/Buffer |
| Wetlands: | Yes | Possible | N/A |
| Regulated Streams: | Yes | Possible | Possible |
| Non-Regulated Streams: | Yes | Possible | Possible |
| Vernal Pools: | No | N/A | N/A |
| Seeps: | Yes | N/A | N/A |

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| Description of Wetland Features: Management activities will occur up to the edges of wetlands to promote full sun, enhance pollinator habitat, and increase the diversity of wetland vegetation. Full delineation of wetlands, streams, stream buffers, and detailed work will be done on a project-by-project basis. |

CULTURAL RESOURCES

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|  | Present | At Risk | Work Within Buffer |
| Stone Walls: | Yes | N/A | N/A |
| Foundation / Cellar Hole: | Possible | Possible | Possible |
| Well: | Yes | Yes | Yes |
| Structures: | No | N/A | N/A |
| Cemetery: | No | No | No |
| Other: Heritage Breed Apple Trees | Yes | Yes | N/A |

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| Description of Cultural Resources: This proposal will be reviewed by the DCR archeologist and significant sites will be identified and protected as per their recommendations. Other includes heritage breed apple trees and surface ditching from either CCC or previous agricultural operations. |

NATURAL HERITAGE / WILDLIFE-HABITAT MANAGEMENT / OTHER RESOURCES

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| Natural Heritage Polygon: Yes | Natural Heritage Restrictions: Possible |
| Restrictions on Harvest Description: Determined on a project-by-project basis. Known species within the area include Bartram's Shadbush, Wood Turtle, Bailey's Sedge, Woodland Millet | |

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| Wildlife Specific Management: No | Targeted Species: N/A |
| Goals: N/A | |

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| Additional Habitat Management: Yes | Habitat Type: Fields/Pollinator Habitat |
| Goals: Maintain as pollinator habitat | |

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| SWAP: Yes | ACEC: No |
| BIO Map2: Yes | Public Water Supply: No |
| Additional Detail: Increase the occurrence and distribution of early seral forest habitat, reduce the amount of mature stage-class habitat. Release/increase the occurrence and distribution of soft mast producing vegetation in the area to supplement declining beech. | |

FOREST HEALTH / INVASIVE SPECIES

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| Forest Health Concern: Yes | Species Affected: White Ash, Norway Spruce |
| Management Considerations: High Mortality Rates | |

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| Plant Invasive Species Present: Yes | Species Present: Japanese Barberry, Multiflora Rose, Honeysuckle, Oriental Bittersweet |
| Management Considerations: Many are disturbance driven, pre-treatment or immediate post treatment will be required. | |

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| Insect Invasive Species Present: Yes | Species Present: Emerald Ash Borer |
| Management Considerations: Harvest white ash that shows indications of decline, EAB infestation, or Ash Yellows | |

CLIMATE ADAPTATION AND CARBON CONSIDERATIONS

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| **Action Type** | **Identified Issue** | **Action Description** |
| Resilience | USFS Tree Atlas identifies red spruce and balsam fir as likely to migrate north and out of the current range. Oak and hickory are anticipated to increase in occurrence and distribution as they move into areas previously occupied by trees requiring more moisture and cold. | The current mix of potential species are favored, and the maximum amount of diversity within that suite are promoted. The most vulnerable species and the most likely species to migrate are being biased for retention. Regeneration and preparatory cuts will focus on propagating red oak, balsam fir, and red spruce. Softwood species will receive the strongest preference in retention and propagation. Any tree species that are used for facilitated migration will mimic the role of a migrating species within the natural system. For example, planting Frasier fir for Balsam fir. |

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| Adaptive Management Strategies: Due to the high elevation species mixes, storm damage, mortality, and low carbon sequestration rates (most front lawns are sequestering more carbon per unit area than this forest) shorter rotations will be utilized. The shorter rotations provide for more regenerative opportunities; are appropriate for the primary species cover types that should be present, white birch and aspen; and can promote softwood regeneration. |

**INFRASTRUCUTRE / RECREATION/ AESTHETICS**

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| Access Road: Adams Road, Burnett Pond Road, New State Road, Bannis Road, Haskins Road, Cheshire Road | Ownership: Town |
| Condition: Various | Road Repair/Upgrade: Possible |
| Existing Landing: Yes | Landing Repair/Upgrade: Possible |
| Project Access and Landing Site: Various projects, main access routes listed above. | |

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| Existing Skid Trail Network: Possible | Pre-Harvest Repair/Upgrade: Possible |
| Skid Trail Network Description: Various areas, generally skid trail networks have been converted into hiking trails. | |

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| Shared Infrastructure: Yes | Road/Trail Names: Snowmobile Parking Lot |
| Management Considerations: High recreational use. | |

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| Official Trail Present: Yes | Condition: Various |
| Illegal Trail Present: Possible | Condition: Various, usually created by ATV’s |
| Existing Trail Head: Yes | Condition: Various |
| Recreation Facility: No | Condition: N/A |
| Recreation and Aesthetic Concerns/Opportunities: Hunting and wildlife viewing are anticipated to benefit the most from the planned projects. | |

SILVICULTURE

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| **Acres** | **Silviculture Type** | **Silviculture Description** |
| 142 | Variable-Density Thinning | Reduce stem densities of those trees that have poor health, form, or vigor. Also reduce the densities of less desirable species such as American beech and red maple in favor of more desirable species such as sugar maple, yellow birch, and black cherry. |
| 271 | Preparatory Cuts | Both conventional and irregular shelterwood systems to establish advance regeneration. The second treatment within these systems will be overstory removals. |
| 216 | Regeneration Cuts | Group Selection, clearcut, and clearcut with reserves will be utilized to regenerate stands that have become senescent. |

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| General Comments on Silviculture Proposed: Due to the mature stands in much of the project area advance regeneration is limited to canopy gaps. This is generally more pronounced within the Norway spruce plantations (Norway Spruce) than the northern hardwoods (Beech-Birch-Maple). A variety of gap sizes will be utilized up to 5 acres. |

PERMIT REQUIREMENTS / OPPORTUNITIES

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|  | Description |
| Seasonal Restrictions: Possible | Harvesting in frozen conditions may be required due to listed species and desired species for regeneration |
| Equipment Restrictions: Possible | Hand-felling is typically better at soil scarification while mechanized operations are better for unstable soils. Specific restrictions will be made on a project basis |
| Recreation Restrictions: Possible | Generally avoided but may be necessary in certain circumstances. |
| Green Docket: Possible | Any improvements that are not covered by a Ch. 132 cutting plan will require Green Docket approval. Determined on a project basis. |
| In-kind Services: Yes | Focus mainly on invasive vegetation treatments, restoration, and infrastructure improvements. |

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| Potential Local Economic Benefits: The sale of forest products within the community helps underserved and rural economies in many ways. Generally, firewood that is not suitable for commercial processing is sold locally as log length at a rate that is much cheaper than processed firewood. Road and trail improvements that are conducted as in-kind services utilize local resources through hauling and spreading of material. Improvements to hunting and fishing opportunities draw more sportsman to the area where they may buy food and other provisions from local sellers. |

**Map

Description automatically generated**

**Diagram, map

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**Map

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