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| Project Name:Geisler Swamp | Date Proposed: 3/3/2022 |
| Property Name: Otis SF | Town(s): Otis |
| Acres: 88 | Landscape Designation: Woodland |
| Forestry District: SBK | Rec Complex/District: Lakes District |
| Forester: Jeff Martin | FOTL/F&P Supervisor: Robert Mason |

MASSACHUSETTS FOREST ACTION PLAN GOALS

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| \* Increase resistance and resilience of trees and forests to mitigate and adapt to the effects of climate change |
| \* Cultivate and support partnerships with forestry and conservation Stakeholders |
| \* Other Part of the Landscape Scale Restoration Grant, with Partners |

GENERAL LOT DESCRIPTION

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| **Acres** | **Forest Type** | | **Stand Description** |
| 30 | Overstory: Hemlock/Hardwood | Understory: various shrubs including mountain laurel and blueberry. Beech and sugar maple seedlings/saplings dominate. | A mixed stand with mostly large diameter hemlock, white pine, Norway spruce and a few red pines. Hardwoods of various size classes dominated by red oak, sugar maple, red maple, and black birch. |
| 8 | Overstory: White pine/Red pine | Understory: native shrubs, beech dominates the understory. | A CCC plantation of white pine, red pine and Norway spruce, mostly large diameter. Approximately 10-20% of stand is hardwood of medium to large diameter including red oak, sugar maple and black cherry. |
| 30 | Overstory: Beech/Birch/Maple | Understory: understory shrubs including mountain laurel, viburnums, and blueberry. Beech dominates understory. | Northern hardwood stands of mixed species dominated by large diameter black cherry, beech and red oak. Conifers in the stand include hemlock and white pine. Some smaller diameter hardwoods, mostly beech in the midstory level result of past harvesting. |
| 20 | Overstory: White pine/Hemlock | Understory: various understory shrubs and beech and some white pine regeneration. | Mixed stand with large diameter white pine and hemlock. Hardwoods, mostly red oak, comprise approximately 15-20% of the stand. |

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| Description of Project Area: The 88-acre Geisler Swamp project is in the uplands of Upper Spectacle Pond and bisected by the wetlands of Spectacle Pond Brook and state route 23. This part of Otis State Forest housed a CCC work camp in the 1930’s and the chimney of the old cook’s house is still standing. The remaining plantations of white pine, red pine and Norway spruce are in decline, especially the red pine which has many dead trees. Softwood stands, including the plantations, cover two thirds of the forest area with northern hardwood stands and oak covering the rest. A CCC road and a snowmobile trail are in the area along with a mintained parking area off route 23 that is maintained by staff at Tolland State Forest. |

# SOILS AND TOPOGRAPHIC FEATURES

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| Acres | Soil Type | Drainage Characteristic |
| 39 | Pob Berk. | Gently sloping, very deep and poorly drained soils on foot slopes of drainage ways and in slightly concave areas of glacial till uplands. Permeability and available water capacity is moderate |
| 48 | PmC Berk. | Peru Marlow association soils are very deep, well drained soils on the sides and crests of glacial till uplands. Permeability and available water capacity are moderate. The seasonal high water table can cause drainage issues in the winter and spring. |

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| Average Slope Percent:6-10% | Terrain Consistency: Variable |
| General Aspect:Varied | Terrain Position: Lower Slope |
| Description of Soils and Topographic Features: Soils are deep, moderately well drained with some stoniness. Area is mostly level with slopes of 5-10% and lots of bordering wetlands associated with Spectacle pond brook. | |

# WETLAND FEATURES

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

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| Description of Wetland Features: Wetlands and beaver swamps associated with Spectacle Pond Brook bisect the project area from north to south. Northern boundary of project borders a forested wetland, and another forested wetland is just south of route 23. |

CULTURAL RESOURCES

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|  | Present | At Risk | Work Within Buffer |
| Stone Walls: | Yes | No | Yes |
| Foundation / Cellar Hole: | Possible | Possible | Possible |
| Well: | Possible | Possible | Possible |
| Structures: | No | No | No |
| Cemetery: | No | No | No |
| Other: Click or tap here to enter text. | Choose an item. | Choose an item. | Choose an item. |

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| Description of Cultural Resources: Stone walls are mostly along perimeter of project area, and it is uncertain if there are any cellar holes present. There are remnants of the old CCC camp including partially collapsed chimney other structures are gone. |

NATURAL HERITAGE / WILDLIFE-HABITAT MANAGEMENT / OTHER RESOURCES

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| Natural Heritage Polygon: No | Natural Heritage Restrictions: No |
| Restrictions on Harvest Description: Click or tap here to enter text. | |

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| Wildlife Specific Management: Yes | Targeted Species: American woodcock, Ruffed grouse |
| Goals: provide young forest habitat near bordering wetlands | |

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| Additional Habitat Management: Yes | Habitat Type: Young Forest |
| Goals: Diversify Forest stage Structure | |

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| State Forest Action Plan: Yes | State Wildlife Action Plan: Yes |
| ACEC: No | Public Water Supply: No |
| BIO Map2: Yes | Current Resource Management Plan: Possible |
| Additional Detail: Click or tap here to enter text. | |

FOREST HEALTH / INVASIVE SPECIES

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| Forest Health Concern: Yes | Species Affected: Red Pine, Ash, Norway Spruce, Hemlock |
| Management Considerations: Salvage all red pine and ash and remove declining spruce and hemlock | |

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| Plant Invasive Species Present: Possible | Species Present: Click or tap here to enter text. |
| Management Considerations: attempt to eradicate if present | |

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| Insect Invasive Species Present: Yes | Species Present: EAB, red pine scale, HWA |
| Management Considerations: salvage where appropriate | |

CLIMATE ADAPTATION AND CARBON CONSIDERATIONS

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| **Action Type** | **Identified Issue** | **Action Description** |
| Resilience | Mature even aged stands in decline | Encourage species diversity and manage for variable age classes |
| Resilience | Diseased red pine plantations are failing | Convert non-native/off-site plantations to native forest types |

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| Adaptive Management Strategies: regenerate native species and diversify stand structure |

**INFRASTRUCUTRE / RECREATION/ AESTHETICS**

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| Access Road: route 23 and Spectacle Pond Rd. | Ownership: state, DCR |
| Condition: good | Road Repair/Upgrade: Possible |
| Existing Landing: Yes | Landing Repair/Upgrade: Possible |
| Project Access and Landing Site: three landings needed, 2 north of 23 and one south | |

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| Existing Skid Trail Network: Yes | Pre-Harvest Repair/Upgrade: Possible |
| Skid Trail Network Description: some existing skid trails | |

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| Shared Infrastructure: No | Road/Trail Names: Click or tap here to enter text. |
| Management Considerations: Click or tap here to enter text. | |

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| Official Trail Present: Possible | Condition: old snowmobile trail, not maintained |
| Illegal Trail Present: Possible | Condition: Click or tap here to enter text. |
| Existing Trail Head: No | Condition: Click or tap here to enter text. |
| Recreation Facility: No | Condition: Click or tap here to enter text. |
| Recreation and Aesthetic Concerns/Opportunities: roadside frontage, slash considerations | |

SILVICULTURE

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| **Acres** | **Silviculture Type** | **Silviculture Description** |
| 88 | shelterwood | Shelterwood with group openings |

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| General Comments on Silviculture Proposed: remove declining species and regenerate stand, beech control |

PERMIT REQUIREMENTS / OPPORTUNITIES

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|  | Description |
| Seasonal Restrictions: Yes | Bordering wetlands and seasonal high-water table |
| Equipment Restrictions: Possible | Portion of the project may require mechanized equipment |
| Recreation Restrictions: Possible | May need to close road for operations |
| Green Docket: No | Click or tap here to enter text. |
| In-kind Services: Yes | Road improvements on DCR |

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| Potential Local Economic Benefits: This project will provide sustainable local wood products and reduce hazard trees along Route 23. |

**Attachments:**

**Locus Map**

**Proposal Map**

Map

Description automatically generated

Map

Description automatically generated