

Shaft 12 lot

■ 97 acres

■ Red Pine, Oak\pine, oak hardwood types. ■ 0.3 – 3.5 acre openings Harvest primarily red pine and poorly formed white pine Vernal pools Partially constructed railroad bed

FY2017 Proposed Forestry Project HA-17-10



Gate 25 lot

- 94 acres
- Hemlock/ Hardwood forest type
- Harvest primarily declining hemlock, trees with poor stem structure and areas with advance regeneration
- Cultural resources
- vernal pools
- Unusual species (spleenwort)



Rattlesnake Hill lot

■ 76 acres

- Red pine, white pine / hemlock, and red oak forest types
- Harvest most of the red pine plantation. In other forest types openings up to 2 acres in size will be located in declining hemlock, groups of poorly formed stems or areas with advance regeneration. No treatment in areas dominated by healthy well formed oaks.
- Acidic rocky outcrop natural community on top of hill will be enhanced by the reduction of the white pine component.

Pepartment of Conservation - Division of Water Supply Protection - Office of Watersbed Management FY2017 Proposed Forestry Project NS-17-16





Harris Hill lot

■ 80 acres

- White pine and red pine forest types.
- Red pine and low quality white pine will be harvested in groups up to 2 acres in size releasing advance regeneration
- NHESP habitat
- Area heavily used by walkers and road bicyclists.

Bepartment of Conservation - Division of Water Supply Protection - Office of Watershed Masagement **FY2017 Proposed Forestry Project** NS-17-19 Quabbin Reservoir Reservation Proposed Forestry Lot Review OCR Gale Protected Bird Site Cultural Site NHESP Priority Habitats of Rare Species - Cultural Site: Railroad NHESP Certified Vernal Pool Mainr State Route Town Paved & Gravel Ros Proposed Lot Ope All-Weather Access Road Proposed Lot DCRW Property Rounda Open Wate Cart road Wetland Gravel Pit CEI Plot Rare Plant Watershed Boundary Vegetation Type

Blackington Road lot

■ 57 acres

- White pine / hemlock and white pine/ hardwood forest types.
- Forest openings up to 2 acres in size will be created in areas poorly formed white pine, declining hemlock and areas with advance regeneration.



Gate 4 lot

■ 80 acres

- White pine / hardwood, oak/ hardwood and red maple forest types.
- Openings up to 2 acres in size will be created in areas dominated by poorly formed stems or advance regeneration.
- Vernal poolCellar holes

😫 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management **FY2017 Proposed Forestry Project** PE-17-1 Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate · Protected Bird Site Cultural Site Locus Map B Barway Cultural Site: Railroad. C. NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernal Pool Major State Route Skid Trail Town Paved & Gravel Ros Dotantial Vernal Dool Proposed Lot Openi All-Weather Access Road Proposed Lot Seeps & Springs Seasonal Access Road DCRW Property Boundary Cart med CEI Piot Open Water Gravel Pit Wetland Rare Plant Vegetation Type Quable Secureolr and

Griswold Brook lot

□ 113 acres

- Red pine, white pine and oak/ hardwood forest types.
- Removal of the 10 acre declining red pine plantation is planned, pending approval of the DCR Commissioner.
- Releasing advance regeneration in openings up to 2 acres is also planned

FY2017 Proposed Forestry Project PR-17-6-A & B

😫 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management

Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Locus Ma B Barway Cultural Site: Railroad, C NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernal Pool Major State Route Skid Trail Town Paved & Gravel Ros Potential Varnal Rool Proposed Lot Openin All-Weather Access Road Proposed Lot Seasonal Access Road DCRW Property Boundary Onen Water Cart road CFI Plot Con Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type



Observatory -South lot

■ 29 acres

- Red pine/ white pine plantation forest type.
- Declining red pine will be harvested in openings up to 15 acres pending approval of DCR Commissioner.

🚱 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management 🔺 **FY2017 Proposed Forestry Project** PR-17-8-A & B Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Barway Cultural Site: Railroad, C NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossin Major State Route Shiel Tenil Town Paved & Gravel Ros Proposed Lot Ope All-Meather Access Road Proposed Lot Seasonal Access Road DCRW Property Boundary Onen Water Cart mad CFI Plot Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type

Observatory lot

■ 6 acres

- Red pine/ white pine plantation
- One 5 acre opening is planned to salvage declining red pine.



Mount Pleasant Road lot

- 13 acres
- Red pine plantation
- Openings up to 5 acres are planned to salvage declining red pine.
- Black bear rub trees in section B

Bepariment of Conservation - Division of Water Supply Protection - Office of Watershed Management **FY2017 Proposed Forestry Project** PR-17-12-A & B Quabbin Reservoir Reservation Proposed Forestry Lot Review CR Gate Protected Bird Site Cultural Site NHESP Priority Habitats of Rare Species Cultural Site: Railroad, C NHESP Certified Vernal Pool Stona Wall OCR Verified Vernal Pool Major State Route Watland Cros Potential Vernal Pool Town Paved & Gravel Roa Proposed Lot Ope Pool not vernal All-Weather Access Road Processed Lot Seasonal Access Road DCRW Property Boundary Open Water Cart road Wetland Gravel Pit CEI Plot Rare Plant Watershed Boundary Vegetation Type

Gate 20 lot

- 11 acres
 Red pine plantation
 Openings up to 5 acres are planned to salvage declining red pine.
- Cellar hole

🚱 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management 🔺 **FY2017 Proposed Forestry Project** PR-17-15 Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Locus Map Barway NHESP Priority Habitats of Rare Species Cultural Site: Railroad, C Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernal Pool Major State Rout Skid Trail Town Paved & Gravel Ros Potential Varnal Rool Proposed Lot Openi Pool not vernal All-Weather Access Road Proposed Lot Seasonal Access Road DCRW Property Boundary Onen Water Cart mad CFI Plot Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type

e Path: W/GISiProjects/Forestry_Section/ProposedHarvestLots/QREnvRev2017 msd

Egypt Brook lot

- 73 acres
- Mixed oak, red oak and oak/ pine forest types.
- This project proposes about 10 acres of thinning (primarily in the red oak type) as well as openings up to 2 acres (primarily in the mixed oak and oak/ pine types).
- Openings will be placed in areas with poorly formed stems and/or advance regeneration.
- Stream crossing

FY2017 Proposed Forestry Project PR-17-16

🚱 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management 🔺

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Gate 40 lot

- □ 158 acres
- Hemlock, mixed oak and white pine forest types.
- Openings up to 2 acre are proposed in areas with declining hemlock and/or poorly formed stems of oak and pine.
- Some thinning between openings is also proposed.
- Vernal pools

😫 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management **FY2017 Proposed Forestry Project** PT-17-6 Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Locus Map B Barway Cultural Site: Railroad, C NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernai Pool Major State Route Skid Trail Potential Varnal Rool Town Paved & Gravel Ros Proposed Lot Openin Pool, not vernal All-Weather Access Road Proposed Lot Stream Seasonal Access Road DCRW Property Boundary Open Water Cart mad CFI Plot Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type

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Gate 37 lot

- 76 acres
- White pine, oak / hardwood, hemlock/ hardwood and red pine forest types.
- Openings up to 2 acres are proposed for areas with declining red pine and hemlock and white pine /oak areas with poor form/ vigor or advance regeneration
- Stream/ wetland complex functioning as vernal pool.

Pepartment of Conservation - Division of Water Supply Protection - Office of Watersbed Management FY2017 Proposed Forestry Project PT-17-10

Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Locus Map B Barway Cultural Site: Railroad, Ca NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernal Pool Major State Route Skid Trail Potential Varnal Rool Town Paved & Gravel Ros Proposed Lot Openin Pool, not vernal All-Weather Access Road Proposed Lot Stream Seasonal Access Road DCRW Property Boundary Onen Water Cart mad CFI Plot C Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type



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Birch Drive lot

■ 35 acres

- Oak/ hardwood and hemlock/ hardwood forest types.
- Forest health concerns include, hemlock wooly adelgid, hemlock elongate scale, nectria canker, beech bark disease and ash decline.
- Openings up to 2 acres are proposed for areas with forest health issues and/ advance regeneration.

🚱 Department of Conservation - Division of Water Supply Protection - Office of Watershed Management 🔺 **FY2017 Proposed Forestry Project** PT-17-14 Quabbin Reservoir Reservation Proposed Forestry Lot Review DCR Gate Protected Bird Site Cultural Site Locus Ma B Barway Cultural Site: Railroad. C. NHESP Priority Habitats of Rare Species Landing Site NHESP Certified Vernal Pool Wetland Crossing DCR Verified Vernai Pool Major State Route Skid Trail Town Paved & Gravel Ros Proposed Lot Open All-Weather Access Road Proposed Lot Seasonal Access Road DCRW Property Boundary Onen Water Cart road CFI Plot C Wetland Gravel Pit Watershed Boundary Rare Plant Vegetation Type Cases Post

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Pelham Red Pine Salvage Lot 3

- FY-16 proposal
- Originally proposed as openings up to 5 acres

 Now proposed as openings up to 16 acres pending DCR Commissioner approval



STAC recommendations

- 1. Produce illustrated plain-language summaries of Land Management Plans to increase their accessibility to the general public
- 2. Explore new approaches and continue to enhance source water protection on the Wachusett Reservoir watershed
- 3. Re-start active forest management using methods that eliminate the geometric patch cut approach in favor of irregular-shaped regeneration openings and specialized thinning techniques. Consider creating both Early Successional and Old Growth conditions on limited areas.
- 4. Monitor the effectiveness of Best Management Practices using established protocols and post time-sequence photography online
- 5. Monitor hydrologic and water quality effects of forest management above and below, and before and after harvesting operations

From Here Forward: DWSP responses to STAC report

The DCR Division of Water Supply Protection, Office of Watershed Management

- Will produce accessible LMP summaries, per recommendations
- Is continuing to build watershed protection for Wachusett Reservoir
- Is continuing to refine lot review process and public awareness, via public meetings, online postings, and on-site tours and signage
- Plans to restart forest management primarily using small, irregularly shaped regeneration openings, with green retention in larger openings
- Is working to implement USDA FS Best Mgt Practices monitoring protocol and will establish photo points on some harvest lots, and post images online
- Is committed to a greater level of routine water quality monitoring within harvest areas, and is refining both short and long-term monitoring programs
- Has released Terrestrial Invasive Plants Management Strategy, online @ <u>http://www.mass.gov/eea/agencies/dcr/water-res-protection/watershed-mgmt/plans.html</u>