Massachusetts Department of Conservation and Recreation Division of Water Supply Protection, Office of Watershed Management Forest Management Project Summary

Project Title:

| DWSP Harvest Permit Number: 3160 |
|--|
| DCR Forest Cutting Plan File Number: 204-11152-1 |

Site Information

| Watershed: Quabbin | Town(s): New Salem |
|--|--|
| Acres: 50 | Nearest Road: Cooleyville, Gate 17 |
| Natural Heritage Atlas overlap?: Yes | Public Drinking Water Supply Watershed?: Yes |
| Forest Types: White Pine/Red Pine | ACEC?: No |
| Soils: Gneiss derived rock sandy loam | |
| Wetland Resources: No | |
| Vernal Pools present or within 200 feet of harvest?: | No |

Harvest Information

| Harvest Start Date: June, 6, 2019 | Harvest End Date: June 30, 2021 |
|-----------------------------------|----------------------------------|
| Number of Wetland Crossings: None | Number of Stream Crossings: None |

Best Management Practices Applied

| Stream Crossings | None |
|------------------------|------|
| Filter Strips | None |
| Wetland Crossings | None |
| Harvesting in Wetlands | None |

| DWSP Forester supervising this harvest |
|--|
| Name: Derek Beard |
| Forester License # 14 |
| Phone #: 617-780-0631 |
| Email: derek.beard@mas.gov |

ACEC: Area of Critical Environmental Concern

NARRATIVE

General Description/Forest Composition/History:

This watershed forestry project covers 50 acres of White/Red Pine forest (all the red pine is plantation) located near the old UMASS observatory site on the east side of the gate 17 Road (Prescott Rd).

All areas have been thinning once and is some cases twice. First thinnings were completed in the 1980s. Beginning in the early to middle 2000s red pine, throughout the watershed, began to rapidly die from infestation of the red pine scale; a microscopic insect that pierces the needle disrupting photosynthesis leading to death. The primary goal of the harvest is to remove the plantations, improve timber quality of native species and release/spur growth of a young forest age class.

Site Selection:

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large legacy trees). In addition, the forest should be vigorous; actively growing and regenerating. Forest in this condition is ideally suited to be resilient to and quickly recover from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes. Sufficient advanced regeneration coupled with an underrepresented young forest layer merits some regeneration harvesting.

Silvicultural Objectives:

Harvest purpose is to ameliorate further red pine mortality by removing the plantations, improve timber quality of native species (primarily white pine) and release/spur growth of a young forest age class. Achievement of these objectives should lead to a more diverse resilient forest over the long term.

Cultural Resources:

Stone walls are the most prominent cultural resource in the project area. There are also two old field stone wells that have been identified.

Wildlife/Rare or Endangered Species:

Maintaining and/or enhancing habitat is a high priority when planning and executing watershed forest management projects. As such, retaining live and dead snags, trees that show sign of use by wildlife for nesting/denning, scenting and foraging is a priority. Falling in a natural heritage bubble, the project area was reviewed by MA Natural Heritage and Endanger Species program and deemed to have no impact on the specie(s) within the bubble.

FIGURES

Figure 1. Forest Cutting Plan

| Notice of Intent L pter 132 – The Fo tices Act, 304 CM ctive Date: 3/15/16) | orest Cu IR 11.00 | I.G.L. Itting | an 。 | 2 | For DCR Use Only: File Number 204-11152-19 Date Recht Eurliest Start 4-14-14 River Basin 4-14-14 River Basin 4-14-14 River Basin 4-14-14 Ger, Obj. 17 | | |
|--|----------------------|------------------|---------|--|--|--|--|
| Location | | | | | Landowner | | |
| Tirwn <u>New Salem</u> Road <u>Cooleyville Ro</u> Acres <u>50</u> Vol. NBF <u>501</u> Vo | Рюр | used Start | | Name DCR - Div. of Water Supply Protection Multing Address 485 Ware Rd. Town, State, Zig Bekhartown, MA D1007 Pisone 413-323-6921 | | | |
| Plan Preparer | | | | | Ch6161A61BStew*Case # FSCCRCR_Holder | | |
| Name <u>Derek Baard</u> Addres <u>s 485 Ware Rd.</u> | | | | | Licensed Timber Harvester** | | |
| | 80-0631 | MA 010 | 07 | | Name King Timber Henristing Address KS Regard Hill Rd Yown State, Zip Hutberdoon, MA 01415 | | |
| Type of Preparer Fores | | | | | Phone 978-928-4422 | | |
| *Mass. Forester License | : A <u>14</u> | | | | Mass. Lie. Elárvester # 2020-262/128 **Třisinforvation mey besoppied attention fran is opposed | | |
| rditax location or organized by a second sec | SC-1 | SC-2 | sc-3 | SC-4 | Indiana: Iocation on Inter Forest Type (see pg 2) | | |
| Existing Statelute | + | i – | | | Acres to be lfarvested | | |
| Type of Dotturn | - | <u> </u> | | | Resid. Baral Area | | |
| Bank Eleight (B) | | | | | (>50395) | | |
| Stubilization | i | | | | | | |
| | igs | | | | Service Forester Comments | | |
| Wetland Crossin | | | | | | | |
| | MAC-1 | WC-I | WC-3 | ₩C.4 | Sent The requires revenion of | | |
| hidilate keatum on map | | 1 . | : | | H Soul The 220" DBH/ACR. ON | | |
| Inditate Restore on map | | | | | | | |
| hidilaas kestuun oli map | | Ser. | | | been murked we such - AML | | |
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| Indi, ale Reation of map Length of Conssing Nitigation Stobilization | F§-1 | 1/9-2 | FS-3 | 1:5-4 | | | |
| Indiaac keatum on map Length of Quissing Nilgation Sinhi.ization Flitter Strips | FS-1 | 1/9-2 | F\$-3 | 184 | | | |

Products to be Harvested*

| Species | MIs/7Cids | | MERCE |
|--------------|-----------|-----------------|-------|
| White Phile | 10B | Red Maple | 1 |
| lied Plan | 407 | Suga Maple | . 9 |
| Pitch Pine | | Red Onk | 3 |
| Hemlock | | Hisek Onk | |
| Sprace | | White Oak | |
| Other Silwd. | | Other Hidsed | |
| White Ash | 31 | Total MINE | 561 |
| Beech | | Cordword (Cib) | 148 |
| White Dirch | | SW Pulp (Pons) | 835 |
| B & Y Birch | 1 | IfW Pulp (Tons) | |
| Bluck Cherry | 2 | Chips (Tons) | |

*Note: Volumes indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. Mbf = thousand board feet.

Cutting Standards

| ladirate location on map | ST-1 | \$1.2 | 81-3 | ST |
|--------------------------|-------|--------|-------|-----|
| Forest Type | WP/RP | WP/ RP | WP/RP | WP/ |
| ർവല | 6 | · 29 | 6 | ź |
| Landowner Objective | UT | LT | LI | LT |
| Designation of Trees | CT | CT | СТ | GT |
| Type of Cur | 57 | SE | 51, | SA |
| Source of Regeneration | AD | AD | AD | AD |

Landowner Signature

andowner

The most importants information on a cutting plan is the Lancowner's objective, as this will determine which trees will be harvested and which will remain; this decision will also determine the Informe condition of the forest for decades to enner. After having real the Massachuseus Forest Cutting Plan Information Sheet on page one, indicate your objective by checking the appropriate box below.

LT - Long-term Parest Management Planned management of the forest to achieve one or mare of the

following objectives: produce innuediate and maximize long-term income, entence wildlife liability, improve recreational opportunities, protect soil and water quality, or produce forest specialty products. ST - Short-term Harvest

Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan information Sheet, and an aware of inty (our) management options. I (we) hereby cartily that I (we) have the legal authority to carry but the operation described above.

I (we) coldify flag I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two handred feet of the area to be harvested.

I (we) understand that the valuences in this plaw have not been independently verified by the service forestor -

upon approval and will report final values and values to the Director or higher agent if the final figures differ from those reported.

| Determin | nation and Status 204 | 11152-19 | Final Report and Comments |
|-------------------------------|-------------------------|-------------------------|---|
| Cuting Plan Nignmure of Se | | 14:21 6-A-19 Date | I hereby certify that the affirer duary local Forest Criting Plan and all relevant statutes have been substantially complied with Determined the state of the state |
| Extension | IC 20 . / | s Set. For. Ints. | |
| American | Δρρ I Dis I Δρβ ? Dia 2 | | |

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BM

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Narrative Page (Effective Date: 3/15/16) Use this page to provide further explanation or if

Other (OT) was used in any category on pages 3 or 4.

| Landowner | DCR - Div. of Water Supply Protection | | | | |
|-------------|---------------------------------------|--|--|--|--|
| Town | New Salem | | | | |
| File Number | 204.11152.19 | | | | |

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

The intent of this timber harvest is to substantially reduce the red pine component of these mixed softwood (white pine/red pine) plantations. In past decades, red pine, a species native to the upper mid-west, has died throughout the watershed; falling prey to a scale insect and diplotia fungus. Although mostly alive, significant mortality has struck the southern portion of the project(stands designated as salvage "SA"). Stand two is a DCR approved large opening with green tree retention of mainly while pine and black birch. Live and dead trees with cavity.den. bird peck (excavation) sign (know as snags) will be retained throughout the project area. Ultimately, the project should lead to future forest that is healthier and more diverse in composition and structure.

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

| | Describe Trees to be Cut | | | Describe Trees to be Left | | | % BA/AC | |
|-----------|--------------------------|------|---------|---------------------------|------|---------|---------|-----|
| Stand No. | Species | Size | Quality | Species | Size | Quality | Cut | Lef |
| | | | | | | ******* | | |
| | | | | | | | | |
| | | | | | | | | ļ |
| | | | | | | | | |

| | Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4. | | | |
|-----------|--|--|--|--|
| Stand No. | Source of Regeneration (ex. AD, SE) | How will Regeneration be obtained/protected? If using AD - Desoribe the species present and how the regeneration will be protected If using SE - Desoribe the source of the seed and the number of seed trees/acre | | |
| | | | | |
| | | | | |
| | | | | |
| Stand No. | | Desired Future Condition | | |
| | Describe what the s | stand is expected to look like five years from the harvest, including the condition of the overstory & underst | | |
| | | | | |
| - H | | | | |
| | | | | |

pg 5 of 5







DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581 p; (508) 389-6300 | f: (508) 389-7890 M A S S . G O V / M A S S W | L D L | F E

Andrew Rawcliffe Department of Conservation and Recreation 40 Cold Storage Drive Amherst, MA 01004

| Cutting Plan No. | 204-1152-19 | |
|--------------------|------------------|--|
| NHESP Tracking No. | 19-38707 | |
| Town | New Salem | |
| Road | Cooleyville Road | |
| Landowner | DCR-DWSP | |
| Preparer | Derek Beard | |
| Date | June 14, 2019 | |

Dear Andrew,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife ("the Division") has reviewed the above-referenced Forest Cutting Plan ("the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(5)). Based on details of the Plan and Information in the NHESP database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in Take (as defined in 321 CMR 10.02) of plant or animal species protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Rebekah Zimmerer at (508) 389-6354 or Rebekah.zimmerer@state.ma.us.

Sincerely,

V.,

Jonathan V. Regosin, Ph.D. Deputy Director

Cc: New Salem Conservation Commission

MASSWILDLIFE

| | | · |
|--|-------------------------|---|
| FILE # 204 1152 - 19 | CATE | ous place within the area in which the harvesting operation is to take place. R. DWSP 435 Ware Rel Belcherhown, MA Oldorf in accordance with the (Name of Owner) (Address) (Name of Owner) (Address) (Name of Owner) (Address) (Name of Owner) (Address) (Name of Owner) (Name of State Parks and Recreation (Name of State Parks and Recreation) (Name of State Parks and Recreation (Name of State Parks and Recreation) (Name of State Parks and |
| COMMONWEALTH OF MASSACHUSETTS Department of Conservation and Recreation Division of State Parks and Recreation | UTTING PLAN CERTIFICATE | Post this in a conspicuous place within the area in which the harvesting operation is to take place. This certifies that XR-NUSP 485 Ware Rel Belcher AnnAn, MA Oldorf in acc (Address) provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst EO with the Dept and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the Gale 17 lot, New Soler Approval Date 6/19/19 Director's Agent Andrew RowCLiffe Director's Agent Andrew RowCLiffe DIR Phone No. 617.549.1677 |
| dcf COMMONWE Department of Division of State | FOREST CUTT | Post this in a conspicuous place w This certifies that DCR-DW provision of M.G.L. Chapter 132, and Recreation, Division of State Gale (7 Jot, Neu boleyvilk 20 Jot, Neu boleyvilk 20 Jot, Neu Director's Agent Andreu DCR Phone No. 617-549 . |