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April 19, 2019

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : East Branch North River Restoration
PROJECT MUNICIPALITY : Colrain
PROJECT WATERSHED : Deerfield River
EEA NUMBER : 16001
PROJECT PROPONENT : Connecticut River Conservancy
DATE NOTICED IN MONITOR : March 20, 2019

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project will stabilize eroded river banks, enhance aquatic habitat and restore riparian buffer areas along a 6,100-linear foot (lf) (1.16 miles) section of the East Branch of the North River.

Three sections of the bank totaling 1,150 lf will be stabilized using a series of wood buttresses extending 8 ft into the river from the toe of the bank and up the bank to approximately the Ordinary High Water mark (OHW). The buttresses will be comprised of intertwined horizontal and vertical logs that will be driven into the bank and river bottom and lateral logs connecting adjacent buttresses. Rootwads at the end of the logs will be used to anchor adjacent logs. Spaces within the buttresses will be filled by natural material, including tree branches, boulders and gravel collected at the site. The logs will be prepared from locally harvested hemlock trees with intact rootwads to enhance aquatic habitat.

In-stream habitat enhancement will include 30 structures comprised of combinations of hemlock logs with rootwads and boulders. The in-stream structures include log sills consisting of one or more partially-buried logs placed transverse to river flow, isolated logs with rootwads placed either parallel or transverse to the river flow, and boulder supported log jams and boulder clusters. The structures will add or enhance riffles, which provide aquatic habitat and help restore natural streambed sediment transport, provide habitat under a variety of flow conditions and increase sediment-sorting. The structures will be placed in clusters along the river to minimize the area of streambed impacted by construction vehicles.

The project will enhance 3,665 lf (0.7 miles) of the riparian zone adjacent to the river. A 25-ft wide area will be planted with either trees and shrubs to provide a forested buffer adjacent to the river where a forest canopy is lacking or native grasses and herbaceous plants to provide a herbaceous riparian zone for floodplain areas adjacent to forested areas. An approximately 320-ft long section of a farm road will be moved away from the river and two culverts conveying flows from an intermittent stream will be removed. A stabilized rock ford will be provided across the relocated section of the farm road in place of one culvert; the other section of intermittent stream will be restored and stabilized upon removal of the culvert.

Project Site

The project site includes a 1.16-mile long section of the East Branch of the North River. The northern end of the site is located approximately 0.5 miles south of the Vermont Border and just upstream of a bridge carrying Route 112 (Jacksonville Road) across the river. The river is bordered by farmland interspersed with woodlands.

The Franklin Regional Council of Governments' (FRCOG) report *A Watershed-based Plan to Maintain the Health and Improve the Resiliency of the Deerfield River Watershed*, published in 2015, identified the North River as among the watersheds most impacted by Hurricane Irene in 2011, including severe erosion of streambanks and agricultural fields. According to the Federal Emergency Management Agency's (FEMA) National Flood Insurance Rate Map (FIRM) (2501130005B, effective July 2, 1980), the project area is located within the 100-year floodplain (Zone A) for which no base flood elevation has been established.

The East Branch of the North River is a Cold Water Fishery. According to the Natural Heritage and Endangered Species Program (NHESP), the site is located within mapped *Priority* and *Estimated Habitat* of the Longnose Sucker (*Catostomus catostomus*) and Ocellated Darner (*Boyeria grafiana*), two species state-listed as Special Concern. As noted below, NHESP has identified conditions under which the work must proceed in order to avoid a Take of rare species.

Environmental Impacts and Mitigation

Potential environmental impacts of the project include alteration of 1,150 lf of Bank, 120 sf of Bordering Vegetated Wetlands (BVW), 55,340 sf of Land Under Water (LUW), 91,625 sf of Bordering Land Subject to Flooding (BLSF) and 91,745 sf of Riverfront Area. These resource areas provide habitat for rare species.

The project is intended to enhance aquatic habitat value, stabilize eroded stream banks, improve the riparian buffer along the river and add resiliency to the river from the effects of flooding. Impacts associated with the project are temporary and will help achieve the project's goal of restoring the river.

Permitting and Jurisdiction

The project is undergoing MEPA review and requires the filing of an ENF because it will require an Agency Action and it meets the review thresholds at 301 CMR 11.03(3)(b)(1)(b), alteration of 500 lf of inland bank, and 301 CMR 11.03(3)(b)(1)(f), and alteration of ½ or more acres of any other wetlands (BVW, LUW, BLSF and Riverfront Area). The project requires a Section 401 Water Quality Certificate (WQC) from the Massachusetts Department of Environmental Protection (MassDEP).

The project requires an Order of Conditions from the Colrain Conservation Commission (or, on appeal only, a Superseding Order of Conditions from MassDEP). It requires authorization from the U.S. Army Corps of Engineers (ACOE) under the General Permits for Massachusetts.

Because the Proponent is not seeking Financial Assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to land alteration, wetland and water quality.

Review of the ENF

The ENF provided a detailed description and plans of existing and proposed conditions, analyzed alternatives, and identified potential impacts and mitigation measures. It reviewed modifications to the design of the project that were made in consultation with NHESP and the Division of Fisheries and Wildlife (DFW) to enhance the habitat value of the project for Longnose Suckers and other aquatic species and minimize construction impacts.

The Proponent should consult comment letters from MassDEP and NHESP for guidance on preparing the Notice of Intent and WQC application for the project. MassDEP's recommendations include delineating and mapping all wetland resource areas and documenting the consistency of the project design with the principles and techniques included in the Natural Resources Conservation Service's (NRCS) *Stream Restoration Handbook*. NHESP issued a "Conditional No Adverse/Conditional No Take" determination for the project on August 8, 2018. The determination includes a time-of-year (TOY) restriction that limits activities affecting wetland resource areas to the period from July 1 through October 1, requires that the work take place under the supervision of a fluvial geomorphologist and specifies that only native species should be planted.

Alternatives Analysis

The ENF reviewed a No Action alternative and included an analysis of alternative designs to achieve the project's goal of restoring the river segment. Without addressing erosion, the near-vertical banks will collapse and destabilize the riparian buffer and agricultural uses along the top of the bank.

Alternatives to the use of wood buttresses to stabilize the banks include riprap bank armoring or boulder deflectors. Bank armoring, especially with smooth, flat surfaces such as riprap, do not provide habitat or reduce shear stress in the stream channel and were not considered for use in this project. Boulder deflectors stabilize the bank by directing flow away from the bank and promoting slackwater deposition along the toe. Because of the river's meandering geometry and shifting course, boulder deflectors would be expected to be less effective than the continuous treatment along the toe of the bank provided by the wood buttresses proposed in the Preferred Alternative.

The ENF reviewed alternative construction methods for installing the in-stream habitat features. One alternative would include the use of cofferdams to dewater the stream channel by redirecting streamflow away from the work area. This technique would minimize impacts to water quality caused by the suspension of sediments into the river. This method was not selected because redirecting flow would impact a larger area of the stream for a longer period of time. The Preferred Alternative includes installation of in-stream features using an excavator in normal stream flow conditions. Impacts will be minimized by installing the logs and boulders quickly and within the same general area that can be easily accessed from land.

The Preferred Alternative will prevent further erosion of the stream bank, enhance the habitat value of the river and riparian buffer and restore sediment transport characteristics of the river. Design refinements adopted after consultation with state and federal agencies include incorporating log sills to enhance Longnose Sucker habitat, reducing the number of in-stream habitat structures from 47 to 30 and installing them in clusters to minimize construction impacts, reducing the horizontal and vertical extent of wood buttresses to minimize impacts on the bank and anchoring logs and boulders without the use of cables.

Construction

Construction is expected to take nine months over two seasons. The Proponent should implement measures to minimize the potential for releases of oil and/or other hazardous materials by requiring that construction equipment entering the river use biodegradable hydraulic fluid and through the development and implementation of a spills contingency plan. The project must comply with the Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54. I refer the Proponent to comments from MassDEP regarding construction-period requirements regarding air quality, spills prevention and solid waste management. The Proponent should consult with MassDEP regarding the disposal of any concrete debris generated by the project. The Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00) if oil and/or hazardous materials are found during construction.

Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and demonstrated that the project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable. Based on the information in the ENF and after consultation with State Agencies, I find that no further MEPA review is required at this time. Remaining issues can be addressed through the local, state and federal permitting and review processes.



April 19, 2019

Date

Matthew A. Beaton

Comments received:

- 04/09/2019 Natural Heritage and Endangered Species Program (NHESP)
- 04/09/2019 Massachusetts Department of Environmental Protection (MassDEP) – Western Regional Office (WERO)

MAB/AJS/ajs



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581

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MASS.GOV/MASSWILDLIFE

August 8, 2018

Colrain Conservation Commission
Box 31
Colrain, MA 01340

Andrew Fisk
Connecticut River Watershed Council
15 Bank Row
Greenfield, MA 01301

RE: Applicant: Andrew Fisk, Connecticut River Watershed Council
 Project Location: **Franklin County Registry of Deeds:**
 Book 06833, Page 170, 18 Jesse Wood Lane
 Book 06552, Page 341, 438 Jacksonville Road
 Book 01334, Page 295, 310 Jacksonville Road

Project Description: Construction of log sills, boulder clusters, isolated logs and boulder-supported log jams; planting of a riparian buffer; removal of two culverts

NHESP File No.: **15-35056**

DEP Wetlands File No.: WE 136-0079

401 Water Quality Cert.: Not available at this time

Documents Reviewed:

- NOTICE OF INTENT, Ecological Restoration Limited Project Checklists. Narrative with photographs and attachments (13 pages)
- EAST BRANCH NORTH RIVER RESTORATION PROJECT. Dated 5/10/18, 15 sheets. Prepared by Field Geology Services and Woidt Engineering, herein the "Site Plans"

Dear Commissioners & Applicants:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with Site Plans (as noted above) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.58(4)(b) & 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18; "MESA").

The Division has determined that the proposed project is located within mapped *Priority* and *Estimated Habitat* of the Longnose Sucker (*Catostomus catostomus*) and Ocellated Darner (*Boyeria grafiana*), two species state-listed as Special Concern. These species and their habitats are protected pursuant to the WPA and the MESA. Fact sheets for these species can be found on our website, www.mass.gov/nhesp.

MASSWILDLIFE

A fluvial geomorphic and habitat assessment was conducted by Field Geological Services for the Franklin Regional Council of Governments. Field Geological Services identified stream reaches that lacked high quality cold water fisheries habitat and poor geomorphic function and bank stability. The initial proposed design for this reach of the North Branch, therefore, included significant in-water structure intended to create habitat complexity and features associated with salmonids. However, due to the presence of state-listed species, the design was modified to avoid full-reach depth and channel reworking by structures, while prioritizing bank stability. In addition to the proposed work along river-facing Bank and in-water, the project includes the restoration of a 35 foot wide riparian buffer and the relocation of an existing farm road, which will result in the removal of two small culverts.

According to the NOTICE OF INTENT, ECOLOGICAL RESTORATION LIMITED PROJECT CHECKLISTS submitted to the Division, the project will alter 1,150 linear feet of Bank, 120 square feet of Bordering Vegetated Wetland, 91,625 square feet of Bordering Land Subject to Flooding, and 91,745 square feet of Riverfront Area. The project also proposed to dredge 73 cubic yard of Land Under Waterbodies and Waterways. The work will occur on portions of 18 Jesse Wood Lane, 438 Jacksonville Road, and 310 Jacksonville Road (collectively, the "Site").

We note that the project will be submitted for a 401 Water Quality Certificate (MA Department of Environmental Protection) and, potentially a 404 Permit (U.S. Army Corps of Engineers). The Division remains available for consultation throughout the permitting process and **shall receive copies of all final plans with a narrative detailing how any changes are consistent with this determination.**

Based on the information provided and the information contained in our database, it is the opinion of the Division that this project, as currently proposed, **must be conditioned in order to avoid adverse effects to the Resource Area Habitats of state-listed wildlife species (10.58(4)(b), 10.59) and must be conditioned in order to avoid a prohibited Take of state-listed species (321 CMR 10.18(2)(a)).** The Project must comply with the following conditions:

1. **Pre-Work Inspection:** **Between 14 and 21 days prior to the start of Work**, a Division-approved fluvial geomorphologist (FGM) shall conduct an onsite inspection to determine (1) if the field conditions are properly reflected on the Site Plans and (2) if the proposed work can be implemented as shown on the Site Plans without increased impacts to the Resource Areas (as defined in 310 CMR 10.02). Within 24 hours of this inspection:
 - a. The FGM shall certify in writing to the Division that all pertinent geomorphic features, water elevations, and other onsite conditions have not substantially changed and are accurately reflected in the Site Plans; **OR**
 - b. The FGM shall alert the Division in writing to any substantial change in onsite conditions and propose revisions to the Site Plans or submit narratives that comply, to the greatest extent practicable, with the design principles underlying the proposed project. The Division reserves the right, at its sole discretion, to modify conditions of this authorization necessitated by any Division-approved change to the Site Plans.

Following the submittal of this information, the Division will issue a Pre-Work Authorization.

2. Confirmation of Site Conditions: Following receipt of the Pre-work Authorization and within twenty-four (24) hours of the start of work, the FGM shall conduct another inspection to ensure that no high-flow events have resulted in any substantial movement of the pertinent geomorphic features of the work area. If substantial movement has occurred, the FGM shall contact the Division for further evaluation prior to the start of any additional work.
3. Recordation: Prior to the start of Work, and following receipt of the Pre-Work Authorization, the Applicant shall (a) record this letter and the final Site Plans, incorporating any changes required per Condition 1, in the Franklin County Registry of Deeds so as to become a record part of the chain of title for the Site, and (b) provide the Division with proof of said recordation.
4. Limit of Work: All Work on the Site shall conform to the approved Site Plans. Any changes to the proposed Limit of Work shown on the Site Plans shall require additional review and written approval from the Division.
5. Timing of Work: All Work shall occur only from July 1st through October 1st while this determination remains valid.
6. Fluvial Geomorphologist: All Work shall be under the direct supervision of the Division-approved FGM. The FGM shall be onsite for the duration of construction to direct the installation of all structures, placement and installation of all rootwads and tree materials, and any non-live stakes/plantings. The FGM shall direct the final grades and excavation of the floodplain shelf.
7. Trees/Logs: Trees used within the bank structures shall be a minimum of fifteen (15) feet long with a minimum diameter at breast height of 12 inches. To the greatest extent possible the tree species used shall be Hemlock, Black Locust or other rot-resistant species.
8. Machinery: Any machinery entering the river is required to use biodegradable hydraulic fluids. Work shall be staged to minimize travel of machinery back and forth along the river bottom.
9. Planting or Seeding of Project Site: All planting and seeding shall be composed of native plant species in accordance to *The Vascular Plants of Massachusetts: A County Checklist, First Revision* (Dow Cullina, M., B. Connolly, B. Sorrie, and P. Somers. 2011. MA NHESP DFW). Available from Massachusetts state archive at:
<http://archives.lib.state.ma.us/bitstream/handle/2452/120973/ocn747431427.pdf?sequence=1>
10. Geotextile Fabric: Geotextile use on the Site is limited to that shown on the Site Plans. If additional slope stabilization is necessary, the Applicant shall contact the Division for written approval.
11. The Division maintains the right to require an immediate cessation of Work, in whole or in part, should it be determined that the final approved Site Plans inaccurately reflect Site conditions, standard construction methodologies, or practical construction considerations sufficient to require a change to the Site Plans.

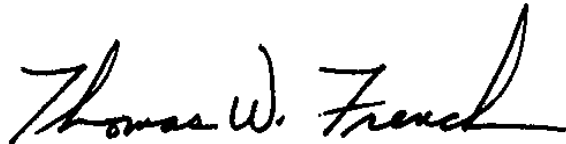
Provided these conditions are adhered to, and are included in any approving or amended Orders of Conditions issued by the Conservation Commission, the project will not result in an adverse impact to the resource area habitats of state-listed wildlife species pursuant to the WPA and will not result in a prohibited Take pursuant to the MESA. A copy of the final Order of Conditions shall be sent to the NHESP simultaneously with the applicant as stated in the Procedures section of the WPA (310 CMR 10.05(6)(e)).

We note that all work is subject to the anti-segmentation provisions (321 CMR 10.16) of the MESA. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the Site Plans may require an additional filing with the Division pursuant to the MESA. This determination is valid for five years from the date of issuance. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

This authorization does not relieve the Applicant or any other person of the necessity of complying with all applicable federal, state, or local statutes, ordinances, bylaws, or regulations, including but not limited to those administered by the US Army Corps of Engineers and the MA Department of Environmental Protection.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Misty-Anne Marold, Senior Endangered Species Review Biologist, at (508) 389-6356 or misty-anne.marold@state.ma.us.

Sincerely,

A handwritten signature in black ink that reads "Thomas W. French". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Thomas W. French, Ph.D.
Assistant Director

cc: William Dornbusch & Jana Standish, 18 Jesse Wood Lane
Carolyn Cromack, 438 Jacksonville Rd
Curtis & Aleta Cromack, 310 Jacksonville Rd
Michael Leff, Ecological Connections
MA DEP Western Region



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

April 9, 2019

Matthew A. Beaton, Secretary
Executive Office of Energy & Environmental Affairs
Massachusetts Environmental Policy Act Office
Alex Strycky, EEA No. 16001
100 Cambridge Street, 9th Floor
Boston, MA 02114-2524

Re: East Branch North River Restoration,
Colrain

Dear Secretary Beaton,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office (WERO) appreciates the opportunity to comment on the Expanded Environmental Notification Form (EENF) submitted for the proposed East Branch North River Restoration, Colrain (EEA# 16001). Although MassDEP staff did not attend the on-site MEPA scoping session, staff have met on site with the proponent during a pre-permitting meeting. The applicable MassDEP regulatory and permitting considerations regarding wetlands, waterways, air pollution, solid waste, and waste site cleanup are discussed.

I. Project Description

The project is proposed as stream restoration, habitat enhancement and establishment of riparian buffers along a section of the East Branch of the North River in Colrain, a Cold Water Fishery. The lack of riparian buffer has resulted in unstable banks subject to erosion, degradation of habitat and loss of agricultural land. The project length is approximately 1.16 miles commencing 0.5 miles downstream of the Vermont border. The proposed work includes emplacement of both hard (boulders) and soft (woody material) to decrease flow velocities and stabilize banks. In addition, a farm access road located proximal to the river will be relocated away from the bank; two existing culverts will be removed, and the bank will be stabilized.

The project is being partially funded through USDA, Natural Resources Conservation Service.

The project is subject to an ENF because it requires a State Agency Action and exceeds a MEPA threshold of alteration of 500 linear feet of bank. The project requires a 401 Water Quality Certification, review by Natural Heritage and Endangered Species, and a Section

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

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404 review by Army Corps of Engineers. The project also requires an Order of Conditions (OOC) from the Colrain Conservation Commission. The project may also be subject to the local Zoning Bylaw.

Environmental impacts associated with this project include:

- 1,150 linear feet of Bank,
- 55,340 s.f. of Land Under Water (LUW),
- 91,745 s.f. of Riverfront Area (RA),
- 120 s.f. Bordering Vegetated Wetland (BVW), and
- 91,625 s.f. of Bordering Land Subject to Flooding (BLSF)

II. Required Mass DEP Permits and/or Applicable Regulations

Wetlands & Waterways

310 CMR 10.00

314 CMR 9.00

Air Pollution

310 CMR 7.00

Solid Waste

310 CMR 16.00

Bureau of Waste Site Cleanup

310 CMR 40.000

III. Permit Discussion

Bureau of Water Resources

Wetlands & Waterways

The scope of the project requires that a Notice of Intent (NOI) be filed with the Colrain Conservation Commission; prior to commencement of project construction, a final Order of Conditions (OOC) must be issued by the Commission. In addition to the Wetlands Protection regulation, Colrain has a local Zoning Bylaw which the project may be applicable.

If a NOI is filed prior to completion of the MEPA process, the Conservation Commission will be advised to hold any hearing open until the Secretary's Certificate is issued, and all comments are received from other State and Federal permitting agencies, as appropriate. MassDEP will not issue any permits until the MEPA process is completed.

The Site appears to contain Bank (Inland), Bordering Vegetated Wetland, Land Under Water Bodies and Waterways (LUWW), Bordering Land Subject to Flooding (BLSF) and Riverfront Area. Significant pre-permitting guidance has been provided and MassDEP will continue to review the proposal work during permitting.

Resource Delineation

If not already conducted, all delineation of jurisdictional resource areas should be accomplished through flagging in the field, surveying, and then presentation on a scaled site plan. Resource areas should be delineated and depicted on the site plans and each

resource area alteration individually quantified and tabulated. Polygons of impacts to each resource area should be reflected on the site plans submitted for permitting.

Ecological Restoration Project Provisions

The Proponent has characterized the project as an *Ecological Restoration Limited Project* per 310 CMR 10.53(4)(e)(1). As such, the applicant should provide the following credible evidence, specific to the Project Site (as defined at 310 CMR 10.04), in order for MassDEP to determine whether the proposed work qualifies as an Ecological Restoration Project:

- Describe in detail the specific anthropogenic influence(s) that the applicant cites, with specific credible evidence of such influences;
- Describe the nature of observed degradation and/or destruction of each cited "Interest Identified in MGL c. 131, § 40" ["Interest", per 310 CMR 10.01(2)] with supportive credible evidence;
- Describe how the proposed Ecological Restoration Project will specifically improve one or more of the Interests.

401 Water Quality Certification

As proposed, this project will require a Clean Water Act Section 401 Water Quality Certification (WQC). To the extent the project has been described in the ENF, the project includes stabilizing sediments in place, emplacement of boulder clusters, log sills, isolated logs and log jams. Any structures proposed for the practicably navigable channel, such as boulder clusters, should be informed by natural and representative river bed conditions up and downstream of the project site. If boulder clusters do not exist naturally at this river reach, they should be eliminated from the design.

MassDEP advises the Proponent to review and include maintenance best management practices reviewing soft methods, well as bank hardening methods of bank stabilization. The Proponent is advised to review the plans and include revisions, where applicable to comply with and be based upon the principles, methods, techniques, modeling, and requirements of the Natural Resources Conservation Service (NRCS) Stream Restoration Design Handbook, National Engineering Handbook Part 654 (Released September 20, 2007). Specifically, proposed design should include techniques and methods described within the following references:

- *Technical Supplement 14I, Streambank Soil Engineering, Part 654 National Engineering Handbook;*
- *Technical Supplement 14J, Use of Large Woody Material for Habitat and Bank Protection, Part 654 National Engineering Handbook;*

The following techniques and methods, as derived from the above Technical Supplements, should be evaluated, starting from the lowest elevation of the project and ascending to the highest elevation:

- Coir fascines for "toe protection"
- Brush revetments for "toe protection"
- Rootwad revetments for "toe protection"
- Fascines
- Live pole cuttings
- Brush layer benches
- Geotextile "vegetated reinforced soil slopes" (VRSS) and interstitial plantings.

The installation and design of “toe protection” techniques and methodologies should include written confirmation of the ability of selected methodologies to significantly contribute to localized aggradation (as defined in *Terminology in Stream Restoration Design Handbook, National Engineering Handbook Part 654*). Other methodologies and techniques described in the two (2) above-referenced Technical Supplements may be considered based upon the results of a written alternatives analysis.

Bureau of Air and Waste

Air Quality

Construction and Demolition Activities

The construction and demolition activity must conform to current Air Pollution Control Regulations. The proponent should implement measures to alleviate dust, noise, and odor nuisance conditions that may occur during the construction and demolition activities. Such measures must comply with the MassDEP’s Bureau of Waste Prevention Regulations 310 CMR 7.01, 7.09, and 7.10.

Construction Period Air Quality Mitigation Measures

The Proponent has acknowledged that all non-road engines shall be operated using only ultra-low sulfur diesel (ULSD) with a sulfur content of 15 ppm.

Asbestos

Although there is currently no indication of asbestos on-site, if any portion of the proposed project involves removal or abatement of regulated asbestos-containing material, an asbestos removal notification (AQ04) must be sent to MassDEP using the asbestos notification form ANF 001, at least 10 working days prior to initiating work. The Proponent should be aware that some cement pipe may contain asbestos. The handling and removal of asbestos from a facility and/or facility component must adhere to the requirements at 310 CMR 7.15. For disposal, the Proponent is referred to 310 CMR 19.061.

Solid Waste

The proponent shall properly manage and dispose of all solid waste generated by this proposed project pursuant to 310 CMR 16.00 and 310 CMR 19.000, including the regulations at 310 CMR 19.017 (waste ban).

The BUD regulations at 310 CMR 19.060 establish levels of assessment for four categories of beneficial use. These regulations would be applicable to reuse of any materials generated by this project that would otherwise be considered solid waste.

The project proponent is advised that construction activity at the site must comply with both Solid Waste and Air Quality Control regulations. The appropriate Solid Waste provisions addressing this include M.G.L. Chapter 40, Section 54.

Bureau of Waste Site Cleanup

There are no identified disposal sites governed by the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E, and the Massachusetts Contingency Plan (310 CMR 40.0000), within the immediate project site.

If however, soil and/or groundwater contamination is encountered during construction activities, the proponent should retain a Licensed Site Professional (LSP); the MCP details procedures to follow for the parties conducting work. MassDEP staff are available for guidance.

Spills Prevention

A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential on-site activity releases. In addition, due to the work being conducted in a Cold Water Fishery, the Proponent should consider non-petroleum based lubricants in the construction equipment.

IV. Other Comments/Guidance

As noted previously, the submittal is not detailed enough for permit level review but MassDEP has provided guidance and will continue to work with the Proponent. MassDEP has adequate authority through the 401 WQC permitting processes and through review of the NOI submitted to the local Conservation Commission, to determine the potential environmental impacts from the project and to ensure that all feasible measures are taken to avoid, minimize and mitigate any negative impacts as necessary.

If you have any questions regarding this comment letter or pre-permitting, please do not hesitate to contact Catherine Skiba at (413) 755-2119.

Sincerely,

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Michael Gorski
Regional Director

cc: MEPA File