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May 24, 2021

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

PROJECT NAME : Maintenance Dredging of Upper Leyden Glen Reservoir
PROJECT MUNICIPALITY : Leyden
PROJECT WATERSHED : Deerfield
EEA NUMBER : 15780
PROJECT PROPONENT : City of Greenfield
DATE NOTICED IN MONITOR : April 23, 2021

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 change **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Notice of Project Change (NPC), the project change consists of changes to the dredge methodology and timeframe for completing the work. Specifically, the project change consists of dredging approximately 50,000 cubic yards (cy) of sediment from the Upper Leyden Glen Reservoir over an approximately 10-month period. All dredging will be performed with the reservoir fully drawn down via the low-level outlet of the reservoir dam. The original project did not involve drawing down the reservoir. A baseflow channel will be constructed in an approximately 0.24-acre area which will be maintained throughout drawdown. Excavation equipment will access the dewatered pond via the East Glen access road located east of the dam. Sediment is anticipated to dewater in place, although some sediment may require additional dewatering before trucked to the disposal site.

Upper Leyden Glen Reservoir supplies approximately 25% to 30% of the Town of Greenfield's public drinking water supply. The purpose of the project is to maintain water supply capacity in the reservoir and remove organic sediment near the water intake structure which may be affecting the quality of the water supply. The project is anticipated to begin in June 2021 with dredging being performed July through September 2021, and reservoir refill beginning in October 2021 and in March 2022, for a 10-month project timeline.

Original Project Description

In the original project, dredging was proposed in the wet using a clamshell bucket, dragline or hydraulic dredge; therefore not requiring the drawdown of the pond. Additionally, the original project involved dredging 50,000 cy of sediment over a five-year period (approximately 10,000 cy/year). The project change proposes to dredge all of the 50,000 cy within an approximately 10-month period. The NPC indicated that the cost of the originally proposed phased dredging in the wet was higher than anticipated. The project changes will reduce the cost of the project and allow it to proceed within the budget allotted for the project.

The project received a Certificate on the original Environmental Notification Form (ENF) on December 22, 2017 which determined no additional MEPA review was required.

Project Site

The 15.1-acre project site consists of the 7.4-acre reservoir with the remainder of the site consisting of forested upland and an access road. The project site is located in the Town of Leyden and is owned and operated by the Town of Greenfield as a public drinking water supply. The project area is bounded by Greenfield Road to the west, and forested area to the north, south and east. The reservoir is fed by Glen Brook and East Glen Brook from the north. The project area does not include mapped *Priority and/or Estimated Habitat* identified in the Natural Heritage and Endangered Species Program's (NHESP) *Massachusetts Natural Heritage Atlas (14th Edition)*.

Environmental Impacts and Mitigation

Environmental impacts associated with the original project included impacts to 808 lf¹ of Bank, 88,165 sf of Land Under Water (LUW) and 81,383 sf of Riverfront Area. The project required approximately one acre of upland clearing associated with the dewatering area and access between the Reservoir and the dewatering area.

The project change will impact an additional 3,492 lf of bank (4,300 lf total) and an additional 5.38 acres (7.4 acres total) of LUW associated with drawdown and dredging. The project change requires clearing an approximately 0.2-acre area for dewatering, which represents an 0.8-acre reduction in clearing compared to the original project. The project impacts are temporary in nature.

Measures to avoid, minimize and mitigate Damage to the Environment include erosion control measures, installation of a dewatering containment barrier, and maintaining a baseflow channel.

Permitting and Jurisdiction

The original project was subject to MEPA review and preparation of an ENF pursuant to 301 CMR 11.03(3)(b)(1)(c) and 11.03(3)(b)(3) because it requires a State Agency Action and will result in the alteration of 1,000 or more sf of outstanding resource water and dredging of 10,000 or more cubic yards of sediment. The project required a 401 Water Quality Certification from the Massachusetts Department of Environmental Protection (MassDEP) which was issued on June 19, 2018. The project required a Section 404 General Permit from U.S. Army Corp of Engineers (ACOE).

¹ The Certificate on the ENF listed 80 lf of impacts to Bank which was an error.

The project change will continue to exceed these thresholds and will also exceed the ENF threshold at 301 CMR 11.03(3)(b)(1)(f) because it involves the alteration of more than ½ acre of any other wetland. The project change requires an amended 401 WQC from MassDEP. The project change continues to require a Section 404 General Permit from U.S. Army Corp of Engineers (ACOE). A National Pollutant Discharge Elimination System (NPDES) General Permit “General Permit” for Discharges from Construction Activities will be obtained from the U.S. Environmental Protection Agency (EPA).

The project is not receiving Financial Assistance from the Commonwealth. Therefore, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of any required or potentially required State Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations.

Review of the NPC

The NPC provided a description of existing and proposed conditions, preliminary project plans, and identified measures to avoid, minimize and mitigate project impacts. The NPC included an alternatives analysis which identified a No-Action Alternative, a Passive Sediment Removal Alternative, Hydraulic Dredging without Draw-down Alternative (original project) and the Preferred Alternative (as described above). As described in the NPC, the No-Action Alternative was dismissed because it does not address the capacity and water quality concerns related to the accumulated sediment in the reservoir which will eventually compromise Greenfield’s water supply, as well as contribute to worsening aquatic habitat conditions. The Passive Sediment Removal involves opening the dam’s low-level outlet each year to allow some sediment to be passively released during a partial draw down of the reservoir. However, as described in the NPC, this alternative will not address the full amount of sediment that requires removal because the low-level outlet does not have enough capacity to allow the full amount of sediment to be released downstream and therefore was dismissed. As noted above, the originally reviewed project involved hydraulically dredging the sediment and therefore would not require the pond draw down. However, as noted in the NPC, this alternative was dismissed due to the cost of the project. Additionally, the original project required a significantly larger dewatering area than the Preferred Alternative. In the Preferred Alternative, almost no dewatering is anticipated because the reservoir will be fully drawn down and the sediment will be allowed to dry directly in the reservoir. However, some sediment may still need dewatering. The area set up for dewatering in the Preferred Alternative is approximately 0.2 acres which consists of overgrown brush (no tree removal). For the original project, the dewatering area required clearing approximately 1 acre, including both brush and trees. As described in the NPC, the Preferred Alternative was selected as it will address the capacity and water quality concerns related to the accumulated sediment in the reservoir, reduce project costs, and reduce tree clearing.

Wetlands and Water Quality

The project will result in temporary impacts to Bank and LUW. As noted in comments from MassDEP provided on the original project and asserted by the Proponent, activities by a Public Water Supply system to maintain a public water supply source are exempt from permitting under the Wetlands Protection Act, M.G.L. Chapter 131, Section 40. The project will require an amended 401 Water Quality Certification from MassDEP. Due to the scale of the proposed changes in the project, a comprehensive request for amendment must be submitted to MassDEP including a new sampling and

analysis plan. The NPC indicated that the dredged sediment is assumed to be clean based on the mostly undeveloped and forested contributing drainage area and based on the results of sediment testing done in 2018. Dewatered dredge material will be analyzed again as required at 314 CMR 9.07(2). If contaminated sediments are identified, a Soils Management Plan must be developed and approved by MassDEP. I refer the Proponent to comments from MassDEP for additional guidance on this issue.

Construction

A Stormwater Pollution Prevention Plan (SWPPP) will be developed prior to beginning construction. The project must comply with Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. c.40, s.54. To reduce construction-period air emissions, I encourage the Proponent to require its construction contractors to use equipment manufactured to Tier 4 federal emission standards which are the most stringent emissions standards available for off-road engines. If equipment is not available in the Tier 4 configuration, the Proponent should consider equipment with after-engine emissions controls, such as oxidation catalysts or diesel particulate filters.

Comments on the ENF from the Massachusetts Board of Underwater Archeological Resources (BUAR) indicate that this project is not likely to affect any submerged cultural resources. However, if any unknown archeological resources are encountered during the course of the project, the Proponent should limit adverse impacts and contact BUAR immediately.

Conclusion

Based on a review of the NPC and comments received, and in consultation with State Agencies, I have determined that the NPC 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. The project may proceed to permitting.

May 24, 2021

Date



Kathleen A. Theoharides

Comments received:

05/13/2021 Massachusetts Department of Environmental Protection – Western Regional Office
(MassDEP – WERO)

MAB/EFF/eff



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Erin Flaherty, EEA No. 15780
100 Cambridge Street, 9th Floor
Boston, MA 02114-2524

Re: Maintenance Dredging of Upper
Leyden Glen Reservoir, Leyden

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office (WERO) appreciates the opportunity to comment on the Revised Notice of Project Change (NPC) submitted for the proposed dredging of the Upper Leyden Glen Reservoir located at 0 East Glen Road in Leyden, MA (EEA #15780).

The applicable MassDEP regulatory and permitting considerations regarding wetlands, waterways, air pollution, solid waste, hazardous waste and waste site cleanup are discussed.

I. Project Description

The project proponent, the City of Greenfield, proposes to dredge the Upper Leyden Glen Reservoir to maintain design volume for water supply capacity. The reservoir which supplies approximately 25-30% of the Town of Greenfield's water supply has accumulated an estimated 120,000 cubic yards of sediment over time. The Proponent intends to dredge up to 50,000 cubic yards near the dam where the water intake structure is located, over a one-year time period. Access will be by an existing road. The drawdown is expected to result in temporary dewatering impacts to the entire 7.0-acre reservoir. A baseflow channel will be constructed in an approximate 0.24-acre area and will be maintained throughout drawdown.

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

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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The dredging will be performed with the reservoir fully drawn down. Sediments will be dry and will be transported to a disposal site. Dewatered dredged material will be sampled for chemical constituents as outlined in the Environmental Notification Form, the NPC and permitted through a 401 Water Quality Certificate, prior to removal from the site. All sediment testing shall be performed in accordance with 314 CMR 9.07(2).

The NPC differs from the ENF in that 1) the project will be completed in one year rather than over a five year period, 2) 50,000 cubic yards of material will be removed in that one-year period rather than removal of 10,000 cubic yards in each of five years, 3) previously there was no plan to draw down the reservoir, with the NPC there will be a full draw down and 4) the sediment will not require dewatering, it is expected that because of the draw down, the sediment will be dry and can be direct loaded onto trucks for disposal.

A NPDES General Permit for Discharges from Construction Activities will be obtained for this construction project site that is greater than 1 acre. A Stormwater Pollution Prevention Plan will be developed for this project before construction begins. The project is anticipated to begin in June 2021 with dredging being performed July through September 2021, and refill beginning in October 2021, with the refill being completed in March 2022, for a 10-month project timeline.

Environmental Impacts associated with this project include:

- total site acreage – 2.37 acres
- other wetland alteration –
 - 7.4 acres, Land Under Water and Waterways, temporary (dewatering), (1.93 acres active work area),
 - 4,300 linear feet Bank – temporary

II. Required Mass DEP Permits and/or Applicable Regulations

Wetlands & Waterways

310 CMR 10.000

314 CMR 9.00

Air Pollution

310 CMR 7.00

Solid Waste

310 CMR 16.00

310 CMR 19.00

Hazardous Waste

310 CMR 30.00

Bureau of Waste Site Cleanup

310 CMR 40.000

III. Permit Discussion

Wetlands and Waterways

MassDEP issued a 401 Water Quality Certificate (WQC) for the originally proposed project on June 19, 2018. Due to the scale of the proposed changes in the project, a comprehensive request for amendment must be submitted to MassDEP including a new sampling and analysis plan. As indicated in the NPC, the Proponent has consulted with the Boston permitting staff in this regard and staff are available for additional consultation, as necessary. An Amended 401 WQC must be issued by the Boston office prior to commencement of work. The dredged sediments shall be assessed, managed, and disposed in accordance with conditions of a 401 WQC Permit as detailed in the *MassDEP Interim Policy COMM 94-007 Sampling, Analysis, Handling & Tracking Requirements for Dredged Sediment Reused or Disposed at Massachusetts Permitted Landfills* and regulation 314 CMR 9.00.

Bureau of Air and Waste

Air Quality

Construction Activities

The earth moving and excavation 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 dredging activities. Such measures must comply with the MassDEP's Bureau of Air and Waste (BAW) Regulations 310 CMR 7.01, 7.09, and 7.10.

Construction Equipment

All non-road engines shall be operated using only ultra-low sulfur diesel (ULSD) with a sulfur content of no greater than 15 ppm pursuant to 40 CFR 80.510.

Solid Waste

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

Hazardous Waste

If any hazardous waste, including waste oil and soil and debris is generated or discovered anywhere at the site, the Proponent must register as a generator and properly manage and dispose of the waste in accordance with 310 CMR 30.0000.

Bureau of Waste Site Cleanup

Massachusetts Contingency Plan (MCP)

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 (MCP 310 CMR 40.0000), within the immediate project site. In the event contamination is encountered during project activities, or a release occurs, 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.

In addition, 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 releases. This plan is of particular importance due to the proximity of the work at the Upper Leyden Glen Reservoir.

IV. Other Comments/Guidance

MassDEP staff is available for discussions as the project progresses. If you have any questions regarding this comment letter, please do not hesitate to contact Kathleen Fournier at (413) 755-2267.

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