



*The Commonwealth of Massachusetts*  
*Executive Office of Energy and Environmental Affairs*  
*100 Cambridge Street, Suite 900*  
*Boston, MA 02114*

Maura T. Healey  
GOVERNOR

Kimberley Driscoll  
LIEUTENANT GOVERNOR

Rebecca L. Tepper  
SECRETARY

Tel: (617) 626-1000  
Fax: (617) 626-1081  
<http://www.mass.gov/eea>

October 11, 2024

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

PROJECT NAME	: Closure of Northern Mound of Haverhill Landfill
PROJECT MUNICIPALITY	: Haverhill
PROJECT WATERSHED	: Merrimack
EEA NUMBER	: 12626
PROJECT PROPONENT	: City of Haverhill and Aggregate Industries-Northeast Region, Inc.
DATE NOTICED IN MONITOR	: August 23, 2024

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62L) and Sections 11.10 of the MEPA regulations (301 CMR 11.00), I hereby determine that the decommissioning plan described in the Notice of Project Change (NPC) **does not require** a Supplemental Environmental Impact Report (EIR).

Original Project Description

As previously described in the Final EIR (FEIR), the project consists of permanently capping the 20-acre Northern Mound of the Haverhill Municipal Landfill and a separate 2.1-acre area of buried ash at a portion of the site known as the “Lot 26 Ash Are” or “Lot 26.” The capping is proposed to prevent exposure of landfill material to humans and the environment. As described in the FEIR, a Standard Solid Waste Cap (Standard Cap) will be installed at the Northern Mound. The Standard Cap will consist of a six-inch coarse sand venting layer, covered by a 40-mil (0.04 inches) geomembrane, a 12-inch layer of coarse sand, and an eight-inch layer of topsoil. In areas where trees will be planted on a plateau to be created along the slope, a 36- to 50-inch layer of plating soil will be added just below the eight-inch layer of topsoil. A Standard Cap will also be used at Lot 26, but will be modified in certain areas as follows:

- In the part of the Lot 26 site used as a stormwater basin, a low-permeability cap will be installed that will consist of geosynthetic clay liner, a 40-mil geocomposite membrane, and a 12-inch layer of topsoil;
- Within the footprint of a gravel driveway to be constructed through Lot 26, the eight-inch topsoil level of the Standard Cap will be replaced by a filter fabric layer and 12 inches of gravel; and,
- In an area of Lot 26 where turtle habitat will be provided, the top layer will consist of eight to 12 inches of sand instead of topsoil.

Prior to construction of the cap, the sides of the Northern Mound will be regraded to provide a stable side slopes; the maximum slope near the outer edges of the Northern Mound will have a maximum slope of 3:1 (horizontal:vertical), except as described below, and the top will have a minimum slope of 20:1. Landfill material excavated from the sides of the Northern Mound will be placed at the top of the landfill before the cap is constructed.

The northern edge of the Northern Mound cap will slope down to the Merrimac River. The eastern edges of the Northern Mound and Lot 26 caps will border on Johnson Creek. The cap designs in these areas include shoreline stabilization features to stabilize the slope and protect the caps from erosion and water damage. The primary bank stabilization method along the Merrimack River and Johnson Creek will include a 3:1 riprap slope from the base of the slope just above the mean high water (MHW) elevation up the slope to the 10-year floodplain elevation. Sections of the shoreline along the Merrimack River will also include a shelf with additional soil cover and plantings between the MHW and riprap to provide wildlife habitat. Edges of the cap adjacent to high-velocity section of Johnson Creek will be stabilized by a revetment with a 1.5:1 slope. The top of the cap will be planted with native grasses to stabilize the slope and protect the cap.

The project is intended to isolate landfilled waste to prevent exposure to humans and the environment, decrease the production and release of leachate, and control off-site migration of landfill gas. The closure of the landfill is being undertaken pursuant to an Administrative Consent Order (ACO) between the Massachusetts Department of Environmental Protection (MassDEP) and the Proponents to ensure compliance with MassDEP's Solid Waste Management Regulations (310 CMR 19.00) which require the closure of unlined and uncapped landfills. The landfill is listed as a Superfund site on the Environmental Protection Agency's (EPA) National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and is subject to regulation under the MCP (310 CMR 40.000).

### Project Change

As described in the NPC currently under review, referred to herein as the "2024 NPC," the Northern Mound will be capped in a manner that will allow its use as a public park with walking trails and two athletic fields. A parking lot with 95 spaces will be constructed on the Lot 26 cap for users of the park and athletic fields. No public use of the site was proposed in the FEIR. The following specific changes in the project design are needed to support the proposed public use of these areas:

- The design of the cap to be constructed on the Northern Mound has been modified to consist of a 6-inch subgrade fill layer over the landfill waste, which will be covered by a gas-venting

geocomposite, a 40-mil geomembrane, and a drainage geocomposite, above which will be placed 18 inches of vegetative support fill which will be covered by erosion control fabric where the cap slope is 4(horizontal):1(vertical) or steeper.

- The design of the landfill gas venting system has been modified so that gases will be vented at higher elevations away from areas to be used by the public.
- The area of tree and shrub plantings on the Northern Mound has been reduced from 2.8 acres to 2.04 acres to accommodate final grading for public walkways.
- A new stormwater management feature will be incorporated into the proposed parking area on Lot 26 to accommodate increased runoff from the additional impervious area.
- The Wood Turtle habitat mitigation area previously proposed on Lot 26 will be constructed instead on property owned by Holcim-NER, Inc. southeast of Lot 26.
- The Bald Eagle roosting pole previously proposed to be located near the center of the Northern Mound will be installed at a location west of the final cap.
- Yemma Road, which provides access to the Northern Mound and Lot 26 from Main Street will be upgraded to accommodate public use of the site.

According to the 2024 NPC, construction activities, including capping of the Northern Mound and Lot 26, construction of recreational facilities, and construction of the parking lot and stormwater basin, will occur over a two-year period. The project will generate up to 100 truck trips per day during the construction period for the delivery of capping materials to the site.

#### Procedural History

An Expanded Environmental Notification Form (EENF) for the landfill closure was originally filed in 2001 and included a request for a Phase 1 Waiver. The project was to be divided into three phases. Phase I would include the acceptance, testing, and placing of 300,000 cy of soil from either the Central Artery/Tunnel Project or other construction projects to reach interim closure grades on the South Mound and install appropriate stormwater management measures, including detention basins. Phase I would also include: an emergency investigation to evaluate the potential presence of drums at the landfill; groundwater testing; a delineation of the extent of waste; and shaping and grading of an approximately 15-acre upland area prior to completion of a Comprehensive Landfill Site Assessment (CSA). Phase II would relocate the power lines and sewer main that pass through the site, and would accept additional fill (up to 600,000 cy) to fill in the valley between the two mounds to allow for site grading for recreational fields. Phase III would include excavating previously deposited trash from the banks of the Merrimack River and Johnson Creek around the Northern Mound, placing the excavated material within the landfill, possibly installing a gas collection and flare system, installing the final capping liner, and constructing the recreational fields and proposed parking areas to final grades.

The project required the preparation of a Mandatory EIR. The Phase I Waiver was requested to allow the first phase of the project to proceed to permitting prior to the completion of the EIR. On November 30, 2001, a Certificate was issued that required an EIR and proposed to grant the Waiver. On January 31, 2002, a Final Record of Decision (FROD) was issued granting a Phase I Waiver.

A Notice of Project Change (2005 NPC) was submitted in 2005 that proposed an additional truck route for soil delivery in Phase I. The proposed alternate truck route would route trucks from Interstate 95 (I-95) to Route 133, to Route 97, to Salem Street, to Washington Street, to Main Street to the landfill

access road. The truck route would be used for up to 120 truck trips (60 round trips) per day. A Certificate on the 2005 NPC was issued on March 11, 2005 and indicated that further MEPA review of the project change was not required.

On January 10, 2008, the MEPA Office issued an Advisory Opinion allowing the Proponents to increase the amount of fill to be placed on the Southern Mound from approximately 300,000 cy to 329,000 cy in Phase I. In March 2008, a second NPC (2008 NPC) was submitted that described a new phase (“Phase 1A”) and requested a Waiver so that the revised Phase I could proceed prior to completion of the MEPA process. The project change resulted in a net reduction in the amount of grading and shaping material delivered to the site by eliminating placement of fill between the two mounds across the utility easement. The change also included an eight-foot increase in the finished height of the Southern Mound. Phase IA replaced the previously proposed Phase II and Phase III remained unchanged. On March 21, 2008, a Certificate was issued that indicated that further MEPA review of the 2008 NPC was not required. On April 25, 2008, a Final Record of Decision (FROD) allowing the revised Phase I to proceed to permitting prior to the completion of the EIR.

A third NPC (2009 NPC) was submitted on July 31, 2009 that separated the capping of the Southern Mound from the capping of the Northern Mound. This was necessary because the complexity of the permitting and regulatory issues for the Northern Mound would delay landfill closure activities on the Southern Mound. The Certificate on the 2009 NPC was issued on September 18, 2009. It allowed the construction of the Southern Mound cap to proceed and included a Scope that identified issues to be evaluated in the Draft EIR (DEIR) with respect to capping the Northern Mound.

The DEIR was submitted in January 2017. A Certificate on the DEIR was issued on March 3, 2017 which determined that the DEIR adequately and properly complies with MEPA. The DEIR Certificate included a limited Scope for the FEIR which was focused on mitigation for impacts to rare species habitat and GHG emissions associated with the venting of landfill gas. The FEIR was filed in September 2021. In addition to addressing the Scope included in the Certificate on the DEIR, the FEIR identified changes to the design of the Northern Mound cap to minimize impacts to wetland resource areas adjacent to the Merrimack River and Johnson’s Creek and described a change in the design of the Lot 26 cap from a 3-foot soil cap to a Standard Cap with a geosynthetic clay layer. A Certificate on the FEIR was issued on November 15, 2021 which determined that the project adequately and properly complies with MEPA and required no further MEPA review.

### Project Site

The Haverhill Municipal Landfill is located on a 70-acre site, of which 55 acres were used as a landfill. The site is bordered to the north by the Merrimack River, to the east by Johnson Creek and the Groveland municipal boundary, to the south by residences along Old Groveland Road, and to the west by residences, conservation land, and a National Grid electric substation. The landfill is bisected by an east-west electric utility easement and sewer line that separates the Northern Mound from the 35-acre Southern Mound. The landfill was opened in the late-1930s and stopped accepting solid waste in 1981. Between 1981 and 1996, sludge from the Haverhill Wastewater Treatment Plan was placed at the landfill. In the fall of 1996, the site was covered with soil and seeded.

Lot 26 is located south of the southeastern portion of the Northern Mound and is now owned by Holcim-NER, Inc. It is bordered to the north by the electric utility easement, to the east by the Groveland municipal boundary and Johnson's Creek, and to the south and west by the Southern Mound. No permanent structures, such as the Lot 26 cap or shoreline stabilization along Johnson's Creek are proposed in Groveland; however, a small area of regrading adjacent to Johnson's Creek may occur within Groveland. The combined area of the Northern Mound and Lot 26 is 20 acres.

Wetland resource areas associated with the Merrimack River include a Bordering Vegetated Wetland (BVW) in the center portion of the shoreline, Bank, Riverfront Area and Bordering Land Subject to Flooding (BLSF). An intermittent stream and Isolated Vegetated Wetland (IVW) are located along the western edge of the Northern Mound. Wetland resource areas associated with Johnson's Creek include Bank, Riverfront Area, BLSF and a BVW located east of the southern end of Lot 26. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) number 25009C0093F (effective July 3, 2012), the site's edges along the Merrimack River and Johnson Creek are located within the 100-year floodplain (Zone AE) as defined by a Base Flood Elevation (BFE) of 21 feet North American Vertical Datum of 1988 (NAVD 88). A portion of the northern edge of the landfill is located on filled tidelands and is subject to M.G.L. Chapter 91 and the Waterways regulations (310 CMR 9.00).

According to the Natural Heritage and Endangered Species Program (NHESP), the site and adjacent waters of the Merrimack River contain habitat of the following rare species: Bald Eagle (*Haliaeetus leucocephalus*), Wood Turtle (*Glyptemys insculpta*), Atlantic Sturgeon (*Acipenser oxyrinchus*), and Shortnose Sturgeon (*Acipenser brevirostrum*). The Merrimac River also provides important habitat for several diadromous fish species managed by the Division of Marine Fisheries (DMF), including Atlantic salmon (*Salmo salar*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American shad (*Alosa sapidissima*), American eel (*Anguilla rostrata*) and rainbow smelt (*Osmerus mordax*). Migrating American eel (*Anguilla rostrata*) and sea lamprey (*Petromyzon marinus*) enter Johnson's Brook to reach upstream tributaries, including Argilla Brook.

The project site is not located within one mile of any Environmental Justice (EJ) populations. It is located within five miles of EJ populations designated as Minority; Minority and Income; and Minority, Income, and English Isolation located in Haverhill, Lawrence, and Methuen.<sup>1</sup>

### Environmental Impacts and Mitigation

The purpose of the project is to provide a permanent cover over the landfill to prevent exposure of landfill material to humans and the environment, and is expected to improve water quality by preventing off-site migration of landfill leachate. In addition, as described in the NPC, the cap will provide a public park and athletic fields. Capping of the Northern Mound and Lot 26 will impact approximately 1,415 linear feet (lf) of Bank,<sup>2</sup> 1,185 square feet (sf) of Bordering Vegetated Wetland (BVW), 950 sf of Isolated Vegetated Wetland (IVW), and 9.62 acres of Riverfront Area. Construction of the parking lot and upgrades to Yemma Road, as proposed in the 2024 NPC, will impact 2.16 acres of

<sup>1</sup> As the project was first reviewed in 2001, which is well before the January 1, 2022 effective date of new MEPA EJ regulations and protocols, this project change is not subject to these new rules.

<sup>2</sup> The 2024 NPC listed 1,415 lf of Bank impacts, compared to the previous estimate of 1,720 lf. This reflects an updated estimate rather than change in design.

Bordering Land Subject to Flooding (BLSF), which represents an increase 0.18 acres from the 1.98 acres of impact proposed in the FEIR, and add 0.7 acres of impervious area (no new impervious area was proposed in the FEIR). Most of the impact to wetland resource areas is associated with the bank stabilization which is designed to protect the cap from erosion. The project includes activities within mapped habitat of rare species, including Bald Eagle, Atlantic Sturgeon, Shortnose Sturgeon and Wood Turtle. The project will generate up to 100 truck trips per day during the construction period for the delivery of capping materials to the site, and up to 200 trips per day associated with the use of the park and playing fields. Greenhouse Gas (GHG) emissions associated with the project include continued emission of methane, a potent GHG, from the landfill and emissions of CO<sub>2</sub> from construction vehicles.

Measures to avoid, minimize and mitigate environmental impacts include avoiding work below the MHW mark, in situ restoration of BVW and IVW, providing habitat by creating a planting shelf adjacent to the Merrimac River, revegetating the Riverfront Area with an 60-ft wide tree planting zone on a plateau on the slope, providing 3,073 cubic yards (cy) of compensatory flood storage, providing 10,000 sf of Wood Turtle nesting habitat on the Holcim-NER, Inc. property, installing turtle barriers along Yemma Road and the proposed parking lot, and installing a Bald Eagle roosting pole. Stormwater runoff from the landfill will be directed to a stormwater management system, including drainage swales and detention basins, designed to comply with the Wetlands Protection Act Regulations (310 CMR 10.00) stormwater management standards (SMS). The project includes the use of solar flare vents that may mitigate the release of methane, and the Proponents have installed a solar photovoltaic (PV) system on the Southern Mound of the landfill. Construction equipment will be fitted with diesel oxidation catalysts to reduce air pollutants and will be subject to an anti-idling policy. Solar panels will be installed on the roof of the construction trailer to generate electricity for on-site use. The Proponents will implement construction-period mitigation measures, including designated truck routes, sedimentation and erosion controls, and dust and odor suppression measures.

#### Jurisdiction and Permitting

This project is subject to MEPA review and requires the preparation of a mandatory EIR because it requires Agency Actions and will alter ten or more acres of wetlands (301 CMR 11.03(3)(a)(1)(b)). The project will require a Corrective Action Alternatives Analysis (CAAA) review, a Post-Closure Use Permit, and a Corrective Action Design permit from MassDEP. The project will require a Conservation and Management Permit (CMP) from NHESP in connection with a Take of Wood Turtle and potentially Shortnose Sturgeon and Atlantic Sturgeon. This project is subject to review under the May 2010 MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (“the Policy”).

Activities proposed in the 2024 NPC do not meet or exceed any new review thresholds or require any new Agency Actions. According to the MassDEP Waterways Regulation Program (WRP), the project does not require a Chapter 91 License because it does not propose any new fill, structures or uses on filled or flowed tidelands. During the review period, the Proponents confirmed that no work will be conducted below the high tide line and that the project will not require a Section 401 Water Quality Certification (WQC) from MassDEP, or a permit from the Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act and the General Permits for Massachusetts.

The project will require Orders of Conditions from the Haverhill and Groveland Conservation Commissions (or in the case of an appeal, a Superseding Order of Conditions (SOC) from MassDEP). It

will require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the EPA. It will also require review by the EPA pursuant to CERCLA.

The Proponents have received Financial Assistance through the State Revolving Fund (SRF) for previous project elements and will seek additional funding to cap the Northern Mound. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

### Review of the NPC

The 2024 NPC described and included plans of the original project and the project change and reviewed the impacts and mitigation measures associated with the project change. It confirmed that the landfill gas will be collected and directed to passively vented solar vent flares which may burn off the gas when sufficient volumes of gas are present as a mitigation measure to minimize the release of methane from the landfill. During the review period, the Proponents provided additional information about rare species impacts and mitigation and details of the design of the stormwater management system for the proposed parking lot. Comments from Agencies, including MassDEP and NHESP, did not request additional information or recommend a Supplemental EIR.

### *Solid Waste*

According to the 2024 NPC, the Northern Mound cap will include additional soils above the capping layer to create a flat surface to accommodate the proposed athletic fields and walking trails, and to support vegetative growth. The proposed cap cross-section has been designed to meet the requirements for a Standard Solid Waste Cap pursuant to the Solid Waste Regulations at 310 CMR 19.112. The Proponents submitted an application for Corrective Action Design (CAD) for the closure of the Northern Mound and Lot 26 in October 2022. The CAD application was placed on hold while the design of the proposed changes described in the 2024 NPPC were finalized. According to MassDEP, the Proponents must submit a revised CAD application which reflects the final design described in the 2024 NPC.

The revised CAD application must also describe the proposed use of the Northern Mound and Lot 26 as a recreational facility and associated parking lot, which will require MassDEP review and approval. In accordance with the Solid Waste Regulations at 310 CMR 19.143(3), the Proponents will be required to demonstrate that the installation and operation of the proposed use will meet the following standards:

- It will not result in a disturbance of the Landfill cap that could cause an adverse impact to public health, safety or the environment;
- It will not impair the integrity or functioning of the final cover, the components of the containment system, the landfill gas control system, the environmental monitoring systems, or any other component of the landfill closure; and
- It will provide for the maintenance of the Landfill cap's stormwater drainage facilities, basins, swales, and other erosion/sedimentation controls.

*Rare Species*

The project will directly impact areas that provide suitable habitat for a population of Wood Turtles. In the FEIR, the Proponents proposed to create 10,000 sf of Wood Turtle nesting habitat on top of the Lot 26 cap, which is now the location of the proposed parking lot. According to the 2024 NPC, 10,000 sf Wood Turtle habitat is now proposed to be provided on an adjacent parcel owned by one of the Proponents (Holcim-NER, Inc.) and permanent turtle barriers will be installed along Yemma Road and the parking lot. During the review period, the Proponents committed to filing a notice at the Registry of Deeds that restricts future activities on the Wood Turtle habitat mitigation area, a 50-ft wide buffer around the habitat area, and a 50-ft wide path from the habitat area to Johnson's Creek. The design of the habitat area and turtle barriers, and the appropriate legal mechanism for permanently protecting the habitat mitigation area, will be confirmed by NHESP in the CMP to be issued for the project.

The project will minimize potential impacts to sturgeon by avoiding work below the high water mark; however, according to NHESP, additional details regarding the location and type of siltation controls to be used in the Merrimack River and Johnson's Creek will be required in order to determine whether these structures may impact sturgeon. The project will directly impact Bald Eagle habitat adjacent to the Merrimack River; however, according to NHESP, the project may avoid a Take of Bald Eagle if the Proponents adhere to specific conditions including, but not limited to, eagle nest surveys prior to tree clearing, time of year (TOY) restrictions on construction activities, and habitat enhancement. As noted above, the Proponents will provide a roosting pole for Bald Eagles in a new location; according to NHESP, the location and design of the roosting pole, as well as potential measures to ensure that recreational users are directed away from nesting habitats, will be reviewed during the CMP permitting process. According to NHESP, additional information will be required during the CMP permitting process regarding the use of fertilizer on the park and athletic fields and the treatment of nutrients by the stormwater management system.

*Wetlands and Stormwater*

The project change impact an additional 0.18 acres of BLSF and add 0.7 acres of impervious area in connection with construction of the parking lot and upgrades to Yemma Road. The 2024 NPC included a commitment to provide compensatory storage to mitigate impacts to the floodplain. As noted by the Water Resources Commission (WRC), a regulatory floodway is located in the Merrimack River adjacent to the landfill. However, as noted above, the project does not include any activities below the high water mark and will not impact the floodway.

Runoff from the parking lot will be directed to a bioretention swale that conveys runoff to a previously-constructed stormwater basin which has adequate capacity to accept additional runoff volume. According to the 2024 NPC, the stormwater management system will be designed to comply with the SMS. In addition, the stormwater management system will reduce the temperature of runoff from the parking lot surface prior to the Merrimack River or Johnson's Creek.

## Mitigation and Section 61 Findings

The 2024 NPC did not include revised draft Section 61 findings. The mitigation measures below include those listed in the draft Section 61 Findings provided in the FEIR as supplemented with the additional mitigation measures discussed above.

### *Rare Species*

- Place rip rap armoring above the mean high water mark (4.47 ft NAVD 88) and only up to the 10-year flood elevation (14 ft NAVD 88);
- The armoring will follow the natural meanders and river contours and consist of rip rap of various sizes to mimic natural shoreline habitat conditions;
- Plant native trees and other vegetation on a shelf between MHW and rip rap and a 60-ft wide plateau to be constructed higher up the slope to provide habitat for Bald Eagle and other species (2.8 acres of trees and shrubs total);
- Minimize tree clearing to the minimum needed to construct the new cap;
- Retain existing trees and other vegetation below the cap;
- Add a bald eagle roosting pole of a size and location determined in consultation with NHESP;
- Conduct construction activities along the Merrimack River and Johnson's Creek outside of the time-of-year (TOY) restriction for Shortnose Sturgeon (March 15 to June 15);
- All work will be conducted from upland areas;
- Work will take place during low water conditions to the greatest extent possible;
- A sediment barrier/fish exclusion barrier will be installed at the mean low water line;
- Provide a 10,000-sf Wood Turtle nesting habitat area on the Holcim-NER, Inc. parcel and permanently protect the habitat mitigation area, a 50-ft buffer around the habitat mitigation area, and a 50-ft wide path to Johnson's Creek through a Conservation Restriction or similar mechanism;
- Conduct construction activities at the Lot 26 site in accordance with the Wood Turtle TOY restriction (no work from third week of May to June 30<sup>th</sup> or as otherwise specified by NHESP);
- Wood Turtles will be removed from the construction area;
- An exclusion fence will be installed around the Lot 26 work area; and,
- Workers will be trained to identify Wood Turtles and instructed to follow protocols on relocating turtles from the work area.

### *Wetlands and Stormwater*

- Provide at least 3,073 cy of flood storage (an increase of 724 cy over existing conditions);
- Restore all wetlands temporarily impacted during the construction period to preconstruction conditions or better;
- Construct a bioretention swale to convey runoff from the parking lot to the previously-constructed stormwater basin;
- Construct a stormwater management system designed to comply with the SMS, including requirements to remove Total Suspended Solids (TSS), maintain pre-development peak

discharge rates and volumes, and remove 44 percent of the TSS in stormwater before discharge into the existing infiltration basin at the Lot 26 site; and,

- Monitor water quality in the Merrimack River and Johnson's Creek prior to and during construction and during the 30-year post closure monitoring period.

#### *Climate Change*

- Maintain a 3.46 MW PV facility on the surface of the Southern, which will offset 1,352 tons of GHG per year;
- Install solar flares on the landfill passive gas vents; and,
- Plant trees and shrubs on the cap.

#### *Construction*

- Implement stormwater controls and sedimentation and erosion control measures as required by the Stormwater Pollution Prevention Plan (SWPPP);
- Minimize noise impacts of construction activities by requiring contractors to limit idling and use exhaust mufflers and quieter construction methods when possible;
- Minimize air emissions from construction vehicles by using emissions controls and Ultra Low Sulfur Diesel (ULSD) and meeting U.S. EPA's Tier 4 Emissions Standards (40 CFR part 1039); and,
- Minimize the spread of dust by using covering trucks leaving the site, washing wheels and underbodies of trucks, sweeping paved areas and spraying water on soil; vegetative cover, mulch, spray-on adhesives, water sprinkling, dust barriers and wetting agents on exposed soil.

#### Conclusion

The 2024 NPC has sufficiently described the nature and general elements of the project change for the purposes of MEPA review and described measures to avoid, minimize and mitigate the project's environmental impacts. Comments from Agencies do not request additional MEPA review. Accordingly, I find that a Supplemental EIR is not required for this project change.

October 11, 2024  
Date

Rebecca L. Tepper



Comments received:

09/12/2024 Massachusetts Department of Environmental Protection (MassDEP)- Waterways

Regulation Program (WRP)  
09/24/2024 Water Resources Commission (WRC)  
10/01/2024 Massachusetts Department of Environmental Protection (MassDEP)- Northeast  
Regional Office (NERO)  
10/04/2024 Natural Heritage and Endangered Species Program (NHESP)

RLT/AJS/ajs



# Department of Environmental Protection

100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey  
Governor

Rebecca L. Tepper  
Secretary

Kimberley Driscoll  
Lieutenant Governor

Bonnie Heiple  
Commissioner

## Memorandum

**To:** Alexander Strysky, Environmental Analyst, MEPA/EEA  
**From:** Ivan Morales, Waterways Regulation Program, MassDEP/Boston  
**Cc:** Daniel Padien, Program Chief, Waterways Regulations Program, MassDEP/Boston  
**Re:** **Haverhill Landfill Closure, EEA #12626 Notice of Project Change (NPC)**  
**Comments from the Chapter 91 Waterways Regulation Program**  
**Date:** September 12, 2024

The Department of Environmental Protection Waterways Regulation Program (the “Department”) has reviewed the referenced Notice of Project Change (NPC) (EEA #12626), submitted by the City of Haverhill (“the Proponent”).

The proposed project consists of permanently capping the 20-acre northern mound of the City of Haverhill Municipal Landfill and a 2.1-acre area of buried ash within a portion of the project area, also known as “Lot 26”, off Groveland Road in Haverhill (“Project Site”). The proposed cap will be comprised of a 6-inch coarse sand gas venting layer, a 40-mil geomembrane, and an 8-inch layer of topsoil. An additional 36- to 50-inch layer of planting soil will be placed just below the topsoil layer in areas where new trees are to be planted. Additionally, the proposed landfill capping activities includes: (1) regrading of the northern mound sides down to the Merrimack River in the northern part of the site and on Lot 26 in the eastern portion of the project site, bordering on Johnson Creek; (2) shoreline stabilization of the Merrimack River and Johnson Creek consisting of the placement of a 3:1 riprap slope landward of the mean high water line to the 10-year floodplain elevation. This project was initially reviewed by MEPA and the Secretary issued a Certificate thereon, on September 22, 2021.

As described in the NPC, the proposed changes to the project since the issuance of the Secretary’s Certificate are as follows:

- Post-closure use of the northern mound and Lot 26 area as a public park with associated access roads, walking trail and rectangular fields.
- A new parking lot with 90 spaces.
- Upgrades to the existing paved road traversing Lot 26.
- The cap design has been revised on the northern mound and Lot 26 buried ash area, as detailed

Haverhill Landfill Closure, EEA #12626 Notice of Project Change (NPC)  
Comments from the Chapter 91 Waterways Regulation Program

in Figure D-2 of the NPC.

- The landfill gas venting system will be manifolded where it is proposed at shallow depths to prevent exposure to the public.
- The footprint of the tree planting area on the northern mound adjacent to the Merrimack River has been reduced from 2.8 acres to 2.04 acres to accommodate final grading for the construction of the public park and sport fields.
- Addition of a new stormwater system to divert waters from the parking area.
- Relocation of the wood turtle habitat area from on top of the Lot 26 area southeast to a Holcim Property.
- Relocation of single roosting pole for Bald Eagles from the center of the Northern Mound to the west of the final capping area.

**Chapter 91 Jurisdiction and Regulatory Analysis:**

No Filled Tidelands appear to be present on the project site, and the project site is located entirely on uplands, or landward of the high water mark of the Merrimack River and Johnson Creek. The Department determines that pursuant to 310 CMR 9.04, the project site is not located on any geographic areas subject to jurisdiction pursuant to M.G.L. Chapter 91 and 310 CMR 9.00, and is therefore not subject to licensing or permitting thereunder.

If you have any questions regarding the Department's comments, please contact Ivan Morales at (857) 276-3013 or [ivan.morales@mass.gov](mailto:ivan.morales@mass.gov)



THE COMMONWEALTH OF MASSACHUSETTS  
WATER RESOURCES COMMISSION  
100 CAMBRIDGE STREET, BOSTON MA 02114

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September 24, 2024

Secretary Rebecca L. Tepper  
Executive Office of Energy and Environmental Affairs  
Attn: Alexander Strysky, MEPA Office  
100 Cambridge Street, Suite 900  
Boston, Massachusetts 02114

Re: MEPA File No. 12626 - Haverhill

Dear Secretary Tepper:

The Water Resources Commission (WRC) staff has reviewed the Notice of Project Change (NPC) for Haverhill Landfill Closure in the City of Haverhill.

As proposed, the Project involves activities within a 100-year floodplain as delineated on the current effective Flood Insurance Rate Map (FIRM) for Essex County dated July 3, 2012. In its role as the state coordinating agency for the National Flood Insurance Program (NFIP), I submit the following comments on behalf of the WRC.

WRC's Flood Hazard Management Program (FHMP), under agreement with the Federal Emergency Management Agency (FEMA), is the state coordinating agency for the NFIP. As such, the FHMP provides technical assistance to communities that participate in the NFIP related directly to the program and also related to floodplain management in general. Communities that participate in the NFIP are required by FEMA, as a condition of their participation, to regulate development within the 100-year floodplain in a manner that meets or exceeds the minimum standards established by FEMA, located at 44 CFR 60.3. Participating communities such as the City of Haverhill are required to adopt the NFIP requirements through locally enforceable measures. In Massachusetts, many of the requirements contained in 44 CFR 60.3 are enforced through existing state regulations such as the State Building Code (780 CMR) and Wetlands Protection Act regulations (310 CMR 10.00). Communities typically adopt the remainder of the requirements as part of a zoning ordinance or other locally enforceable measure. The City of Haverhill has a Zoning Ordinance which has been accepted by FEMA as meeting their requirements under the NFIP.

In our role as NFIP coordinator, the FHMP offers comments on the proposed Project's relationship to many of the above regulations and requirements. The FHMP does not administer any of these requirements and therefore does not provide official determinations as to compliance with them; rather, our comments are provided as an overview of the requirements and the documentation that the FHMP believes may be necessary to demonstrate compliance with these requirements.

The Project includes completing the mandated closure of the Haverhill Landfill Superfund Site. This NPC includes the redevelopment of the capped Northern Mound Portion of the Landfill into recreational fields and pathways to provide a public park adjacent to the Merrimack River. Based on information submitted

with the NPC, the project site is located within the 100-year floodplain on the current effective FIRM in a Zone AE with a regulatory floodway present along the Merrimack River. Because of its location in the 100-year floodplain, compliance with the requirements of several federal, state and local measures related to floodplain development are required.

The City of Haverhill's Floodplain Overlay District includes requirements for encroachments in watercourses that have a regulatory floodway delineated in Section 9.1.4, Floodway. This requirement prohibits any encroachment in the regulatory floodway that would result in any increase in flood levels during the occurrence of the 100-year flood. This requirement is also located in minimum NFIP standards found in 44 CFR 60.3(d), which prohibits any encroachments within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge. The NPC states that the landfill closure requires construction of a final cap that extends to the edge of both waterbodies. The proponent should be aware that if any work proposed as part of this project is in the regulatory floodway as mapped on the effective FIRM, that the proper analysis must be completed to ensure the above requirement is met. If any increases are expected in the published base flood elevations, then a Conditional Letter of Map Revision (CLOMR) must be submitted to FEMA prior to any encroachment occurring, as outlined in 44 CFR 65.12 (a).

Additionally, if it is determined that there will be a change in the published base flood elevations, 44 CFR 65.3 requires that communities notify FEMA within six months of changes in the base flood elevation by submitting technical or scientific data. This is in addition to the Notification of Watercourse Alteration located in Section 9.1.9 of Haverhill's Floodplain Overlay District as outlined below (note that the three addresses below have changed):

“In a riverine situation, any party proposing to alter or relocate a watercourse shall notify the following:

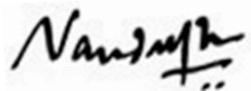
1. Adjacent communities of Merrimac, West Newbury, Groveland, Boxford, North Andover, and Methuen, Massachusetts and Salem, Atkinson, Plaistow, and Newton, New Hampshire;
2. NFIP State Coordinator - New Hampshire Office of Energy and Planning, Johnson Hall, 3rd Floor, 107 Pleasant Street, Concord, NH 03301;
3. NFIP State Coordinator - Massachusetts Department of Conservation and Recreation, 251 Causeway Street, Suite 600-700, Boston, MA 02114-2104; and
4. NFIP Program Specialist - Federal Emergency Management Agency, Region I, 99 High Street, 6th Floor, Boston, MA 02110.

The party shall provide the City of Haverhill Zoning Officer with proof of proper notifications in the form of a notarized affidavit.”

Additionally, projects within the 100-year floodplain involving any federal action (e.g., permit, funding) must also comply with federal Executive Order 11988, Floodplain Management, as amended by Executive Orders 13690 and 14030. Executive Order 11988 requires an eight-step decision-making process which includes analysis of alternatives, avoiding impacts when possible, and minimizing impacts when avoidance is not possible. If this project requires submittal of any federal permits or has received funding from any federal agency, compliance with the eight-step decision-making process is necessary. Compliance with these orders will also require meeting the Federal Flood Risk Management Standard (FFRMS) which can involve design and construction to a higher standard, to be determined by the applicable federal agency.

The proponent should be aware that climate change can bring further impacts to the proposed development. Changes to the state's precipitation regime are ongoing with further predicted changes to the amount and timing of rainfall. This may increase the potential for flooding to properties located in the 100-year floodplain.

Thank you for the opportunity to comment on the NPC. If you have any questions regarding these comments, or to request additional information or coordination with the FHMP, please contact Katie Paight at [katie.o.paight@mass.gov](mailto:katie.o.paight@mass.gov) or 857-283-0583.

A handwritten signature in black ink, appearing to read "Vandana Rao".

Vandana Rao, PhD  
Executive Director, MA Water Resources Commission

cc: Katie Paight, Department of Conservation and Recreation  
Nadia Madden, Department of Conservation and Recreation  
Eric Carlson, Department of Conservation and Recreation  
Joy Duperault, Department of Conservation and Recreation  
Richard Osborn, Building Inspector, City of Haverhill  
Robert E. Moore, Jr., Environmental Health technician, City of Haverhill



# Department of Environmental Protection

Northeast Regional Office • 150 Presidential Way Woburn, MA 01801 • 978-694-3200

Maura T. Healey  
Governor

Kimberley Driscoll  
Lieutenant Governor

Rebecca L. Tepper  
Secretary

Gary Moran  
Acting Commissioner

October 1, 2024

Rebecca L. Tepper, Secretary  
Executive Office of  
Energy & Environmental Affairs  
100 Cambridge Street  
Boston MA, 02114

RE: Haverhill  
Haverhill landfill Closure  
EEA # 12626

Attn: MEPA Unit

Dear Secretary Tepper:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Notice of Project Change (NPC) for the proposed Haverhill Landfill Closure in Haverhill. MassDEP provides the following comments.

## Solid Waste

The capping of the Landfill is required by the Solid Waste Management Regulations (310 CMR 19.000) promulgated by the Massachusetts Department of Environmental Protection (MassDEP) and an Administrative Consent Order (ACO) between the project proponent and MassDEP. The Northern Mound and Lot 26 Ash Area are both part of the Haverhill Landfill Superfund Site as listed by the U.S. Environmental Protection Agency (EPA) and the selected remedy for closure will need to satisfy the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and be acceptable to EPA.

Closure of the Landfill is being performed in accordance with the requirements of both MassDEP's regulations and CERCLA, and the project has been divided into two (2) phases. Phase 1 consisted of the closure of the Southern Mound (approximately 35 acres), completed in 2013. Phase 2 is the subject of the 2021 FEIR and this NPC, which consists of the remaining 20-acre Northern Mound closure and the 2.1-acre Lot 26 Ash Area.

The Northern Mound and Lot 26 Ash Area also required an assessment of the site pursuant to 310 CMR 19.150(6) *Corrective Action Alternatives Analysis (CAAA)* and CERCLA<sup>1</sup>. The CAAA is the final step in the assessment process and is an evaluation of the preferred alternatives for corrective action. The objective of the CAAA is to evaluate options for corrective actions to be taken at the site to mitigate potential adverse impacts associated with the Northern Mound and Lot 26 Ash Area. MassDEP accepted the proponent's CAAA for the Landfill in a conditional approval dated April 3, 2023.

The FEIR described the potential impacts from the construction of the selected Landfill capping actions and the measures proposed to avoid or minimize those impacts.

As discussed in the NPC, the proposed corrective actions include:

- Northern Mound. The final cap recommended in the FEIR for the Northern Mound is a MassDEP Standard Solid Waste Cap designed pursuant to the standards established at 310 CMR 19.112 et al (i.e., a cap pursuant to RCRA Subtitle D) and is similar to the landfill cap constructed on the Southern Mound. The design of the final cap was revised to place additional soils above the capping layer to create the flatter slopes needed to support the proposed recreational fields.
- Lot 26 Ash Area: As discussed in the FEIR, the final cap for the ash area will also be a MassDEP Standard Solid Waste Cap. Portions of the Lot 26 area will be paved to provide parking for the proposed recreational facility.
- Riverbank. Along the bank with Johnson Creek and the Merrimack River, trees will be cleared off existing landfilled slopes and the slopes will be regraded as shown on the conceptual plans provided in the FEIR. The cap will include the installation of stone rip rap from the bottom of the slope to the 10-year floodplain elevation (elevation 14 feet above MSL) and the remainder of the slope will be grassed. The Revised Corrective Action Design permit to be submitted to MassDEP will need to include design details and calculations for the rip rap area and landfill slopes. As proposed, there will be no tree removal below the edge of landfilled waste unless required to install the final cap.
- Other Corrective Actions. A selection of native trees are proposed to be planted along the top of the slopes of the Northern Mound for mitigation related to the bald eagle habitat. The FEIR discussed the establishment of a turtle habitat area on the Lot 26 Ash Area, near to Johnson Creek. The turtle habitat area will be relocated from the top of the Lot 26 Ash Area southeast to a location on adjacent property. On the Northern Mound the project will evaluate the installation of solar passive vent flares to mitigate methane emissions. Landfill gas vents will be installed at locations away from public access. The stormwater basin on the Lot 26 Ash Area will be lined and reconstructed to meet current stormwater control requirements and will be designed to accommodate the proposed additional impervious parking area.

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<sup>1</sup> United States Code Title 42, Chapter 103; “Comprehensive Environmental Response, Compensation, and Liability Act”, as amended by “Superfund Amendments and Reauthorization Act” (SARA) and the Small Business Liability Relief and Brownfields Revitalization Act.

In October 2022, the proponent submitted to MassDEP an application for *Corrective Action Design* (BWP SW25, Application Number: 22-SW25-0008-APP) for the closure of the Northern Mound and Lot 26 Ash Area (the CAD application) pursuant to the requirements contained in 310 CMR 19.151 *Corrective Action Requirements*. The CAD application was placed on hold at the request of the proponent while the design of the proposed changes was being finalized. The proponent will be required to submit to MassDEP a revised CAD application that reflects the proposed changes discussed in NPC.

The use of the capped Northern Mound and Lot 26 Ash Area for the proposed recreational facility also requires MassDEP review and approval for post-closure use in accordance with the Solid Waste Regulations. The revised CAD application must demonstrate pursuant to 310 CMR 19.143(3) that the installation and operation of the proposed use:

- Will not result in a disturbance of the Landfill cap that could cause an adverse impact to public health, safety or the environment;
- Will not impair the integrity or functioning of the final cover, the components of the containment system, the landfill gas control system, the environmental monitoring systems, or any other component of the landfill closure; and
- Provides for the maintenance of the Landfill cap's storm water drainage facilities, basins, swales, and other erosion/sedimentation controls.

Any future post-closure use(s) of the Landfill not reviewed and permitted as part of the closure design would require submittal of a separate application to MassDEP, category BWP SW36 *Post-Closure Use-Major* or BWP SW37 *Post-Closure Use-Minor*, as appropriate, in accordance with the Solid Waste Regulations.

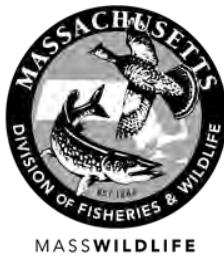
The MassDEP appreciates the opportunity to comment on this proposed project. Please contact [John.MacAuley@mass.gov](mailto:John.MacAuley@mass.gov) at (978) 815-0423 for further information on solid waste issues. If you have any general questions regarding these comments, please contact me at [John.D.Viola@mass.gov](mailto:John.D.Viola@mass.gov) or at (857) 276-3161.

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.

John D. Viola  
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission,  
Eric Worrall, John MacAuley, Mark Fairbrother, Richard Spieler, MassDEP-NERO



## DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581  
p: (508) 389-6300 | f: (508) 389-7890  
**MASS.GOV/MASSWILDLIFE**

October 4, 2024

Secretary Kathleen Theoharides  
Executive Office of Energy and Environmental Affairs  
Attention: MEPA Office  
Erin Flaherty, EEA No. 12626  
100 Cambridge Street  
Boston, Massachusetts 02114

**Project Name:** *Closure of the Northern Mound of the Haverhill Landfill and capping of Lot 26 Ash Area*  
**Proponent:** *Aggregate Industries – Northeast Region, Inc. and the City of Haverhill*  
**Location:** *Groveland and Yemma Roads, abutting the Merrimack River and Johnson Creek*  
**Document Reviewed:** *Notice of Project Change*  
**EEA No.:** *12626*  
**NHESP No.:** *99-5547*

Dear Secretary Theoharides:

The Natural Heritage & Endangered Species Program and Fisheries Program of the Massachusetts Division of Fisheries & Wildlife (MassWildlife) the *Notice of Project Change* (NPC) for the proposed *Closure of the Northern Mound of the Haverhill Landfill* (the Project).

### THE PROJECT

The Project's goal is to cap and close the Northern Mound of the inactive Haverhill Landfill and the Lot 26 Ash Area. Construction of the final caps is required by 310 CMR. 19.00 and will isolate historically landfilled waste from the environment, decrease future leachate production to ground and surface waters and control emissions from the landfill. The Landfill property is approximately 70 acres, and the current project will occur on approximately 19.8 acres including the Northern Mound (~17.2 acres) and Lot 26 (~2.6 ac), collectively known as the "Project". The Project is located abutting the Merrimack River to the north and Johnson Brook/Creek to the east (Figure 1-2, Figure 1-3). At present, the Project area is largely covered in shrubs and forested vegetated cover, although portions of the Lot 26 Ash Area are open and sandy.

The Merrimack River has a diverse diadromous and warmwater fishery, and the Project is located between two critical areas utilized for spawning and wintering of shortnose and Atlantic sturgeon. Bald Eagle forage throughout the River. Johnson Creek, a tributary to the Merrimack River on the east side of the landfill, contains a regionally important population of Wood Turtles that are utilizing areas of the landfill for nesting and foraging, as well as aquatic habitats for juvenile sturgeon.

In the **NPC**, the proponent has revised the project to incorporate developed recreational fields on the cap of the Northern Mound. A parking area will be developed near to Lot 26, and an access path road will be added to connect the recreational fields and the parking. The addition of the parking area required the location and extent of created nesting habitat mitigation to be shifted from the prior location. Project designs of the existing

waste and bank stabilization along the Merrimack River and Johnston Creek have advanced and work below Ordinary High Water of more than 5,000 sf is not required.

#### STATE LISTED SPECIES

Based on the information provided, the Project, is located within *Priority Habitat* and *Estimated Habitat* as indicated in the *Massachusetts Natural Heritage Atlas*. The following state-listed rare species are associated with the Project site:

Scientific Name	Common Name	Taxonomic Group	State Status
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Vertebrate: Bird	Threatened**
<i>Glyptemys insculpta</i>	Wood Turtle	Vertebrate: Turtle	Special Concern
<i>Acipenser oxyrinchus</i>	Atlantic sturgeon	Vertebrate: Fish	Endangered*
<i>Acipenser brevirostrum</i>	Shortnose sturgeon	Vertebrate: Fish	Endangered*

State-listed species are protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). State-listed wetland wildlife habitat is also protected under the state's Wetlands Protection Act (WPA) (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most state-listed rare species can be found on our website ([www.mass.gov/nhesp](http://www.mass.gov/nhesp)).

\*The Shortnose and Atlantic sturgeon are federally-protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11) implemented by the National Marine Fisheries Service ("NMFS"; collectively the two species are referred to as "sturgeon" herein). \*\* The Bald Eagle is protected pursuant to the federal Bald and Golden Eagle Act (16 U.S.C. 668-668d) and the Migratory Bird Treaty Act (16 U.S.C. 703-712), both of which are implemented by the United States Fish & Wildlife Service (USFWS).

#### **FISHERIES**

Please see MassWildlife's comments on the FEIR.

#### **COMMENTS ON THE 2024 NPC & ADDITIONAL INFORMATION**

The Proponents provided additional information to the agencies following the submission of the NPC ("Subject: Notice of Project Change Closure of Northern Mound and Lot 26 Ash Area of Haverhill Landfill EEA File Number 12626 Response to Comments", dated 9/27/2024, Langdon Environmental LLC). The project also advanced the project design and determined that "*the extent of landfilled waste along the Merrimack River and Johnson's Creek is above the elevation of the astronomical high tide for this portion of the River. Therefore, there will be no construction activities in the River or Creek within the jurisdictional limits*" for a MA 401 Water Quality Certificate or Army Corps of Engineers 404 Permit.

- Wood Turtle: Based on the materials presented in the prior FEIR, current NPC and the Additional Information, and in advance of a formal MESA CMP application, the MassWildlife still anticipates that the project will require a MESA Conservation and Management Permit (MESA CMP; 321 CMR 10.23) for the wood turtle.
- Sturgeon: Project designs now exclude work below Ordinary High Water of the Merrimack River and Johnson Brook which is a beneficial change for sturgeon. Information is still pending about the location, extent of type of siltation controls that will be deployed in the Merrimack River and Johnson Brook. At this point, it is unclear if the project will require a MESA CMP for sturgeon or if the project can be approved subject to 321 CMR 10.18. However, the Division is confident that this information will be forthcoming, and we can determine the permit pathway as part of the MESA review process.

Work associated with the Merrimack River banks will be timed in coordination with the MA DMF (typical time-of-year restrictions found in TR-47; <https://www.mass.gov/doc/time-of-year-recommendations-tr-47>) and MassWildlife due to specific habitat features associated with this stretch of the Merrimack River. MassWildlife and the Proponent will also coordinate with the NMFS to ensure measures to protect sturgeon and consistent with both the federal ESA and MESA.

- Bald Eagle: We believe that impacts to Bald Eagle can be offset and managed with adherence to specific conditions including, but not limited to, pre-tree clearing eagle nest surveys, time of year restrictions, and habitat enhancement.

Projects resulting in a Take of state-listed species (321 CMR 10.02) may only be permitted if they meet the performance standards for a MESA Conservation and Management Permit (MESA CMP; 321 CMR 10.23). The Proponent must demonstrate that the project has avoided, minimized and mitigated impacts to state-listed species consistent with the following performance standards: (a) the applicant has adequately assessed alternatives to both temporary and permanent impacts to state-listed species; (b) an insignificant portion of the local population would be impacted by the project; and (c) the applicant agrees to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of the state-listed species impacted.

As part of the MESA permitting process, the Division will seek additional information about nutrient management from the recreational fields such that the project can demonstrate that there is adequate treatment in place to avoid nutrient runoff to the River. Further, the Division will look for opportunities to ensure that recreational users are directed away from created nesting habitats and ensure those habitats are managed and protected in perpetuity.

#### SUMMARY

The Proponent continues to proactively work with MassWildlife, and we are confident that the project can meet the MESA Performance Standards and resolve any outstanding concerns during the MESA permitting process. MassWildlife will not render a final decision until the MEPA review process and its associated public comment period is complete, and until all required application materials have been submitted to MassWildlife.

If you have any questions about state-listed species relative to this letter, please contact Misty-Anne Marold, Senior Endangered Species Review Biologist by email at [misty-anne.marold@mass.gov](mailto:misty-anne.marold@mass.gov). We appreciate the opportunity to comment on this project.

Sincerely,



**Jesse Leddick**  
Assistant Director  
Natural Heritage & Endangered Species  
MA Division of Fisheries & Wildlife