



To: Murphy Road Energy Storage
Project File

Date: May 20, 2025

Memorandum

Project #: 58952.13

From: Allison Slaney, PWS
Environmental Scientist; Adam Crary, PWS,
PWD, Regulatory Team Leader-Renewables

Re: Section 248 Natural Resources Assessment

Introduction

At the request of Encore Renewable Energy ("Encore"), and on behalf of Murphy Road Energy Storage, LLC ("Petitioner"), VHB prepared this technical memorandum as part of plans to develop a Battery Energy Storage System ("BESS") facility ("Project" or "BESS"). The proposed Project facility is located at 419 Murphy Road in Bennington, Vermont.

The Project will be located north of, but separate from, the existing ER Paper Mill Village Solar, LLC, a 0.5-megawatt ("MW") solar energy production project which received a Certificate of Public Good ("CPG", Case #: 16-0049-NMP) issued by the Public Utility Commission ("PUC") in 2016. Natural resource assessments for the BESS Project were conducted on a five-acre subset of the overall parcel, so that any potential nearby resources or their buffers could be identified (collectively, the "Study Area"). The Project will occupy approximately 0.37 acre within a fence, and a total of 2.14 acres of total Project disturbance - including the battery storage units, transformers, fencing, secondary containment, access, temporary staging, and electrical connection to the point-of-interconnection ("POI") with the existing distribution line system on Murphy Road ("Project Area"). See the Natural Resources Map in **Attachment 1**.

This technical memorandum includes an overview of the proposed BESS Project, analysis of the Project's potential impacts to natural resources, site conditions, descriptions of the methodologies used for assessments, assessment findings, and an evaluation of the Project with respect to the applicable 30 V.S.A. § 248(b)(5) natural resources criteria reviewed by the PUC. The memorandum focuses on the BESS Project to the POI, and any distribution system upgrades are considered separately.

- Outstanding Resource Waters (10 V.S.A. § 1424a(d));
- Headwaters (§ 6086(a)(1)(A));
- Floodways (§ 6086(a)(1)(D));
- Streams (§ 6086(a)(1)(E));
- Shorelines (§ 6086(a)(1)(F));
- Wetlands (§ 6086(a)(1)(G));
- Rare and Irreplaceable Natural Areas ("RINA") (§ 6086(a)(8)); and
- Necessary Wildlife Habitat and Endangered Species (§ 6086 (a)(8)(A));

An assessment of each criterion is presented in the Section 248 Natural Resources Criteria Assessment Table in **Attachment 2** which includes a brief assessment of potential impacts to the natural resources covered by each criterion, recommended approaches for follow-up detailed surveys if applicable, design or management options to first avoid and then minimize potential effects, and identification of collateral environmental permits that may be required for the Project activity.

The following sections contain Project and site descriptions, and an overall summary of the resource assessments. Additional technical information is contained in the attachments and include representative photographs of the site (**Attachment 3**), USACE Wetland Data Sheets (**Attachment 4**), a summary table of Potential Rare, Threatened, and Endangered Species and Significant Natural Communities in the Project Region (**Attachment 5**), a Partial Floristic Inventory (**Attachment 6**), and the U.S. Fish and Wildlife Service's online Information, Planning, and Conservation System ("IPaC") review (**Attachment 7**).

In making assessments of potential Project impacts to natural resources, VHB relied on Project information provided by Encore and Project site plans prepared by VHB. VHB conducted natural resources field assessments for the BESS on July 26, 2024, and January 21, 2025.

Project Description

The Project will include the construction and operation of an approximately 5 MW BESS facility, on concrete equipment pads within an enclosed fence, improvements to an existing access drive and extension to the Project site, an overhead electric line through the Project Area to the interconnection point on Murphy Road, and a separate distribution line upgrade for the existing Green Mountain Power ("GMP") line along Murphy Road (See VHB's separate Distribution Line Upgrades – Section 248 Natural Resources Assessment Supplement Memorandum provided as Exhibit MRES-AC-3). The Project will also include approximately 2,340 square feet of tree clearing (areas where woody material will be removed with stump removal/grubbing). The Project Area was selected and designed after considering all site constraints – including topography, environmental resources, cultural resources, and aesthetic impacts. The Project will store and discharge electricity from/to the electric grid via the nearby GMP substation. Please see the detailed project description in the prefiled testimony of Taegen Kopfler for further Project details.

Site Description

The Study Area occurs in the Vermont Valley biophysical region of Vermont which is characterized as a steep-sided valley between the Taconic and Green Mountain ranges. It shares many characteristics with the Champlain Valley, including rich soils. Climate in the Vermont Valley is influenced by the surrounding mountains and weather can be highly variable (Sorenson 2019). The Study Area occurs within Walloomsac River Watershed (HUC12: 0200030704). On-site elevation within the Study Area ranges from approximately 565 to 600 feet above mean sea level. The Natural Resources Conservation Services ("NRCS") has mapped the dominant soils within the Study Area as Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky, and Groton gravelly fine sandy loam, 0-3 percent slopes. There are no Vermont Hydrography Dataset ("VHD") mapped streams located in the Study Area. The Walloomsac River flows west approximately 700 feet north of the Study Area. There are no wetlands mapped by the Vermont Significant Wetland Inventory ("VSWI") located within the Study Area, however there are several VSWI mapped wetlands in the general vicinity east of the Study Area.

The Project site is generally surrounded by rural, residential, agricultural, and undeveloped forest areas. A 12.47-kV GMP overhead utility corridor runs east to west and exits the Study Area south of Murphy Road. Dominant vegetation in the BESS Project Study Area includes: red maple (*Acer rubrum*), smooth brome (*Bromus inermis*), Deptford pink (*Dactylis glomerata*), wild carrot (*Daucus carota*), whorled bedstraw (*Galium mollugo*), common St. Johnswort (*Hypericum perforatum*), timothy (*Phleum pratense*), European buckthorn (*Rhamnus cathartica*), black-eyed Susan (*Rudbeckia hirta*), Canada goldenrod (*Solidago canadensis*), calico American-aster (*Symphyotrichum lateriflorum*), and red clover (*Trifolium pratense*), among others.

SECTION 248 NATURAL RESOURCES CRITERIA

The following resources that are protected by the associated Section 248 criteria were found to not be present in VHB's desktop and/or field review, and as such the Project would have no effect on these criteria:

- Outstanding Resource Waters (10 V.S.A. § 1424a(d));
- Headwaters (§ 6086(a)(1)(A));
- Floodways (§ 6086(a)(1)(D));
- Streams (§ 6086(a)(1)(E));
- Shorelines (§ 6086(a)(1)(F)); and
- Rare and Irreplaceable Natural Areas ("RINA") (§ 6086(a)(8)).

The following resources that are protected by the associated Section 248 criteria were found to be present in VHB's review, and/or required more review to demonstrate that the Project would have no adverse effect on the criteria:

- Wetlands (§ 6086(a)(1)(G)); and
- Necessary Wildlife Habitat and Endangered Species (§ 6086 (a)(8)(A));

Regarding the Section 248 criterion for Wetlands (§ 6086(a)(1)(G)), for the BESS, VHB Environmental Scientists conducted detailed wetland assessments and delineations within the Study Area in the summer of 2024.

VHB performed additional field reconnaissance ("recon") investigation on January 21, 2025, under snow covered ground conditions. Field investigations south of Murphy Road were not included as part of the July 2024 field investigations but were reviewed in January 2025 to capture the extents of the expanded Study Area, south of the BESS Project Area, providing access to the site. VHB approximately mapped one potential Class II wetland, on the south of Murphy Road, which may result in a 50-foot wetland buffer that would overlap the southernmost portion of the Project Area, where access drive improvement is proposed. A detailed wetland delineation was not performed as vegetation and ground conditions were not suitable for an accurate assessment of wetland hydrology or hydrophytes. For conservative purpose, until a detailed delineation is performed in the 2025 growing season which VHB has planned to occur in mid-June 2025, VHB suggests assuming the wetland could be a Categorical Class II as it likely provides the following Vermont Wetland Rule ("VWR") (ANR 2023) functions: Water Storage for Flood Water and Storm Runoff (5.1) and Surface and Ground Water Protection (5.2). Based on general characteristics observed from Murphy Road, the wetland could exceed 0.5-acre in size and thus would be considered significant under the VWR. The palustrine forested ("PFO") hillside seep exists in a forest fragment between two residential properties and is drained by a roadside ditch flowing east. Vegetation within the potential Class II wetland includes red maple (*Acer rubrum*) red-osier dogwood (*Cornus sericea*), quaking aspen (*Populus tremuloides*), European buckthorn (*Rhamnus cathartica*), and highbush-cranberry (*Viburnum opulus*). The wetland and 50-foot design setback are depicted in the Natural Resources Map (**Attachment 1**). Representative photographs are provided in **Attachment 3**. Wetland features were approximately mapped outside of the growing season and would require detailed delineation, classification determinations, and DEC review in the 2025 growing season. The BESS Project avoids all direct Class II wetland impacts; however, if this potential wetland is determined to be a Class II, wetland buffer impacts (extending from the opposite roadside, within non-functioning buffer portions) are necessary to facilitate existing access drive improvements. As such, the Petitioner would apply for a General Vermont Wetland Permit ("VWP"), to authorize impacts to Class II wetland buffer, which should not require mitigation as access improvements would not result in any

adverse impact to buffer function. Impacted areas will be re-seeded with appropriate, native mixes post construction. The Project will therefore comply with the VWR and Section 404 of the CWA and will not result in undue adverse impacts to wetlands as a result of avoidance, minimization, and VWP authorization before Project construction.

Regarding the Section 248 criterion for Endangered Species (§ 6086(a)(8)(A)), VHB found no records of Vermont threatened or endangered plants or animal species within the Study Area. VHB Botanists conducted a general plant inventory on July 26, 2024. This plant inventory followed ANR's *Guidance for Conducting Rare, Threatened, and Endangered Plant Inventories in Connection with Section 248 Projects* (ANR 2016a). All plant species identified in the inventory were checked against the current *Rare and Uncommon Native Vascular Plants of Vermont* list (ANR2022b), as well as the *Endangered and Threatened Plants of Vermont* (ANR 2022a), to determine their rarity rank and any potential protections under endangered species law. No RTE plant species were observed in these inventories. A complete list of identified on-site vascular plants is included in **Attachment 6**.

Additionally, the Study Area is within the known range of the federal and state listed endangered northern long-eared bat (*Myotis septentrionalis*) ("MYSE") and tricolored bat¹ (*Perimyotis subflavus*) ("PESU"). In addition to the federally listed species, there is one candidate species, monarch butterfly (*Danaus plexippus*), but there is no critical habitat within the Project area under the USFWS office jurisdiction. See the United States Fish and Wildlife Services ("USFWS") Official Species List (IPaC provided as **Attachment 7**). As there are no known occurrences of MYSE summer habitat or winter hibernacula, the Project is assumed to occur within "Potential Summer Habitat," according to FWD guidance (2017b). If tree clearing in assumed Potential Summer Habitat is kept under one percent of the available MYSE habitat within one mile of the Project center, no additional conservation measures are necessary. The Project is proposing approximately 2,340 square feet (0.05-acre) of tree clearing (tree removal with stumping/ grubbing). Based on an analysis of forested landcover, using ANR's Natural Resources Atlas "Summarize Landcover" tool, the total forested area within one mile of the Project is 1,269 acres. Therefore, the total area of tree cutting for the Project represents an insignificant amount of the total forested area within one mile of the Project and will not require further conservation or mitigation measures. In addition, VHB performed a potential roost tree ("PRTs") survey on January 21, 2025, and there were three PRT's observed within the Study Area (as shown on Attachment 1). The PRT survey was performed in accordance with the *Vermont Fish and Wildlife Department Survey Procedures and Guidelines for Endangered and Threatened Bats* (FWD 2023). The PRT's will be retained, as such, VHB concludes a no effect determination for forested bat species. Based on a review and analysis of available databases and targeted RTE plant inventories, VHB concludes that the Project will not destroy or significantly imperil any endangered species.

Regarding the Section 248 criterion for Necessary Wildlife Habitat (§ 6086(a)(8)(A)), according to FWD guidance (ANR 2021), VHB understands that open fields greater than 20 acres could be considered as Necessary Wildlife Habitat (NWH") for grassland bird species. The largest field within the overall Study Area is not large enough to be considered appropriate grassland bird habitat by FWD standard. It is approximately three acres in size and bound by forested areas to the north, east, and west, and the existing solar array to the south. No NWH is observed or mapped within or in the vicinity of the Study Area. As such, the Project will not destroy or significantly imperil necessary wildlife habitat.

Conclusion

Based on VHB's assessment of the Project, with respect to the natural resources criteria listed above and assessed, VHB concludes that the Project will not result in undue adverse effects to the natural environment provided that the

¹ *P. subflavus* federally proposed endangered on September 13, 2022.

required permit(s) are obtained, and the Project is constructed in the site and as proposed. During natural resource investigations no waters², floodways, rare/irreplaceable natural areas, or necessary wildlife habitat was present in the Study Area. A detailed wetland delineation will be performed in the 2025 growing season to confirm the absence or presence of wetland buffers in the BESS Project Area. Additionally, a site visit with the DEC District Ecologist will be requested for wetland delineation and proposed classification review. The Petitioner will obtain all collateral environmental permits identified before Project construction, to include a DEC construction stormwater general permit 3-9020 and potentially a VWP for Class II wetland buffer impact associated with access upgrades, as to-be determined applicable.

Attachments

1. Natural Resources Map
2. Section 248 Natural Resources Criteria Assessment Table
3. Representative Site Photographs
4. USACE Wetland Determination Data Form
5. Potential Rare, Threatened, and Endangered Plant Species and Significant Natural Communities Summary in the Project Region and Onsite Habitats
6. Partial Floristic Inventory
7. USFWS IPaC Official Species List

Resources and References

- Agency of Natural Resources 2024. *Rare and Uncommon Native Vascular Plants of Vermont*. Fish and Wildlife Department. Effective June 10, 2024.
- 2023. *Survey Procedures and Guidelines for Endangered and Threatened Bats*, Vermont Fish and Wildlife Department. Updated July 2023.
- 2022. *Endangered and Threatened Plants of Vermont*. Natural Heritage Inventory, Fish and Wildlife Department. Effective February 10, 2022.
- 2021. *Guidance for the review and Mitigation of Impacts to Grassland Bird Habitat in Connection with Regulated Projects in Vermont*. Effective October 26, 2021.
- 2017b. *Regulatory Review Guidance for Protecting Northern Long-eared Bats and Their Habitats*. Fish and Wildlife Department. Effective February 2017.
- 2016a. *Guidance for Conducting Rare, Threatened, and Endangered Plant Inventories in Connection with Section 248 Projects*. Fish and Wildlife Department. Effective October 5, 2016.
- Argentine, C. C. 2008. *Vermont Act 250 Handbook*. Putney Press, Brattleboro, Vermont.
- Natural Resources Conservation Service (NRCS), United States Department of Agriculture. 2023. *Web Soil Survey*.

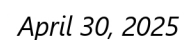
² Outstanding Resource Waters, headwaters, streams, waterbodies, shorelines

Thompson, E. H., Sorenson, E.R., and R.J. Zaino. 2019. *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont*. Second Edition. Published by Vermont Fish and Wildlife Department, The Nature Conservancy, and Vermont Land Trust. Distributed by Chelsea Green Publishing.






















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ATTACHMENT 1

Murphy Road Energy Storage Project | Bennington, Vermont



| NRSC Soil Information | | | | |
|-----------------------|---|---------------------------------|-----------------------------|--------------|
| Soil Abbreviation | Soil Map Unit | Vermont Farmland Classification | Erodibility Ranking | Area (Acres) |
| 40C | Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky | Statewide | highly erodible | 1.9 |
| 70B | Groton gravelly fine sandy loam, 3 to 8 percent slopes | Statewide | potentially highly erodible | 2.1 |
| 67C | Georgia loam, 8 to 15 percent slopes, very stony | NPSL | highly erodible | 1.0 |

- | | | | |
|--|---|---|---|
|  Study Area (VHB) |  Public Water Source (ANR) (0) |  Surface Water SPA (ANR)(0) |  Natural Communities (ANR) (0) |
|  Preliminary Wetland (Approx.) (VHB) | Stream (ANR) (0) |  Deer Wintering Areas (ANR) (0) |  NRCS Soil Boundary (VCGI) (7) |
|  50' Design Setback (Approx.) (VHB) |  Waterbody (ANR)(0) |  AE/VCE Confirmed Vernal Pools (0) |  Town Road (VTrans) (1) |
|  Potential Bat Roost Trees (VHB) (3) |  VSWI Wetland (ANR) (0) |  Uncommon Species (ANR) (0) |  Town Boundary (VCGI) (1) |
|  Found Culvert (VHB)(8) |  River Corridor (ANR) (0) |  RTE Species (ANR) (0) |  Parcel Boundary (VCGI)(7) |
|  Wetland Determination Data Point (VHB) (1) |  Ground Water SPA (ANR)(0) | | |

NOTE: VHB Environmental Scientist (A. Pierce) conducted natural resources investigation of the site on July 26, 2024 and a recon of potential line upgrade areas during winter conditions on January 21, 2025.

Mapped wetland boundaries and classifications are subject to review by DEC District Wetlands Ecologist.

Sources: Background Imagery by VCGI (Collected in 2019), VCGI (Vermont Center for Geographic Information - Various Dates), ANR (Vermont Agency of Natural Resources - Various Dates), VTans (Vermont Agency of Transportation - Various Dates), VHB (2023, 2024)

NOTE: (#) indicates the count of feature layers within the map extent of each map sheet.

Path: \\vhb.com\gis\proj\SBurlington\58952.13 Encore Murphy Rd VT BESS\Project\Encore_Murphy_Rd_Battery_NR Map.aprx (User: kmaines, Date: 4/30/2025)

ATTACHMENT 2

Section 248 Natural Resources Criteria Assessment

Project Name: Murphy Road Energy Storage Project
Client: Encore Renewable Energy
Project Location: Bennington, VT
Project Area: 5 acres

Date: 5/16/2025
Prepared By: VHB
Project Plan Date: 5/14/2025
Field Date: July 26, 2024 & January 21, 2025



| Section 248 Natural Resources Criteria | | | | | | | | | |
|---|---|--|--|--|---|--|---|--|---|
| | Outstanding Resource Waters (10 V.S.A. § 1424a(d)) | Headwaters (10 V.S.A. § 6086(a)(1)(A)) | Floodways (10 V.S.A. § 6086(a)(1)(D)) | Streams (10 V.S.A. § 6086(a)(1)(E)) | Shorelines (10 V.S.A. § 6086(a)(1)(F)) | Wetlands (10 V.S.A. § 6086(a)(1)(G)) | Rare or Irreplaceable Natural Areas (10 V.S.A. § 6086(a)(8)) | Necessary Wildlife Habitat (10 V.S.A. § 6086(a)(8)(a)) | Endangered Species (10 V.S.A. § 6086(a)(8)(a)) |
| Identification Method | Review of the Natural Resources Board/ Agency of Natural Resources list of Outstanding Resource Waters (ORW) (ANR). | If not in an intensively developed area, sub-criteria reviewed by evaluating NRCS soils data, contour data; watershed size; ground and surface water protection areas to determine if the site meets the headwater criteria. | Review of floodplain mapping provided by VCGI and FEMA (Panel No. 50003C0411D, Effective 2015); Review of ANR River Corridor Map Layer (ANR); Stream flow regime from watershed sizes and in-field determinations. | Review of the VHD stream mapping provided by VCGI; field review in 2024 and 2025. | Review of waterbody data provided by VCGI ; field review in July, 2024 and 2025 to determine presence/absence of waterbodies - lakes, ponds, reservoirs, or rivers. | Review of VSWI and ANR's Wetland Advisory Layer mapping by VCGI; field review in [2024 and 2025] for potential federal/state jurisdictional features. If present, wetland classifications under the VT Wetland Rules assessed. | Review of the significant natural community mapping by VCGI; database reviews corroborated by field assessment for potential rare and significant natural communities. | 1-mile radius review VT NHI database of black bear and deer wintering habitat data by VCGI; database reviews corroborated by field review in 2024. | 1-mile radius review VT NHI database of RTE species data by VCGI, and USFWS IPaC; database reviews corroborated by field review in July, 2024. |
| Presence/ Absence | Absent | Absent | Absent | Absent | Absent | Present | Absent | Absent | Potential |
| Resource Description | None present | It is VHB's finding that the Project is not in a Headwater location, additionally the Project will meet applicable health and Environmental regulations regarding the quality of groundwater and surface waters. | Study Area is not located in a floodway or floodway fringe. The Walloomsac River is mapped approximately 700 feet north of the Study Area. There is a ANR River Corridor and a FEMA mapped 100 year floodplain associated with the Walloomsac River, mapped approximately 300 feet north of the Study Area at its closest reach. | There are no natural streams or riparian buffers present within the Study Area. The Walloomsac River is present approximately 700 feet to the north. | The closest shoreline would be associated with Walloomsac River, approximately 700 to the north from the Study Area | VHB approximately mapped one preliminary wetland, opposite the existing access road, south of Murphy Road in the southernmost portion of the Study Area. | No significant natural communities are mapped within the Study Area. Rich Northern Hardwood Forest is mapped approximately 0.6 miles to the northwest and a Red Maple-Black Ash Seepage Swamp is mapped approximately 1.0 miles to the south. | No state-mapped Necessary Wildlife Habitat ("NWH") present within the Study Area, which was confirmed by field review. The field complex within the overall parcel is intersected with forest and hedgerow and is not large enough to constitute critical habitat as defined in FWD's Guidance for the Review and Mitigation of Impacts to Grassland Bird Habitat. | No state-mapped RTEs are within the Study Area, and there were no RTE plants observed in the Study Area. The Project is within the known summer range of the northern long-ear bat (<i>Myotis septentrionalis</i>) ("MYSE") and tricolored bat ("Perimyotis subflavus"), although there is no critical habitat present in the Study Area for either species. |
| Further Survey Recommended? | No | No | No | No | No | Yes, in order to delineate and determine final VWR classification | No | No | No |
| Potential Adverse Impacts (Yes/No) | No | No | No | No | No | Yes | No | No | Yes |
| Impact Mitigation Description/ Recommendation | N/A | N/A | N/A | N/A | N/A | Impacts are to the potential wetland buffer from upgrades to the existing access road located on the opposite roadside from the wetland, within managed and non-functioning buffer portions. No mitigation required, although the access road upgrade width will be minimized upon operations. | N/A | No | Minimal tree clearing is proposed and all potential roost trees (PRTs) will be retained. |
| Impact Assessment | ORWs are not present and will not be effected by the Project. | As Study Area does not meet any of the headwater sub-categories, there will be no adverse impacts on ground or surface water quality. | As the Study Area is not located in areas mapped as floodway or floodway fringe, the Project will not significantly increase the peak discharge of the river or stream within or downstream from the area of development and endanger the health, safety, or welfare of the public or riparian owners during flooding. | The Project will not impact the natural condition of any streams in the vicinity; and will not endanger the health, safety, or welfare of the public or of adjoining landowners. | The Project is not located on or near a shoreline. | Petitioner will apply for a General Vermont Wetland Permit in order to authorize impacts to Class II wetland buffer. | There are no natural communities, state-mapped or otherwise observed, within the Study Area, therefore there will be no impact to RINA | The Study Area is within an agricultural field and, corroborated by field review, does not provide NWH | No known records of protected bats are known from within 1 mile of the Study Area and minimal tree clearing is proposed for the project; therefore no specific conservation measures required to avoid impacts to MYSE. In addition, VHB preformed a potential roost tree survey and all PRTs will be retained. For these reasons, the proposed Project is anticipated to be able to be designed to avoid undue adverse impact on RTE bat species. Additionally VHB botanist preformed a plant survey in July 2024 and there were no RTE plants observed. |
| Applicable Permit(s) (if required) | N/A | No specific permits required for Headwaters Criterion; a project must comply with applicable DEC health and environmental regulations | Flood Hazard and River Corridor Permit (registration, general or individual) | Clean Water Act Section 404 Permit/Clean Water Act Section 401 WQC/Stream Alteration Permit | Rivers and Harbors Act Section 10 Permit/Shoreland Encroachment Permit | Clean Water Act Section 404 Permit/Clean Water Act Section 401 WQC/Vermont Wetland Permit | None | None | Endangered Species Takings Permit |
| Agency | N/A | Public Utility Commission/VT ANR; VT DEC Stormwater Section; Department of Fish and Wildlife | VT DEC River Management Section | USACE/DEC Watershed Management Division/DEC River Management Section | USACE/ DEC Lakes and Ponds Section | USACE/ DEC Watershed Management Division/DEC Wetlands Section | VT FWD/ U.S. Fish and Wildlife Service | VT FWD/ U.S. Fish and Wildlife Service | VT FWD/ U.S. Fish and Wildlife Service |
| Required (Yes/No) | No | No | No | No | No | Probable, VWP for access road impacts, if the wetland is present/Class II. | No | No | No |

ATTACHMENT 3



© VHB

Murphy Road Energy Storage Project Bennington, VT

PROJECT NUMBER

58952.13

CLIENT

Encore Renewable Energy

50 Lakeside Avenue

Burlington, VT 05401

LOCATION

Murphy Road

Bennington, VT 05201



NO. 1 / 1.21.2025

DESCRIPTION

A representative photograph of approximately mapped potential Palustrine Forested (PFO) wetland. The wetland exists on the opposite roadside from the existing access road in the southernmost portion of the Study Area in a forest fragment between two residential dwellings. View looking south from Murphy Road.



NO. 2 / 1.21.2025

DESCRIPTION

A representative photograph of a boxelder (*Acer negundo*) potential roost tree (PRT) for bats mapped by VHB in a hedgerow within the Study Area. View looking southwest from the existing access road to the solar array.



NO. 3 / 7.26.2024

DESCRIPTION

A representative photograph of the proposed energy storage facility location north of Murphy Road.



NO. 4 / 7.26.2024

DESCRIPTION

A representative photograph of an upland field in the western quadrant of the study area.



NO. 5 / 7.26.2024

DESCRIPTION

A representative photograph of a hedgerow bisecting the study area. View facing west.



NO. 6 / 7.26.2024

DESCRIPTION

A representative photograph of a break in an upland hedgerow facing east.

ATTACHMENT 4

Vermont Potential Rare, Threatened, and Endangered Species and Natural Communities in the Project Region and Onsite Habitats Summary

Client: Encore Renewable Energy
Project: Murphy Road Energy Storage Project
Prepared by: VHB (A. Pierce, K. Maines) January 21, 2025
Survey Date: July 26, 2024 (A. Pierce)



| | Species | Common Name | Type | State Rank | Global Rank | Vermont Status | Federal Status | EO last Observed | Habitat Description ¹ | Occurrence Description ² | Optimal Survey Time ³ | EO Mapped within Study Area? | Potential for Habitat to Occur Onsite? | Survey Recommended? | |
|-------------------------------------|-----------------------------------|--------------------------------|-----------|------------|-------------|----------------|----------------|------------------|--|---|----------------------------------|------------------------------|--|---------------------|--|
| | | | | | | | | | | | | | | (yes/no) | Comments |
| Element Occurrences - 1 Mile Radius | <i>Bartramia longicauda</i> | Upland Sandpiper | Animal | S2B | G5 | E | - | 2021 | Grasslands; pastures, prairies, fallow fields, road edges, elevated ridges in wetlands and floodplains | Found in mowed strip along airport runway | Summer-Late Summer | No | No | No | No suitable habitat is present onsite as field within the Study Area is 3 acres and separated from adjacent fields by forested/hedgerow shrub cover. VHB understands FWD staff agree open fields over 20 acres could be NWH for grassland bird species |
| | <i>Carex formosa</i> | Handsome Sedge | Plant | S3 | G4 | - | - | 1984 | Meadows, rich, mesic forests; often upslope of wetlands or drainages with sparse litter or vegetation | Silk Road Woods, along west side of Silk Road | Summer | No | Yes | No | Species is not state or federally protected |
| | <i>Gentianopsis crinita</i> | Greater fringed-gentian | Plant | S3 | G5 | - | - | 2012 | Fields, meadows, roadsides, clearings | North Bennington | Late Summer - Fall | No | Yes | No | Species is not state or federally protected |
| | <i>Liparis liliifolia</i> | Lily-leaved wide-lipped orchid | Plant | S1 | G5 | T | - | 1999 | Dry-mesic to wet-mesic forests and woodlands, often on soils of middle to high-pH; limestone, trap and sandstone | North of Bennington Airport swamp south of Vail Road. | Spring - Summer | No | No | No | No suitable habitat onsite |
| | <i>Lonicera hirsuta</i> | Hairy Honeysuckle | Plant | S2 | G5 | - | - | 1984 | Rocky forests and woodlands, ledges, usually high-pH bedrock regions | East of Silk Road Woods, 0.3 miles north of intersection with Vail Road | Summer | No | No | No | No suitable habitat onsite |
| | <i>Solidago patula</i> | Roughleaf Goldenrod | Plant | S3 | G5 | - | - | 1999 | Found in riparian forests, wooded swamps, wet meadows | Bennington Airport Swamp | Late Summer | No | Yes | No | Species is not state or federally protected |
| | <i>Sturnella magna</i> | Eastern Meadowlark | Animal | S2B | G5 | T | - | 2023 | Grasslands; pastures, prairies, fallow fields, road edges, elevated ridges in wetlands and floodplains | Bennington College | Spring- Summer | No | No | No | No suitable habitat is present onsite as field within the Study Area is under 5 acres and separated from adjacent fields by forested/hedgerow shrub cover. VHB understands FWD staff agree open fields over 20 acres could be NWH for grassland bird species |
| | Red Maple-Black Ash Seepage Swamp | | Community | S4 | - | - | - | 1999 | Groundwater seepage is common on upslope margins; organic soils over 40 inches depth usually over bedrock. | Bennington Airport Swamp; north and south of Vail Road | Summer-Fall | No | No | No | - |
| | Rich Northern Hardwood Forest | | Community | S4 | - | - | - | 1987 | Benches, coves and gullies; often have high nutrient quality of soils and rich vegetative productivity in basins. Top of hills have leached nutrients and lower diversity. | Northwest of Bennington off Route 67A | Spring - Fall | No | No | No | - |

¹Potential sources for habitat description listed below
Ahles, Harry E. and Magee, Dennis W. 2007. *Flora of the Northeast*. A Manual of the Vascular Flora of New England and Adjacent New York
Animal Diversity Web. Retrieved from: <https://animaldiversity.org/accounts>
Cornell Lab of Ornithology Bird Guide. Retrieved from: <https://www.allaboutbirds.org/guide/>
Gilman, Arthur V. 2015. *New Flora of Vermont*. The New York Botanical Garden.
Gleason, Henry A. and Cronquist, Arthur. 1991. *Manual of Vascular Plants of Northeast United States and Adjacent Canada*. The New York Botanical Garden.
Haines, Arthur. 2011. *Flora Novae Angliae*. New England Wildflower Society/Yale University Press, New Haven, CT. 973 Pp.
Newcomb, Lawrence. 1977. *Newcomb's Wildflower Guide*. Little, Brown, and Company, Boston
Seymour, Frank Conkling. 1982. *The Flora of New England*. 2d ed. Phytologia Memoirs 5. Plainfield, NJ: Harold N. Moldenke and Alma L. Moldenke. 611 p. [7604]
Thompson, Elizabeth H., Sorenson, Eric R. and Zaino, Robert J. 2019. *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont*. Vermont Department of Fish and Wildlife and The Nature Conservancy.
Vermont Natural Resources Atlas, Accessed July 2024 and January 2025. Element Occurrence Reports
²Sources for occurrence description listed below:
Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department - Element Occurrence Reports.
³Flowering Time: Spring (April-May), Summer (June-July), Late Summer (August-September), Fall (October-November)

ATTACHMENT 5



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

2024-REP-UPL

| | | | | | |
|---|---|--|------------|-----------------|--------------|
| Project Site: | Murphy Road Energy Storage Project | City/County: | Bennington | Samp. Date: | 7/26/2024 |
| Applicant/Owner: | Encore Renewable Energy | State: | VT | Sampling Point: | 2024-REP-UPL |
| Investigator(s): | VHB (A. Pierce) | Section, Township, Range: | Bennington | | |
| Landform (hillslope, terrace, etc.): | Flat | Local relief (concave, convex, none): | None | Slope (%): | 0-3 |
| Subregion (LRR or MLRA): | LRR R | Lat: | 42.910977 | Long: | -73.239144 |
| Soil Map Unit: | Galway- Nellis- Farmington complex, 8 to 15 percent slopes, rocky | Datum: | NAD 83 | NWI Class: | Upland |
| Are climatic/hydrologic conditions on the site typical for this time of year? | No | (If no, explain in Remarks.) | | | |
| Are Vegetation, Soil, or Hydrology significantly disturbed? | No | Normal Circumstances? | Yes | | |
| Are Vegetation, Soil, or Hydrology naturally problematic? | No | (If needed, explain any answers in Remarks.) | | | |

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

| | | | |
|--|----|---------------------------------------|----|
| Hydrophytic Vegetation Present? | NO | Is This Sample Area Within a Wetland? | NO |
| Hydric Soil Present? | NO | | |
| Wetland Hydrology Present? | NO | | |
| Remarks: Upland field located in the northern extent of the study area. Upgradient of existing solar array. | | | |

HYDROLOGY

| | | | |
|--|---|--|----|
| Wetland Hydrology Indicators: | | Secondary Indicators (minimum of two required) | |
| Primary Indicators (minimum of one is required; check all that apply) | | | |
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) | |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) | |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Marl Deposits (B13) | <input type="checkbox"/> Moss Trim Lines (B16) | |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Dry-Season Water Table (C2) | |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Crayfish Burrows (C8) | |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Saturation Visible on Aerial (C9) | |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Stunted or Stressed Plants (D1) | |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Geomorphic Position (D2) | |
| <input type="checkbox"/> Inundation Visible on Aerial (B7) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Shallow Aquitard (D3) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | <input type="checkbox"/> Microtopographic Relief (D4) | |
| | | <input type="checkbox"/> FAC-Neutral Test (D5) | |
| Field Observations: | | | |
| Surface Water Present? | Depth (inches): | Wetland Hydrology Present? | NO |
| Water Table Present? | Depth (inches): | | |
| Saturation Present? | Depth (inches): | | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2.14" of rain in 5 days prior in Bennington, VT (NWS 2024); PDSI 3.38 (Very Moist Spell) for week ending 7/27/2024 | | | |
| Remarks: Saturation > 12" | | | |

SOIL

| | | | | | | | |
|---|--|------|----------------|--|-------------------|------------------|---------------|
| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | |
| Depth | Matrix | | Redox Features | | | | |
| (in) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture |
| 0-7 | 2.5Y 5/4 | 100% | | | | | GRAVELLY LOAM |
| 7-12 | 10YR 4/4 | 95% | 2.5YR 3/6 | 5% | C | M | GRAVELLY LOAM |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| ¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. | | | | | | | |
| ² Location: PL=Pore Lining, M=Matrix. | | | | | | | |
| Hydric Soil Indicators: | | | | Indicators for Problematic Hydric Soils ³ : | | | |
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | | | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) | | | |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | | | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) | | | |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | | | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) | | | |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | | | <input type="checkbox"/> Dark Surface (S9) (LRR K, L, M) | | | |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | | | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) | | | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | | | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) | | | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | | | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) | | | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | | | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) | | | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) | | | |
| <input type="checkbox"/> Sandy Redox (S5) | | | | <input type="checkbox"/> Red Parent Material (F21) | | | |
| <input type="checkbox"/> Stripped Matrix (S6) | | | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) | | | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | | | <input type="checkbox"/> Other (Explain in Remarks) | | | |
| ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. | | | | | | | |
| Restrictive Layer (if observed): | | | | Hydric Soil Present? | | | |
| Type: | | | | NO | | | |
| Depth (inches): | | | | | | | |
| Remarks: Auger refusal to coarse rock at 12-inches | | | | | | | |

| Tree Stratum | (Plot size: 30' RAD) | Absolute % Cover | Dom. Sp? | Indicator Status | |
|---|-----------------------------------|--------------------------|-------------|---------------------|---|
| 1. | | | | | Dominance Test Worksheet: # Dominants OBL, FACW, FAC: 1 (A) # Dominants across all strata: 7 (B) % Dominants OBL, FACW, FAC: 14% (A/B) |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| | | = Total Cover | | | Prevalence Index Worksheet: Total % Cover of: Multiply By: OBL _____ x 1 = _____ FACW _____ x 2 = _____ FAC 18 x 3 = 54 FACU 66 x 4 = 264 UPL 53 x 5 = 265 Sum: 137 (A) 583 (B) Prevalence Index = B/A = 4.26 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | = Total Cover | | | Hydrophytic Vegetation Indicators: _____ Dominance Test is > 50% _____ Prevalence Index is <= 3.0 _____ Problematic Hydrophytic Vegetation ¹ (explain) _____ Rapid Test for Hydrophytic Vegetation _____ Morphological Adaptations <small>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small> |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | = Total Cover | | | Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and 3in (7.6cm) or larger in diameter at breast height (DBH). Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH. Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to 6m) in height. Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3ft (1m) in height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation Present? NO |
| Herb Stratum | (Plot size: 5' RAD) | | | | |
| 1. | Daucus carota | 38 | X | UPL | |
| 2. | Rudbeckia hirta | 15 | X | FACU | |
| 3. | Trifolium pratense | 15 | X | FACU | |
| 4. | Galium mollugo | 15 | X | FACU | |
| 5. | Symphotrichum lateriflorum | 15 | X | FAC | |
| 6. | Hypericum perforatum | 15 | X | UPL | |
| 7. | Festuca subverticillata | 15 | X | FACU | |
| 8. | Phleum pratense | 3 | | FACU | |
| 9. | Solidago rugosa | 3 | | FAC | |
| 10. | Plantago major | 3 | | FACU | |
| 11. | | | | | |
| 12. | | | | | |
| | | 137 = Total Cover | | | |
| Woody Vines | (Plot size: 15' RAD) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| | | = Total Cover | | | |
| Remarks: (If observed, list morphological adaptations below). | | | | | |

ATTACHMENT 6

Partial Floristic Inventory

Client: Encore Renewable Energy

Project: Murphy Road Energy Storage Project

Survey Date(s): 7/26/2024 (A. Pierce)

Prepared by: VHB (A. Pierce) 4/3/2025

| Scientific Name ¹ | Common Name | Family | VT Rarity Rank ^{2,3} | Non-Native Invasive Species ⁴ |
|--|-----------------------|-----------------|-------------------------------|--|
| <i>Achillea millefolium</i> L. | common yarrow | Asteraceae | - | - |
| <i>Acer negundo</i> L. | boxelder | Aceraceae | - | - |
| <i>Acer rubrum</i> L. | red maple | Aceraceae | - | - |
| <i>Arctium minus</i> Bernh. | lesser burdock | Asteraceae | - | - |
| <i>Asparagus officinalis</i> L. | garden asparagus | Liliaceae | - | - |
| <i>Asplenium platyneuron</i> (L.) Britton, Sterns & Poggenb. | ebony spleenwort | Aspleniaceae | - | - |
| <i>Betula papyrifera</i> Marshall | paper birch | Betulaceae | - | - |
| <i>Bromus inermis</i> Leyss. | smooth brome | Poaceae | - | - |
| <i>Celastrus orbiculatus</i> Thunb. | Oriental bittersweet | Celastraceae | - | B |
| <i>Cichorium intybus</i> L. | chicory | Asteraceae | - | - |
| <i>Clinopodium vulgare</i> L. | wild basil | Lamiaceae | - | - |
| <i>Cornus racemosa</i> Lam. | gray dogwood | Cornaceae | - | - |
| <i>Cornus sericea</i> L. | redosier dogwood | Cornaceae | - | - |
| <i>Crataegus</i> L. | hawthorn | Rosaceae | - | - |
| <i>Cynoglossum officinale</i> L. | gypsyflower | Boraginaceae | - | - |
| <i>Daucus carota</i> L. | Queen Anne's lace | Apiaceae | - | - |
| <i>Dactylis glomerata</i> L. | orchardgrass | Poaceae | - | - |
| <i>Dianthus armeria</i> L. | Deptford pink | Caryophyllaceae | - | - |
| <i>Euthamia graminifolia</i> (L.) Nutt. | flat-top goldentop | Asteraceae | - | - |
| <i>Eurybia macrophylla</i> (L.) Cass. | bigleaf aster | Asteraceae | - | - |
| <i>Festuca subverticillata</i> (Pers.) Alexeev | nodding fescue | Poaceae | - | - |
| <i>Frangula alnus</i> Mill. | glossy buckthorn | Rhamnaceae | - | B |
| <i>Fraxinus americana</i> L. | white ash | Oleaceae | - | - |
| <i>Fragaria virginiana</i> Duchesne | Virginia strawberry | Rosaceae | - | - |
| <i>Galium mollugo</i> L. | false baby's breath | Rubiaceae | - | - |
| <i>Galium palustre</i> L. | common marsh bedstraw | Rubiaceae | - | - |
| <i>Hypericum perforatum</i> L. | common St. Johnswort | Clusiaceae | - | - |
| <i>Juncus tenuis</i> Willd. | poverty rush | Juncaceae | - | - |
| <i>Lotus corniculatus</i> L. | bird's-foot trefoil | Fabaceae | - | - |
| <i>Lobelia inflata</i> L. | Indian-tobacco | Campanulaceae | - | - |
| <i>Lonicera morrowii</i> A. Gray | Morrow's honeysuckle | Caprifoliaceae | - | B |
| <i>Lysimachia nummularia</i> L. | creeping jenny | Primulaceae | - | - |
| <i>Malus pumila</i> Mill. | paradise apple | Rosaceae | - | - |
| <i>Medicago sativa</i> L. | alfalfa | Fabaceae | - | - |
| <i>Monarda fistulosa</i> L. | wild bergamot | Lamiaceae | - | - |
| <i>Onoclea sensibilis</i> L. | sensitive fern | Dryopteridaceae | - | - |
| <i>Oxalis stricta</i> L. | common yellow oxalis | Oxalidaceae | - | - |
| <i>Pastinaca sativa</i> L. | wild parsnip | Apiaceae | - | WL |
| <i>Phleum pratense</i> L. | timothy | Poaceae | - | - |
| <i>Picea glauca</i> (Moench) Voss | white spruce | Pinaceae | - | - |
| <i>Picea rubens</i> Sarg. | red spruce | Pinaceae | - | - |
| <i>Pinus strobus</i> L. | eastern white pine | Pinaceae | - | - |
| <i>Plantago lanceolata</i> L. | narrowleaf plantain | Plantaginaceae | - | - |
| <i>Plantago major</i> L. | common plantain | Plantaginaceae | - | - |
| <i>Poa palustris</i> L. | fowl bluegrass | Poaceae | - | - |
| <i>Potentilla recta</i> L. | sulphur cinquefoil | Rosaceae | - | - |
| <i>Populus tremuloides</i> Michx. | quaking aspen | Salicaceae | - | - |
| <i>Prunus serotina</i> Ehrh. | black cherry | Rosaceae | - | - |
| <i>Prunus virginiana</i> L. | chokecherry | Rosaceae | - | - |
| <i>Quercus alba</i> L. | white oak | Fagaceae | - | - |
| <i>Rhamnus cathartica</i> L. | common buckthorn | Rhamnaceae | - | B |
| <i>Rhus typhina</i> L. | staghorn sumac | Anacardiaceae | - | - |
| <i>Rosa multiflora</i> Thunb. | multiflora rose | Rosaceae | - | WL |
| <i>Rubus allegheniensis</i> Porter | Allegheny blackberry | Rosaceae | - | - |
| <i>Rumex crispus</i> L. | curly dock | Polygonaceae | - | - |
| <i>Rudbeckia hirta</i> L. | blackeyed Susan | Asteraceae | - | - |
| <i>Rubus occidentalis</i> L. | black raspberry | Rosaceae | - | - |
| <i>Salix bebbiana</i> Sarg. | Bebb willow | Salicaceae | - | - |
| <i>Salix discolor</i> Muhl. | pussy willow | Salicaceae | - | - |
| <i>Salix sericea</i> Marshall | silky willow | Salicaceae | - | - |
| <i>Solidago canadensis</i> L. | Canada goldenrod | Asteraceae | - | - |

Partial Floristic Inventory

Client: Encore Renewable Energy

Project: Murphy Road Energy Storage Project

Survey Date(s): 7/26/2024 (A. Pierce)

Prepared by: VHB (A. Pierce) 4/3/2025

| Scientific Name ¹ | Common Name | Family | VT Rarity Rank ^{2,3} | Non-Native Invasive Species ⁴ |
|---|------------------------|------------------|-------------------------------|--|
| <i>Solidago gigantea</i> Aiton | giant goldenrod | Asteraceae | - | - |
| <i>Solidago juncea</i> Aiton | early goldenrod | Asteraceae | - | - |
| <i>Solidago rugosa</i> Mill. | wrinkleleaf goldenrod | Asteraceae | - | - |
| <i>Symphyotrichum lateriflorum</i> (L.) Á. Löve & D. Löve | calico aster | Asteraceae | - | - |
| <i>Trifolium pratense</i> L. | red clover | Fabaceae | - | - |
| <i>Ulmus americana</i> L. | American elm | Ulmaceae | - | - |
| <i>Valeriana officinalis</i> L. | garden valerian | Valerianaceae | - | WL |
| <i>Verbascum thapsus</i> L. | common mullein | Scrophulariaceae | - | - |
| <i>Viburnum dentatum</i> L. | Arrowwood | Caprifoliaceae | - | - |
| <i>Viburnum opulus</i> L. | European cranberrybush | Caprifoliaceae | - | - |
| <i>Zizia aurea</i> (L.) W.D.J. Koch | golden zizia | Apiaceae | - | - |

¹ Nomenclature follows USDA-NRCS PLANTS database (plants.usda.gov/) (2025).

² The Vermont Rarity Rank from the "Rare and Uncommon Native Vascular Plants of Vermont - Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department", version

³ The Vermont Rarity Rank from the "Endangered and Threatened Plants of Vermont - Vermont Natural Heritage Inventory - Vermont Fish & Wildlife Department", version dated

⁴ **Class B Noxious Weeds Species (B)** from: Quarantine #3- Noxious Weeds (2012).

Watch List Species (WL) from: Vermont Invasive Exotic Plant Committee. 2017. Quarantine and Watch List Update.

ATTACHMENT 7



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To:

05/16/2023 16:00:23 UTC

Project Code: 2025-0097876

Project Name: Murphy Road Energy Storage Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the “**New England Field Office Endangered Species Project Review and Consultation**” website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

<https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review>

NOTE Please do not use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

<https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/service/section-7-consultations>

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

<https://www.fws.gov/program/migratory-bird-permit>

<https://www.fws.gov/library/collections/bald-and-golden-eagle-management>

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

PROJECT SUMMARY

Project Code: 2025-0097876

Project Name: Murphy Road Energy Storage Project

Project Type: Power Gen - Solar

Project Description: New battery storage facility in Bennington, Vermont.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.910199649999996,-73.23878551989307,14z>



Counties: Bennington County, Vermont

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

| NAME | STATUS |
|--|------------------------|
| Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 | Endangered |
| Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515 | Proposed Endangered |

INSECTS

| NAME | STATUS |
|---|------------------------|
| Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 | Proposed Threatened |

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: VHB
Name: Kaitlyn Maines
Address: 20 Winooski Falls Way
Address Line 2: Suite 400B
City: Winooski
State: VT
Zip: 05404
Email: kmaines@vhb.com
Phone: 8024976189