



WATERSHED RESOURCE CONSULTANTS, LLC  
NATURAL RESOURCE AND SOIL SCIENCE CONSULTING

# Protected Natural Resources Report

Town of Bar Harbor  
Town Hill Affordable Workforce Housing Project  
Crooked Road  
Bar Harbor, Maine



**Prepared For:**

Town of Bar Harbor  
93 Cottage Street  
Bar Harbor, ME 04609

**Prepared By:**

Watershed Resource Consultants, LLC  
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October 2024

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## 1.0 INTRODUCTION

This Report presents the findings of protected natural resource services conducted by Watershed Resource Consultants, LLC (WRC) in support of the Town of Bar Harbor's proposed Town Hill Affordable Workforce Housing Project within an approximately 55.3-acre Acadia National Park property off of Crooked Road in Bar Harbor, Maine. The purpose of the services was to identify and delineate Maine Department of Environmental Protection (MDEP) and U.S. Army Corps of Engineers (Corps) defined Protected Natural Resources on the site.

## 2.0 METHODOLOGY

**2.1 Resource Identification and Delineation:** Protected Natural Resources were identified as defined by the Maine Department of Environmental Protection<sup>i</sup> (MDEP) and U.S. Army Corps of Engineers<sup>ii</sup> (Corps). Wetland delineation was conducted using the 1987 Corps Wetland Delineation Manual<sup>iii</sup>, Northeast Regional Supplement<sup>iv</sup>, and the NRCS Field Indicators of Hydric Soils<sup>v</sup>. Stream identification was conducted using the MDEP Natural Resources Protection Act Statute and the Corps General Permit. Vernal pool identification was conducted using MDEP Chapter 335<sup>vi</sup>, the 2014 Maine Association of Wetlands Scientists (MAWS) Vernal Pool Survey Protocol, and the Corps General Permit.

Wetlands, streams, and vernal pools were delineated within the site. Wetland, waterbody, and vernal pool boundaries were delineated in the spring of 2024.

Vernal pool surveys were conducted during the 2024 spring breeding season to identify use by Maine vernal pool indicator species, and/or rare, threatened, or endangered species. A vernal pool is defined as a temporary water body that provides breeding habitat for certain amphibians, fairy shrimp, and rare, threatened, or endangered species. Vernal Pools were classified as either Significant Vernal Pools (SVP's), which are vernal pools that meet classification as SVP as per the MDEP Chapter 335 definition; or non-Significant Vernal Pools (VP's), which are vernal pools that meet the definition of a vernal pool but do not meet classification as Significant: or as Indicator Breeding Areas (IBA's), which are features that support indicator species breeding but do not meet the state or federal definition of a vernal pool, such as roadside ditches, skidder ruts, and ponds with fish. Two separate surveys, early season and late season were conducted to identify all potential breeding activity.

Wetland boundaries were flagged with pink "Wetland Delineation" flagging, stream centerlines/banks were flagged with blue flagging, and vernal pools were flagged with green flagging. Flagging was numbered according to the Resource ID.

Wetland and waterbody resources were characterized using the Cowardin Classification system<sup>vii</sup>.



**2.2 Resource Location:** Resource boundaries were located with a sub-meter GPS. The Protected Natural Resources Plan, attached in Appendix B, was created using GPS data, surveys provided by Plisga & Day Land Surveyors, and publicly available data (MeGIS).

### **3.0 PROTECTED NATURAL RESOURCES ASSESSMENT**

**3.1 Site Overview:** The approximately 55.3-acre area of services (i.e., the “Site”) was the Acadia National Park property (Tax Map 227, Lot 112), located off of Crooked Road and State Route 102 in Bar Harbor, Maine. The property is in the Somes Sound watershed. The property is dominated by hardwood and coniferous forest and has not been disturbed for several decades.

**3.2 Topography and Soils:** The property is located north of Kitteredge Brook and Somes Sound. The property generally slopes to the south and southeast. Site slopes are generally 2-15%, with locally steeper areas.

The project area extends from approximately 90 feet above sea level along the eastern boundary of the property and rises gradually in elevation to nearly 120 feet above sea level in the western of the property.

The USDA NRCS Soil Survey for Hancock County shows several soil types occur within the site including Brayton, Bucksport, Colton, Hermon, Lamoine, Lyman, Scantic, Sebago, and Wonsqueak series soils. Bucksport, Scantic, Sebago, and Wonsqueak soils series are hydric soils, a component of wetlands.

**3.3 Wetlands:** WRC delineated ten freshwater wetlands within the site, as described in the wetland table included in Appendix C, and as located on the Protected Natural Resources Plan attached in Appendix B. Wetlands were forested and scrub-shrub, and had greater than 50% hydrophytic vegetation, hydric soils and evidence of wetland hydrology. Color photographs are attached in Appendix D. Corps Wetland Data Forms for representative wetlands are attached in Appendix E.

**3.4 Streams:** Five streams were delineated on the site. The streams are located on the Protected Natural Resource Plan attached in Appendix B. Streams were intermittent and met MDEP classification as streams. Color photographs are attached in Appendix D.

**3.5 Vernal Pools:** One Maine DEP Significant Vernal Pool, nine non-Significant Vernal Pools, and two Indicator Breeding Areas were documented on the site. Significant Vernal Pool 24-SVP-JL13 was a natural vernal pool located in a forested wetland in the west of the site. Vernal pools 24-V-JL5, 24-V-JL8, 24-V-JL15, 24-V-JL17, 24-V-JL19 through 24-V-JL23, and 24-V-RS1 were in forested wetlands throughout the western half of the property. IBAs 24-IBA-JL1 and 24-IBA-JL9 were also located in forested wetlands in the west of the property. The vernal pools are described in the table in Appendix C. Color photographs and Maine State Vernal Pool Assessment Forms, which contain further information on these vernal pools, are included in Appendix G.



**3.6 Other:** WRC did not identify other field-observable Protected Natural Resources on the site.

**3.7 Resource Agency Mapped Resources:** Watershed Resource Consultants, LLC (WRC) contacted and/or accessed the databases of natural resource agencies to identify if there are Threatened, Endangered, Significant or Essential species and/or habitats mapped on the site. Agencies contacted included Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Natural Areas Program (MNAP), and the U.S. Fish and Wildlife Service (USFWS).

According to the MDIFW response letter and map, dated August 7, 2024, MDIFW maps the site as within the habitat range of three species of bats that are protected under the Maine Endangered Species Act, and within the habitat range of five species of bats that are listed as species of Special Concern in Maine. According to the letter *“While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during migration and/or the breeding season. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.”*

MDIFW recommends that vernal pools be documented, and documentation sent to MDIFW for review.

MDIFW also recommends *“maintaining 100-foot undisturbed vegetated buffers from the upland edge of all intermittent and perennial streams and any contiguous wetlands”*, and that stream crossings be designed for full fish passage and any in-stream work be conducted between July 15 and October 1.

The MNAP response letter dated May 22, 2024, states that *“According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area.”* The MNAP database is not a site-specific field survey.

The US FWS database, accessed on August 26, 2024, indicates that two federally listed species should be considered as part of an effect analysis for the project: the Endangered northern long-eared bat and the Endangered Atlantic salmon. The database also lists the Tricolored Bat as a proposed endangered species and the monarch butterfly as a Candidate species. If the project will require a federal permit or will use federal funding, the federal action agency will determine if there are concerns regarding the project affecting this mapped habitat. The US FWS database result, attached in Appendix E, is valid for 90 days from August 26, 2024.

WRC also reviewed available published mapping for the site including USGS topographic mapping, U.S. Fish and Wildlife National Wetland Inventory (NWI), U.S. Natural Resources Conservation Service (NRCS) soil mapping, and FEMA flood maps, as available, to provide an indication of potential areas of protected natural resources on the property and for wetland classification purposes. These results are also attached in Appendix E.



**3.8 Classification:** Based on the Cowardin Classification System, WRC classified wetlands on the site as freshwater forested and scrub-shrub wetlands. The Cowardin classifications for each wetland are provided on the wetland table attached in Appendix C. Streams were classified as intermittent streams with cobble, sand, and mud substrates. The Cowardin classifications for each stream is provided on the stream table attached in Appendix C.

Vernal pool 24-SVP-JL13 meets the MDEP criteria to be classified as a Significant Vernal Pool. A Significant Vernal Pool (SVP) and the area within a 250-foot radius of the SVP is regulated by MDEP as a Significant Wildlife Habitat. The non-significant vernal pools on the site are natural pools that do not meet the MDEP criteria for Significant Vernal Pools and are therefore not jurisdictional to the MDEP. The indicator breeding areas are man-made pools that do not meet the MDEP criteria for Significant Vernal Pools and are therefore not jurisdictional to the MDEP. All of the pools are potentially jurisdictional to the Corps as vernal pools. Please note that when MSVPA Forms (Appendix G) are sent to the regulatory agencies for review, jurisdictional classifications may be revised.

Based on MDEP Natural Resources Protection Act definitions, the wetlands, streams, and Significant Vernal Pool on the Parcel are Protected Natural Resources. Wetlands that are within 25 feet of streams or contain Essential or Significant Wildlife Habitat meet MDEP criteria to be classified as “Wetlands of Special Significance” (WOSS). The remainder of wetlands on the site meet MDEP classification as “Wetlands Not of Special Significance” (WNSS). WOSS and WNSS classifications are included on the Plan.

**3.9 General Regulatory Discussion:** Based on MDEP Natural Resources Protection Act definitions, the wetlands, streams, and Significant Vernal Pools on the Parcel are Protected Natural Resources. Wetlands that are within 25 feet of streams or contain Significant Wildlife Habitat meet MDEP criteria to be classified as “Wetlands of Special Significance” (WOSS). These include Wetlands 24-W-JL2, 24-W-JL4, and 24-W-JL9. Wetland 24-W-JL2 is part of a wetland system that contains a Riparian Habitat. Wetland 24-W-JL4 contains streams and is within the 250-foot Critical Terrestrial Habitat (CTH) of a significant vernal pool. Wetland 24-W-JL9 is within the 250-foot CTH of a significant vernal pool. The remainder of wetlands on the site meet MDEP classification as “Wetlands Not of Special Significance” (WNSS). WOSS and WNSS classifications are included on the Plan.

Alterations to jurisdictional wetlands, streams and/or vernal pools require a permit from the MDEP and the Corps, the type of permit dependent on the amount and type of alteration. General permitting information included pertains to resources observed on the site.

In general, wetland alterations of between 1 and 4,300 square feet of “Wetlands Not of Special Significance” require filing of a Corps Self-Verification (SV) Form to the Corps. Wetland alterations of between 4,300 and 15,000 square feet of “Wetlands Not of Special Significance” require filing of a MDEP Natural Resources Protection Act (NRPA) Tier 1 Permit Application to the MDEP and an SV to the Corps. Wetland alterations of greater than 15,000 square feet of “Wetlands Not of Special Significance”, or of



any alteration of “Wetlands of Special Significance” require filing of a combined MDEP NRPA Tier 2, Tier 3, or Individual Permit Application / Corps Pre-Construction Notification (PCN) to the MDEP and Corps, depending on the amount and type of alteration. These higher threshold permits generally require further submissions such as wetland data forms and a functional assessment and generally include a wetland compensation component.

A MDEP NRPA Permit-By-Rule (PBR) Notification is required for a stream crossing, minor clearing with the CTH of a significant vernal pool, or for soil/vegetation disturbance at between 25 feet and 75 feet of a stream. A MDEP NRPA Individual Permit is required for direct stream alterations, and for soil/vegetation disturbance within 25 feet of a stream. The Individual permit application generally requires further submissions such as a functional assessment and a wetland compensation plan. A Corps permit is required for direct alterations to a stream.

If wetland alteration occurs for the project, the Corps licensing process includes review for impacts to wetlands, streams, vernal pools, Atlantic salmon habitat and northern long-eared bat habitat. Direct alterations to vernal pools are jurisdictional to the Corps.

**3.10 Municipal Regulatory Discussion:** Based on the Town of Bar Harbor Municipal Land Use Ordinance, some of the wetlands, streams, and vernal pools are jurisdictional and may be subject to zoning restrictions and setbacks.

Under the municipal ordinance, freshwater wetlands are defined as: *“Freshwater swamps, marshes, bogs and similar areas, which are of 80,000 contiguous square feet or more or are wetlands adjacent to any surface water body; and inundated or saturated by surface or ground water at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils. Freshwater wetlands may contain small stream channels or inclusions of land that do not conform to the criteria of this definition”* Under the municipal ordinance, the definition of “upland edge of wetland” is either where wetland vegetation ends, or where trees over 6 meters in height dominate the wetland (a forested wetland). The ordinance differentiates between “freshwater wetlands” and “forested wetlands” in that freshwater wetlands are dominated by vegetation less than 6 meters in height. Wetlands that are within 250 feet of the normal shoreline of the upland edge of a coastal or freshwater wetland, or within 75 feet of the normal high-water line of a stream, tributary stream, or natural vernal pool are defined as the shoreland zone and shoreland zoning setbacks apply.

Wetlands JL2 and JL4 are freshwater forested wetlands greater than 80,000 contiguous square feet that meet the definition of a “forested wetland” under the Town of Bar Harbor municipal ordinance. Based on the wetland type, these wetlands do not create a separate “shoreland zone”. The forested wetland would not have structure related setbacks under the municipal ordinance. These wetlands are identified in the plan in Appendix B



Wetlands JL1, JL3, JL5, JL6, JL7, JL8, JL9, and JL10 are isolated forested wetlands that are less than 80,000 square feet in area and do not meet the definition of “wetland” under the Town of Bar Harbor municipal ordinance. These features would still be jurisdictional under state and federal regulations.

The intermittent streams delineated on the property are jurisdictional under state and federal regulations. The delineated streams do not appear as a solid blue line on the USGS 7.5-minute series topographic map. All of the streams identified on the property are outside of the shoreland zone, and therefore do not meet the definition of “water bodies” under the Land Use Ordinance of the Town of Bar Harbor, Maine.

Under the municipal ordinance, significant vernal pools are regulated and defined as: *“A naturally occurring temporary to permanent inland body of water that forms in a shallow depression and typically fills during the spring or fall and may dry during the summer. The vernal pool contains no viable populations of predatory fish, and it provides the primary breeding habitat for wood frogs, spotted salamanders, blue-spotted salamanders or fairy shrimp. The presence of any one or more of these species is usually conclusive evidence of a vernal pool. Only significant vernal pools that have been mapped or identified by a Town-authorized agency prior to project approval shall be considered as being within this definition. A significant vernal pool further means that there are multiple species present, or that the vernal pool is part of a corridor of other vernal pools, or that the pool is adjacent to a wetland.”*

The Town of Bar Harbor determined vernal pools JL5, JL8, JL13, JL15, JL17, JL21, and JL23 on the site meet the municipal definition for a significant vernal pool. The Indicator Breeding Areas (IBAs) on the site do not meet the town definition of significant vernal pools.

#### **4.0 SUMMARY**

Watershed Resource Consultants, LLC (WRC) conducted Protected Natural Resources identification and delineation services for a proposed housing development within the approximately 55.3-acre Acadia National Park property off of Crooked Road and State Route 102 in Bar Harbor, Maine.

Ten freshwater wetland areas, five streams, one significant vernal pool, nine vernal pools, and two indicator breeding areas were delineated on the site. The wetlands were forested and scrub-shrub, the streams were intermittent, the vernal pools were natural, and the indicator breeding areas were man-made. The portions of wetlands that are within 25 feet of streams, contain Significant Wildlife Habitat, or are within the 250-foot CTH of a Significant Vernal Pool meet MDEP criteria to be classified as “Wetlands of Special Significance” (WOSS). The remainder of wetlands on the site meet MDEP classification as “Wetlands Not of Special Significance” (WNSS).



24040  
October 2024

## 5.0 CLOSING

We appreciate the opportunity to assist you during this phase of the project. If you have any questions, please contact us.

Sincerely,

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### Endnotes

<sup>i</sup> State of Maine, Department of Environmental Protection, Natural Resources Protection Act Statute, 38 M.R.S.A. §480-A to 480-HH, DEPLW284-W2010, Revised August 12, 2011.

<sup>ii</sup> United States Department of the Army, General Permit, State of Maine, Effective: October 14, 2020 to October 14, 2025.

<sup>iii</sup> Environmental Laboratory. 1987. "Corps of Engineers Wetland Delineation Manual", Technical Report Y-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, Miss.

<sup>iv</sup> U.S. Army Corps of Engineers. 2011. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

<sup>v</sup> : United States Department of Agriculture, Natural Resources Conservation Service. 2018. Field Indicators of Hydric Soils in the United States, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

<sup>vi</sup> State of Maine, Department of Environmental Protection, Chapter 335 Significant Wildlife Habitat, amended January 7, 2014.

<sup>vii</sup> Cowardin, et al. 1979. United States, Fish and Wildlife Service, "Classification of Wetlands and Deepwater Habitats of the United States". Biological services program; FWS/OBS-79/31) FWS/OBS-79/31. QH76.U54a 79/31 [QH104] 574.5'0973s [574.5'2632] 79-607795

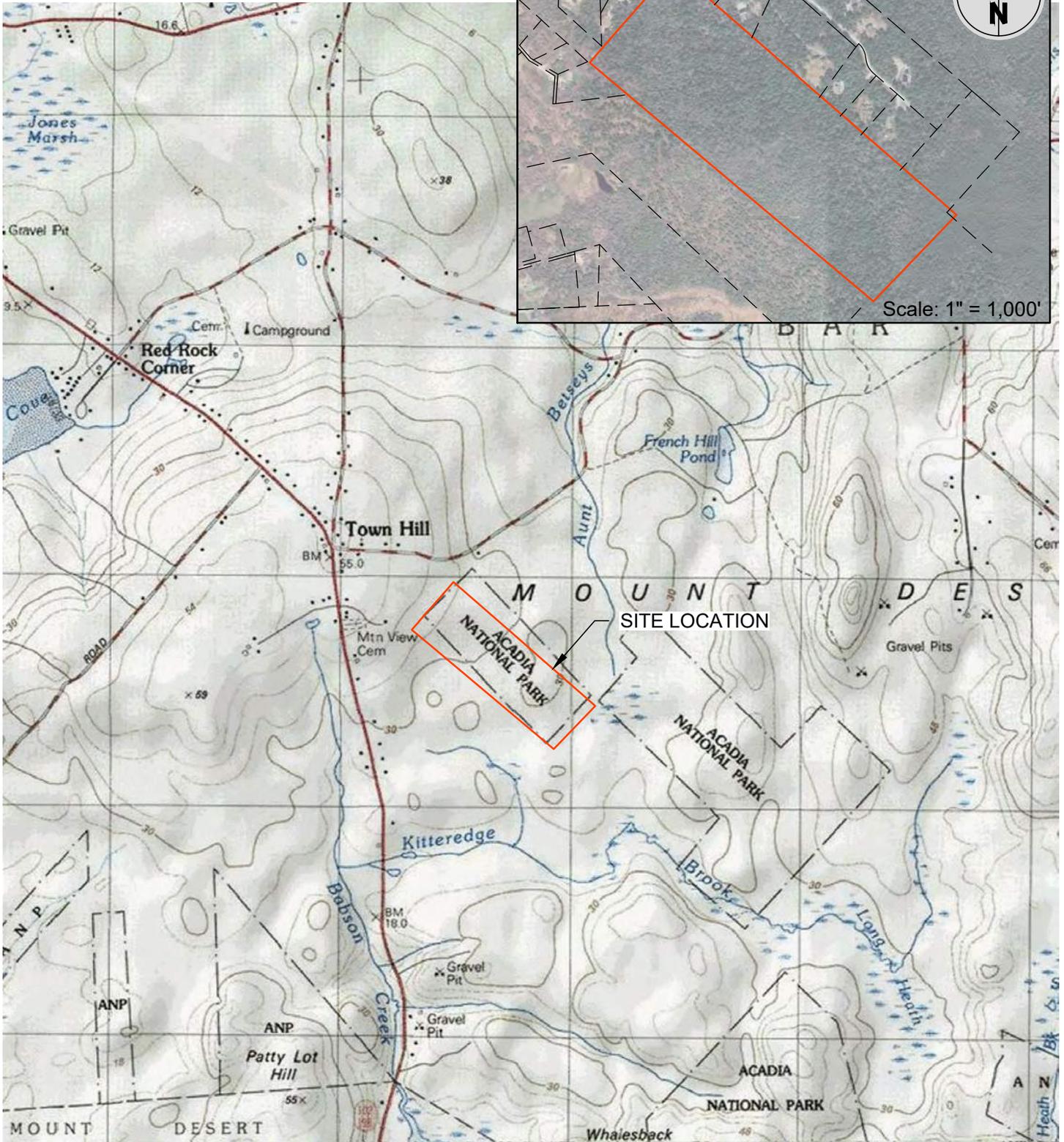
**APPENDIX A**  
Limitations

## **APPENDIX A**

### Limitations

The scope of Watershed Resource Consultants, LLC services has been limited to Protected Natural Resources identification and delineation services on the approximately 55.3-acres Acadia National Park property (Map 227, Lot 112) off of Crooked Road and State Route 102 in Bar Harbor, Maine. This Report has been prepared for the exclusive use of the Town of Bar Harbor. No warranty, expressed or implied, is made. The conclusions made in this report are based on the data obtained from the areas explored at the time of services.

**APPENDIX B**  
Site Location Map  
Protected Natural Resources Plan



Do Not Use for Construction  
For Regulatory Review Only

**Watershed Resource Consultants, LLC.**

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**Site Location Map**

Town of Bar Harbor  
Tax Map 227, Lot 112  
Bar Harbor, Maine

Job No.: 24040

Scale: 1" = 2,000'

Date: 8/27/2024

Sheet: 1



**APPENDIX C**

Protected Natural Resource Tables

**TABLE C-1: Map 227 Lot 112, Town Hill - WETLANDS**

RESOURCE ID	COWARDIN CLASSIFICATION <sup>1</sup>	COMMON VEGETATION <sup>2</sup>	HYDRIC SOIL INDICATORS <sup>3</sup>	HYDROLOGY INDICATORS <sup>3</sup>	MDEP CLASSIFICATION <sup>4</sup>
24-W-JL1	PFO1/4	red maple, red spruce, lowbush blueberry, highbush blueberry, bog Labrador tea, white pine, blue joint grass, three seeded sedge, small cranberry	A1 - Histosol	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, D2 - Geomorphic Position, D5 - FAC-Neutral Test	WNSS
24-W-JL2	PFO1/4, PFO4	red spruce, black spruce, balsam fir, red maple, common winterberry, catbury, highbush blueberry, harlequin blueflag, interrupted fern, cinnamon fern, twin flower, soft-leaved sedge, sphagnum moss	A1 - Histosol	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, D2 - Geomorphic Position, D4 - Microtopographic Relief, D5 - FAC-Neutral Test	WOSS
24-W-JL3	PFO1/4	red spruce, black spruce, red maple, highbush blueberry, sheep laurel, bog Labrador tea, lowbush blueberry, harlequin blueflag, small cranberry, soft-leaved sedge	A1 - Histosol	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, D2 - Geomorphic Position, D5 - FAC-Neutral Test	WNSS
24-W-JL4	PFO1/4	red spruce, red maple, balsam fir, American larch, sheep laurel, highbush blueberry, soft-leaved sedge, common winterberry, bluejoint grass	A1 - Histosol	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, D5 - FAC-Neutral Test	WOSS
24-W-JL5	PFO1/4	red maple, red spruce, balsam fir, northern white cedar, common winterberry, soft-leaved sedge, three seed sedge, maystar	A2 - Histic Epipedon, A3 - Black Histic	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, B10 - Drainage Patterns, D2 - Geomorphic Position	WNSS
24-W-JL6	PFO4	red spruce, balsam fir, sheep laurel, common winterberry, cinnamon fern, harlequin blueflag	A2 - Histic Epipedon, A3 - Black Histic, A11 - Depleted Below Dark Surface	B9 - Water-Stained Leaves, D4 - Microtopographic Relief	WNSS
24-W-JL7	PFO1/4	red spruce, red maple, balsam fir, high bush blueberry cinnamon fern, interrupted fern, maystar, harlequin blueflag	F3 - Depleted Matrix	A3 - Saturation, B9 - Water-Stained Leaves, B10 - Drainage Patterns,	WNSS
24-W-JL8	PFO1/4	red maple, red spruce, balsam fir, cinnamon fern, sphagnum moss, common winterberry, highbush blueberry, interrupted fern, three seed sedge	A2 - Histic Epipedon, A3 - Black Histic, A11 - Depleted Below Dark Surface	A2 - High Water Table, A3 - Saturation, B9 - Water-Stained Leaves, D2 - Geomorphic Position, D4 - Microtopographic Relief	WNSS
24-W-JL9	PFO1/4	balsam fir, red maple, interrupted fern, royal fern	A2 - Histic Epipedon, A3 - Black Histic	A3 - Saturation, B9 - Water-Stained Leaves, D4 - Microtopographic Relief	WOSS
24-W-JL10	PFO1/4	balsam fir, red maple, green ash, maystar, New York fern, bluejoint grass, graceful sedge	A2 - Histic Epipedon, A3 - Black Histic	A3 - Saturation, B9 - Water-Stained Leaves, B10 - Drainage Patterns, D4 - Microtopographic Relief	WNSS

1 - Cowardin, et al. 1979. United States, Fish and Wildlife Service

2 - Dominant vegetation - see Table C-2 for Genus species

3 - U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)

4 - State of Maine, Department of Environmental Protection, Natural Resources Protection Act Statute and Chapter 310

**TABLE C-2: 24040 Map 227 Lot 112, Town Hill - Wetland Vegetation**

<b>Project/Site:</b>	24040 Town Hill Bar Harbor
	Town Hill, Bar Harbor, Maine
<b>Consultant:</b>	Watershed Resource Consultants, LLC
<b>FW Date:</b>	June 11-June 13, 2024

<b>Wetland Plant List</b>	
<b>Species noted</b>	<b>Species (latin)</b>
balsam fir	<i>Abies balsamea</i>
red maple	<i>Acer rubrum</i>
speckled alder	<i>Alnus incana</i>
blue joint grass	<i>Calamagrostis canadensis</i>
soft leaf sedge	<i>Carex disperma</i>
graceful sedge	<i>Carex gracillima</i>
three seeded sedge	<i>Carex trisperma</i>
green ash	<i>Fraxinus pennsylvanica</i>
American manna grass	<i>Glyceria grandis</i>
catberry	<i>Ilex mucronata</i>
common winterberry	<i>Ilex verticillata</i>
harlequin blueflag	<i>Iris versicolor</i>
sheep laurel	<i>Kalmia angustifolia</i>
american larch	<i>Larix laricina</i>
twin flower	<i>Linnaea borealis</i>
interrupted fern	<i>Osmunda claytoniana</i>
royal fern	<i>Osmunda regalis</i>
cinnamon fern	<i>Osmundastrum cinnamomeum</i>
black spruce	<i>Picea mariana</i>
red spruce	<i>Picea rubens</i>
white pine	<i>Pinus strobus</i>
bog labrador tea	<i>Rhododendron groenlandicum</i>
sphagnum moss	<i>Sphagnum spp.</i>
new york fern	<i>Thelypteris noveboracensis</i>
northern white cedar	<i>Thuja occidentalis</i>
maystar	<i>Trientalis borealis</i>
late lowbush blueberry	<i>Vaccinium angustifolium</i>
highbush blueberry	<i>Vaccinium corymbosum</i>
small cranberry	<i>Vaccinium oxycoccos</i>

24040 - Map 227, Lot 112, 55.3-Ac, Town Hill - 2024 Vernal Pool Findings

Resource ID	Pool Origin	Wood Frog Egg Masses			Spotted Salamander Egg Masses			Blue Spotted Salamander Egg Masses			Fairy Shrimp			Max Depth @ Survey (Inches)	Pool Hydroperiod (Estimated)	Veg Cover	Soils	Notes	Corps Jurisdictional*	MDEP Jurisdictional**
		V #1	V #2	V #3	V #1	V #2	V #3	V #1	V #2	V #3	V #1	V #2	V #3							
24-IBA-JL1	Man-Made	0	0	0	6	7	7	0	0	0	0	0	0	18"	Ephemeral	None	Thin Organic	Small Excavation. Dry 6/13/2024	Yes	No
24-V-JL5	Natural	0	0	0	2	3	5	0	0	0	0	0	0	8"	Ephemeral	PFO	Thin Organic	Small chain of natural pools	Yes	No
24-V-JL8	Natural	0	0	0	1	4	--	0	0	--	0	0	--	12"	Ephemeral	PFO	Thick Organic	Natural pool, seasonally flooded	Yes	No
24-IBA-JL9	Man-Made	0	0	0	2	2	2	0	0	0	0	0	0	10	Ephemeral	PFO	Thin organic	Small Excavation. Dry 6/13/2024	Yes	No
24-SVP-JL13	Natural	0	0	0	19	19	25	0	0	0	0	0	0	12	Ephemeral	PFO	Thin Organic	Small chain of natural pools	Yes	Yes - SVP
24-V-JL15	Natural	0	0	0	2	2	2	0	0	0	0	0	0	8"	Ephemeral	PFO	Thin Organic	Small natural depression	Yes	No
24-V-JL17	Natural	0	0	0	2	9	9	0	0	0	0	0	0	16"	Ephemeral	PFO	Thin Organic	Depression in wetland	Yes	No
24-V-JL19	Natural	0	0	0	2	2	1	0	0	0	0	0	0	12"	Ephemeral	None	Mineral	Deeper pool in intermittent stream	Yes	No
24-V-JL21	Natural	0	0	0	1	1	1	0	0	0	0	0	0	10"	Ephemeral	PFO	Thin Organic	Depression in wetland	Yes	No
24-V-JL22	Natural	0	0	0	2	4	4	0	0	0	0	0	0	8"	Ephemeral	PFO	Thin Organic	Depression in wetland	Yes	No
24-V-JL23	Natural	0	0	0	--	4	2	--	0	0	--	0	0	12"	Ephemeral	None	Mineral	Deeper pool in intermittent stream	Yes	No
24-V-RS1	Natural	--	--	0	--	--	5	--	--	0	--	--	0	12"	Ephemeral	None	Mineral	Deeper pool in intermittent stream	Yes	No

Survey Dates: 4/17/2024, 5/7/2024, 5/21/2024

\* Preliminary Determination

\*\* Pending MDIFW review of MSVPA Forms

**APPENDIX D**

Color Photographs of Wetlands and Streams



24040  
October 2024



**Photo 1:** Photograph of wetland 24-W-JL1 PFO. Photograph taken June 11, 2024.



**Photo 2:** Photograph of wetland 24-W-JL2 PFO. Photograph taken June 11, 2024



**Photo 3:** Photograph of wetland 24-W-JL3 PFO. Photograph taken June 11, 2024.



**Photo 4:** Photograph of wetland 24-W-JL4 PFO. Photograph taken June 11, 2024



**Photo 5:** Photograph of wetland 24-W-JL4 PSS. Photograph taken June 11, 2024.



**Photo 6:** Photograph of wetland 24-W-JL5 PFO. Photograph taken June 11, 2024



**Photo 7:** Photograph of wetland 24-W-JL6 PFO. Photograph taken June 11, 2024.



**Photo 8:** Photograph of wetland 24-W-JL7 PFO. Photograph taken June 11, 2024



**Photo 9:** Photograph of wetland 24-W-JL8 PFO. Photograph taken June 11, 2024.



**Photo 10:** Photograph of wetland 24-W-JL9 PFO. Photograph taken June 11, 2024



**Photo 11:** Photograph of wetland 24-W-JL10 PFO. Photograph taken June 11, 2024.



**Photo 12:** Stream 24-S-JL1, looking upstream north. Photograph taken June 11, 2024



**Photo 13:** Stream 24-S-JL2, looking downstream northeast. Photograph taken June 11, 2024.



**Photo 14:** Stream 24-S-MR1, looking downstream southeast. Photograph taken June 13, 2024.



24040  
October 2024



Photo 15: Stream 24-S-MR2, looking downstream southeast. Photograph taken June 13, 2024.

**APPENDIX E**

Agency Letters and Published Mapping



JANET T. MILLS  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF  
INLAND FISHERIES & WILDLIFE  
353 WATER STREET  
41 STATE HOUSE STATION  
AUGUSTA ME 04333-0041



JUDITH CAMUSO  
COMMISSIONER

August 07, 2024

Jeanna Leclerc  
Watershed Resource Consultants LLC  
1366 State Highway 102, #6  
Bar Harbor, ME 04609

**RE: Information Request - Crooked Road, Development, Bar Harbor Project (ERID 7729)**

Dear Jeanna:

Per your request, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information sources for known locations of Endangered, Threatened, and Special Concern (Rare) species; designated Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other protected natural resource concerns within the vicinity of the ***Crooked Road, Development, Bar Harbor*** project, pursuant to MDIFW's authority. Please note that as project details are lacking, our comments should be considered preliminary.

Our Department has not mapped any Essential Habitats that would be directly affected by your project.

***ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES***

**Bat Species**

Of the eight species of bats that occur in Maine, four species are afforded protection under Maines Endangered Species Act (MESA, 12 M.R.S 12801 et. seq.): little brown bat (State Endangered), northern long-eared bat (State Endangered), eastern small-footed bat (State Threatened), and tri-colored bat (State Threatened). The four remaining bat species are designated as Species of Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during spring/fall migration, the summer breeding season, and/or for overwintering. However, our Agency does not anticipate significant impacts to any of the bat species as a result of this project.

***SIGNIFICANT WILDLIFE HABITAT***

**Significant Vernal Pools**

At this time MDIFW Significant Wildlife Habitat (SWH) maps indicate no known presence of Significant Vernal Pools (SVPs) in the project search area. However, a comprehensive statewide inventory for Significant Vernal Pools has not been completed. SVPs are not included on MDIFW maps until project areas have been surveyed using approved methods and the survey results confirmed. Therefore, their absence from resource maps is not necessarily indicative of an absence on the ground. We recommend that surveys for vernal pools be conducted within the

project boundary by qualified wetland scientists prior to final project design to determine whether there are Significant Vernal Pools present in the area. These surveys should extend up to 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, survey forms should be submitted to our Agency for review well before the submission of any necessary permits. Our Department will need to review and verify any vernal pool data prior to final determination of significance.

## ***AQUATIC RESOURCES***

### **Fish Habitat**

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e., natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fisheries and aquatic habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance, we recommend additional consultation with the municipality, and other state resource and regulatory agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance. For information on federally listed species, contact the U.S. Fish and Wildlife Service's Maine Field Office (207-469-7300, [mainefieldoffice@fws.gov](mailto:mainefieldoffice@fws.gov)).

*Letter to Jeanna Leclerc, Watershed Resource Consultants LLC  
Comments RE: Crooked Road, Development, Bar Harbor  
August 07, 2024*

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

A handwritten signature in cursive script, appearing to read "Ciara Wentworth". The signature is written in dark ink on a light background.

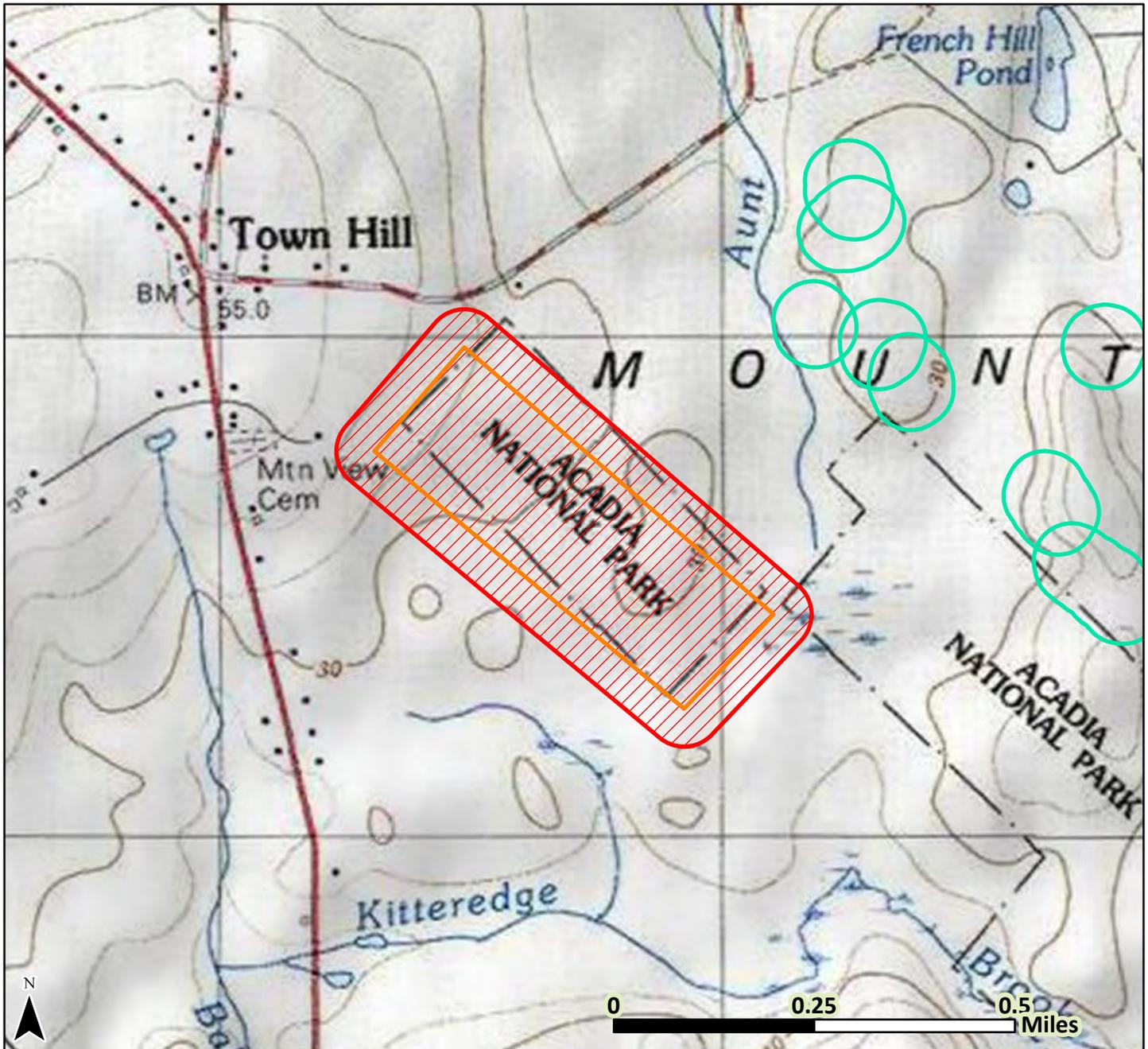
Ciara Wentworth  
Resource Biologist



Maine Department of Inland Fisheries and Wildlife  
Project Area Review of Fish and Wildlife Observations and Priority Habitats

**Crooked Road, Development, Bar Harbor**

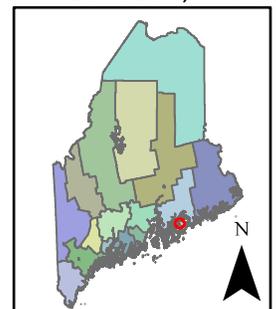
Project ID 7729\_9460



- County Boundary
- Township Boundary
- Project Footprint (Polygon)
- Search Area

- Significant Vernal Pool

Date: 5/29/2024  
Projection:  
UTM Zone 19N, NAD83



Legend only lists resources visible in the map; see response letter for all resources that were evaluated.



**STATE OF MAINE**  
**DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY**

177 STATE HOUSE STATION  
AUGUSTA, MAINE 04333

**JANET T. MILLS**  
GOVERNOR

**AMANDA E. BEAL**  
COMMISSIONER

May 22, 2024

Jeanna Leclerc  
Watershed Resource Consultants  
1366 State Highway 102, #6  
Bar Harbor, ME 04609

Via email: [jleclerc@wrcmaine.com](mailto:jleclerc@wrcmaine.com)

Re: Rare and exemplary botanical features in proximity to: #24040, Town Farm Project, Crooked Road, Bar Harbor, Maine

Dear Jeanna Leclerc:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received May 22, 2024 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Bar Harbor, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

**MOLLY DOCHERTY, DIRECTOR**  
MAINE NATURAL AREAS PROGRAM  
90 BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-8044  
[WWW.MAINE.GOV/DACF/MNAP](http://WWW.MAINE.GOV/DACF/MNAP)

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

*Lisa St. Hilaire*

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program  
207-287-8044 | [lisa.st.hilaire@maine.gov](mailto:lisa.st.hilaire@maine.gov)

**Rare and Exemplary Botanical Features within 4 miles of  
Project: #24040, Town Hill Project, Map 227-Lot 112, Crooked Road, Bar Harbor, ME**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
<b>American Sea-blite</b>						
	T	S2	G5	1998-09-29	8	Tidal wetland (non-forested, wetland)
	T	S2	G5	2013-10-01	18	Tidal wetland (non-forested, wetland)
<b>Auricled Twayblade</b>						
	T	S2	G3G4	1927-09-16	20	Non-tidal rivershore (non-forested, seasonally
	T	S2	G3G4	1891-07-03	21	Non-tidal rivershore (non-forested, seasonally
<b>Birch - Oak Rocky Woodland</b>						
		S3	G3G5	2004-11	11	
		S3	G3G5	2004-12-10	15	
<b>Brackish Tidal Marsh</b>						
		S3	GNR	2009	12	
		S3	GNR	2009	13	
<b>Bush's Sedge</b>						
	PE	SX	G4	1898-07-22	1	Open wetland, not coastal nor rivershore (non-forested,
<b>Canada Burnet</b>						
	T	S1	G5	2007	8	Conifer forest (forest, upland),Non-tidal rivershore (non-
<b>Canada Mountain-ricegrass</b>						
	SC	S2	G4G5	2017-09-01	4	Dry barrens (partly forested, upland)
	SC	S2	G4G5	1897-07-14	10	Dry barrens (partly forested, upland)
<b>Comb-leaved Mermaid-weed</b>						
	E	S1	G5	1937-09	3	Open wetland, not coastal nor rivershore (non-forested,
<b>Low-elevation Bald</b>						
		S3	GNR	1998-08-06	14	
		S3	GNR	2004-12-10	22	
		S3	GNR	2004-12-10	23	

Low-elevation Bald						
	S3	GNR	2004-12-10	24		
Maritime Huckleberry Bog						
	S3	G3G5	2019-06-24	18		
Maritime Spruce - Fir Forest						
	S4	G4G5	1996-06-11	19		
Mountain Firmoss						
SC	S2	G5	2018-10-08	9	Rocky summits and outcrops (non-forested,	
Mountain Sandwort						
SC	S3	G5	1992-07-01	16	Rocky summits and outcrops (non-forested,	
Mountain-laurel						
SC	S2	G5	1890	26	Conifer forest (forest, upland),Hardwood to mixed forest	
Raised Level Bog Ecosystem						
	S4	GNR	2019-06-19	1		
Red and White Pine Forest						
	S3	G3G4	1997-09-10	19		
Salt-hay Saltmarsh						
	S3	G5	2013-10-01	63		
Showy Lady's-slipper						
SC	S3	G4G5	189X	55	Forested wetland,Open wetland, not coastal nor	
Spruce - Fir - Northern Hardwoods						
	S5	GNR	1999	21		
Swarthy Sedge						
E	S2	G5	1891-06-24	4	Rocky coastal (non-forested, upland)	
E	S2	G5	1891-06-24	5	Rocky coastal (non-forested, upland)	
E	S2	G5	1898-08-17	6	Rocky coastal (non-forested, upland)	
E	S2	G5	1899-07-22	10	Rocky coastal (non-forested, upland)	
E	S2	G5	1897-07-12	11	Rocky coastal (non-forested, upland)	

Date Exported: 2024-05-22 15:16

## Conservation Status Ranks

**State and Global Ranks:** This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
<b>S1</b> <b>G1</b>	<b>Critically Imperiled</b> – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
<b>S2</b> <b>G2</b>	<b>Imperiled</b> – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
<b>S3</b> <b>G3</b>	<b>Vulnerable</b> – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
<b>S4</b> <b>G4</b>	<b>Apparently Secure</b> – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
<b>S5</b> <b>G5</b>	<b>Secure</b> – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
<b>SX</b> <b>GX</b>	<b>Presumed Extinct</b> – Not located despite intensive searches and virtually no likelihood of rediscovery.
<b>SH</b> <b>GH</b>	<b>Possibly Extinct</b> – Known from only historical occurrences but still some hope of rediscovery.
<b>S#S#</b> <b>G#G#</b>	<b>Range Rank</b> – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
<b>SU</b> <b>GU</b>	<b>Unrankable</b> – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
<b>GNR</b> <b>SNR</b>	<b>Unranked</b> – Global or subnational conservation status not yet assessed.
<b>SNA</b> <b>GNA</b>	<b>Not Applicable</b> – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
<b>Qualifier</b>	<b>Definition</b>
<b>S#?</b> <b>G#?</b>	<b>Inexact Numeric Rank</b> – Denotes inexact numeric rank.
<b>Q</b>	<b>Questionable taxonomy that may reduce conservation priority</b> – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The “Q” modifier is only used at a global level.
<b>T#</b>	<b>Intraspecific Taxon (trinomial)</b> – The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

**State Status:** Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
<b>E</b>	<b>Endangered</b> – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
<b>T</b>	<b>Threatened</b> – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
<b>SC</b>	<b>Special Concern</b> – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
<b>PE</b>	<b>Potentially Extirpated</b> – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

**Element Occurrence (EO) Ranks:** Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
<b>A</b>	<b>Excellent</b> – Excellent estimated viability/ecological integrity.
<b>B</b>	<b>Good</b> – Good estimated viability/ecological integrity.
<b>C</b>	<b>Fair</b> – Fair estimated viability/ecological integrity.
<b>D</b>	<b>Poor</b> – Poor estimated viability/ecological integrity.
<b>E</b>	<b>Extant</b> – Verified extant, but viability/ecological integrity not assessed.
<b>H</b>	<b>Historical</b> – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
<b>X</b>	<b>Extirpated</b> – Documented loss of population/destruction of habitat.
<b>U</b>	<b>Unrankable</b> – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
<b>NR</b>	<b>Not Ranked</b> – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information  
<http://www.maine.gov/dacf/mnap>





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Maine Ecological Services Field Office  
P. O. Box A  
East Orland, ME 04431  
Phone: (207) 469-7300 Fax: (207) 902-1588

In Reply Refer To:

08/26/2024 14:52:37 UTC

Project Code: 2024-0105324

Project Name: MDI Affordable Workforce Housing 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:

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 feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. 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. This verification can be completed formally or informally as desired. 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 through IPaC by completing the same process used to receive the enclosed list.

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. Under sections 7(a)(1) and 7(a)(2) 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 and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, 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 Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. 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/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**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 [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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:

**Maine Ecological Services Field Office**

P. O. Box A

East Orland, ME 04431

(207) 469-7300

## PROJECT SUMMARY

Project Code: 2024-0105324

Project Name: MDI Affordable Workforce Housing Project

Project Type: Residential Construction

Project Description: Construct affordable workforce housing on a 55.3-acre parcel.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.394304500000004,-68.3243566969692,14z>



Counties: Hancock County, Maine

## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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 Fisheries<sup>1</sup>, 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.

- 
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: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

**FISHES**

NAME	STATUS
Atlantic Salmon <i>Salmo salar</i> Population: Gulf of Maine DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2097">https://ecos.fws.gov/ecp/species/2097</a>	Endangered

**INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

**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: Bar Harbor town  
Name: Jeanna Leclerc  
Address: 1366 State Highway 102, #6  
City: Bar Harbor  
State: ME  
Zip: 04609  
Email: jleclerc@arc-env.com  
Phone: 2079447288

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: National Park Service



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Maine Ecological Services Field Office  
P. O. Box A  
East Orland, ME 04431  
Phone: (207) 469-7300 Fax: (207) 902-1588

In Reply Refer To:  
Project code: 2024-0105324  
Project Name: MDI Affordable Workforce Housing Project

06/18/2024 13:06:47 UTC

Federal Nexus: yes  
Federal Action Agency (if applicable): Army Corps of Engineers

**Subject:** Technical assistance for 'MDI Affordable Workforce Housing Project'

Dear Jeanna Leclerc:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on June 18, 2024, for 'MDI Affordable Workforce Housing Project' (here forward, Project). This project has been assigned Project Code 2024-0105324 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

### **Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.**

### **Determination for the Northern Long-Eared Bat**

Based on your IPaC submission and the standing analysis for the Dkey, your project has reached the determination of "May Affect" the northern long-eared bat.

### **Next Steps**

Your action may qualify for the Interim Consultation Framework for the northern long-eared bat. To determine if it qualifies, review the Interim Consultation Framework posted here <https://www.fws.gov/library/collections/interim-consultation-framework-northern-long-eared-bat>. If you

determine it meets the requirements of the Interim Consultation Framework, follow the procedures outlined there to complete section 7 consultation.

If your project does **not** meet the requirements of the Interim Consultation Framework, please contact the Maine Ecological Services Field Office for further coordination on this project. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect”.

### **Other Species and Critical Habitat that May be Present in the Action Area**

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Atlantic Salmon *Salmo salar* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

MDI Affordable Workforce Housing Project

### 2. Description

The following description was provided for the project 'MDI Affordable Workforce Housing Project':

Construct affordable workforce housing on a 55.3-acre parcel.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.394304500000004,-68.3243566969692,14z>



## DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Does any component of the action involve construction or operation of wind turbines?

**Note:** For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

5. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

**Note:** This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

6. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

7. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

*No*

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

**Note:** Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

*No*

9. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

*No*

10. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

*No*

11. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

*No*

12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?  
(If unsure, answer "Yes.")

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags  $\geq 3$  inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

*Yes*

13. Will the action cause effects to a bridge?

*No*

14. Will the action result in effects to a culvert or tunnel?

*No*

15. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

**Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

*No*

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

*No*

17. Will the action directly or indirectly cause construction of one or more new roads that are open to the public?

**Note:** The answer may be yes when a publicly accessible road either (1) is constructed as part of the proposed action or (2) would not occur but for the proposed action (i.e., the road construction is facilitated by the proposed action but is not an explicit component of the project).

*Yes*

18. Will any new road go through any area of contiguous forest that is greater than or equal to 10 acres in total extent?

**Note:** "Contiguous forest" of 10 acres or more may include areas where multiple forest patches are separated by less than 1,000 feet of non-forest if the forested patches, added together, comprise at least 10 acres.

*Yes*

19. For every 1,000 feet of new road that crosses between contiguous forest patches, will there be at least one place where bats could cross the road corridor by flying less than 33 feet (10 meters) between trees whose tops are at least 66 feet (20 meters) higher than the road surface?

*Yes*

20. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)?

*No*

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

*No*

22. Will the action include drilling or blasting?

*Yes*

23. Will the drilling or blasting affect known or potentially suitable hibernacula, summer habitat, or active year-round habitat (where applicable) for the northern long-eared bat?

**Note:** In addition to direct impacts to hibernacula, consider impacts to hydrology or air flow that may impact the suitability of hibernacula. Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

*No*

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

*No*

25. Will the proposed action involve the use of herbicide or other pesticides (e.g., fungicides, insecticides, or rodenticides)?

*No*

26. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

*No*

27. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

**Note:** Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

*Yes*

28. Will the action use only downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting) when installing new or replacing existing permanent lights? Or for those transportation agencies using the Backlight, Uplight, Glare (BUG) system developed by the Illuminating Engineering Society, will all three ratings (backlight, uplight, and glare) be as close to zero as is possible, with a priority of "uplight" of 0?

Yes

29. Will the action direct any temporary lighting away from suitable northern long-eared bat roosting habitat during the active season?

**Note:** Active season dates for northern long-eared bat can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>.

Yes

30. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

31. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

**Note:** A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property and has a diameter breast height of six inches or greater.

No

32. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags  $\geq 3$  inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

Yes

33. [Semantic] Does your project intersect a known sensitive area for the northern long-eared bat?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your [state agency or USFWS field office](#)

**Automatically answered**

Yes

## PROJECT QUESTIONNAIRE

Will all project activities be completed by November 30, 2024?

No

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

25

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

25

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>

0

Will all potential northern long-eared bat (NLEB) roost trees (trees  $\geq 3$  inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

Yes

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, enter the total extent of those areas. Round up to the nearest tenth of an acre.

25

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees)  $\geq 3$  inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

No

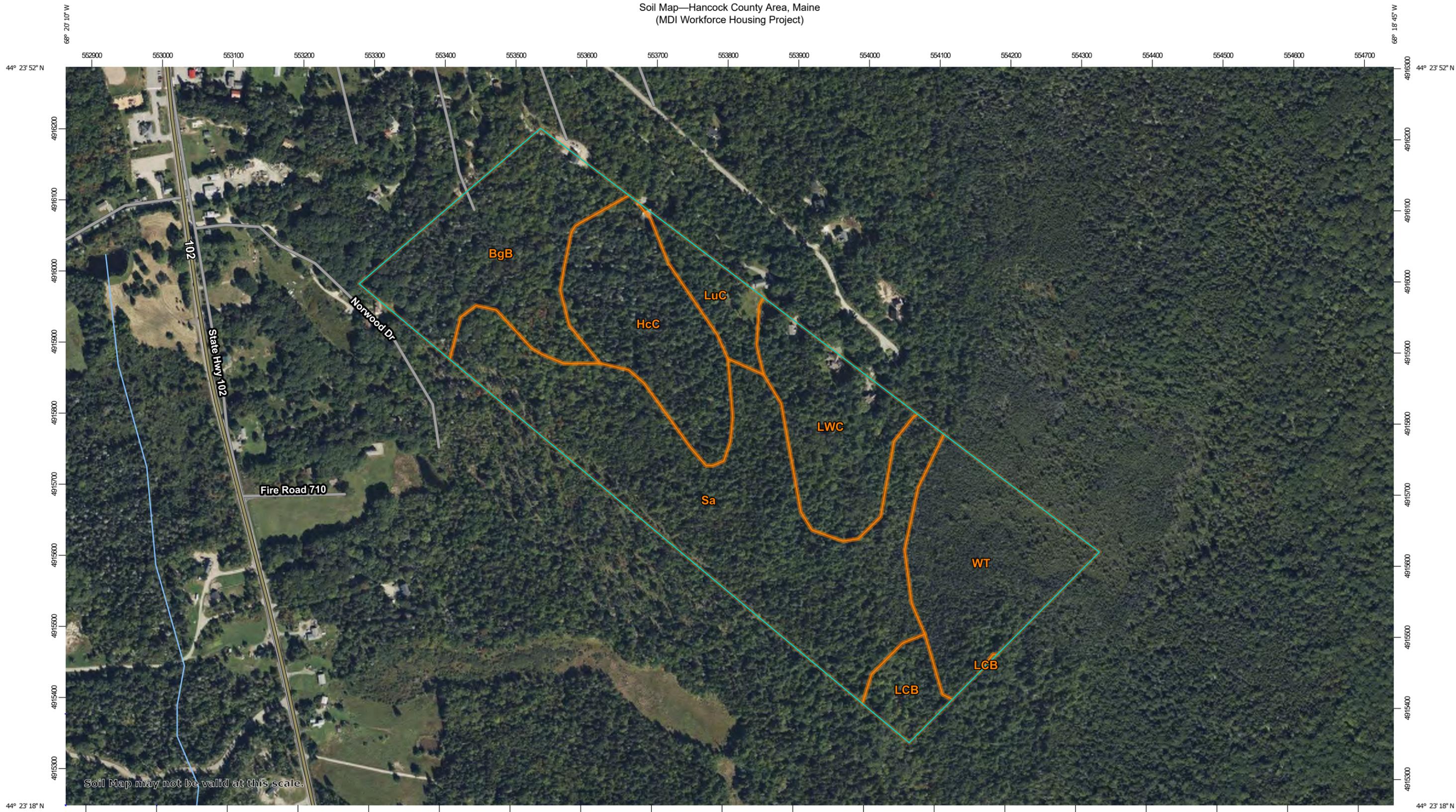
## **IPAC USER CONTACT INFORMATION**

Agency: Bar Harbor town  
Name: Jeanna Leclerc  
Address: 1366 State Highway 102, #6  
City: Bar Harbor  
State: ME  
Zip: 04609  
Email: jleclerc@arc-env.com  
Phone: 2079447288

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Army Corps of Engineers

Soil Map—Hancock County Area, Maine  
(MDI Workforce Housing Project)



Soil Map may not be valid at this scale.

Map Scale: 1:5,060 if printed on B landscape (17" x 11") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hancock County Area, Maine  
Survey Area Data: Version 23, Sep 5, 2023

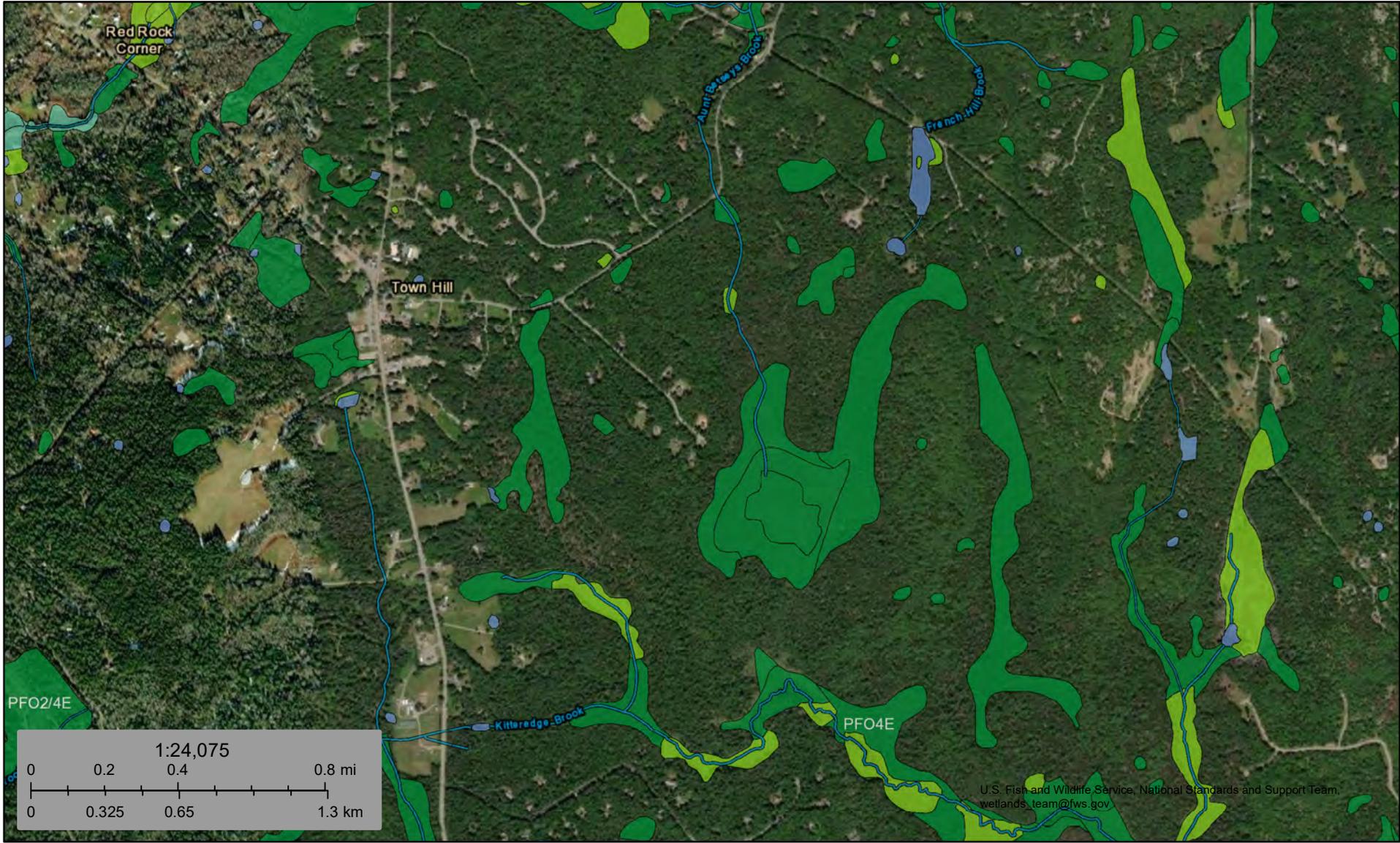
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BgB	Brayton fine sandy loam, 0 to 8 percent slopes, very stony	14.9	16.9%
HcC	Hermon-Colton-Rock outcrop complex, 3 to 15 percent slopes, very stony	12.0	13.6%
LCB	Lamoine-Scantic-Buxton complex, 0 to 15 percent slopes	2.7	3.1%
LuC	Lyman-Tunbridge complex, 0 to 15 percent slopes, very stony	3.3	3.7%
LWC	Lyman-Tunbridge-Schoodic complex, 8 to 15 percent slopes, very stony	10.0	11.4%
Sa	Scantic silt loam, 0 to 3 percent slopes	31.5	35.9%
WT	Wonsqueak, Bucksport, and Sebago soils	13.4	15.3%
<b>Totals for Area of Interest</b>		<b>87.8</b>	<b>100.0%</b>



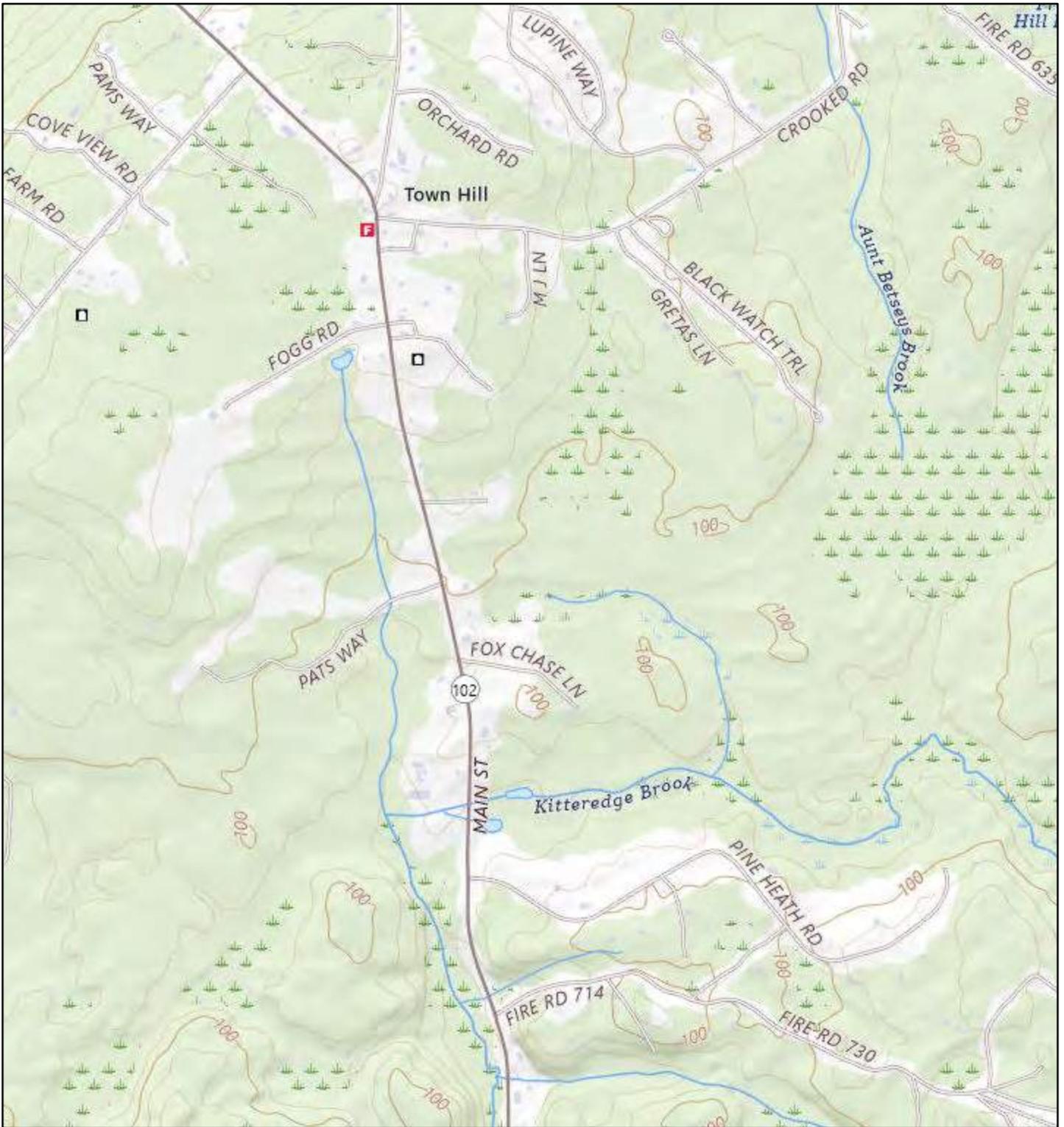
June 18, 2024

**Wetlands**

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  Riverine |

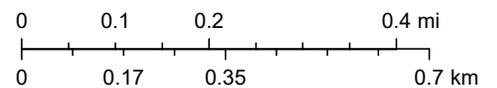
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

# Bar Harbor Affordable Workforce Housing Project



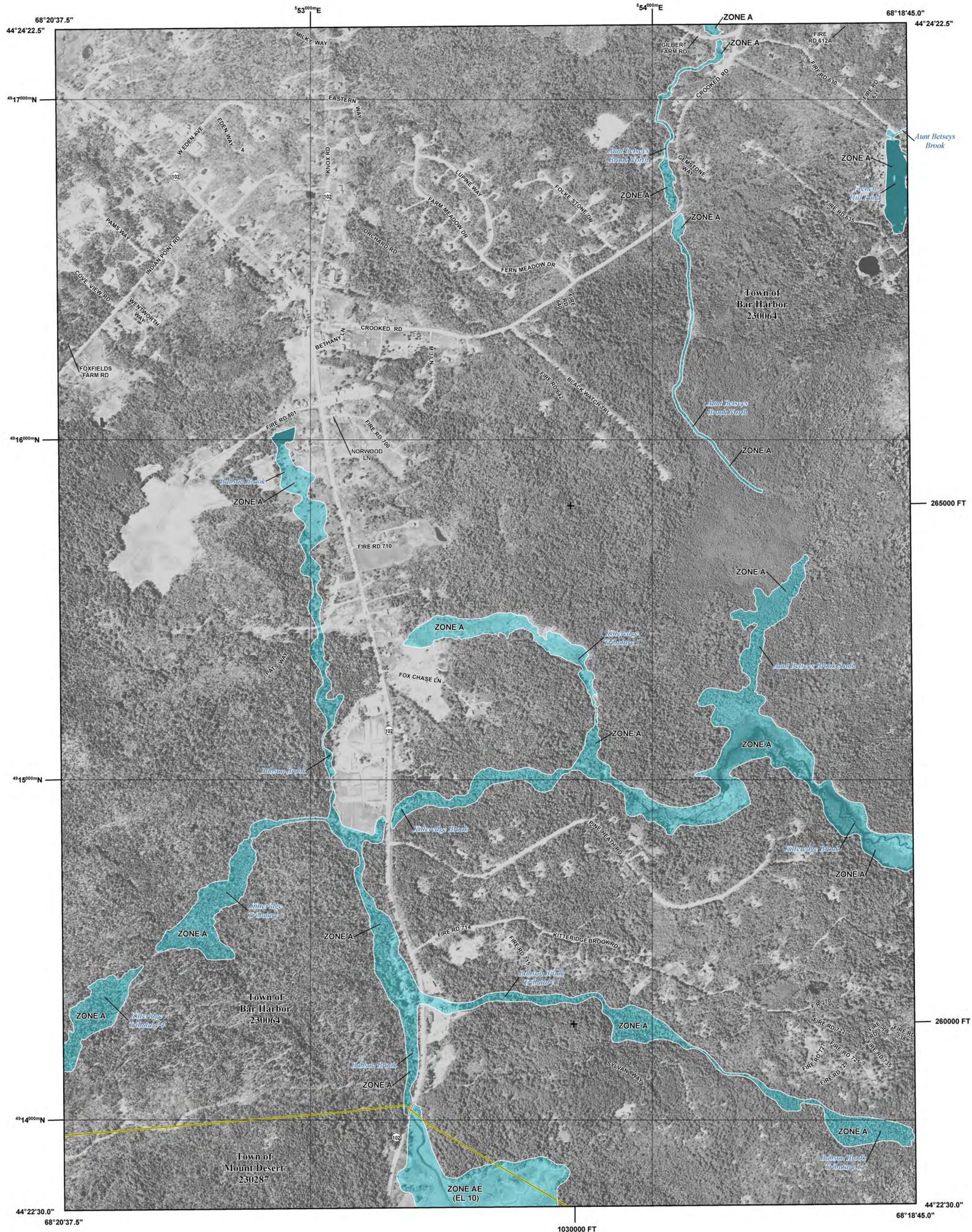
10/28/2024, 11:46:27 AM

1:18,056



USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S.

USGS  
2021 USGS



**FLOOD HAZARD INFORMATION**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT  
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTP://MSC.FEMA.GOV](http://MSC.FEMA.GOV)

	Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	NO SCREEN Areas of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert or Storm Sewer Accredited or Provisionally Accredited Levee, Dike, or Floodwall
	Non-accredited Levee, Dike or Floodwall
	18.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevations (BFE)
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

**NOTES TO USERS**

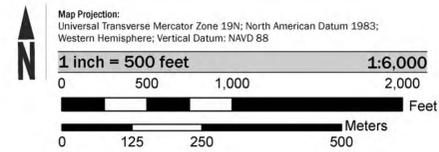
For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above. For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

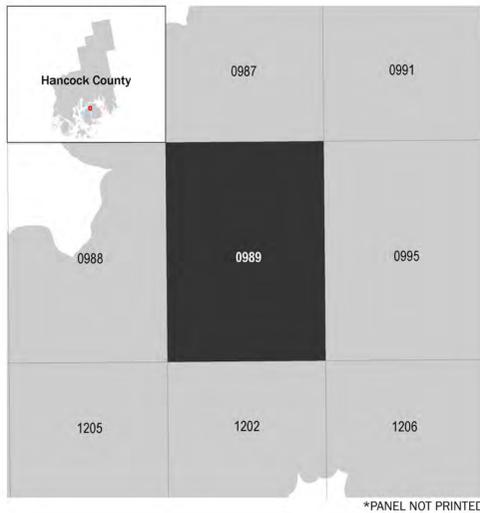
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-639-6620.

BASE MAP INFORMATION: Base map information shown on the FIRM was derived from digital orthophotography by Maine Office of GIS (MEGIS). Orthorectification was produced at a scale of 1:600 and dated August 2012 (MEGIS, 2012). Orthorectification was also acquired between 2003-2005 at a resolution of 1 and 2-ft cell size (MEGIS, 2003-2005).

**SCALE**



**PANEL LOCATOR**



**FEMA**

**National Flood Insurance Program**

**NATIONAL FLOOD INSURANCE PROGRAM**

FLOOD INSURANCE RATE MAP

**HANCOCK COUNTY, ME**

All Jurisdictions

PANEL 0989 of 1552

Panel Contains:

COMMUNITY	NUMBER PANEL SUFFIX
BAR HARBOR, TOWN OF	230064 0989 D
MOUNT DESERT, TOWN OF	230287 0989 D

VERSION NUMBER  
**2.3.2.1**

MAP NUMBER  
**23009C0989D**

EFFECTIVE DATE  
**July 20, 2016**

**APPENDIX F**  
Corps Wetland Data Forms

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL1WET  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.391249°N Long: 68.322963°W Datum: WGS 84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: Upland (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>24-W-JL1</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ <u>x</u> Water-Stained Leaves (B9) <u>x</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>x</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>x</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>9</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL1WET

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u><i>Acer rubrum</i></u>	30	Yes	FAC	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																
2. <u><i>Picea rubens</i></u>	20	Yes	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	50	=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>45</u></td> <td>x 1 = <u>45</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>53</u></td> <td>x 4 = <u>212</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>158</u> (A)</td> <td><u>412</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.61</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>45</u>	x 1 = <u>45</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>53</u>	x 4 = <u>212</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>158</u> (A)	<u>412</u> (B)	Prevalence Index = B/A = <u>2.61</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>45</u>	x 1 = <u>45</u>																			
FACW species <u>25</u>	x 2 = <u>50</u>																			
FAC species <u>35</u>	x 3 = <u>105</u>																			
FACU species <u>53</u>	x 4 = <u>212</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>158</u> (A)	<u>412</u> (B)																			
Prevalence Index = B/A = <u>2.61</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u><i>Picea rubens</i></u>	15	No	FACU																	
2. <u><i>Vaccinium angustifolium</i></u>	15	No	FACU																	
3. <u><i>Vaccinium corymbosum</i></u>	25	Yes	FACW																	
4. <u><i>Rhododendron groenlandicum</i></u>	10	No	OBL																	
5. <u><i>Pinus strobus</i></u>	3	No	FACU																	
6. <u><i>Calamagrostis canadensis</i></u>	20	Yes	OBL																	
7. _____																				
	88	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u><i>Acer rubrum</i></u>	5	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Carex trisperma</i></u>	10	Yes	OBL																	
3. <u><i>Vaccinium oxycoccos</i></u>	5	Yes	OBL																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	20	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																

Remarks: (Include photo numbers here or on a separate sheet.)



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL1UPL  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Rise/Knoll Local relief (concave, convex, none): Convex Slope (%): 5  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.391379°N Long: 68.323205°W Datum: WGS84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: Upland (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>24-W-JL1 Upland</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL1UPL

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u><i>Pinus strobus</i></u>	<u>20</u>	Yes	FACU	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. <u><i>Larix laricina</i></u>	<u>5</u>	No	FACW																	
3. <u><i>Acer rubrum</i></u>	<u>35</u>	Yes	FAC																	
4. <u><i>Picea rubens</i></u>	<u>10</u>	No	FACU																	
5. _____																				
6. _____																				
7. _____																				
	<u>70</u>	=Total Cover																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u><i>Picea rubens</i></u>	<u>12</u>	Yes	FACU	<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>57</u></td> <td>x 3 = <u>171</u></td> </tr> <tr> <td>FACU species <u>79</u></td> <td>x 4 = <u>316</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>141</u> (A)</td> <td><u>497</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.52</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>57</u>	x 3 = <u>171</u>	FACU species <u>79</u>	x 4 = <u>316</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>141</u> (A)	<u>497</u> (B)	Prevalence Index = B/A = <u>3.52</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>57</u>	x 3 = <u>171</u>																			
FACU species <u>79</u>	x 4 = <u>316</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>141</u> (A)	<u>497</u> (B)																			
Prevalence Index = B/A = <u>3.52</u>																				
2. <u><i>Abies balsamea</i></u>	<u>20</u>	Yes	FAC																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>32</u>	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u><i>Pteridium aquilinum</i></u>	<u>15</u>	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. <u><i>Vaccinium angustifolium</i></u>	<u>20</u>	Yes	FACU																	
3. <u><i>Quercus rubra</i></u>	<u>2</u>	No	FACU																	
4. <u><i>Acer rubrum</i></u>	<u>2</u>	No	FAC																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>39</u>	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>  X  </u>																
Remarks: (Include photo numbers here or on a separate sheet.)																				



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/12/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL3WET  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.392251°N Long: 68.325057°W Datum: WGS 84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: Upland (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>24-W-JL3</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ <u>x</u> Water-Stained Leaves (B9) <u>x</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>x</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>x</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>x</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks:	

**VEGETATION – Use scientific names of plants.**

Sampling Point: WJL3WET

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u>Picea rubens</u>	30	Yes	FACU	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)  Total Number of Dominant Species Across All Strata: <u>8</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.5%</u> (A/B)																
2. <u>Picea mariana</u>	15	Yes	FACW																	
3. <u>Acer rubrum</u>	15	Yes	FAC																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	60	=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>50</u></td> <td>x 2 = <u>100</u></td> </tr> <tr> <td>FAC species <u>32</u></td> <td>x 3 = <u>96</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>142</u> (A)</td> <td><u>361</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.54</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>50</u>	x 2 = <u>100</u>	FAC species <u>32</u>	x 3 = <u>96</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>142</u> (A)	<u>361</u> (B)	Prevalence Index = B/A = <u>2.54</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>50</u>	x 2 = <u>100</u>																			
FAC species <u>32</u>	x 3 = <u>96</u>																			
FACU species <u>35</u>	x 4 = <u>140</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>142</u> (A)	<u>361</u> (B)																			
Prevalence Index = B/A = <u>2.54</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u>Vaccinium corymbosum</u>	35	Yes	FACW	<b>Hydrophytic Vegetation Indicators:</b>  <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. <u>Kalmia angustifolia</u>	15	Yes	FAC																	
3. <u>Vaccinium angustifolium</u>	5	No	FACU																	
4. <u>Rhododendron groenlandicum</u>	10	No	OBL																	
5. _____																				
6. _____																				
7. _____																				
	65	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u>Iris versicolor</u>	5	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. <u>Vaccinium oxycoccos</u>	5	Yes	OBL																	
3. <u>Acer rubrum</u>	2	No	FAC																	
4. <u>Carex disperma</u>	5	Yes	OBL																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	17	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/12/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL3UPL  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex Slope (%): 5-8  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.391950°N Long: 68.324429°W Datum: WGS84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: Upland (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>24-W-JL3 Upland</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL3UPL

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u><i>Pinus strobus</i></u>	35	Yes	FACU	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. <u><i>Picea rubens</i></u>	40	Yes	FACU																	
3. <u><i>Acer rubrum</i></u>	5	No	FAC																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	80	=Total Cover																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u><i>Picea rubens</i></u>	5	Yes	FACU	<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>7</u></td> <td>x 3 = <u>21</u></td> </tr> <tr> <td>FACU species <u>115</u></td> <td>x 4 = <u>460</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>122</u> (A)</td> <td><u>481</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.94</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>7</u>	x 3 = <u>21</u>	FACU species <u>115</u>	x 4 = <u>460</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>122</u> (A)	<u>481</u> (B)	Prevalence Index = B/A = <u>3.94</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>7</u>	x 3 = <u>21</u>																			
FACU species <u>115</u>	x 4 = <u>460</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>122</u> (A)	<u>481</u> (B)																			
Prevalence Index = B/A = <u>3.94</u>																				
2. <u><i>Vaccinium angustifolium</i></u>	15	Yes	FACU																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	20	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u><i>Pteridium aquilinum</i></u>	20	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Acer rubrum</i></u>	1	No	FAC																	
3. <u><i>Betula alleghaniensis</i></u>	1	No	FAC																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	22	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>  X  </u>																
Remarks: (Include photo numbers here or on a separate sheet.)																				

**SOIL**

Sampling Point: WJL3UPL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5							Sandy	organic
5-9	10YR 5/1	100					Loamy/Clayey	
9-11	7.5YR 5/4	100					Loamy/Clayey	
11-14	10YR 5/4	100					Loamy/Clayey	
14-15	7.5YR 4/4	100					Loamy/Clayey	
15-17	2.5Y 5/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Rock  
 Depth (inches): 17

Hydric Soil Present? Yes  No

**Remarks:**

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL4PFO  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.393389°N Long: 68.324151°W Datum: WGS 84  
 Soil Map Unit Name: Lymann-Tunbridge-Schoodic complex (NRCS) NWI classification: Upland (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>24-W-JL4 Plot 1 PFO</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) <u>x</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>x</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) <u>x</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>x</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>4</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:





## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL4UPLF  
 Investigator(s): Jeanna Leclerc, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 3  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.393688°N Long: 68.324120°W Datum: WGS 84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: PFO4E (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>24-W-JL4 Upland</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL4UPLF

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u>Acer rubrum</u>	15	Yes	FAC	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
2. <u>Picea rubens</u>	45	Yes	FACU																	
3. <u>Pinus strobus</u>	10	No	FACU																	
4. <u>Abies balsamea</u>	3	No	FAC																	
5. _____																				
6. _____																				
7. _____																				
	73	=Total Cover																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u>Picea rubens</u>	10	No	FACU	<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>70</u></td> <td>x 3 = <u>210</u></td> </tr> <tr> <td>FACU species <u>107</u></td> <td>x 4 = <u>428</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>177</u> (A)</td> <td><u>638</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.60</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>70</u>	x 3 = <u>210</u>	FACU species <u>107</u>	x 4 = <u>428</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>177</u> (A)	<u>638</u> (B)	Prevalence Index = B/A = <u>3.60</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>70</u>	x 3 = <u>210</u>																			
FACU species <u>107</u>	x 4 = <u>428</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>177</u> (A)	<u>638</u> (B)																			
Prevalence Index = B/A = <u>3.60</u>																				
2. <u>Abies balsamea</u>	30	Yes	FAC																	
3. <u>Vaccinium angustifolium</u>	15	Yes	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	55	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u>Acer rubrum</u>	2	No	FAC	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)																
2. <u>Pteridium aquilinum</u>	25	Yes	FACU																	
3. <u>Trientalis borealis</u>	20	Yes	FAC																	
4. <u>Gaultheria procumbens</u>	2	No	FACU																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	49	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>  </u> No <u>  X  </u>																
Remarks: (Include photo numbers here or on a separate sheet.)																				



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL4PSS  
 Investigator(s): Joshua Bohm, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.393473°N Long: 68.327275°W Datum: WGS 84  
 Soil Map Unit Name: Scantic silt loam (NRCS) NWI classification: PFO4/2B (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>x</u> No _____ If yes, optional Wetland Site ID: <u>24-W-JL4 2 PSS</u>
Remarks: (Explain alternative procedures here or in a separate report.)   	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) <u>x</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>x</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>7</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  	
Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL4PSS

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u><i>Acer rubrum</i></u>	<u>15</u>	Yes	FAC	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. <u><i>Picea mariana</i></u>	<u>7</u>	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>22</u>	=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>100</u></td> <td>x 1 = <u>100</u></td> </tr> <tr> <td>FACW species <u>27</u></td> <td>x 2 = <u>54</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>147</u></td> <td>(A) <u>214</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.46</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>100</u>	x 1 = <u>100</u>	FACW species <u>27</u>	x 2 = <u>54</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>147</u>	(A) <u>214</u> (B)	Prevalence Index = B/A = <u>1.46</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>100</u>	x 1 = <u>100</u>																			
FACW species <u>27</u>	x 2 = <u>54</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>147</u>	(A) <u>214</u> (B)																			
Prevalence Index = B/A = <u>1.46</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u><i>Picea mariana</i></u>	<u>10</u>	Yes	FACW																	
2. <u><i>Alnus incana</i></u>	<u>10</u>	Yes	FACW																	
3. <u><i>Acer rubrum</i></u>	<u>5</u>	Yes	FAC																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>25</u>	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u><i>Glyceria grandis</i></u>	<u>100</u>	Yes	OBL	<b>Hydrophytic Vegetation Indicators:</b> <u>  </u> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>  </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>100</u>	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: _____ )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>  </u>																

Remarks: (Include photo numbers here or on a separate sheet.)



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Town Hill Affordable Workforce Housing Project City/County: Town Hill Sampling Date: 6/11/2024  
 Applicant/Owner: Town of Bar Harbor State: ME Sampling Point: WJL4UPL2  
 Investigator(s): Joshua Bohm, WRC LLC. Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, etc.): Sideslope Local relief (concave, convex, none): Convex Slope (%): 8  
 Subregion (LRR or MLRA): LRR R, MLRA 144B Lat: 44.393929°N Long: 68.327087°W Datum: WGS 84  
 Soil Map Unit Name: Hermon-Holton-Rock outcrop complex (NRCS) NWI classification: PFO4/2B (USFWS NWI)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>24-W-JL4 Upl 2</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: WJL4UPL2

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>10M</u> )																				
1. <u>Acer rubrum</u>	35	Yes	FAC	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B)																
2. <u>Picea rubens</u>	25	Yes	FACU																	
3. <u>Abies balsamea</u>	25	Yes	FAC																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	85	=Total Cover																		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>5M</u> )																				
1. <u>Abies balsamea</u>	15	Yes	FAC	<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>92</u></td> <td>x 3 = <u>276</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>172</u> (A)</td> <td><u>576</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.35</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>92</u>	x 3 = <u>276</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>172</u> (A)	<u>576</u> (B)	Prevalence Index = B/A = <u>3.35</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>10</u>	x 2 = <u>20</u>																			
FAC species <u>92</u>	x 3 = <u>276</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>172</u> (A)	<u>576</u> (B)																			
Prevalence Index = B/A = <u>3.35</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	15	=Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>1M</u> )																				
1. <u>Pteridium aquilinum</u>	40	Yes	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Abies balsamea</u>	10	No	FAC																	
3. <u>Picea rubens</u>	5	No	FACU																	
4. <u>Trientalis borealis</u>	7	No	FAC																	
5. <u>Vaccinium myrtilloides</u>	10	No	FACW																	
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	72	=Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>1M</u> )																				
1. _____				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																

Remarks: (Include photo numbers here or on a separate sheet.)



**APPENDIX G**

Maine State Vernal Pool Assessment Forms, Plan, and Color Photographs



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-IBA-JL1

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRC, LLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

- i. USGS topographic map OR aerial photograph with pool clearly marked.
- ii. **GPS location of vernal pool (use Datum NAD83 / WGS84)**
- Longitude/Easting: -68.329603 Latitude/Northing: 44.395130
- Coordinate system: WGS84
- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

Pool exists in a man-made excavation pit

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool is shallow enough that it likely dries up outside of the Spring Season

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 3 m, 9 ft, Length: 9 m, 9 ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	4	7	7	3	3	3	F	M	A						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP    Potential SVP    Non Significant VP    Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Small excavation within hillside seep wetland

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

#### For MDIFW use only

Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant    Potentially Significant but lacking critical data    Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL5

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

- i. USGS topographic map OR aerial photograph with pool clearly marked.
- ii. **GPS location of vernal pool (use Datum NAD83 / WGS84)**
- Longitude/Easting: -68.327864 Latitude/Northing: 44.396034
- Coordinate system: WGS84
- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool is very shallow, at second visit pool was only 4 inches deep

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 45 m ft Length: 90 m ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	2	3	5	3	3	3	F	M	A						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL8

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc. WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

- i. USGS topographic map OR aerial photograph with pool clearly marked.
- ii. **GPS location of vernal pool (use Datum NAD83 / WGS84)**
- Longitude/Easting: -68.323915 Latitude/Northing: 44.393755
- Coordinate system: WGS84
- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty text box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool was observed mostly dry in June

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 45 m, ft Length: 105 m, ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Sphagnum moss, Floating or submerged aquatics, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

INDICATOR SPECIES	Egg Masses (or adult Fairy Shrimp)						Tadpoles/Larvae <sup>4</sup>				
	Visit #1	Visit #2	Visit #3	Confidence Level <sup>1</sup>		Egg Mass Maturity <sup>2</sup>		Observed		Confidence Level <sup>1</sup>	
Wood Frog	0	0									
Spotted Salamander	1	4		3	3	F	M				
Blue-spotted Salamander	0	0									
Fairy Shrimp <sup>3</sup>	0	0									

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

For MDIFW use only Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-IBA-JL9

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.328041 Latitude/Northing: 44.395851

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



# Maine State Vernal Pool Assessment Form



## 5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

### b. Wetland habitat characterization

■ Choose the best descriptor for the landscape setting:

- Isolated depression
- Floodplain depression
- Pool associated with larger wetland complex
- Other: \_\_\_\_\_

■ Check all wetland types that best apply to this pool:

- Forested swamp
- Shrub swamp
- Peatland (fen or bog)
- Emergent marsh
- Wet meadow
- Lake or pond cove
- Abandoned beaver flowage
- Active beaver flowage
- Slow stream
- Floodplain
- Mostly unvegetated pool
- ATV or skidder rut
- Dug pond or borrow pit
- Roadside ditch
- Other: \_\_\_\_\_

### c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin:  Natural  Natural-Modified  Unnatural  Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (**required**):

Pool exists in old excavated pit or man-made depression

### ii. Pool Hydrology

■ Select the pool's estimated hydroperiod AND provide rationale in box (**required**):

- Permanent
- Semi-permanent (drying partially in all years and completely in drought years)
- Ephemeral (drying out completely in most years)
- Unknown

Explain:

■ Maximum depth at survey:  0-12" (0-1 ft.)  12-36" (1-3 ft.)  36-60" (3-5 ft.)  >60" (>5 ft.)

■ Approximate size of pool (at spring highwater): Width: 4  m  ft Length: 8  m  ft

■ Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present)
- Mineral soil (sphagnum moss present)
- Organic matter (peat/muck) shallow or restricted to deepest portion
- Organic matter (peat/muck) deep and widespread

■ Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp. (e.g. haircap moss, lycopodium spp.)
- Dry site ferns (e.g. spinulose wood fern, lady fern, bracken fern)
- Moist site ferns (e.g. sensitive fern, cinnamon fern, interrupted fern, New York fern)
- Moist site vasculars (e.g. skunk cabbage, jewelweed, blue flag iris, swamp candle)
- Sphagnum moss (anchored or suspended)
- Wet site ferns (e.g. royal fern, marsh fern)
- Wet site shrubs (e.g. highbush blueberry, maleberry, winterberry, mountain holly)
- Wet site graminoids (e.g. blue-joint grass, tussock sedge, cattail, bulrushes)
- Aquatic vascular spp. (e.g. pickerelweed, arrowhead)
- Floating or submerged aquatics (e.g. water lily, water shield, pond weed, bladderwort)
- No vegetation in pool

■ Faunal indicators (check all that apply):

- Fish
- Bullfrog or Green Frog tadpoles
- Other: \_\_\_\_\_

### iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet
- Intermittent inlet or outlet
- Permanent inlet or outlet (channel with well-defined banks and permanent flow)
- Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 5/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>			
	#1	#2	#3	1	2	3	F	M	A	H	1	2	3	1	2	3
Spotted	0	0	0													
Blue-spotted	2	2	2	3	3	3	F	A	A							
Fairy Shrimp <sup>3</sup>	0	0	0													

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP    Potential SVP    Non Significant VP    Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

For MDIFW use only   Reviewed by MDIFW   Date: \_\_\_\_\_   Initials: \_\_\_\_\_

This pool is:  Significant    Potentially Significant but lacking critical data    Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-SVP-JL13

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.328147 Latitude/Northing: 44.395373

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Observed almost completely dry in June.

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 45 m ft Length: 50 m ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/204

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	19	19	25	3	3	3	F	M	A						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

For MDIFW use only Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL15

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -69.327915 Latitude/Northing: 44.394809

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other: \_\_\_\_\_

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other: \_\_\_\_\_

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown (with descriptions of each)

Explain:

Pool is very shallow and likely dries up outside of the Spring Season

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 8 m ft Length: 12 m ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other: \_\_\_\_\_

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	2	2	2	3	3	3	F	M	A						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP    Potential SVP    Non Significant VP    Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

For MDIFW use only   Reviewed by MDIFW   Date: \_\_\_\_\_   Initials: \_\_\_\_\_

This pool is:  Significant    Potentially Significant but lacking critical data    Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL17

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.327305 Latitude/Northing: 44.394287

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other: \_\_\_\_\_

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other: \_\_\_\_\_

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown (with descriptions of each)

Explain:

Pool was observed dry in June

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 35 m ft Length: 40 m ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other: \_\_\_\_\_

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	2	9	9	3	3	3	F	M	A						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL19

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRC, LLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.327600 Latitude/Northing: 44.393700

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other: \_\_\_\_\_

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other: \_\_\_\_\_

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

Pool is part of a slow moving stream where pooled water exists.

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent (drying partially in all years and completely in drought years), Ephemeral (drying out completely in most years), Unknown

Explain:

Stream is intermittent, and observed flowing in mid June

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 2 m, ft Length: 8 m, ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp. (e.g. haircap moss, lycopodium spp.), Wet site ferns (e.g. royal fern, marsh fern), Dry site ferns (e.g. spinulose wood fern, lady fern, bracken fern), Wet site shrubs (e.g. highbush blueberry, maleberry, winterberry, mountain holly), Moist site ferns (e.g. sensitive fern, cinnamon fern, interrupted fern, New York fern), Wet site graminoids (e.g. blue-joint grass, tussock sedge, cattail, bulrushes), Moist site vasculars (e.g. skunk cabbage, jewelweed, blue flag iris, swamp candle), Aquatic vascular spp. (e.g. pickerelweed, arrowhead), Sphagnum moss (anchored or suspended), Floating or submerged aquatics (e.g. water lily, water shield, pond weed, bladderwort), No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other: \_\_\_\_\_

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet (channel with well-defined banks and permanent flow), Intermittent inlet or outlet, Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 05/07/24, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	2	2	1	3	3	3	F	M	M						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL21

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.328175 Latitude/Northing: 44.393936

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other: \_\_\_\_\_

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other: \_\_\_\_\_

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

Empty text box for describing human impacts.

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown, (drying partially in all years and completely in drought years), (drying out completely in most years)

Explain:

Pool observed dry in early June

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 8 m, ft Length: 12 m, ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp. (e.g. haircap moss, lycopodium spp.), Wet site ferns (e.g. royal fern, marsh fern), Dry site ferns (e.g. spinulose wood fern, lady fern, bracken fern), Wet site shrubs (e.g. highbush blueberry, maleberry, winterberry, mountain holly), Moist site ferns (e.g. sensitive fern, cinnamon fern, interrupted fern, New York fern), Wet site graminoids (e.g. blue-joint grass, tussock sedge, cattail, bulrushes), Moist site vasculars (e.g. skunk cabbage, jewelweed, blue flag iris, swamp candle), Aquatic vascular spp. (e.g. pickerelweed, arrowhead), Sphagnum moss (anchored or suspended), Floating or submerged aquatics (e.g. water lily, water shield, pond weed, bladderwort), No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other: \_\_\_\_\_

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet (channel with well-defined banks and permanent flow), Intermittent inlet or outlet, Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 4/17/24, 5/7/2024, 5/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	1	1	1	3	3	3	F	M	M						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Pool appears to be non-viable due to early dry out period.

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments: \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL22

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.327671 Latitude/Northing: 44.393715

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other: \_\_\_\_\_

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other: under tip-up

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

Empty text box for describing human impacts.

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool is a small pool in an intermittent stream

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 4 m, 4 ft, Length: 4 m, 4 ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Sphagnum moss, Floating or submerged aquatics, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other: \_\_\_\_\_

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain): \_\_\_\_\_



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 04/17/2025, 05/07/24, 05/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	VISIT			CONFIDENCE LEVEL <sup>1</sup>			EGG MASS MATURITY <sup>2</sup>			OBSERVED			CONFIDENCE LEVEL <sup>1</sup>		
	#1	#2	#3	1	2	3	F	M	A	1	2	3	1	2	3
Spotted	0	0	0												
Blue-spotted	2	4	2	3	3	3	F	M	M						
Fairy Shrimp <sup>3</sup>	0	0	0												

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-JL23

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Jeanna Leclerc, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

Access to the site has not been established. Once access is obtained directions to the pools can be provided.

#### b. Mapping Requirements

i. USGS topographic map OR aerial photograph with pool clearly marked.

#### ii. GPS location of vernal pool (use Datum NAD83 / WGS84)

Longitude/Easting: -68.327870 Latitude/Northing: 44.394858

Coordinate system: WGS84

- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty box for describing human impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool was observed dry in early June

Maximum depth at survey: 0-12", 12-36", 36-60", >60"

Approximate size of pool (at spring highwater): Width: 8 m, Length: 10 m

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Floating or submerged aquatics, Sphagnum moss, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 05/07/24, 05/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	Visit #1		Visit #2		Visit #3		Confidence Level <sup>4</sup>		Egg mass maturity <sup>2</sup>		Observed		Confidence Level <sup>1</sup>	
	Count	CL	Count	CL	Count	CL	1	2	3	4	5	6	7	8
Spotted			4		4		3	3		M	M			
Blue-spotted			0		0									
Fairy Shrimp <sup>3</sup>			0		0									

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%

2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching

3-Fairy shrimp: X = present

4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen

\*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

#### For MDIFW use only

Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:



# Maine State Vernal Pool Assessment Form



## INSTRUCTIONS:

- Complete all 3 pages of form thoroughly. Most fields are required for pool registration.
- Clear photographs of a) the pool AND b) the indicators (one example of each species egg mass) are required for all observers.

Observer's Pool ID: 24-V-RS1

MDIFW Pool ID: \_\_\_\_\_

### 1. PRIMARY OBSERVER INFORMATION

- a. Observer name: Roger St.Amand, WRCLLC
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes

### 2. PROJECT CONTACT INFORMATION

- a. Contact name:  same as observer  other \_\_\_\_\_
- b. Contact and credentials previously provided?  No (submit Addendum 1)  Yes
- c. Project Name: Town Hill Affordable Workforce Housing Project

### 3. LANDOWNER CONTACT INFORMATION

- a. Are you the landowner?  Yes  No If no, was landowner permission obtained for survey?  Yes  No
- b. Landowner's contact information (required)
- Name: Town of Bar Harbor Phone: 207-288-4098 E-mail: cmartinez@barharbormail.o
- Street Address: 93 Cottage Street City: Bar Harbor State: ME Zip: 04609
- c.  Large Projects: check if separate project landowner data file submitted

*The Maine Department of Environmental Protection will e-mail official status letters to the project contact and landowner. Please check these data for completeness and accuracy to prevent delay in mailings. E-mail is the preferred method of notification; please provide e-mail addresses for the project contact and the landowner when available.*

### 4. VERNAL POOL LOCATION INFORMATION

a. Location Township: Bar Harbor

Brief site directions to the pool (using mapped landmarks):

We do not currently have direct access to the site. We can provide directions once access to the site has been secured.

#### b. Mapping Requirements

- i. USGS topographic map OR aerial photograph with pool clearly marked.
- ii. **GPS location of vernal pool (use Datum NAD83 / WGS84)**
- Longitude/Easting: -68.3276773 Latitude/Northing: 44.3965464
- Coordinate system: WGS84
- Check one:  GIS shapefile  
 - send to VernalPool.MDIFW@maine.gov; observer has reviewed shape accuracy
- (Best) The pool perimeter is delineated by multiple GPS points. (Excellent)  
 - Include map or spreadsheet with coordinates.
- The above GPS point is at the center of the pool. (Good)



5. VERNAL POOL HABITAT INFORMATION

a. Habitat survey date (only if different from indicator survey dates on page 3): \_\_\_\_\_

b. Wetland habitat characterization

Choose the best descriptor for the landscape setting:

- Isolated depression, Pool associated with larger wetland complex, Floodplain depression, Other:

Check all wetland types that best apply to this pool:

- Forested swamp, Wet meadow, Slow stream, Dug pond or borrow pit, Shrub swamp, Lake or pond cove, Floodplain, Peatland (fen or bog), Abandoned beaver flowage, Mostly unvegetated pool, Roadside ditch, Emergent marsh, Active beaver flowage, ATV or skidder rut, Other:

c. Vernal pool status under the Natural Resources Protection Act (NRPA)

i. Pool Origin: Natural, Natural-Modified, Unnatural, Unknown

If modified, unnatural or unknown, describe any modern or historic human impacts to the pool (required):

[Empty text box for describing impacts]

ii. Pool Hydrology

Select the pool's estimated hydroperiod AND provide rationale in box (required):

- Permanent, Semi-permanent, Ephemeral, Unknown

Explain:

Pool is a small pool in an intermittent stream

Maximum depth at survey: 0-12" (0-1 ft.), 12-36" (1-3 ft.), 36-60" (3-5 ft.), >60" (>5 ft.)

Approximate size of pool (at spring highwater): Width: 4 m, ft Length: 40 m, ft

Predominate substrate in order of increasing hydroperiod:

- Mineral soil (bare, leaf-litter bottom, or upland mosses present), Organic matter (peat/muck) shallow or restricted to deepest portion, Mineral soil (sphagnum moss present), Organic matter (peat/muck) deep and widespread

Pool vegetation indicators in order of increasing hydroperiod (check all that apply):

- Terrestrial nonvascular spp., Wet site ferns, Dry site ferns, Wet site shrubs, Moist site ferns, Wet site graminoids, Moist site vasculars, Aquatic vascular spp., Sphagnum moss, Floating or submerged aquatics, No vegetation in pool

Faunal indicators (check all that apply):

- Fish, Bullfrog or Green Frog tadpoles, Other:

iii. Inlet/Outlet Flow Permanency

Type of inlet or outlet (a seasonal or permanent channel providing water flowing into or out of the pool):

- No inlet or outlet, Permanent inlet or outlet, Intermittent inlet or outlet, Other or Unknown (explain):



# Maine State Vernal Pool Assessment Form



## 6. VERNAL POOL INDICATOR INFORMATION

a. Indicator survey dates: 05/21/2024

### b. Indicator abundance criteria and pool survey effort

- Is pool depression bisected by 2 ownerships (straddler pool)?  Yes  No
- Was the entire pool surveyed for egg masses?  Yes  No; what % of entire pool surveyed? \_\_\_\_\_
- For each indicator species, indicate the exact number of egg masses, confidence level for species determination, and egg mass maturity. Separate cells are provided for separate survey dates.

SPECIES	Visit #1	Visit #2	Visit #3	Confidence Level <sup>4</sup>			Egg mass maturity <sup>2</sup>			Observed			Confidence Level <sup>1</sup>				
				1	2	3	F	M	A	H	X	1	2	3			
Spotted	-	-	0														
Blue-spotted	-	-	0														
Fairy Shrimp <sup>3</sup>	-	-	0														

1-Confidence level: 1 = <60%, 2 = 60-95%, 3 = >95%  
 2-Egg mass maturity: F= Fresh (<24 hrs), M= Mature (round embryos), A= Advanced (loose matrix, curved embryos), H= Hatched or Hatching  
 3-Fairy shrimp: X = present  
 4-Tadpoles/larvae: X = present

### c. Rarity criteria

- Note any rare species associated with vernal pools. Observations should be accompanied by photographs.

SPECIES	Method of Verification*			CL**	SPECIES	Method of Verification*			CL**
	P	H	S			P	H	S	
Blanding's Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Wood Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spotted Turtle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Ribbon Snake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ringed Boghaunter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\*Method of verification: P = Photographed, H = Handled, S = Seen  
 \*\*CL - Confidence level in species determination: 1= <60%, 2= 60-95%, 3= >95%

### d. Optional observer recommendation:

- SVP  Potential SVP  Non Significant VP  Indicator Breeding Area

### e. General vernal pool comments and/or observations of other wildlife:

Send completed form and supporting documentation to: [VernalPool.MDIFW@maine.gov](mailto:VernalPool.MDIFW@maine.gov)

NOTE: Digital submissions are preferred but if not possible, please mail to: Maine Department of Inland Fisheries and Wildlife  
 Attn: Vernal Pools  
 106 Hogan Road, Suite 1  
 Bangor, ME 04401

**For MDIFW use only** Reviewed by MDIFW Date: \_\_\_\_\_ Initials: \_\_\_\_\_

This pool is:  Significant  Potentially Significant but lacking critical data  Not Significant due to:  does not meet biological criteria.  does not meet MDEP vernal pool criteria.

Comments:





**Photo 1:** Photo of indicator breeding area 24-IBA-JL1. Photograph taken April 17, 2024.



**Photo 2:** Spotted salamander egg masses on a branch in indicator breeding area 24-IBA-JL1. Photograph taken April 17, 2024.



**Photo 3:** Photo of vernal pool 24-V-JL5. Photograph taken April 17, 2024.



**Photo 4:** Spotted salamander egg mass in vernal pool 24-V-JL5. Photograph taken April 17, 2024.



**Photo 5:** Photo of vernal pool 24-V-JL8. Photograph taken April 17, 2024.



**Photo 6:** Spotted salamander egg mass on a branch in Vernal Pool 24-V-JL8. Photograph taken April 17, 2024.



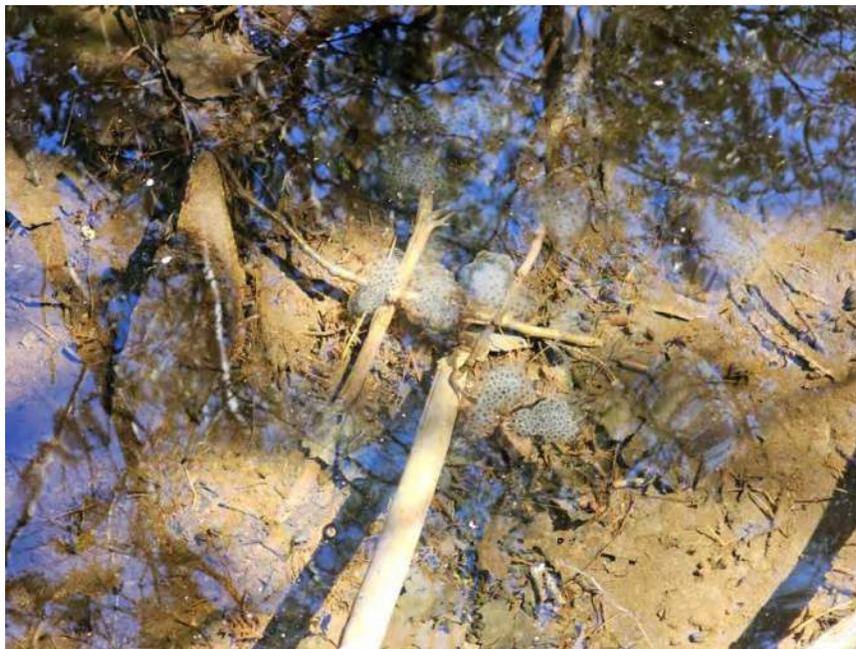
**Photo 7:** Photo of indicator breeding area 24-IBA-JL9. Photograph taken April 17, 2024.



**Photo 8:** Spotted salamander egg mass at the surface in indicator breeding area 24-IBA-JL9. Photograph taken April 17, 2024.



**Photo 9:** Photo of significant vernal pool 24-SVP-JL13. Photograph taken April 17, 2024.



**Photo 10:** Spotted salamander egg masses on a branch in Significant Vernal Pool 24-SVP-JL13.  
Photograph taken April 17, 2024.



**Photo 11:** Photo of vernal pool 24-V-JL15. Photograph taken April 17, 2024.



**Photo 12:** Spotted salamander egg mass on a branch in Vernal Pool 24-V-JL15. Photograph taken April 17, 2024.



**Photo 13:** Photo of vernal pool 24-V-JL17. Photograph taken April 17, 2024.



**Photo 14:** Spotted salamander egg mass on a branch in Vernal Pool 24-V-JL17. Photograph taken April 17, 2024.



**Photo 15:** Photo of vernal pool 24-V-JL19. Photograph taken April 17, 2024.



**Photo 16:** Spotted salamander egg mass in Vernal Pool 24-V-JL19. Photograph taken April 17, 2024.



**Photo 17:** Photo of vernal pool 24-V-JL21. Photograph taken April 17, 2024.



**Photo 18:** Spotted salamander egg mass in Vernal Pool 24-V-JL21. Photograph taken April 17, 2024.



**Photo 19:** Photo of vernal pool 24-V-JL22. Photograph taken May 7, 2024.



**Photo 20:** Spotted salamander egg masses in Vernal Pool 24-V-JL22. Photograph taken May 7, 2024.



**Photo 21:** Photo of vernal pool 24-V-JL23. Photograph taken May 7, 2024.



**Photo 22:** Spotted salamander egg masses on a branch in Vernal Pool 24-V-JL23. Photograph taken May 7, 2024.



**Photo 23:** Photo of vernal pool 24-V-RS1. Photograph taken May 21, 2024.



**Photo 24:** Spotted salamander egg masses on a branch in Vernal Pool 24-V-RS1. Photograph taken May 21, 2024.