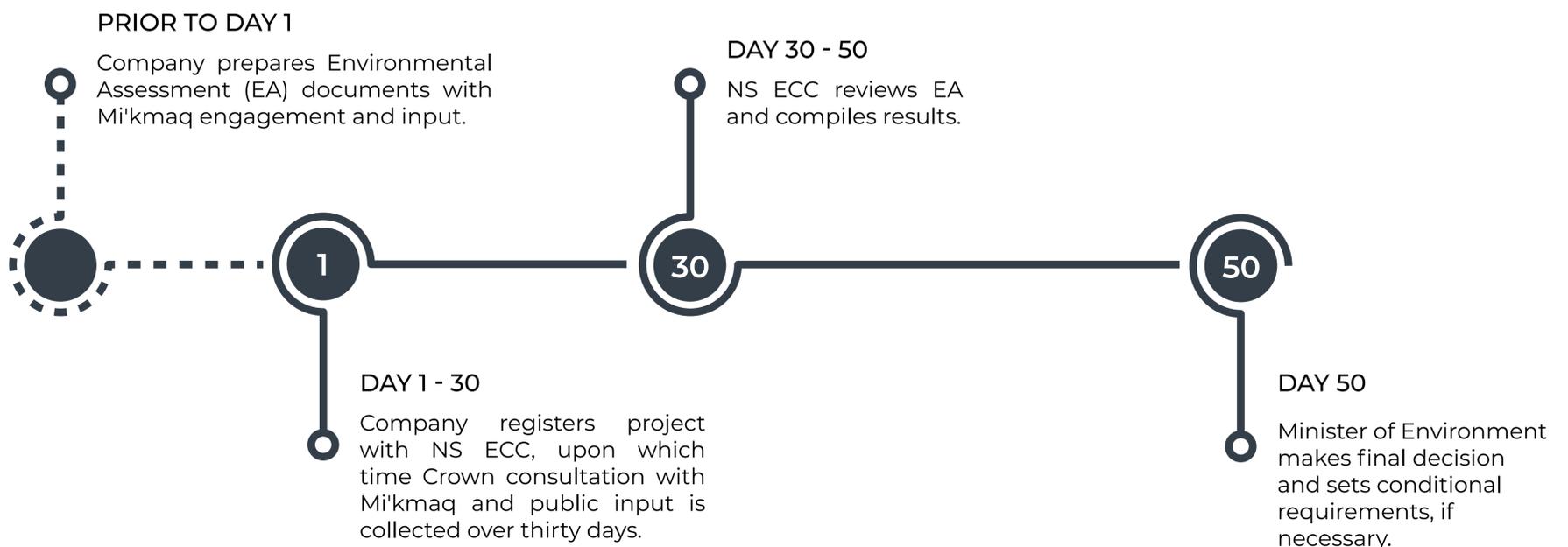


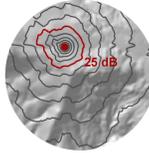
SWEB BLUEBERRY ACRES PROJECT

ENVIRONMENTAL ASSESSMENT CLASS I PROCESS

- Is required by Nova Scotia Environment & Climate Change (NS ECC) to ensure that a Project's environmental effects are minimized.
- Identifies and evaluates environmental effects at an early stage in Project development, and recommends mitigation to reduce adverse impacts.
- Public consultation is an integral part of this process. Community is invited to comment on the environmental assessment during the review period.
- Reviewed by NS ECC and other relevant government agencies.
- Nova Scotia Minister of the Environment only provides approval once satisfied that environmental effects have been adequately assessed and addressed.



TYPICAL BASELINE STUDIES

	AVIFAUNA		WETLANDS		VISUAL AESTHETICS		AIR QUALITY
	GENERAL WILDLIFE		WATERCOURSES & FISH HABITAT		CULTURAL & HERITAGE RESOURCES		SOUND MODELING
	PLANTS		GROUNDWATER & GEOLOGY		SOCIOECONOMIC CONDITIONS		

SWEB BLUEBERRY ACRES PROJECT

BASELINE SURVEYS

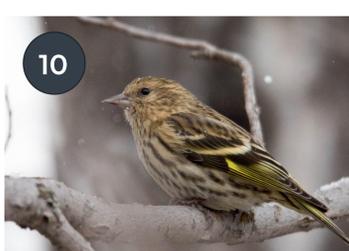
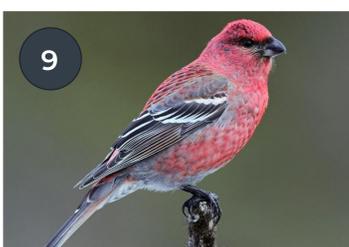
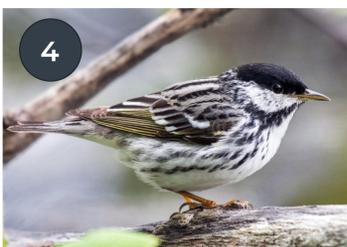
AVIFAUNA (BIRD SURVEYS)

SURVEY TYPE

METHOD

SIGNIFICANT RESULTS

BREEDING BIRD (YEAR 1)	10-minute point counts were conducted on site from sunrise to ~11AM.	A total of 208 individuals (29 species) were observed. 1 is a SAR: Eastern Wood-Pewee, and 2 SOCC: Bay-breasted Warbler and Boreal Chickadee.
BREEDING BIRD (YEAR 2)	10-minute point counts were conducted on site from sunrise to ~11AM.	A total of 249 individuals (45 species) were observed. 6 are SOCC: Bay-breasted Warbler, Boreal Chickadee, Cape May Warbler, Pine Siskin, Purple Finch and Red Crossbill.
COMMON NIGHTHAWK	7-minute point counts at 9 survey stations on site.	9 individual Common Nighthawks were observed during surveys.
FALL MIGRATION	15 ten-minute point counts were completed on site from sunrise to ~11AM across 4 survey events.	A total of 504 individuals (50 species) were observed. 1 is a SAR: Eastern Wood-Pewee, and 8 are SOCC: American Kestrel, American Robin, Bay-breasted Warbler, Blackpoll Warbler, Boreal Chickadee, Canada Jay, Purple Finch and Veery.
WINTER BIRD	9-15 ten-minute point counts were conducted on site across 3 different dates.	A total of 388 individuals (22 species) were observed. 1 is a SAR: Evening Grosbeak, and 5 are SOCC: Boreal Chickadee, Canada Jay, Pine Grosbeak, Purple Finch, and Red Crossbill.
NOCTURNAL OWL	7-minute point counts.	To be determined.
SPRING MIGRATION	10-15 ten-minute point counts were completed on site from sunrise to ~11AM across 4 survey events.	To be determined.



SPECIES OF CONSERVATION CONCERN

- 1 American Kestrel
Photo Source: Gary Grossman
- 2 American Robin
Photo Source: Alex Eberts
- 3 Bay-breasted Warbler
Photo Source: Keenan Yakola
- 4 Blackpoll Warbler
Photo Source: Simon Boivin
- 5 Boreal Chickadee
Photo Source: Ryan Sanderson
- 6 Canada Jay
Photo Source: Andrew Theus
- 7 Cape May Warbler
Photo Source: Keenan Yakola
- 8 Common Nighthawk
Photo Source: Richard Stebbins
- 9 Pine Grosbeak
Photo Source: Christoph Moning
- 10 Pine Siskin
Photo Source: David Mitchell
- 11 Purple Finch
Photo Source: Frances Higgs
- 12 Red Crossbill
Photo Source: Michael Stubblefield
- 13 Veery
Photo Source: Drew Weber

SPECIES AT RISK

- 14 Eastern Wood-Pewee
Photo Source: John Deitsch
- 15 Evening Grosbeak
Photo Source: Bellemare Celine

SWEB BLUEBERRY ACRES PROJECT

BASELINE SURVEYS

BAT SURVEYS

SURVEY TYPE

METHOD

SIGNIFICANT RESULTS

BAT SURVEYS

ECCC's Canadian Wildlife Service (Atlantic Region) - Wind Energy & Birds Environmental Assessment Guidance Update (ECCC, 2022). Passive monitoring using autonomous recording units (ARU's, SM4BAT, Wildlife Acoustics).

Total of 8 bats were detected in the Project Area, including 3 confirmed detections of the Little Brown Myotis, a SAR, as well as 3 unknown species from the Myotis genus.



SPECIES AT RISK

- 1 Little Brown Bat
Photo Source: Ron C. Wilson

BASELINE SURVEYS

PLANTS, WETLANDS & WINTER TRACKING

SURVEY TYPE

METHOD

SIGNIFICANT RESULTS

EARLY VEGETATION

Transects were walked throughout Study Area.

131 species of vascular plants were identified. Mostly native, with exotic species typically observed in disturbed areas. 2 are SOCC: American Beech and White Elm, no SAR. Total combined length of transects: 16.7 km.

LATE VEGETATION

Transects were walked throughout Study Area.

32 species of vascular plants were identified. Mostly native, with exotic species typically observed in disturbed areas. No SAR or SOCC. Total combined length of transects: 12.3 km.

WETLAND DELINEATION

US Army Corps of Engineers Wetlands Delineation Manual and the Northcentral and Northeastern Interim Regional Supplement Version 2.0 (US Army Corps of Engineers, 2012).

A total of 47 wetlands were delineated, ranging in size between 0.001 ha and 54.063 ha. 8 watercourses / drainage channels were delineated.

WINTER TRACKING

Pre-determined transects covering representative habitats, with priority given to Mainland moose wintering areas.

Confirmed tracks from: 1 SAR: Mainland Moose, and 3 common species: White-tailed Deer, Grouse and Snowshoe Hare. Total combined length of transects: 9.5 km.



SPECIES OF CONSERVATION CONCERN

- 1 American Beech
Photo Source: Ontario.ca
- 2 White Elm
Photo Source: Ontario.ca

SPECIES AT RISK

- 3 Mainland Moose
Photo Source: Ryan Hagerty

SWEB BLUEBERRY ACRES PROJECT

ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT (ARIA)

- Required as part of the Environmental Assessment process
- Conducted under the terms of the Special Places Protection Act
- Purpose of the ARIA is to determine the potential for archaeological resources within the project area and to provide recommendations for appropriate resource management strategies.
- Key components of the assessment:
 - Historical Research Permit
 - Historical background study
 - Archaeological reconnaissance



Source: Davis MacIntyre & Associates

STUDY

ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT (ARIA)

METHOD

Historic background study and site reconnaissance survey conducted by Davis MacIntyre & Associates Limited.

SIGNIFICANT RESULTS

The main findings are two small areas of archaeological potential; one is considered of low archaeological significance and does not require mitigation, the other which may require further assessment depending on the final Project Development Area.

MI'KMAW ENGAGEMENT

The Proponent began initiating engagement and consultation with Mi'kmaq communities as early as 2021, establishing communication through various channels to designated contacts for the respective communities. Key engagement activities that have been carried out by the Proponent till date include the following:

- Introductory email sent to all Mi'kmaq Communities regarding proficiency of Proponent in development of similar projects in Nova Scotia, invitation to further discuss proposed project and potential for collaboration.
- Hand-delivery of letters by SWEB Developmental Director (Jason Parise) to Mi'kmaq communities providing details on the Proponent's Background, plans to develop the proposed project and invitation for further discussion on the projects.
- Convening virtual meetings with representatives of Mi'kmaq communities to provide overview of the proposed project and potential for collaboration.

The Proponent will continue to employ and sustain consultation efforts with the Mi'kmaq Communities throughout the development of the proposed project to ensure their meaningful participation in decisions that could potentially impact indigenous land and resources.

Where issues/concerns are raised, plans to address the issues will be developed and mitigation measures timely implemented to alleviate potential impacts.



Source: Province of Nova Scotia



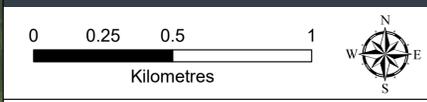
LEGEND:

- PROPOSED WIND TURBINE GENERATOR (WTG) LOCATIONS FOR BLUEBERRY ARCS WIND ENERGY PROJECT
- PROPOSED PROJECT DEVELOPMENT AREA (PDA)
- NOISE RECEPTORS**
 - RECEPTOR LOCATIONS
- BIRD SURVEY LOCATIONS**
 - NOCTURNAL OWL (2024 PROPOSED LOCATIONS)
 - MIGRATORY BIRD (FALL 2022 & SPRING 2024)
 - COMMON NIGHTHAWK (2022)
 - BREEDING BIRD (2021/22)
 - WINTER BIRD (2021/22)
- BAT MONITOR LOCATIONS (2022)**
 - WILDLIFE ACOUSTICS INC. SM4 SONG METER
- BIOPHYSICAL SURVEY AREA**
 - 100 M BUFFER AROUND PDA
 - ADDITIONAL SURVEY AREA (IF TIME PERMITTED)
 - EARLY VEGETATION TRANSECTS (2022)
 - LATE VEGETATION TRANSECTS (2022)
 - FIELD DELINEATED WATERCOURSES & DRAINAGE CHANNELS (2022)
 - FIELD IDENTIFIED WETLANDS (2022)
- PROVINCIAL MAPPED WATER FEATURES**
 - WATERCOURSE
 - WATERCOURSE (INDEFINITE)
 - WETLANDS

FIGURE:

BASELINE BIOPHYSICAL SURVEY LOCATIONS

SCALE:



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