

Romney Wind Energy Centre Natural Heritage Site Investigation Report

Prepared for: DNV-GL Suite 100, 4100 Rue Molson Montreal, Canada H1Y 3N1



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Report submitted on June 30, 2017

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1.0 Project Description

Natural Resource Solutions Inc. (NRSI) was retained in April 2016 by DNV-GL, on behalf of Romney Energy Centre Limited Partnership (the "Proponent"), to conduct a Natural Heritage Assessment (NHA) in accordance with the Renewable Energy Approval (REA) Regulation, Ontario Regulation (O. Reg.) 359/09. This assessment includes a records review, site investigation, evaluation of significance, and environmental impact study of any potentially significant natural features or wildlife habitats at a proposed wind energy generating facility.

The Proponent is proposing to develop the Romney Wind Energy Centre (the "Project"). This Project, with a total nameplate capacity of up to 60 megawatts (MW), is considered to be a Class 4 wind facility. A total of 18 wind turbine locations are being permitted.

The Romney Wind Energy Centre is located in southwestern Ontario, Town of Lakeshore and the Municipality of Chatham Kent, Ontario. More specifically, the Project is located south of Highway 401, and extends along Richardson Side Road and Wheatley Road near the community of Wheatley, ON. The Project is located entirely within Ecoregion 7E (MNRF 2016a).

Project components will be installed primarily on privately-owned agricultural lots within this area. It is anticipated that the electrical collector lines will be partially located within public road allowances. It is planned to connect to the existing Hydro One Networks Inc. (HONI) 230 kV transmission line located within the Town of Lakeshore, close to Richardson Side Road. A small section of transmission line (less than 1km) is proposed for the Project, to be built by HONI from the Point of Common Coupling (PCC) to the Point of Interconnect (POI).

According to O. Reg. 359/09, as amended, and as per the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR 2012), the Project Location is defined as "...a part of land and all or part of any building or structure in, on or over which a person is engaging in or proposes to engage in the project and any air space in which a person is engaging in or proposes to engage in the project". As described therein, the Project Location boundary is the outer limit of where site preparation and construction activities will occur (i.e., disturbance areas described below) and where permanent infrastructure will be located, including the air space occupied by turbine blades.

In accordance with Section 26 of the REA Regulation, O. Reg. 359/09, NRSI has conducted a site investigation to identify any potentially significant natural features and wildlife habitats within 120m of the Project Location. This includes areas within 120m of proposed wind turbines, measured from blade tip, as well as within 120m of any areas that may be used as temporary lay-down areas, crane pads, access roads, Points of Common Coupling (PCC), Operations and Maintenance (O&M) building, meteorological tower, substation, and electrical collector lines. Junction boxes may also be installed below or above ground where more than one circuit must be connected together. See Map 1 for an illustration of the Project Location and natural features.

2.0 REA Requirements

Ontario Regulation 359/09 – *Renewable Energy Approvals* under *Part V.0.1 of the Act* (herein referred to as the REA Regulation), made under the *Environmental Protection Act*, identifies the requirements for the development of renewable energy projects in Ontario. In accordance with the REA Regulation, the Project is classified as a Class 4 wind facility and is required to complete a REA.

Section 26 of the REA Regulation requires proponents of Class 4 wind projects to undertake a natural heritage site investigation for the purpose of determining:

- 1. whether the results of the analysis summarized in the [Natural Heritage Records Review] report prepared under subsection 25 (3) are correct or require correction, and identifying any required corrections;
- whether any additional natural features exist, other than those that were identified in the Natural Heritage Records Review Report prepared under subsection 25 (3);
- 3. the boundaries, located within 120m of the project location, of any natural feature that was identified in the records review or the site investigation; and,
- 4. the distance from the project location to the boundaries determined under clause (c).

Natural Features are defined in Section 1.1 of the REA Regulation to be all or part of:

- an area of natural and scientific interest (ANSI; life science or earth science),
- a coastal, northern, or southern wetland,
- a wildlife habitat, or
- a woodland.

Subsection 3 of Section 26 of the REA Regulation requires the proponent to prepare a report that includes the following:

- 1. A summary of any corrections to the report prepared under subsection 25 (3) and the determinations made as a result of conducting the site investigations under subsection (1).
- 2. Information relating to each natural feature identified in the records review and in the site investigations, including the type, attributes, composition and function of the feature.
- 3. A map showing:
 - a) the boundaries mentioned in clause (1) (c),
 - b) the location and type of each natural feature identified in relation to the project location, and
 - c) the distance mentioned in clause (1) (d).
- 4. The dates and times of the beginning and completion of the site investigation.

- 5. The duration of the site investigation.
- 6. The weather conditions during the site investigation.
- 7. A summary of methods used to make observations for the purposes of the site investigation.
- 8. The name and qualifications of any person conducting the site investigation.
- 9. Field notes kept by the person conducting the site investigation.

This *Natural Heritage Site Investigation Report* has been organized and prepared to satisfy the conditions of the requirements outlined above.

As part of this Project, NRSI has considered all aspects relating to provincially Threatened and Endangered species; however, since these species are addressed through a separate permitting process under the *Endangered Species Act* (2007), they have not been discussed within any of the NHA reports. These species will be addressed in full detail, including a description and results of field assessments, potential impacts, and recommended mitigation measures, as part of a separate reporting process to be addressed with the Ministry of Natural Resources and Forestry (MNRF), as required.

3.0 Staff Roles

The requirements of the REA process indicate that the name and qualifications of staff participating in the site investigation should be included. As a result, the qualifications and roles of key staff participating in the site investigation for the Project have been outlined below.

Andrew Ryckman, B.Sc.

Andrew is a Senior Terrestrial and Wetland Biologist with more than 11 years of experience working on a variety of environmental projects. He has considerable experience managing Environmental Assessments and NHAs for wind project developments across Canada, including experience with project management, report generation, data analysis, and considerable field monitoring. Andrew specializes in acoustic bat inventories and sonogram analysis, and has working experience with bat monitoring equipment and various bat analysis software. He routinely utilizes analysis software to identify bat species, and has helped create a reference call library using recorded bat calls.

Andrew's role in this project was to act as the project advisor, overseeing all aspects of the NHA, including all associated field work and reporting.

Charlotte Teat, M.E.S.

Charlotte is a Terrestrial and Wetland Biologist with more than 7 years of experience in biological monitoring and conducts environmental impact assessments on a variety of project types. Charlotte has completed her Bachelor of Environmental Studies and has a Master of Environmental Studies from the University of Waterloo. Charlotte has managed a variety of environmental projects, and has coordinated numerous types of surveys, including vegetation community delineations, bat surveys, mammal studies, breeding bird surveys and herpetofauna studies. She is certified in the Ontario Wetland Evaluation System (OWES) (2012) and in the Ecological Land Classification (ELC) system for southern Ontario (2013). Charlotte has managed the biological monitoring and reporting for numerous wind power projects throughout Ontario and Saskatchewan, and has extensive experience with client and agency liaison through her project management role on similar projects.

Charlotte's role in this project was to act as the project manager, overseeing all aspects of the NHA, including all associated field work and reporting. She was the main contact point for agency staff and assisted with the preparation of all corresponding reports.

Andrew Dean, B.E.S

Andrew is a Terrestrial and Wetland Biologist with more than 6 years of experience in the environmental industry, working in both the non-profit and private sectors. His areas of expertise include the coordination of, and participation in, a wide variety of biological field surveys including vegetation mapping and vascular plant inventories, acoustic bat monitoring, bat habitat assessments and post-construction mortality monitoring at wind energy facilities. Andrew is trained and certified in both the ELC system for southern Ontario (2011) and OWES (2012), with considerable experience in tree identification, vegetation community classification, and botanical Species at Risk inventories. Andrew is also a certified Butternut Health Assessor (2014).

Andrew was a lead biologist during this site investigation, conducting ELC mapping, wetland assessments, and wildlife habitat assessment surveys within the Project.

Christy Humphrey, B.E.S.

Christy is a Terrestrial and Wetland Biologist with more than 8 years of environmental consulting experience, working on a variety of project tasks. Her areas of expertise are vegetation mapping and floral inventories, visual and acoustic bat monitoring, and post-construction mortality monitoring; however, she also has experience conducting bird assessments, amphibian studies, and other fauna assessments. Christy is experienced in conducting literature and background reviews, preparing NHAs, Environmental Effects Monitoring Plans, Environmental Impact Studies, and post-construction mortality monitoring reports. She is certified in the ELC system for southern (2010) and northeastern Ontario (2010), as well as in OWES (2012).

Christy assisted with the preparation of this report, specific to the description of wetland habitats.

Erin Bannon, B.E.S.

Erin is a Terrestrial and Wetland Biologist with more than 5 years of experience in the environmental field. She routinely completes natural resource inventories, surveys of amphibians, plants, and mammals, and research and impact studies. Her background in wind energy engineering has also allowed her to gain experience in natural heritage studies. Erin has worked on projects focusing on the identification of important natural features and the evaluation of the significance and sensitivity of these features. During her consulting experience, Erin has conducted bird and bat assessments, amphibian studies, and other flora and fauna assessments throughout Ontario. She is certified in the ELC system for southern Ontario (2013), and has participated in field investigations and reporting for wind power projects throughout Ontario.

Erin assisted with the preparation of this report.

Kathryn Hoo, B.Sc.

Kathryn is a Field Biologist with over five years of experience in the biological field. She has extensive experience conducting biological monitoring fieldwork, specifically bird and amphibian surveys. Kathryn is experienced in both visual and auditory amphibian identification, and has completed amphibian surveys at numerous locations within southern Ontario, including anuran call surveys, and amphibian egg mass and larval surveys. She also has experience conducting numerous avian studies utilizing a wide range of research techniques including point counts, transects and standardized area searches.

Kathryn was a lead field biologist, conducting wildlife habitat assessment surveys within the Project.

Ken Burrell, M.E.S.

Ken is a Terrestrial and Wetland Biologist with more than 8 years of experience in terrestrial ecology, with a strong background in avian research. Ken is regarded as one of the leading amateur ornithologists in Ontario, having developed his skills through a wide range of avian surveys and from his extensive background volunteering for numerous organizations and working as a field biologist. Ken has conducted spring and fall migration studies as well as breeding bird surveys in the form of point counts, transects, and inventories involving a wide range of species. He has extensive migration monitoring experience throughout Ontario, as well as in Canada and the United States and is well-versed in Species at Risk (SAR) in Ontario and Canada, specifically having published several papers on SAR. Ken is also certified in the ELC system for northeastern Ontario (2011).

Ken was a lead biologist during the site investigation, specifically completing the avian wildlife habitat assessments within the Project.

Pat Deacon, B.E.S.

Pat is a Terrestrial and Wetland Biologist with more than 6 years of environmental consulting experience. He regularly conducts vegetation inventories and community mapping, and specializes in ecological restoration with particular focus on Species at Risk, tallgrass prairie ecosystems, and invasive species management. Pat is certified in the ELC system for northeastern Ontario (2011) and is OWES certified (2012). He is also a certified Butternut Health Assessor (2014).

Pat was a lead biologist during the site investigation, conducting ELC mapping, wetland assessments, and wildlife habitat assessment surveys within the Project.

4.0 Summary of Records Review

In accordance with the REA Regulation, the Project Location and 120m setback area was examined for natural heritage features, including known Areas of Natural and Scientific Interest (ANSI), woodlands, wetlands, and wildlife habitat. Numerous agencies were contacted to compile the records review, including (but not limited to) the MNRF and the Lower Thames Valley Conservation Authority (LTVCA). NRSI also utilized numerous background review resources, such as the Natural Heritage Information Centre (NHIC), Ontario Breeding Bird Atlas (OBBA), Ontario Herpetofauna Atlas, Atlas of the Mammals of Ontario and the Ontario Butterfly Atlas. The results of the records review are summarized in Table 1.

Criteria	Result
1. In or within 120m of a Provincial Park or Conservation Reserve	The Project is not located in or within 120m of a Provincial Park or Conservation Reserve.
2. In a Natural Feature	The results of this records review indicate the Project Location (i.e. disturbance area, collector lines, access roads, etc.) overlaps with 8 woodlands. Species associations and distances of these habitats to the Project Location will be confirmed during the site investigation phase of this NHA. The intention of the proposed Project Location is to avoid overlap with natural features, including woodlands, wherever possible.
3. Within 50m of a Provincially Significant ANSI-Earth Science (ES)	No Provincially Significant ANSI-ES is located within 50m of the Project Location.
4. Within 120m of a Natural Feature	
Provincially Significant ANSI-Life Science (LS)	No Provincially Significant ANSI-LS is located in or within 120m of the Project Location.
Coastal Wetland	No coastal wetlands are located in or within 120m of the Project Location.
Northern Wetland	No northern wetlands are located in or within 120m of the Project Location.
Southern Wetland	No known southern wetlands are located in or within 120m of the Project Location. There are 23 woodlands in or within 120m of the Project Location, each of which has the potential to contain unevaluated wetland habitat. All of the potential wetland habitats in or within 120m of the Project Location will be further examined during the site investigation phase of this NHA.
Wildlife Habitat	One possible bald eagle nest record may be present within the vicinity of the Project. This record will be carried forward to the Site Investigation phase of the project. A total of 23 woodlands are located in or within 120m of the Project Location and could provide several types of Significant Wildlife Habitat (SWH). Other natural features such as naturalized drainage ditches, hedgerows and meadows have been identified in or within 120m of the Project Location and could also provide SWH. These features will be surveyed to determine if they are used for animal movement corridors or provide habitat for species of conservation concern.

Table 1.	Summarv	of Records	Review fo	or the l	Proiect
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Table 1. Summary of Records Review for the Project

Criteria Result			
	All of these wildlife habitats will be examined during the site investigation phase and, if applicable, the evaluation of significance phase of this project to confirm presence of candidate significant wildlife habitat and determine the significance of each candidate significant wildlife habitat.		
Woodland	A total of 23 woodlands are located in or within 120m of the Project Location. Basemapping indicates these habitats range in size from 0.19- 15.95ha. These woodlands are expected to be primarily dominated by mid- aged to mature deciduous tree species; however, young woodlands, treed plantations, or occasional coniferous woodlands may also be present in or within 120m of the Project Location.		

The results of the records review of wildlife habitat are provided in Table 2. This table summarizes any known presence of the full range of potential wildlife habitats that may exist in or within 120m of the Project Location. The purpose of this table is to guide the site investigation to further refine the types of wildlife habitats that have the potential to occur within the Project Location and 120m setback. Any wildlife habitats that have already been confirmed to not be applicable to the Project Location or 120m setback or are known to be absent from the Project Location and 120m setback will not be discussed in this, or subsequent, NHA reports for the Project.

Wildlife Habitat	Present Within 120m of the Project Location	Present Within Project Location	Carried Forward to Site Investigation (Y/N)
Seasonal Concentration Areas			
Waterfowl Stopover and Staging Areas (Terrestrial)	Unknown	Unknown	Yes
Waterfowl Stopover and Staging Areas (Aquatic)	Unknown	Unknown	Yes
Shorebird Migratory Stopover Area	Unknown	Unknown	Yes
Raptor Wintering Area	Unknown	Unknown	Yes
Bat Hibernacula	Unknown	Unknown	Yes
Bat Maternity Colonies	Unknown	Unknown	Yes
Bat Migratory Stopover Area	N/A	N/A	No
Turtle Wintering Areas	Unknown	Unknown	Yes
Reptile Hibernaculum	Unknown	Unknown	Yes
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	Unknown	Unknown	Yes
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	Unknown	Unknown	Yes
Colonially – Nesting Bird Breeding Habitat (Ground)	Unknown	Unknown	Yes
Migratory Butterfly Stopover Areas	Unknown	Unknown	Yes
Landbird Migratory Stopover Areas	Unknown	Unknown	Yes

Table 2. Summary of Wildlife Habitat Records Review for the Project

Wildlife Habitat	Present Within 120m of the Project Location	Present Within Project Location	Carried Forward to Site Investigation (Y/N)
Deer Winter Congregation Areas	Yes	No	Yes
Rare Vegetation Communities			
Cliffs and Talus Slopes	Unknown	Unknown	Yes
Sand Barren	Unknown	Unknown	Yes
Alvar	Unknown	Unknown	Yes
Old Growth Forest	Unknown	Unknown	Yes
Savannah	Unknown	Unknown	Yes
Tallgrass Prairie	Unknown	Unknown	Yes
Other Rare Vegetation Communities	Unknown	Unknown	Yes
Specialized Wildlife Habitats			
Waterfowl Nesting Area	Unknown	Unknown	Yes
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Possible*	Possible*	Yes
Woodland Raptor Nesting Habitat	Unknown	Unknown	Yes
Turtle Nesting Areas	Unknown	Unknown	Yes
Seeps and Springs	Unknown	Unknown	Yes
Amphibian Breeding Habitat (Woodland)	Unknown	Unknown	Yes
Amphibian Breeding Habitat (Wetlands)	Unknown	Unknown	Yes
Woodland Area-Sensitive Bird Breeding Habitat	Unknown	Unknown	Yes
Habitats for Species of Conservation Co	ncern		
Marsh Bird Breeding Habitat	Unknown	Unknown	Yes
Open Country Bird Breeding Habitat	Unknown	Unknown	Yes
Shrub/Early Successional Bird Breeding Habitat	Unknown	Unknown	Yes
Terrestrial Crayfish	Unknown	Unknown	Yes
Special Concern and Rare Wildlife Species	Possible	Possible	Yes
Animal Movement Corridors			
Amphibian Movement Corridors	Unknown	Unknown	Yes

Table 2. Summary of Wildlife Habitat Records Review for the Project

*The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, as determined in the Site Investigation and Evaluation of Significance phases of the Project.

Additional candidate habitats for species of conservation concern will be considered in the Site Investigation Report. These additional candidate habitats are identified in Table 7.

5.0 Site Investigation Methods

Comprehensive site investigations to document the environmental and biological characteristics of the Project were undertaken in accordance with the REA Regulation and the requirements of the MNRF. These site-specific field investigations focused on vegetation community mapping to support and build on the information collected during the records review phase of this Project. The results of these site investigations were used to identify and map the boundaries of the natural features in and within 120m of the Project Location, and to identify candidate Significant Wildlife Habitat (SWH) according to habitat criteria identified in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a). Information collected at this stage will be used to evaluate the significance of features in a subsequent report.

5.1 Survey Dates

In accordance with the REA Regulation, NRSI recorded dates, times, duration, and weather conditions during each site investigation. This information has been summarized in Table 3. Detailed descriptions of staff roles and qualifications can be found in Section 3.0 of this report, and completed field forms have been appended to this report (Appendix I). The crew lead for each survey is indicated in bold font within the table.

			Start Time	Duration	Weather Conditions		
Staff Name(s)	Purpose	Date	(hrs) (hrs) Temp. (°C) Beaufort Wir		Beaufort Wind	Cloud Cover (%)	
Ken Burrell	Candidate Wildlife Habitat Assessment	March 10, 2016	0950	4.5	13	1	100
Ken Burrell	Candidate Wildlife Habitat Assessment	March 17, 2016	0920	4.25	9	4	0
Ken Burrell	Candidate Wildlife Habitat Assessment	March 25, 2016	0908	4.25	-1	3	100
Andrew Dean Carlene Perkin	ELC/Wetland Assessments and Candidate Wildlife Habitat Assessment	May 9, 2016	1320	4.25	13	2	75
Andrew Dean Carlene Perkin	ELC/Wetland Assessments and Candidate Wildlife Habitat Assessment	May 10, 2016	0815	5.0	9	4	100
Andrew Dean Carlene Perkin	ELC/Wetland Assessments and Candidate Wildlife Habitat Assessment	May 11, 2016	0820	7.25	11	4	100
Pat Deacon	ELC/Wetland Assessments and Candidate Wildlife Habitat Assessment	May 30, 2016	1219	3.25	25	2	10
Pat Deacon Nathan Miller	ELC/Wetland Assessments and Candidate Wildlife Habitat Assessment	September 21, 2016	1320	2.5	28	1	50
Kathryn Hoo Kayla MacLellan	Candidate Wildlife Habitat Assessment	April 28, 2017	16:30	0.5	17	4	100

Table 3. Site Investigation Survey Dates

5.2 Alternative Site Investigations

As identified in Part IV, Section 26 (1.1) of the REA Regulation, an alternative site investigation may be conducted if the applicant determines that it is not reasonable to access a property to conduct a site investigation. The denial of site access by adjacent landowners and unsafe site conditions, such as natural hazards or unstable soils, are examples of suitable situations where conducting a site investigation would not be reasonable (OMNR 2012).

All landowners with properties containing natural features in and within 120m of the Project Location were contacted, either by phone, in person, and/or by mail with a specific request to obtain site access. Where adjacent landowners were reached and site access was denied, or when adjacent landowners could not be reached after multiple attempts to contact the landowner, alternative site investigations were conducted. Where this alternative method had to be employed, it is clearly indicated in this report and also on the field data sheets found in Appendix I of this report. The specific methods used during the alternative site investigations are detailed in Sections 5.4, 5.5, and 5.6 of this report. In all other instances, site access was granted through verbal confirmation and site investigations were conducted, including all areas specifically proposed for project infrastructure.

5.3 Designated Natural Areas

Natural areas, including provincial parks, conservation reserves, and ANSIs are identified and confirmed by the MNRF. There are no designated natural areas in or within 120m of the Project Location, and as such, provincial parks, conservation reserves, and ANSIs (earth science and life science) are not discussed further in this report.

5.4 Woodlands

Woodlands, as identified by the NHA Guide for Renewable Energy Projects (OMNR 2012), are defined as being a *"treed area, woodlot or forested area, other than a cultivated fruit or nut orchard or a plantation established for the purpose of producing Christmas trees,that is located south and east of the Canadian Shield"*. The NHA Guide

suggests that the ELC definition for "forest" (>60% tree cover) can be used to help identify woodlands in addition to the definition in the Guide (OMNR 2012).

To identify woodlands in and within 120m of the Project Location, NRSI biologists have conducted detailed ELC mapping of all vegetation communities. The ELC mapping was completed using the modified ELC system for southern Ontario (Lee *et al.* 1998) and ELC code assignment was based on updates made to the system in 2008 (Lee 2008). ELC polygons were delineated during site investigations and were compared with available aerial photography to delineate woodland boundaries along the wooded dripline. No previous ELC mapping was available or used during these surveys.

ELC surveys included performing area searches within each polygon and the concurrent completion of detailed vegetation inventories for private properties where right-of-entry was obtained. During these area searches, NRSI biologists documented a wide range of applicable information as outlined in the ELC manual (Lee *et al.* 1998), including (but not limited to) vegetation layer cover codes and dominance, polygon descriptions, stand composition, size class analysis, and the completion of detailed plant inventory lists and wildlife habitat assessments. The completion of substrate sampling (soil augers) was determined unnecessary for the identification of woodlands, but was used for the identification of wetlands, and is discussed in more detail below. The complete suite of information collected within each polygon can be found on the completed field data sheets (Appendix I).

For properties where site-specific access could not be obtained, NRSI biologists conducted ELC mapping from the closest observable point (i.e. roadside, neighbouring property, etc.) and compared this to a detailed review of aerial photographs to characterize the polygon to the most detailed level possible. Where this alternative methodology had to be employed, it is clearly indicated on the ELC field data sheets found in Appendix I of this report.

For any potential woodlands identified in and within 120m of the Project Location, ecological characteristics were compared to the criteria for woodlands, as described in Table 11 of the NHA Guide for Renewable Energy Projects (OMNR 2012), to determine woodland form and function. These criteria include 3 broad categories: woodland size, ecological functions, and uncommon characteristics.

The completed ELC mapping is provided on Maps 3-1 to 3-5 and field notes and field maps can be found in Appendix I.

5.5 Wetlands

Wetlands include habitats that are seasonally or permanently covered by shallow water and display the presence of specific soil types and vegetation communities (OMNR 2012). Preliminary wetland identifications were made through the implementation of ELC mapping to identify lowland forests, wetlands, or other habitat types that have the potential to function as wetlands.

In addition to the detailed ELC methods described above, soil sampling (augering) was conducted in any potential wetland to confirm the moisture regime. Vegetation inventories were also used to identify the presence and abundance of wetland indicator species. These habitats were then compared to the OWES manual to confirm their wetland status. Any communities identified as wetlands were delineated using site-specific field investigations combined with the use of detailed aerial photography. In accordance with OWES, wetland boundaries were delineated by OWES-certified staff once 50% (or more) of the plant community consisted of wetland species. Data collected included wetland type, site type, presence of inflows/outflows, vegetation community delineation, number and types of forms (>25% cover), dominant species, dominant form, and soil type.

In potential wetlands where site access or right-of-entry could not be obtained, NRSI biologists conducted ELC mapping to the most detailed level possible from the nearest observation point, such as roadside or property boundary and/or through air photo interpretation using detailed aerial photography. The limitations of this alternative method are that detailed habitat, and specifically substrate, information is not easily determined, and could not be properly assessed. In these instances where potential wetlands could not be ruled out, and assuming no direct overlap with the Project Location, NRSI has assumed these features to be wetlands in the absence of

appropriate habitat characteristics. Instances where site access could not be obtained are clearly identified on the ELC field data sheets found in Appendix I of this report.

5.6 Wildlife Habitat

The identification of wildlife habitat in and within 120m of the Project Location, followed the definitions provided in the NHA Guide for Renewable Energy Projects (OMNR 2012), SWH Technical Guide (OMNR 2000), and SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a), which generally include areas where plants and animals live with adequate food, water, shelter and space to sustain their populations (OMNR 2012).

NRSI has used Table 19 of the NHA Guide for Renewable Energy Projects (OMNR 2012) to determine whether candidate significant wildlife habitats are required to be individually identified and delineated within 50m or 120m of each proposed project component (marked with an "X" and/or "Y" in Table 19 of the Guide). In accordance with Appendix D of the NHA Guide for Renewable Energy Projects (OMNR 2012), some habitats are not required to be individually identified and delineated within 50m or 120m of a project component and have been grouped together as generalized candidate SWH.

Most candidate wildlife habitat assessments were conducted during ELC surveys so that as vegetation communities were delineated, surveys were conducted for wildlife habitat features that are associated with the identified vegetation communities. These surveys were undertaken using comprehensive area searches for habitat features and through recording wildlife observations (i.e. visual sightings, vocalizations, tracks, etc.) of specific species, which could indicate the potential presence of SWH. Habitat features for which area searches were performed included, but were not limited to: nests, snags, fallen logs, tree cavities, cliffs/banks, caves, burrows, dens, rock piles/stone walls, organics piles, karsts, old foundations, vernal pools/woodland ponds, sand, fine sandy gravel, and crayfish chimneys. All preliminary candidate wildlife habitat assessments were conducted between March 10, 2016 and April 28, 2017.

For properties where site-specific access could not be obtained, NRSI biologists conducted candidate wildlife habitat assessments from the closest observable point (i.e. roadside, neighbouring property, etc.), using binoculars, where appropriate, to observe any candidate wildlife habitat features. Where this alternative methodology had to be

employed, it is clearly indicated on the wildlife habitat assessment field data sheets found in Appendix I of this report.

For the purposes of the NHA reports, NRSI has separated the discussion on wildlife habitat into the 4 habitat categories, including seasonal concentration areas, rare vegetation communities and specialized wildlife habitats, habitats for species of conservation concern, and animal movement corridors, using the same general categories as the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a). Each of these broad habitat types is described in more detail in the following sections, and the field notes for each are provided in Appendix I.

5.6.1 Seasonal Concentration Areas

Wildlife seasonal concentration areas are defined as areas where animals occur in relatively high densities for all, or portions, of their life cycle (OMNR 2012), and are often relatively small in size, particularly when compared to areas used by these species during other times of the year. Habitats of seasonal concentrations of animals have been identified by using the habitat criteria found in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a). The habitat criteria for each potential seasonal concentration area have been summarized in Table 4.

Candidate Seasonal Concentration Areas	Criteria ¹	Methods		
Habitat Characteristics				
Waterfowl Stopover and Staging Areas (Terrestrial)	 Fields with sheet water or annual spring melt water flooding found in any of the following Community Types: Meadow (ME), Thicket (TH), or fields utilized by tundra swans during Spring (mid-March to May). Agricultural fields with seasonal flooding and waste grains are commonly used by waterfowl; these are not considered candidate SWH unless used by Tundra Swans in the Long Point, Rondeau, Lake St. Clair, Grand Bend or Point Pelee areas. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential waterfowl stopover and staging locations. Surveys of field conditions were conducted in March 2016 to determine the presence of seasonal flooding and/or tundra swans. 		
Waterfowl Stopover and Staging Areas (Aquatic)	 The following Community Types: Shallow Marsh (MAS), Shallow Aquatic (SA), Deciduous Swamp (SWD). Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches 		

Table 4.	Characteristics	Used to Identify	Candidate	Seasonal	Concentration	Areas
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Candidate Seasonal Concentration Areas	Criteria ¹	Methods
	 migration. These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water). Sewage treatment ponds and storm water ponds do not qualify as candidate SWH; however, a reservoir managed as a large wetland or pond/lake does qualify. 	associated with ELC mapping, NRSI biologists documented the presence of any potential waterfowl stopover and staging locations and recorded the presence of suitable permanent open water containing an abundant food supply for waterfowl.
Shorebird Migratory Stopover Area	 The following Community Types: Shoreline (BB), Sand Dune (SD), and Meadow Marsh (MAM). Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un- vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as candidate SWH. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential shorebird stopover locations.
Raptor Wintering Area	 For hawks/owls: presence of fields and woodlands (i.e. at least one Forest (FO) Community Type, in addition to one of the following Community Types: Meadow (ME), Thicket (TH), Savannah (SV), Woodland (WO) (<60% cover) that are >20ha and provide roosting, foraging and resting habitats for wintering raptors). Upland habitat (ME, TH, SV, WO) must represent at least 15ha of the 20ha minimum size. Field area of the habitat is to be wind swept with limited snow depth or accumulation. For bald eagle: any of the following Community Types: Forest (FO) or Treed Swamp (SWD, SWM, SWC) on shoreline areas adjacent to large rivers or adjacent to lakes with open water. Eagle sites have open water and large trees and snags available for roosting. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential raptor wintering locations. Habitat sizes were determined using GIS calculations based on site-specific ELC delineations.
Bat Hibernacula	 Caves, mine shafts, underground foundations, Karst or one of the following Community Types: Crevice (CCR), Cave (CCA). Does not include buildings or active mine shafts. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential bat hibernacula locations.

Table 4.	Characteristics	Used to Ident	ifv Candidate	Seasonal	Concentration	Areas
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Candidate Seasonal Concentration Areas	Criteria ¹	Methods
Bat Maternity Colonies	 Any of the following Community Types: Deciduous Forest (FOD), Mixed Forest (FOM), Deciduous Treed Swamp (SWD), Mixed Treed Swamp (SWM) that have >25cm diameter at breast height (dbh) trees. Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be candidate SWH). Maternity roosts are not found in caves and mines in Ontario. If suitable snag/cavity trees >25 cm dbh are found in a density of ≥10 suitable snags per hectare, the site is a candidate for maternity colony roosts. Female bats prefer wildlife trees (snags/cavity trees) in early stages of decay (i.e. Class 1-3). 	 Habitat identification occurred during the leaf off period in conjunction with the detailed ELC mapping that was conducted throughout the Project. Snag/cavity tree density was calculated by randomly selecting plots within a candidate natural feature. Ten plots were selected for natural features ≤10ha, with one plot being added for each hectare over 10ha to a maximum of 35 plots. These sampling plots was then each plot. The snag/cavity tree density of these plots was then extrapolated to the natural feature². Where candidate natural features were too narrow to conduct 12.6m radius plots, all snag/cavity trees within the natural feature were counted. During area searches associated with ELC mapping, NRSI biologists documented the presence of any cavity trees or potential bat maternity colony habitats.
Turtle Wintering Areas	 Over-wintering areas are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen, and are generally the same habitat as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. These habitats are found in the following Community Types: Swamp (SW), Marsh (MA), Open Water (OA), Shallow Water (SA), Open Fen (FEO), Open Bog (BOO). Man-made ponds, such as sewage lagoons or storm water ponds, are not considered candidate SWH. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential turtle wintering locations.
Reptile Hibernaculum	 Hibernation occurs in sites located below frost lines in burrows, rock crevices, broken and fissured rock, wetlands such as conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. For all snakes, habitat may be found in 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential reptile hibernation locations.

Table 4	Characteristics Used to Identif	v Candidate Seasonal	Concentration Areas
		y Canalate Seasonal	Concentration Areas

Candidate Seasonal	Criteria ¹	Methods
Concentration Areas	any ecosite other than very wet ones	
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	 Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, or barns found in any of the following Community Types: Meadow (ME), Thicket (TH), Savannah (SV), Bluff (BL), Cliff (CL). Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted Mineral Aggregate Operation. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential colonial bird nesting locations.
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	 Any of the following Community Types: Mixed Swamp (SWM), Deciduous Swamp (SWD), Coniferous Treed Fen (FETC1). Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15m from the ground, near the top of the tree. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any stick/bowl nests within potentially suitable habitats.
Colonially – Nesting Bird Breeding Habitat (Ground)	 Any rocky island or peninsula within a lake or large river, close proximity to watercourses in open fields or pastures with scattered trees or shrubs found in any of the following Community Types: Meadow Marsh (MAS), Meadow (ME), Thicket (TH), Savannah (SV). Nesting colonies of gulls and terns on islands or peninsulas associated with open water or in marshy areas. Brewer's Blackbird (<i>Euphagus cyanocephalus</i>) colonies are found loosely on the ground or in low bushes in close proximity to streams and irrigation ditches within farmlands. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential colonial bird nesting locations.
Migratory Butterfly Stopover Areas	 A combination of field (CUM, CUT, CUS) and forest (FOC, FOD, FOM, CUP) habitats of at least 10ha in size, and located within 5km of Lake Erie or Lake Ontario. The habitat should be undisturbed fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists documented the presence of any potential migratory butterfly stopover habitats containing both forest and field habitat types.
Landbird Migratory Stopover Areas	 Any of the following Community Types: Coniferous Forest (FOC), Mixed Forest (FOM), Deciduous Forest (FOD), Coniferous Swamp (SWC), Mixed Swamp (SWM), Deciduous Swamp 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches

Table 4. Characteristics Used to Identify Candidate Seasonal Concentration Areas

Candidate Seasonal Concentration Areas	Criteria ¹	Methods
	 (SWD); >5ha in size and within 5km of Lake Erie and Lake Ontario. If woodlands are rare in an area of shoreline, woodland fragments 2-5ha can be considered. Sites should have a variety of habitats; forest, grassland and wetland complexes. 	associated with ELC mapping, NRSI biologists documented the presence of any forest and swamp areas within 5km of the shoreline to identify potentially suitable habitats.
Deer Winter Congregation Areas	 Deer management is an MNRF responsibility, and deer winter congregation areas considered significant will be mapped by MNRF. 	 Habitat identification occurred through the detailed review of background information, including basemapping layers from the MNRF, which outline the location of deer winter congregation areas.

Table 4.	Characteristics Used	to Identify	v Candidate	Seasonal	Concentration	Areas
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SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a)

² OMNR Bat and Bat Habitats: Guidelines for Wind Power Projects (OMNR 2011)

5.6.2 Rare Vegetation Communities and Specialized Wildlife Habitat

Rare vegetation communities are areas that contain a provincially rare vegetation community and/or areas that contain a vegetation community that is rare within the planning area (MNRF 2015a). Specialized wildlife habitats are considered to be areas that support wildlife species with highly specific habitat requirements, areas with exceptionally high species diversity or community diversity, and/or areas that provide habitat that greatly enhances a species' survival (MNRF 2015a).

Rare vegetation communities and specialized wildlife habitats have been identified in and within 120m of the Project Location by using the habitat criteria found in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a). The habitat criteria for rare vegetation communities and specialized wildlife habitats have been summarized in Table 5.

Candidate Rare Vegetation Communities and Specialized Wildlife Habitats	Criteria ¹	Methods
Candidate Rare Vegetat	ion Communities	
Cliffs and Talus Slopes	 Any of the following Community Types: CLO (Open Cliff), CLS (Shrub Cliff), CLT (Treed Cliff), TAO (Open Talus), 	 Habitat identification occurred through the detailed ELC mapping that was conducted

Table 5. Characteristics Used to Identify Candidate Rare Vegetation Communities and Specialize	ed
Wildlife Habitats	

	T.	-
Candidate Rare Vegetation Communities and Specialized Wildlife Habitats	Criteria ¹	Methods
	TAS (Shrub Talus), TAT (Treed Talus),	throughout the Project.
Sand Barren	 Any of the following Community Types: SBO1 (Open Sand Barren Ecosite), SBS1 (Shrub Sand Barren Ecosite), SBT1 (Treed Sand Barren Ecosite) that are >0.5ha in size. Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always ≤ 60%. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Habitat sizes were determined using GIS calculations based on site-specific ELC delineations.
Alvar	 Any of the following Community Types: ALO1 (Open Alvar Rock Barren Ecosite), ALS1 (Alvar Shrub Rock Barren Ecosite), ALT1 (Treed Alvar Rock Barren Ecosite), FOC1 (Dry Pine Calcareous Shallow Coniferous Forest Ecosite), FOC2 (Dry Cedar Calcareous Shallow Coniferous Forest Ecosite), CUM2 (Bedrock Cultural Meadow Ecosite), CUS2 (Bedrock Cultural Savannah Ecosite), CUT2-1 (Common Juniper Cultural Alvar Thicket Type), CUW2 (Bedrock Cultural Woodland Ecosite) that are >0.5ha in size. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Habitat sizes were determined using GIS calculations based on site-specific ELC delineations.
Old Growth Forest	 Any of the following Community Types: FOD (Deciduous Forest), FOM (Mixed Forest), FOC (Coniferous Forest), SWD (Deciduous Swamp), SWM (Mixed Swamp), SWC (Coniferous Swamp) that are >0.5ha in size. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Tree age was estimated during ELC surveys and any tree stand estimated to be Old Growth will be carried forward as candidate significant wildlife habitat. Habitat sizes were determined using GIS calculations based on site-specific ELC delineations.
Savannah	 Any of the following Community Types: TPS1 (Dry-Fresh Tallgrass Mixed Savanna Ecosite), TPS2 (Fresh-Moist Tallgrass Deciduous Savanna Ecosite), TPW1 (Dry-Fresh Black Oak Tallgrass Deciduous Woodland Ecosite), TPW2 (Fresh-Moist Tallgrass Deciduous Woodland Ecosite), CUS2 (Bedrock Cultural Savannah Ecosite). These communities can be either restored or natural. Remnant sites, such as railway right of ways, are not considered candidate SWH. No minimum size requirements for a 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project.

 Table 5. Characteristics Used to Identify Candidate Rare Vegetation Communities and Specialized

 Wildlife Habitats

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Candidate Rare Vegetation Communities and Specialized Wildlife Habitats	Criteria ¹	Methods
	site to be considered candidate SWH	
Tallgrass Prairie	 Any of the following Community Types: TPO1 (Dry Tallgrass Prairie Ecosite), TPO2 (Fresh-Moist Tallgrass Prairie Ecosite). These communities can be either restored or natural. Remnant sites, such as railway right of ways, are not considered candidate SWH. No minimum size requirements for a site to be considered candidate SWH. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project.
Other Rare Vegetation Communities	 Provincially Rare S1, S2 and S3 Communities Types are listed in Appendix M of the SWH Technical Guide (OMNR 2000). Any ELC Ecosite Code that has an ELC Vegetation Type that is provincially rare is candidate SWH. Rare vegetation communities may include beaches, fens, forests, marshes, barrens, dunes, and swamps. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project.
Candidate Specialized W	/ildlife Habitats	
Waterfowl Nesting Area	 Upland habitats of any kind located adjacent to (≤120m) any PSW or the following wetland Community Types: Meadow Marsh (MAM), Shallow Marsh (MAS), Shallow Aquatic (SA), Mineral Thicket Swamp (SWT), or Mineral Deciduous Swamp (SWD). Wetland is >0.5ha or cluster of 3 or more smaller wetlands within 120m of each other where waterfowl nesting occurs. Upland areas should be at least 120m wide. Wood Ducks (<i>Aix sponsa</i>) and Hooded Mergansers (<i>Lophodytes cucullatus</i>) utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches associated with ELC mapping, NRSI biologists identified potential waterfowl nesting area locations, recording the presence of suitable permanent open water, in addition to shrubland/grassland or suitable cavity trees for nesting in upland areas >40cm dbh. Proximity of upland habitat to wetland habitat and determination of wetland size have been confirmed through GIS mapping.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	 Any of the following Community Types: Forest (FO) or Treed Swamp (SW) that is immediately adjacent to rivers, lakes, ponds, and wetlands. Nests may be located in dead trees over water along forested shorelines, islands or structures. Nests located on man-made objects (e.g. telephone poles and constructed) 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During area searches of this habitat, NRSI biologists looked for large suitable trees, or the presence of stick nests within suitable treed habitats located

Table 5.	Characteristics Used to Identify Candidate Rare Vegetation Communities and Speci	alized
Wildlife I	Habitats	

Table 5.	Characteristics Used to Identify Ca	andidate Rare Vegetation	Communities and Specialized
Wildlife I	Habitats		

Candidate Rare Vegetation Communities and Specialized Wildlife Habitats	Criteria ¹	Methods
	nesting platforms) are not candidate SWH.	near water features.
Woodland Raptor Nesting Habitat	 Any of the following Community Types: Forest (FO), Treed Swamp (SW), Coniferous Plantation (TAGM1) that are >30ha in size or contain >4ha of interior habitat. Interior habitat is determined by excluding a 200m buffer around the inside edge of the forest. 	 Habitat identification occurred during the leaf off period in conjunction with the detailed ELC mapping that was conducted throughout the Project. Habitat size and interior habitat were determined through GIS mapping.
Turtle Nesting Areas	 Exposed mineral soil (sand or gravel) areas <100m from or within the following Community Types: Shallow Marsh (MAS), Shallow Aquatic (SA), Open Bog (BOO), Open Fen (FEO). For an area to function as a turtle nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not candidate SWH. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project.
Seeps and Springs	 Locations where groundwater comes to surface, often in forested headwater areas. Any forested area (with <25% meadow, field, or pasture) within the headwaters of a stream or river system may have seeps or springs. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project.
Amphibian Breeding Habitat (Woodland)	 Forests (FO) and Treed Swamps (SW), in addition to wetlands/lakes/ponds/vernal pools that are >500m² in size (about 25m diameter) that are found within or adjacent (<120m) to the woodland. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Habitat size and proximity to other habitats were determined through GIS mapping. Surveys of woodland conditions were generally conducted in April or May to determine the presence of seasonal flooding and/or vernal pools. A single woodland was surveyed outside of this preferred time period to determine the presence of seasonal flooding and/or vernal pools, but is not located within 120m of an access road and therefore has been considered generalized candidate SWH.
Amphibian Breeding Habitat (Wetlands)	Any of the following Community Types:	Habitat identification occurred

Candidate Bare		
Vegetation Communities and Specialized Wildlife Habitats	Criteria ¹	Methods
	Swamp (SW), Marsh (MA), Fen (FE), Bog (BO), Open Water (OA), Shallow Aquatic (SA) that are >500m ² or 25m in diameter, and located >120m from woodlands.	 through the detailed ELC mapping that was conducted throughout the Project. Habitat size and proximity to other habitats were determined through GIS mapping. Surveys of wetland conditions were conducted in May to determine the presence of seasonal flooding and/or vernal pools.
Woodland Area- Sensitive Bird Breeding Habitat	 These include any of the following Community Types: Forest (FO), Treed Swamp (SW) that are mature forest stands (>60 years old) or woodlots >30ha. Interior habitat is total area of the feature that is present at a distance of at least 200m from the forested edge. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Woodland size and interior forest calculations were determined through GIS mapping.

Table 5.	Characteristics Used to Identify Candidate Rare Vegetation Communities and Specializ	ed
Wildlife I	abitats	

¹ SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a)

5.6.3 Habitats for Species of Conservation Concern

Habitats of species of conservation concern are those habitats that have been identified as important in maintaining long-term, viable populations of these species (OMNR 2012). The habitat characteristics for species of conservation concern have been summarized in Table 6 and Table 7. The presence of these habitat characteristics was investigated during site investigations in order to determine whether candidate habitat for species of conservation concern are present in or within 120m of the Project Location.

Candidate Habitats for Species of Conservation Concern	Criteria ¹	Methods
Marsh Bird Breeding Habitat	 May include any of the following Community Types: Meadow Marsh (MAM), Shallow Aquatic (SA), Open Bog (BOO), Open Fen (FEO) with emergent aquatic vegetation, or for Green Heron: SW (Swamp), MA (Marsh) and Meadow (ME) Community Types. All wetland habitats with shallow water and emergent aquatic vegetation. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During ELC mapping and area searches, NRSI biologists documented the presence of any potential nesting locations, as well as the presence of shallow water and emergent aquatic vegetation.

Table 6.	Characteristics Used to	Identify Candidate Habitats f	or Species of Conservation Concern
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Candidate Habitats for Species of Conservation Concern	Criteria ¹	Methods
		• Surveys of wetland and open aquatic conditions were conducted in May 2016 to determine the presence of shallow water and emergent aquatic vegetation.
Open Country Bird Breeding Habitat	 Large grassland areas (including natural and cultural fields and meadows) >30ha, not Class 1 or Class 2 agricultural lands, with no row- cropping or intensive hay or livestock pasturing within the last 5 years, in the following Community Type: Meadow (ME). 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Habitat size was determined through GIS mapping. Previous land use was determined through discussions with the landowner.
Shrub/Early Successional Bird Breeding Habitat	 Large shrub and thicket habitats 10ha, not Class 1 or Class 2 agricultural lands, with no row-cropping or intensive hay or livestock pasturing in the last 5 years, in the following Community Types: Thickets (TH), Savannahs (SV), Woodlands (WO). 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. Habitat size was determined through GIS mapping. Previous land use was determined through discussions with the landowner.
Terrestrial Crayfish	 Any of the following Community Types: Meadow Marsh (MAM), Shallow Marsh (MAS), Deciduous Swamp (SWD), Mixed Swamp (SWM), Thicket Swamp (SWT). Meadows (ME) with inclusions of above meadow marsh Ecosites may also be used. Wet meadows and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish. 	 Habitat identification occurred through the detailed ELC mapping that was conducted throughout the Project. During ELC mapping and area searches, NRSI biologists documented the presence of any chimneys in suitable habitats.
Special Concern and Rare Wildlife Species	 All Special Concern or provincial rare (S1-S3, SH) plant and animal species element occurrences within a 1 or 10km grid. 	 Area searches were conducted during ELC mapping to determine candidate habitat, as outlined in the Ecoregion 7E Criteria (MNRF 2015a), for any identified species or communities. See Table 7 below for specific criteria for each Special Concern or provincially rare plant and animal species that may be present within the Project.

Table 6. Characteristics Used to Identify Candidate Habitats for Species of Conservation Concern

¹ SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a)

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
Birds					
Great Egret (<i>Ardea alba</i>)	S2B	-	-	 Prefers open swamp woods or willow thickets, offshore islands and mudflats for feeding¹. Nests in standing trees in open water, thickets, sometimes low vegetation on islands or in rookeries of other herons and egrets¹. 	 Breeding habitat for this species is covered under Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs).
Redhead (<i>Aythya americana</i>)	S2B S4N	-	-	 Prefers shallow cattail and bulrush marshes with good interspersion of vegetation with open areas, often near lakes, ponds, and fens^{1, 2}. Typically nests close to shallow water (most within 2m)¹. 	• Breeding habitat for this species was identified using area searches for suitable habitat in conjunction with ELC mapping (MAS adjacent to bodies of water).
Eastern Wood-Pewee (<i>Contopus virens</i>)	S4B	SC	SC	 Prefers open, deciduous, mixed or coniferous forests predominated by oak with little understory, forest clearings, edges, farm woodlots, and parks¹. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (WO, FO, TAGM2, TAGM3, SWC, SWM, SWD). Migratory habitat for this species has been determined through the consideration of Landbird Migratory Stopover Areas.
Rusty Blackbird (<i>Euphagus carolinus</i>)	S4B	NAR	SC	• Prefers openings in coniferous woodlands bordering bodies of water; tree-bordered marshes, beaver ponds, muskegs, bogs, fens or wooded swamps; stream borders with alder and/or willow, and wooded islands on lakes ¹ .	 Breeding habitat for this species is not known to occur within this area of the province. Although this species is not specifically protected under the <i>Migratory Birds Convention Act</i> (1994), this is a migratory songbird with preferred habitats similar to those protected by Landbird Migratory Stopover Area habitats. Therefore, migratory habitat for this species will be considered under Landbird Migratory

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
					Stopover Areas.
Red-throated Loon (<i>Gavia stellata</i>)	S1N S3B	-	-	 Prefers sheltered, shallow marine waters, and occasionally large freshwater lakes and rivers³. Breeds primarily in coastal tundra habitats, largely on remote ponds³. During migration, stages on large lakes, including several of the Great Lakes³. Winters primarily on marine coastal waters, and occasionally on inland lakes and rivers near the coast³. Very rarely winters on the lower Great Lakes or other large interior lakes and rivers³. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (SH, OA, SA).
Bald Eagle (<i>Haliaeetus</i> <i>leucocephalus</i>)	S2N S4B	SC	NAR	 Requires large continuous areas of deciduous or mixed woods near large lakes or rivers¹. Require an area of 255ha for nesting, shelter, feeding and roosting¹. Prefers open woods with 30 to 50% canopy cover and will nest in trees 50 to 200m from the shore of a water body. The bald eagle requires tall, dead or partially dead trees within 400m of a nest for perching¹. According to the <i>Bald Eagle Habitat Management Guidelines</i> (OMNR 1987), a disturbance area of 400-800m should be included as essential habitat for bald eagles. Up to 800m should be included if topography and vegetation permit a direct line of sight from the nest to potential activities at that distance. 	 Breeding habitat for this species is addressed under the consideration of Bald Eagle Nesting, Foraging and Perching Habitat. Overwintering habitat for this species is addressed under the consideration of Raptor Wintering Areas.

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
Little Gull (<i>Hydrocoloeus minutus</i>)	S1B	-	-	 Requires marsh habitat, occasionally found on islands¹. Prefers inland marshes and marshy borders on lakes¹. Nests on floating to semi-floating mats¹. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (MA).
Wood Thrush (<i>Hylocichla mustelina</i>)	S4B	SC	Т	 Prefers undisturbed, moist, mature deciduous or mixed forest with deciduous sapling growth^{1, 4} 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FOM, FOD, SWM, SWD). Migratory habitat for this species has been determined through the consideration of Landbird Migratory Stopover Areas.
Red-headed Woodpecker (<i>Melanerpes</i> <i>erythrocephalus</i>)	S4B	SC	Т	 Lives in open woodlands and woodland edges, especially in oak savannahs and riparian forest¹. They can also be found in fields or pastures, orchards and small woodlots¹. These habitats contain a higher density of dead trees, which they commonly use for nesting and perching¹. Requires trees with a diameter at breast height of at least 40cm for tree cavity nesting and require approximately 4ha for territory¹. 	 Area searches within suitable habitat (ME, TH, SV, WO, FO, SW) for large (>40cm dbh) cavity trees were conducted in conjunction with ELC mapping, with snag size class analysis documented on ELC data sheets. Based on the generalist nature of this species, specific breeding habitat is often difficult to identify. This species will be considered when development is proposed within woodland edges; otherwise it will be identified as generalized candidate SWH where the ELC codes above occur.
Black-crowned Night- heron (<i>Nycticorax nycticorax</i>)	S3B S3N	-	-	 Breeds in a wide variety of wetland habitats, including deciduous woodland swamps, cattail marshes, islands, wooded rivers and lake banks, and coastal wetlands^{1, 5}. Migratory habitat consists of wetlands associated with migratory routes, generally along coastal areas or the Mississippi River system⁵. 	 Area searches for suitable migratory habitat were conducted in conjunction with ELC mapping (SH, SWM, SWD, MAM, MAS, OA along coastal areas). Breeding habitat for this species is addressed under the consideration of Colonially-Nesting Bird Breeding Habitat (Trees/Shrubs).

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
White-eyed Vireo (<i>Vireo griseus</i>)	S2B	-	-	 Prefers dense, swampy thickets and hillsides with blackberry and briar tangles, forest edges, and early successional fields¹. Territories are 1-2ha in size¹. 	 Area searches for suitable breeding habitat were conducted in conjunction with ELC mapping (SWT, FO, ME). Migratory habitat for this species has been determined through the consideration of Landbird Migratory Stopover Areas.
Herpetofauna					
Snapping Turtle (<i>Chelydra serpentina</i> <i>serpentina</i>)	S3	SC	SC	 Resides in habitat that consists of permanent or semi-permanent fresh water, marshes, swamps or bogs or rivers and streams with soft muddy banks or bottoms¹. Uses soft soil or clean dry sand on southfacing slopes for nest sites, which can be some distance from water. They will also take advantage of man-made structures for nest sites, including roads (especially with gravel shoulders), dams and aggregate pits¹. Often hibernate together in groups in mud under water¹. 	 Habitat for this species is addressed under the consideration of Turtle Nesting Areas and Turtle Wintering Areas.
Mammals					
Eastern Mole (Scalopus aquaticus)	S2	SC	SC	• Prefers areas of deep, sandy or sandy-loam soils in pastures, meadows or lawn; is occasionally found in open woodlands and often found in moist bottomlands ¹ .	 Area searches for suitable breeding habitat were conducted in conjunction with ELC mapping (OAGM4, SAGM6, TAGM4, ME, WO).
Vegetation				-	
Slightly Hirsute Sedge (<i>Carex hirsutella</i>)	S3		-	 Prefers dry-mesic to wet-mesic hardwood forests, edge and old fields¹. Identification of sedges should be made during a time period when this species exhibits characteristics that allow for confident identification, preferably during the fruiting period of April and June. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FOD, SW, WO, ME).

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
Squarrose Sedge (<i>Carex squarrosa</i>)	S2	-	_	 Found in mesic to wet hardwood forests, often on floodplains¹. Identification of sedges should be made during a time period when this species exhibits characteristics that allow for confident identification, preferably during the fruiting period of April and September. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FO, SW, WO).
Cattail Sedge (<i>Carex typhina</i>)	S2	-	-	 Resides in wet-mesic hardwood forests¹. Identification of sedges should be made during a time period when this species exhibits characteristics that allow for confident identification, preferably during the fruiting period of June and August. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FO, SW, WO).
Pumpkin Ash (<i>Fraxinus profunda</i>)	S2?	-	-	 Prefers moist woods¹. Identification should be made during a time period when this species exhibits characteristics that allow for confident identification, preferably when fruit and leaves are present between August and mid-October. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FO, SW, WO).
Black Gum (<i>Nyssa sylvatica</i>)	S3	-	-	• Found in dry to wet woods and savannahs ¹ .	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FO, SW, WO).
Halberd-leaved Smartweed (<i>Persicaria arifolia</i>)	S3	-	-	 Found in marshes, swamps and wet meadows⁶. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (FO, SW, WO, MA, ME).
Climbing Prairie Rose (<i>Rosa setigera</i>)	S3	SC	SC	 Typically found in open habitats with moist, heavy, clay to clay-loam soils such as old fields, abandoned agricultural land, as well as prairie remnants and shrub thickets⁷. Identification should be made during a time period when this species exhibits characteristics that allow for confident identification, preferably during the leaf-on period of May to September. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (ME, TH, SV, WO).

Species of Conservation Concern	S-Rank (MNRF 2016)	SARO Status (2016)	COSEWIC Status (2016)	Habitat Criteria	Methods
Insects					
Hackberry Emperor (<i>Asterocampa celtis</i>)	S2	-	-	 Found along wooded streams, forest glades and river edges, wooded roadsides and towns⁸. 	• Area searches for suitable habitat were conducted in conjunction with ELC mapping, including searches to identify the presence of host plants, such as hackberry (<i>Celtis occidentalis</i>).
Monarch (<i>Danaus plexippus</i>)	S2N S4B	SC	E	 Utilizes a variety of open habitats including fields, meadows, weedy areas, marshes, and roadsides, where a variety of nectar-producing wildflowers can be found for feeding⁸. Caterpillars rely on a variety of milkweed species including common milkweed (<i>Asclepias syriaca</i>) and swamp milkweed (<i>A. incarnate</i>) among others⁸. 	 Area searches for suitable breeding or foraging habitat were conducted in conjunction with ELC mapping, including searches to identify the presence of host plants, such as milkweeds (<i>Asclepias</i> spp.). Migratory habitat for this species has been determined through the consideration of Migratory Butterfly Stopover Areas.
Duke's Skipper (<i>Euphyes dukesi</i>)	S2	-	-	 Resides in shaded black gum swamps, partially shaded marshes or ditches⁸. 	 Area searches for suitable habitat were conducted in conjunction with ELC mapping (SW, MA), including searches for the presence of black gum swamps or marshes and presence of host plants, such as lake-bank sedge (<i>Carex</i> <i>lacustris</i>) and hyaline-scaled sedge (<i>Carex hyalinolepis</i>).
Common Sootywing (<i>Pholisora catullus</i>)	S3	-	-	 Prefers open or disturbed areas such as landfills, vacant lots, gardens, roadsides, fields, and pastures⁸. 	• Area searches for suitable habitat were conducted in conjunction with ELC mapping (ME, OAGM4), including searches for the presence of host plants, such as Lamb's-quarters (<i>Chenopodium</i> <i>album</i> var. <i>album</i>) and members of the Amaranth family (Amaranthaceae).

^{1.} OMNR Significant Wildlife Habitat Technical Guide (2000) ^{2.} Woodin & Michot (2002) ^{3.} Barr *et al.* (2000) ^{4.} Cornell Lab of Ornithology (2016)
^{5.} Hothem *et al.* (2010)
^{6.} Gleason and Cronquist (1991)
^{7.} MNRF (2015b)
^{8.} Butterflies and Moths of North America (2014)

Provincial Rank (S-Rank) S1: Critically Imperiled

COSEWIC and SARO Status E: Endangered

S2: Imperiled S3: Vulnerable

S4: Apparently Secure

T: Threatened SC: Special Concern NAR: Not at Risk

5.6.4 Animal Movement Corridors

Animal movement corridors are defined by the MNRF as "distinct passageways or well defined natural features used by animals to move between habitats, which are required by the animals to complete their life cycles" (MNRF 2015a). Animal movement corridors are represented by a diversity of landscape features such as riparian areas, woodlands, ravines, ridges and fencerows (MNRF 2015a). The only animal movement corridors considered in Ecoregion 7E are amphibian movement corridors (MNRF 2015a). Aerial photography and site-specific field investigations were used to identify potential amphibian movement corridor features in or within 120m of the Project Location. Movement corridors for amphibians traveling from their terrestrial habitat to breeding habitat can be extremely important for local amphibian populations. According to the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a), amphibian movement corridors, which are used between breeding and summer habitat, must be determined when wetland amphibian breeding habitat has been confirmed as SWH. NRSI has used the presence of any candidate wetland amphibian breeding habitats located in or within 120m of the Project Location, as outlined in Section 5.6.2 (Table 5), to identify potential amphibian movement corridors. In the event that significant wetland amphibian breeding habitat is present in or within 120m of the Project Location, further investigation of the presence of amphibian movement corridors will be completed. The habitat characteristics used to identify animal movement corridors are outlined in Table 8.

Candidate Animal Movement Corridors	Criteria ¹	Methods
Amphibian Movement Corridors	 Movement corridors must be considered when Amphibian Breeding Habitat (Wetland) is confirmed as SWH. Movement corridors are between breeding habitat and summer habitat. Corridors should be at least 200m wide with gaps <20m and, if following riparian areas, with at least 15m of vegetation on both sides of waterway. 	 Significant amphibian breeding habitat (wetland) to be examined for amphibian movement corridors. The width and presence of gaps along potential corridors were determined using GIS mapping.

Tahla 8	Charactoristics	llead to Identif	v Candidato	Animal Movemer	of Corridore
i abie o.	Characteristics	Used to identil	y Canuluale	Ammai woverner	

¹ SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a)

6.0 Site Investigation Results

6.1 Woodlands

Site investigations conducted in and within 120m of the Project Location have identified a total of 13 candidate significant woodlands. This is a change from the records review, as available basemapping initially indicated a total of 23 woodlands in or within 120m of the Project Location. Many of these woodlands were counted as individual woodlands during the records review; however, under the definition of a woodland in the NHA Guide (OMNR 2012), woodlands bisected by an opening of 20m or less from crown edges are considered to be single woodlands. As such, site investigations have confirmed that some of these individually identified woodlands should be considered larger woodlands based on the definition in the NHA Guide (OMNR 2012). The site investigation has also confirmed that some of the woodlands identified through the records review are hedgerows and fencerows, which do not meet the ELC definition of a "forest" (>60% tree cover). In addition, the site investigation has confirmed that some of the woodlands identified during the records review process no longer exist.

No candidate significant woodlands are located within the Project Location. There are 13 candidate significant woodlands (WOD-001, WOD-002, WOD-003, WOD-004, WOD-005, WOD-006, WOD-007, WOD-008, WOD-009, WOD-011, WOD-012, WOD-013 and WOD-014) located within 120m of the Project Location. All infrastructure will be placed outside of the features, in order to avoid impacts to the features themselves. Woodlands within 120m of the Project Locations. ELC mapping of these features can be seen on Maps 3-1 to 3-5, while detailed mapping of woodlands within 120m of the Project Location can be seen on Maps 4-1 to 4-5. Woodland size, composition, attributes, functions and distance to the Project Location are summarized in Table 9.

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WOD-001₁ Woodland	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's Maple (<i>Acer x freemanii</i>), and occasional shagbark hickory (<i>Carya ovata</i> var. <i>ovata</i>), white elm (<i>Ulmus</i> <i>americana</i>) and bur oak (<i>Quercus macrocarpa</i>).	 Woodland diversity Uncommon characteristics: occasionally occurring white trout lily (Coefficient of Conservation (CC) 8) 	WT - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	4-2 4-3	Yes
WOD-002₃ Woodland	3.27	FODM9-3	Fresh-Moist Bur Oak Deciduous Forest with an abundance of bur oak and occasional shagbark hickory.	 Provides some water protection Woodland diversity 	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	4-2 4-3	Yes
		OV DIVIT-2	Swamp				
WOD-003₃ Woodland	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp with an abundance of bur oak and the occasional shagbark hickory and Freeman's maple.	 Provides some water protection Woodland diversity 	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	4-2 4-3	Yes
WOD-004₁ Woodland	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's Maple and white elm, and occasional green ash (<i>Fraxinus pennsylvanica</i>), and shagbark hickory.	Woodland diversity	WT -> 120 AR - 1 CL - 1 CA - 1 SI -> 120	4-3 4-4	Yes
WOD-005 ₃ Woodland	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's maple and white elm, with occasional American basswood (<i>Tilia</i> <i>americana</i>), green ash, shagbark hickory, Shumard oak (<i>Quercus shumardii</i>)***	 Provides some water protection Woodland diversity 	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	4-4	Yes

Table 9. Summary of Woodlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
		TAGM1	and shellbark hickory (<i>Carya laciniosa</i>). Coniferous Plantation dominated by Norway spruce (<i>Picea abies</i>).				
WOD-006 ₃ Woodland	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's maple, with occasional American basswood, white elm, shagbark hickory, sycamore (<i>Plantanus</i> <i>occidentalis</i>) and green ash.	 Woodland diversity Uncommon characteristics: abundance of white trout lily (CC8) 	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	4-5	Yes
WOD-007 ₂ Woodland	10.01	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's maple, black walnut (<i>Juglans nigra</i>), and white elm, with occasional American basswood.	 Provides some water protection Woodland diversity Uncommon characteristics: Abundance of wild garlic (CC8) and occasional occurrence of white trout lily (CC8) 	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	4-5	Yes
		TAGM1	Coniferous Plantation with an abundance of white pine (<i>Pinus strobus</i>) and Norway spruce.				
		TAGM3**	Deciduous Plantation with an abundance of black walnut.				
		FODM7	Fresh-Moist Lowland Deciduous Forest with an abundance of white elm, and occasional black walnut, shagbark hickory, green ash, bitternut hickory (<i>Carya cordiformis</i>), American basswood,				

Table 9.	Summary of Woodlands	Within 120m of th	e Project Location
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Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
			sycamore and Manitoba maple (<i>Acer negundo</i>).				
WOD-0081 Woodland	0.74	TAGM2	Mixed Plantation abundant with silver maple (<i>Acer</i> <i>saccharinum</i>) and occasional eastern cottonwood (<i>Populus</i> <i>deltoides ssp. deltoides</i>), white ash and white spruce (<i>Plcea glauca</i>).	• None	WT - >120 AR - >120 CL - >0.1* CA - >0.1* SI - >120	4-5	Yes
WOD-0092 Woodland	1.02	FODM7-1	White Elm Lowland Deciduous Forest with an abundance of white elm and green ash, with occasional American basswood.	 Some woodland diversity Uncommon characteristics: occasional occurrence of wild garlic (CC8) and of white trout lily (CC8) 	WT ->120 AR - 109 CL - 109 CA - 109 SI ->120	4-4 4-5	Yes
		TAGM1**	Coniferous Plantation Dominated by Norway Spruce.				
		TAGM3**	Deciduous Plantation with an abundance of red oak (<i>Quercus rubra</i>) and silver maple.				
WOD-011₁ Woodland	22.40	SWDM3-3	Swamp Maple Mineral Deciduous Swamp with an abundance of Freeman's maple and white elm, with occasional shagbark hickory, American basswood and green ash.	 Provides some interior habitat Provides some water protection Provides some woodland diversity Uncommon characteristics: occasional occurrence of spring cress (CC8) and wild garlic (CC8) 	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	4-4	Yes
WOD-012 ₃ Woodland	1.22	SWDM3-2	Silver Maple Mineral Deciduous Swamp Type dominated by silver maple.	Woodland diversity	WT ->120 AR ->120 CL - 65 CA - 65 SI ->120	4-4	Yes
WOD-013 ₂	9.52	SWDM4-2	White Elm Mineral	 Provides some water 	WT - >120	4-5	Yes

Table 9. Summary of Woodlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
Woodland		FODM6-5**	Deciduous Swamp abundant with white elm with occasional green ash and Manitoba maple. Fresh-Moist Sugar Maple- Hardwood Deciduous Forest with abundant sugar maple (<i>Acer saccharum</i> ssp. <i>saccharum</i>).	 protection Provides some woodland diversity 	AR - >120 CL - >0.1* CA - >0.1* SI - >120		
		WODM5**	Fresh-Moist Woodland with Honey Locust (<i>Gleditsia</i> <i>triacanthos</i>)				
WOD-014-	1 / 8		Deciduous Forest	Drovidos somo woodlond	WT - >120	1-5	Vos
Woodland	1.40	Gvv Divio-S	Deciduous Swamp dominated by Freeman's maple with occasional white elm and American basswood.	diversity	AR - >120 CL - 68 CA - 68 SI - >120		103

* Mapping depicts this woodland being overlapped by the Project Location; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).

** ELC codes have not been mapped as they have been identified as inclusions (<0.5ha in size).

*** Species identification of Shumard oak to be confirmed during the appropriate season to identify this species, which is during a time period when this species exhibits characteristics that allow for confident identification, preferably during the period of October to December when leaves and fully-developed acorns are present.

Subscripts:

1: Entire woodland delineated on site.

2: Woodland delineated via a combination of methods: on site and property line/aerial photograph, where portions were not accessible.

3: Entire woodland delineated from property line/ aerial photograph.

Legend

WT: Wind Turbine

AR: Access Road

CL: Collector Lines

CA: Construction Activity/Temporary Infrastructure/ Laydown Area

SI: Supporting Infrastructure - Building/Substation/Meteorological Tower/Point of Interconnect

6.2 Wetlands

During the site investigation, a total of 8 candidate provincially significant wetlands (WET-001, WET-002, WET-003, WET-004, WET-005, WET-006, WET-008 and WET-009) were identified within 120m of the Project Location. There are no wetlands within the Project Location. This is a change from the records review, as available basemapping indicated that no confirmed wetlands were located in or within 120m of the Project Location. No infrastructure will be placed within wetlands; however, infrastructure (construction disturbance area, access roads and cabling) will be placed adjacent to, and outside of, the features in order to avoid impacts to the features themselves. All wetlands were delineated during site-specific field visits, along with the aid of detailed aerial photography interpretation where site access was not available.

The 8 wetlands identified within 120m of the Project Location are mostly individual wetland communities, as well as two small wetland complexes (WET-006 and WET-008). They range in size from 1.48ha to 23.62ha. The Project is generally represented by flat land with heavy silty clay or silty clay loam soils. As a result, the wetlands within 120 of the Project Location typically represent remnant treed swamps with constructed drainage. They are largely dominated by trees such as Freeman's maple (*Acer* x *freemanii*), bur oak (*Quercus macrocarpa*), white elm (*Ulmus americana*), and hickory species (*Carya* spp.).

Vegetation mapping can be seen on Maps 3-1 to 3-5 and detailed mapping of wetlands and wetland complexes can be seen on Maps 4-1 to 4-5. Wetland size, composition, attributes, functions and distance to the Project Location are summarized in Table 10.

Table 10. Summary of Wetlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WET-0012 Wetland Big Creek Watershed	4.23	Individual Wetland SWDM3-3 Swamp Maple Mineral Deciduous Swamp	Wetland Types 100% Swamp Vegetation Communities Three Forms: hS1 deciduous trees (Acer x freemanii), tall shrubs (Ulmus americana), herbaceous (Sanicula sp.) Soils 100% mineral (silty clay) Site Type 100% Palustrine	 Primary productivity Flood attenuation Short-term water quality improvement Groundwater recharge Habitat for locally significant plant species (Field Observation – Geum vernum²) 	WT - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	4-2 4-3	Yes
WET-002 ₃ Wetland East Two Creeks Watershed	5.99	Individual Wetland SWDM1-2 Bur Oak Mineral Deciduous Swamp	Wetland Types 100% Swamp Vegetation Communities One form: hS1 deciduous trees (Quercus macrocarpa) Soils 100% mineral (clay ¹) Site Type 100% Palustrine	 Primary productivity Flood attenuation Short-term water quality improvement Groundwater recharge 	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	4-2 4-3	Yes
WET-0031 Wetland East Two Creeks Watershed	2.61	Individual Wetland SWDM3-3 Swamp Maple Mineral Deciduous Swamp	Wetland Types 100% Swamp Vegetation Communities Three Forms: hS1 deciduous trees (Acer x freemanii), tall shrubs (Ulmus americana), herbaceous (Sanicua sp., Claytonia virginica, Persicaria virginiana) Soils 100% mineral (silty clay loam)	 Primary productivity Flood attenuation Short-term water quality improvement Groundwater recharge Habitat for locally significant plant species (Field Observation – Geum vernum²) 	WT ->120 AR - 3 CL - 3 CA - 3 SI ->120	4-3 4-4	Yes

Table 10. Summary of Wetlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
			Site Type 100% Palustrine				
WET-004 ₃ Wetland East Two Creeks Watershed	4.11	Individual Wetland SWDM3-3 Swamp Maple Mineral Deciduous Swamp	Wetland Types100% SwampVegetation CommunitiesThree Forms:hS1 deciduous trees (Acer x freemanii), tall shrubs (Ulmus americana), herbaceous (Claytonia virginica)Soils100% mineral (clay²)Site Type100% Palustrine	 Primary productivity Flood attenuation Short-term water quality improvement Groundwater recharge Habitat for provincially significant plant species (Field Observation – Carya laciniosa) 	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	4-4	Yes
WET-005 ₃ Wetland East Two Creeks Watershed	2.84	Individual Wetland SWDM3-3 Swamp Maple Mineral Deciduous Swamp	Wetland Types 100% Swamp Vegetation Communities Three Forms: hS1 deciduous trees (Acer x freemanii), tall shrubs (Ulmus americana), herbaceous (Claytonia virginica) Soils 100% mineral (clay ²) Site Type 100% Palustrine	 Primary productivity Flood attenuation Short-term water quality improvement Groundwater recharge Habitat for provincially significant plant species (Field Observation – Carya laciniosa) 	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	4-5	Yes
WET-006 ₂ Wetland Yellow Creek Watershed	4.77	Wetland Complex SWDM4-2 White Elm Mineral Deciduous Swamp SWDM3-3 Swamp Maple	<u>Wetland Types</u> 100% Swamp <u>Vegetation Communities</u> Two Forms: hS1 deciduous trees (<i>Ulmus</i> <i>americana</i>), narrow-leaved emergents (<i>Phleum pratense</i>)	 Primary productivity Open water habitat Short-term water quality improvement Shoreline erosion control Habitat for locally significant plant 	WT - >120 AR - 28 CL - 13 CA - 13 SI - >120	4-5	Yes

Table 10. Summary of Wetlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WET-0082	23.62	Mineral Deciduous Swamp Wetland Complex	Three Forms: hS2 deciduous trees (<i>Acer</i> x <i>freemanii</i>), tall shrubs (<i>Ulmus americana, Juglans</i> <i>nigra</i>), herbaceous (<i>Geum vernum</i>) <u>Soils</u> 100% mineral (silty clay, silty clay loam) <u>Site Type</u> 100% Riverine Wetland Types	species (Field Observation – <i>Geum</i> <i>vernum</i> ² in hS1 and hS2)	WT - >120	4-4	Yes
Yellow Creek Watershed	20.02	SWDM3-3 Swamp Maple Mineral Deciduous Swamp	100% Swamp Vegetation Communities One Form: hS1 deciduous trees (Acer saccharinum) Three Forms: hS2 deciduous trees (Ulmus americana), tall shrubs (Ulmus americana), tall shrubs (Ulmus americana, Cornus foemina ssp. racemosa), herbaceous (Persicaria virginiana) Soils 100% mineral (silty clay, clay ¹) Site Type 94% Palustrine 6% Isolated	 Flood attenuation Short-term water quality improvement Groundwater recharge Habitat for provincially significant plant species (Field Observation - Carya laciniosa in hS2) Habitat for locally significant plant species (Field Observation - Carex bromoides², Galium asprellum², Geum vernum² in hS2) 	AR - >120 CL - >0.1* CA - >0.1* SI - >120		
WET-009 ₃ Wharram Drain Watershed	1.48	Individual Wetland SWDM3-3 Swamp Maple Mineral Deciduous Swamp	<u>Wetland Types</u> 100% Swamp <u>Vegetation Communities</u> One Form: hS1 deciduous trees (<i>Acer</i> x <i>freemanii</i>) <u>Soils</u>	 Primary productivity Flood attenuation Groundwater recharge 	WT - >120 AR - >120 CL - 68 CA - 68 SI - >120	4-5	Yes

Table 10. Summary of Wetlands Within 120m of the Project Location

Feature ID	Size (ha)	Composition	Attributes	Functions	Closest Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
			100% mineral (clay ¹)				
			<u>Site Type</u> 100% Isolated				

* Mapping depicts this wetland as being overlapped by the Project Location; however, all project components, including the construction disturbance area, will be located adjacent to the wetland (>0.1m).

Subscripts:

1: Entire wetland delineated on site.

2: Wetland delineated via a combination of methods: on site and property line/aerial photograph.

3: Entire wetland delineated from property line/ aerial photograph.

Superscripts:

1: Ontario Agricultural College 1930 2: Oldham 1993

Legend

WT: Wind Turbine AR: Access Road CL: Collector Lines CA: Construction Activity/Temporary Infrastructure/ Laydown Area SI: Supporting Infrastructure - Building/Substation/Meteorological Tower/Point of Interconnect

6.3 Wildlife Habitat

Wildlife habitat as outlined by the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a) was examined during the site investigation and is categorized into the following four groups: seasonal concentration areas, rare vegetation communities and specialized wildlife habitat, habitat for species of conservation concern and animal movement corridors. These categories are outlined below and all candidate SWH are summarized in Table 15 and shown on Maps 5-1 through 7-6. Wildlife habitats that were determined to be generalized candidate SWH, according to Appendix D of the NHA Guide for Renewable Energy Projects (OMNR 2012), are included in Table 16 and are shown on Maps 8-1 to 8-5.

6.3.1 Seasonal Concentration Areas

The site investigation involved a thorough assessment of natural areas for seasonal concentration areas for wildlife habitat. Potential habitat for 13 types of seasonal concentration areas was examined during the site investigation phase of the Project. Seasonal concentration areas in or within 120m of the Project Location are described in further detail and assessed as to whether they will be carried forward to the evaluation of significance phase of this Project in Table 11 below. Candidate seasonal concentration areas are further described in Table 15 and locations are provided on Maps 5-1 to 5-5. Generalized candidate SWH within 120m of the Project Location can be found in Table 16 and locations are provided on Maps 8-1 to 8-5.

Seasonal Concentration Areas	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
Waterfowl Stopover and Staging Areas (Terrestrial)	 No meadow (ME) or thicket (TH) communities with annual spring melt water flooding have been identified in or within 120m of the Project Location. Several agricultural fields with waste grains (soybeans and corn) located between the Lake St. Clair and Point Pelee areas were identified as containing annual spring melt water flooding in or within 120m of the Project Location. A total of 29 candidate significant terrestrial waterfowl stopover and staging areas habitats have been identified as overlapping the Project Location. 	Yes (29 habitats)	No
Waterfowl Stopover and Staging Areas (Aquatic)	No suitable Shallow Marsh (MAS), Shallow Aquatic (SA), or Deciduous Swamp (SWD) Community Types containing suitable permanent open water with an abundant food supply for waterfowl were identified in or within 120m of the Project Location.	No	No
Shorebird Migratory Stopover Area	No suitable Shoreline (BB), Sand Dune (SD) or Meadow Marsh (MAM) Community Types were identified in or within 120m of the Project Location.	No	No
Raptor Wintering Area	 <u>Hawks/Owls:</u> Forest (FODM6-5) and Swamp (SWDM4-2) Community Types, adjacent to Meadow (MEMM3, MEGM4) and Woodland (WODM5) Community Types that are >20ha in size have been identified within 120m of the southern extent of the Project Location. A single candidate Raptor Wintering Area is located within 120m of underground lines and in accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH. <u>Bald Eagle:</u> Forest (FODM6-5) and Treed Swamp (SWDM4-2) Community Types adjacent to Lake Erie have been identified within 120m of the Project Location. This candidate Raptor Wintering Area falls entirely within the considered generalized candidate SWH. 	Νο	Yes
Bat Hibernacula	No mine shafts, underground foundations, Karst, Crevice (CCR), or Cave (CCA) Community Types were identified in or within 120m of the Project Location.	No	No
Bat Maternity Colonies	Several Deciduous Forest (FOD) and Deciduous Treed Swamp (SWD) Community Types containing >25cm dbh trees have been identified within120m of the Project	Yes	Yes

Seasonal Concentration Areas	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
	Location. There are no candidate significant bat maternity colonies within the Project Location.	(3 habitats)	
	Where site access was obtained, NRSI biologists did not identify any woodlands containing \geq 10 cavity trees per hectare, measured at \geq 25cm dbh, within 120m of a wind turbine. Where site access could not be obtained, 3 woodlands within 120m of a wind turbine have been assumed to contain \geq 10 wildlife trees per hectare, measured at \geq 25cm dbh. These woodlands will be considered candidate bat maternity colonies.		
	Four woodlands which could not be accessed, and therefore have been assumed to contain ≥10 cavity trees per hectare, measured at ≥25cm dbh, are located within 120m of underground or overhead lines and/or access roads. In accordance with Appendix D of the NHA guide (OMNR 2012), these 4 habitats will be considered generalized candidate SWH.		
Turtle Wintering Areas	Several Open Water (OA) Community Types have been identified within 120m of the Project Location. A total of 4 habitats are located within 120m of project components but outside of the Project Location boundaries. In accordance with Appendix D of the NHA guide	No	Yes
	(OMNR 2012), these 4 habitats will be considered generalized candidate SWH.		
Reptile Hibernaculum	Several potentially suitable habitats for reptile hibernaculum have been identified within 120m of the Project Location, including rock and debris piles. These features appear to be the result of agricultural field clearing or dumping, and visual assessments confirmed that these features do not extend below the frost line. As such, these features do not provide suitable habitat for reptile hibernaculum.	No	No
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	No Meadow (ME), Thicket (TH), Savannah (SV), Bluff (BL) or Cliff (CL) Community Types contain eroding banks, sandy hills, borrow pits, steep slopes, or sand piles were identified in or within 120m of the Project Location.	No	No
Colonially – Nesting Bird Breeding Habitat	Several Deciduous Swamp (SWD) Community Types have been identified within 120m of the Project Location.	Yes	Yes
(Tree/Shrubs)	Where site access could not be obtained, three candidate colonial-nesting bird breeding habitats (tree/shrub) have been assumed to be present within 120m of a	(3 habitats)	

Seasonal Concentration Areas	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
	wind turbine or access road. Two additional habitats, where site access could not be obtained, are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA quide (OMNR 2012), these babitats will be considered generalized candidate SWH		
Colonially – Nesting Bird Breeding Habitat (Ground)	Gulls/Terns: No suitable rocky islands or peninsulas located within large lakes or rivers identified in or within 120m of the Project Location. Brewer's blackbird: No Meadow Marsh (MAM), Shallow Marsh (MAS), Thicket (TH), or Savannah (SV) Community types located in close proximity to a watercourse were identified in or within 120m of the Project Location. A total of 2 Meadow (ME) Community Types located in close proximity to a watercourse were identified within 120m of the Project Location. A total of 2 Meadow (ME) Community Types located in close proximity to a watercourse were identified within 120m of the Project Location. A total of 2 Meadow (ME) Community Types located in close proximity to a watercourse were identified within 120m of the Project Location. A total of 2 Meadow (ME) Community Types located in close proximity to a watercourse were identified within 120m of the Project Location. A total of 2 Meadow (ME) Community Types located in close proximity to a watercourse were identified within 120m of the Project Location. A ppendix D of the NHA guide (OMNR 2012), these will be considered generalized candidate SWH.	Νο	Yes
Migratory Butterfly Stopover Areas	One Meadow (ME) Community Type has been identified in combination with a wooded area that is greater than 10ha in size within 120m of the Project Location. This habitat is located within 120m of underground lines and in accordance with Appendix D of the NHA guide (OMNR 2012), will be considered generalized candidate SWH. Monarchs were also observed within 120m of the Project Location, in habitats that are not suitable for migratory butterfly stopover areas. As these observations occurred in habitats that are not considered suitable for important life functions of this species, the observations in non-suitable habitats are considered to be incidental observations and those habitats will not be carried forward to the EOS as candidate significant wildlife habitat or generalized candidate significant wildlife habitat.	No	Yes
Landbird Migratory Stopover Areas	Areas of Deciduous Forest (FOD) and Deciduous Swamp (SWD) Community Types >2ha and within 5km of Lake Erie have been identified within 120m of the Project Location.	Yes (2 habitats)	Yes

Seasonal Concentration Areas	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
	A total of 2 suitable Landbird Migratory Stopover Areas have been identified within 120m of a wind turbine.		
	A total of 3 habitats are located within 120m of underground or overhead lines and/or access roads. In accordance with Appendix D of the NHA guide (OMNR 2012), these 3 habitats will be considered generalized candidate SWH.		
Deer Winter Congregation Areas	MNRF has identified one deer winter congregation area (stratum 2) habitat within 120m of the Project Location. In accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH.	No	Yes

6.3.2 Rare Vegetation Communities and Specialized Wildlife Habitat

The site investigation involved a thorough assessment of natural areas for rare vegetation communities and specialized wildlife habitats. Potential habitat for 15 types of rare vegetation communities and specialized wildlife habitats were examined during the site investigation phase of the project. Rare vegetation communities and specialized wildlife habitat in or within 120m of the Project Location are described in further detail and assessed as to whether they will be carried forward to the evaluation of significance phase of this Project in Table 12 below. Candidate rare vegetation communities and specialized wildlife habitats are further described in Table 15 and locations are provided on Maps 6-1 to 6-5. Generalized candidate SWH within 120m of the Project Location can be found in Table 16 and is shown on Maps 8-1 to 8-5.

Rare Vegetation Communities and Specialized Wildlife Habitats	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
Rare Vegetation C	ommunities		I
Cliffs and Talus Slopes	None of the Cliff or Talus Slope Community Types outlined in Table 5 have been identified in or within 120m of the Project Location.	Νο	No
Sand Barren	None of the Sand Barren Community Types outlined in Table 5 have been identified in or within 120m of the Project Location.	No	No
Alvar	None of the Alvar Community Types outlined in Table 5 have been identified in or within 120m of the Project Location.	No	No
Old Growth Forest	No FO/SW Community Types outlined in Table 5 are dominated by trees species that are >140 years old in or within 120m of the Project Location.	No	No
Savannah	None of the Savannah Community Types outlined in Table 5 have been identified in or within 120m of the Project Location.	No	No
Tallgrass Prairie	None of the Tall-grass Prairie Community Types outlined in Table 5 have been identified in or within 120m of the Project Location.	No	No
Other Rare Vegetation Communities	Two provincially rare vegetation communities have been identified within 120m of the Project Location. Both of these communities consist of Bur Oak Mineral Deciduous Swamp (SWDM1-2), which is a provincially rare (S3) vegetation community. One of these communities is located within WOD-003, which is located within 120m of an access road. The other community is located within 120m of underground or overhead lines and in accordance with	Yes (1 habitat)	Yes
	Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH.		
Specialized Wildlif	e Habitats		
Waterfowl Nesting Area	One upland community that is greater than 120m wide has been identified adjacent (within 120m) to a wetland Community Type outlined in Table 5. This single candidate waterfowl nesting area is located within 120m of underground or overhead lines and an access road. In accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH.	No	Yes
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No stick nests in Forest (FO) or Treed Swamp (SW) communities that are immediately adjacent to rivers, lakes, ponds, or wetlands were identified in or within 120m of the Project Location. Despite no candidate habitat, a bald eagle nest was identified during the site investigation studies. Since this nest location does not meet the criteria for <i>Bald Eagle and Osprey Nesting, Foraging and Perching Habitat</i> , the significance of the nest will be addressed under Species of Conservation Concern.	No	No

Table 12. Summary of Rare Vegetation Communities and Specialized Wildlife Habitat Identified in or Within 120m of the Project Location

Rare Vegetation Communities and Specialized Wildlife Habitats	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
	A possible bald eagle nest record from within the vicinity of the Project was received from Bird Studies Canada (2017). As this possible record does not meet the criteria for <i>Bald Eagle and Osprey Nesting, Foraging and Perching Habitat</i> , the significance of the nest will be addressed under Species of Conservation Concern.		
Woodland Raptor Nesting Habitat	No Forest (FO) or Treed Swamp (SW) Community Types that are >30ha or contain >4ha of interior habitat have been identified in or within 120m of the Project Location.	Νο	No
Turtle Nesting Areas	No Mineral or Organic Shallow Marsh (MAS), Shallow Aquatic (SA), Open Bog (BOO), or Open Fen (FEO) Community Types have been identified in or within 120m of the Project Location.	No	No
Seeps and Springs	No seeps or springs were identified in or within 120m of the Project Location.	No	No
	Several Forest (FO) and Treed Swamp (SW) Community Types with wetlands, ponds or vernal pools that are >500m ² in size were identified within 120m of the Project Location.		
Amphibian Breeding Habitat (Woodland)	 Where site access could not be obtained, one candidate habitat has been assumed as the presence of vernal pooling could not be verified. One additional candidate habitat for amphibian breeding habitats (woodland) is located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH. 	Yes (1 habitat)	Yes
Amphibian Breeding Habitat (Wetlands)	No Swamp (SW), Marsh (MA), Fen (FE), Bog (BO), Open Water (OA), Shallow Aquatic (SA) Community Types that are greater than 500m ² or 25m in diameter, and located more than 120m from woodlands, have been identified in or within 120m of the Project Location.	Νο	No
Woodland Area- sensitive Bird Breeding Habitat	No Forest (FO) or Treed Swamp (SW) Community Types that are mature forest stands (>60 years old) or woodlots >30ha in size containing interior forest habitat (at least 200m from the forest edge) have been identified in or within 120m of the Project Location.	No	No

Table 12. Summary of Rare Vegetation Communities and Specialized Wildlife Habitat Identified in or Within 120m of the Project Location

6.3.3 Habitat for Species of Conservation Concern

The site investigation involved a thorough assessment of natural areas for habitat for species of conservation concern. A total of 5 types of candidate habitats for species of conservation concern were examined during the site investigation phase of the Project. Habitat for species of conservation concern in or within 120m of the Project Location are described in further detail and assessed as to whether they will be carried forward to the evaluation of significance phase of this Project in Table 13 below. Candidate habitats for species of conservation concern are further described in Table 15 and locations are provided on Maps 7-1 to 7-5. Generalized candidate SWH within 120m of the Project Location concern are forward to 8-5.

NRSI biologists have also reviewed the specific habitat considerations of several individual species of conservation concern that are known to occur in or within the vicinity of the Project Location. Individual species of conservation concern include all species that have been designated as a species of Special Concern according to the Species At Risk in Ontario (SARO) list, or have been given a provincial S-Rank of S1-S3, but have not been designated as either Endangered or Threatened within Ontario. Species At Risk (provincially Threatened or Endangered) will be addressed as part of a separate reporting process with the MNRF in accordance with Appendix B Requirements of the Endangered Species Act, 2007 of the Approval and Permitting Requirements Document for Renewable Energy Projects to address the Endangered Species Act (2007), as required. Many special concern and S1-S3 species and communities were identified during the records review as potentially being present in or within 120m of the Project Location. Habitat searches for these species were conducted as part of the site investigation for the Project. Habitat for these species of conservation concern in or within 120m of the Project Location are described in further detail and assessed as to whether they will be carried forward to the evaluation of significance phase of this project in Table 14 below. Candidate habitats for species of conservation concern are further described in Table 15 and locations are provided on Maps 7-1 to 7-5. Generalized candidate SWH within 120m of the Project Location can be found in Table 16 and is shown on Maps 8-1 to 8-5.

Table 13.	Summary	v of Habitats o	of Species o	f Conservation	Concern Identified i	in or Within	120m of the	Project Location
	Gammar	y or mashais c						

Habitat for Species of Conservation Concern	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)	Generalized Candidate Significant Wildlife Habitat (Y/N)
Marsh Bird Breeding Habitat	No wetlands with shallow water and emergent vegetation have been identified in or within 120m of the Project Location.	No	No
Open Country Bird Breeding Habitat	One candidate open country bird breeding habitat is located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH.	No	Yes
Shrub/Early Successional Bird Breeding Habitat	No shrub or thicket habitats >10ha that are not Class 1 or Class 2 agricultural lands, with no row-cropping or intensive hay or livestock pasturing in the last 5 years have been identified in or within 120m of the Project Location.	No	No
Terrestrial Crayfish	Several Deciduous Treed Swamp (SWD) Community Types have been identified within 120m of the Project Location. Where site access was obtained, NRSI biologists confirmed that one of these Community Types within 120m of the Project Location contains crayfish chimneys. Where site access could not be obtained, 6 candidate terrestrial crayfish habitats have been assumed, which are located within 120m of project components but outside of the Project Location boundaries. In accordance with Appendix D of the NHA guide (OMNR 2012), these 7 habitats will be considered generalized candidate SWH.	No	Yes
Special Concern and Rare Wildlife Species	All Special Concern or provincially rare (S1-S3, SH) plant and animal species element occurrences within a 1km or 10km grid, not otherwise considered by other SWH, have been addressed in detail, and outlined in Table 14.	Yes (see Table 14)	Yes

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
Birds		-	
Redhead (<i>Aythya Americana</i>)	No cattail or bulrush marshes have been identified in or within 120m of the Project Location.	No	No
Eastern Wood-Pewee (<i>Contopus virens</i>)	 Several Forest (FO), Woodland (WO), Deciduous Treed Swamp (SWD), and Coniferous and Mixed Plantation (TAGM1; TAGM2) Community Types have been identified within 120m of the Project Location. A total of 5 candidate habitats for eastern wood-pewee have been identified within 120m of a wind turbine. An additional 7 candidate habitats for eastern wood-pewee are located within 120m of underground or overhead lines and/or access roads. In accordance with Appendix D of the NHA guide (OMNR 2012), these habitats will be considered generalized candidate SWH. Eastern wood-pewee was also observed within 120m of the Project Location in habitats that are not suitable for this species. As these observations occurred in unsuitable habitats will not be carried forward to the EOS as candidate significant wildlife habitat or generalized candidate significant wildlife habitat. 	Yes (5 habitats)	Yes
Red-throated Loon (<i>Gavia stellata</i>)	No coastal tundra breeding habitat is present in or within 120m of the Project Location. No Great Lakes, marine coastal waters or inland lakes and rivers near the coast have been identified in or within 120m of the Project Location.	No	No
Bald Eagle (<i>Haliaeetus</i> <i>leucocephalus</i>)	No suitable habitat for Bald Eagle Nesting, Perching and Foraging habitats has been identified in or within 120m of the Project Location. Although no suitable habitat was identified, one bald eagle nest was observed outside the Project Location in habitat that is not considered candidate SWH. In accordance with the <i>Bald Eagle Habitat Management Guidelines</i> (OMNR 1987), an area of 800m from the nest has been included as essential habitat for bald eagles, and is included in the candidate significant wildlife habitat delineation.	Yes (2 habitats)	No
	infrastructure, it will be carried forward as candidate significant wildlife habitat for Bald		

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
	Eagle. A possible bald eagle nest record was received from Bird Studies Canada (2017). The presence and current status of this nest is unknown (active or inactive) and does not meet the suitable habitat criteria for Bald Eagle Nesting, Perching and Foraging habitat. This bald eagle nest record will be carried forward to the evaluation of significance phase and a site investigation will be completed as part of pre-construction commitments to determine if the nest is present and/or active.		
Little Gull (Hydrocoloeus minutus)	No marsh habitats have been identified in or within 120m of the Project Location.	No	No
Wood Thrush (<i>Hylocichla mustelina</i>)	 Several mature Forest (FO) and Deciduous Treed Swamp (SWD) Community Types have been identified within 120m of the Project Location. One candidate habitat for wood thrush has been identified within 120m of a wind turbine. An additional 2 candidate habitats for wood thrush are located within 120m of underground or overhead lines and/or access roads. In accordance with Appendix D of the NHA guide (OMNR 2012), these 2 habitats will be considered generalized candidate SWH. Wood thrush was also observed within the Project in habitats that are not suitable for this species. As these observations occurred in unsuitable habitats, the observations will be treated as incidental and these unsuitable habitats will not be carried forward to the EOS as candidate significant wildlife habitat or generalized candidate significant wildlife habitat. 	Yes (1 habitat)	Yes
Red-headed Woodpecker (<i>Melanerpes</i> <i>erythrocephalus</i>)	Several Forest (FO) and Swamp (SW) Community Types containing trees >40cm dbh have been identified within 120m of the Project Location. No candidate habitats for red-headed woodpecker have been identified as overlapping the Project Location**. A total of 12 candidate habitats for red-headed woodpecker are located within 120m of project components but outside of the Project Location boundaries. In accordance with Appendix D of the NHA guide (OMNR 2012), these habitats will be considered generalized candidate SWH.	Νο	Yes

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
White-eyed Vireo (<i>Vireo griseus</i>)	Several Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location. No dense, swampy thickets, hillsides or forests with blackberry or briar tangles have been identified within 120m of the Project Location.	No	No
Eastern Mole	Soils in and within 120m of the Project Location are clav-based: there are no deep, sandy		N
(Scalopus aquaticus)	or sandy-loam soils that have been identified.	NO	NO
Vegetation			
Slightly Hirsute Sedge (<i>Carex hirsutella</i>)	 Several dry-mesic and wet-mesic Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location. A total of 7 candidate habitats for slightly hirsute sedge have been identified within 120m of an access road. An additional 5 candidate habitats for slightly hirsute sedge are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH. 	Yes (7 habitats)	Yes
Squarrose Sedge (<i>Carex squarrosa</i>)	 Several mesic to wet-mesic Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location. A total of 7 candidate habitats for squarrose sedge have been identified within 120m of an access road. An additional 5 candidate habitats for squarrose sedge are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH. 	Yes (7 habitats)	Yes
Cattail Sedge (<i>Carex typhina</i>)	Several wet-mesic Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location. A total of 7 candidate habitats for cattail sedge have been identified within 120m of an access road. An additional 5 candidate habitats for cattail sedge are located within 120m of	Yes (7 habitats)	Yes

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
	underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH.		
	The records review phase of this project did not identify the presence of this species; however, site investigations conducted in 2016 confirmed the presence of this species within 120m of the Project Location. As such, habitat for this species has been considered in and within 120m of the Project Location.		
	This species prefers wet or wet-mesic deciduous forests ¹ , and can also be found on riverbanks and in rich floodplain forests ² . Identification of this species can be made year round using several distinct characteristics of the species (leaves, buds, twigs and/or nuts).		
Shellbark Hickory***	Several wet Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location.	Yes	Yes
(Carya laciniosa)	A total of 7 candidate habitats for Shellbark hickory have been identified within 120m of an access road.	(7 habitats)	
	An additional 5 candidate habitats for Shellbark hickory are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH.		
	Shellbark hickory was also observed within 120m of the Project Location in one habitat that is not suitable for this species, e.g. in a hedgerow. As this observation occurred in unsuitable habitat, the observation will be treated as incidental and the unsuitable habitat will not be carried forward to the EOS as candidate significant wildlife habitat or generalized candidate significant wildlife habitat.		
	Several wet Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location.		
Pumpkin Ash (<i>Fraxinus profunda</i>)	A total of 7 candidate habitats for pumpkin ash have been identified within 120m of an access road.	Yes (7 habitats)	Yes
	An additional 5 candidate habitats for pumpkin ash are located within 120m of		

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
	underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH.		
Plack Cum	Several Forest (FO) and Swamp (SW) Community Types have been identified within 120m of the Project Location.	Yes	Yes
Black Gum (Nyssa sylvatica)	A total of 7 candidate habitats for black gum have been identified within 120m of an access road. An additional 5 candidate habitats for black gum are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH.	(7 habitats)	
	Several Swamp (SW) Community Types have been identified within 120m of the Project Location.		
Halberd-leaved Smartweed (Persicaria arifolia)	A total of 6 candidate habitats for halberd-leaved smartweed have been identified within 120m of an access road.	Yes (6 habitats)	Yes
	An additional 3 candidate habitats for halberd-leaved smartweed are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 3 habitats will be considered generalized candidate SWH.	(e habiato)	
Shumard Oak*** (<i>Quercus shumardii</i>)	The records review phase of this project did not identify the presence of this species; however, site investigations conducted in 2016 identified oak species that may be Shumard oak within 120m of the Project Location. Species identification of Shumard oak is to be confirmed during the appropriate season to identify this species, which is during a time period when this species exhibits characteristics that allow for confident identification, preferably during the period of October to December when leaves and fully-developed acorns are present. As such, habitat for this species has been considered as potentially being present within 120m of the Project Location. (7 habitats)		Yes
	A total of 7 candidate habitats for Shumard oak have been identified within 120m of an access road.		

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
	An additional 5 candidate habitats for Shumard oak are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 5 habitats will be considered generalized candidate SWH.		
	Several meadow habitats and one Woodland (WO) Community Type were identified within 120m of the Project Location.		
Climbing Prairie Rose (<i>Rosa setigera</i>)	One candidate habitat for climbing prairie rose has been identified within 120m of an access road.	Yes (1 habitat)	Yes
	An additional 2 candidate habitats for climbing prairie rose are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 2 habitats will be considered generalized candidate SWH.	(Thashat)	
Insects			
	One Forest (FO) Community Type that contains hackberry has been identified within 120m of the Project Location.		
Hackberry Emperor (Asterocampa celtis)	No candidate habitats for hackberry emperor have been identified within 120m of a wind turbine.	No	Yes
	One candidate habitat for hackberry emperor is located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), this habitat will be considered generalized candidate SWH.		
	Three Meadow (ME) Community Types that contain nectar-producing wildflowers and that may contain milkweed have been identified within 120m of the Project Location. No candidate habitats for monarch have been identified within 120m of a wind turbine.		
Monarch (Danaus plexippus)	Three candidate habitats for monarch are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these habitats will be considered generalized candidate SWH.	No	Yes
	Monarchs were also observed within 120m of the Project Location in roadside habitats that are highly disturbed throughout the year. Due to the disturbed nature of these habitats, important life functions of this species cannot be carried out in these locations. The observations are considered to be incidental observations and these habitats will not		

Species	Rationale	Individually Delineated Candidate Significant Wildlife Habitat (Y/N)*	Generalized Candidate Significant Wildlife Habitat (Y/N)*
	be carried forward to the EOS as candidate significant wildlife habitat or generalized candidate significant wildlife habitat.		
Duke's Skipper (<i>Euphyes dukesi</i>)	Several Swamp (SW) Community Types have been identified within 120m of the Project Location, but none containing black gum. No black gum swamps or host plants for Duke's skipper, lake-bank sedge or hyaline- scaled sedge, were identified within 120m of the Project Location.	No	Νο
Common Sootywing (<i>Pholisora catullus</i>)	Several Meadow (ME) Community Types have been identified within 120m of the Project Location. Two candidate habitats for common sootywing are located within 120m of underground or overhead lines. In accordance with Appendix D of the NHA guide (OMNR 2012), these 2 habitats will be considered generalized candidate SWH.	No	Yes

* The presence of candidate or generalized habitats was identified when area searches conducted during the appropriate time of year confirmed the presence of this species within suitable habitat. Candidate or generalized habitats was assumed to be present when area searches were not conducted during the appropriate time of year or when site access was not granted, and therefore, the presence of this species could not be verified.

** On the mapping, several woodlands appear to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).

*** Species identified through site investigations and not identified through records review phase of the project.

Superscripts:

1: OMNR Significant Wildlife Habitat Technical Guide (2000)

2: Reznicek et al. (2011)

3: MNRF (2015c)

6.3.4 Animal Movement Corridors

The detailed site investigation confirmed the presence of several linear features, including treed fencerows and naturalized drains, in or within 120m of the Project Location, which have the potential to act as animal movement corridors. These features were examined during the site investigation and compared with the other appropriate wildlife habitats that may suggest the presence of animal movement corridors. NRSI biologists used the presence of any candidate wetland amphibian breeding habitats located in or within 120m of the Project Location, as outlined in Table 5, to identify amphibian movement corridors as per the criteria outlined in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015a). Since no candidate significant wetland amphibian breeding habitats were identified, no associated candidate animal movement corridors are being considered as part of this site investigation.

6.3.5 Summary of Wildlife Habitat

Based on the comprehensive site investigation conducted by NRSI biologists, a total of 103 individually delineated candidate SWH have been identified in and within 120m of the Project Location. In addition, several generalized candidate significant wildlife habitats have been identified within 120m of the Project Location, as per Appendix D of the NHA Guide for Renewable Energy Projects (OMNR 2012). A summary of the 103 individually delineated candidate SWH that will be carried forward to the evaluation of significance phase of this Project is provided in Table 15. This table includes the size, composition, attributes, functions, distances to Project Locations, and map references of each habitat. A summary of the generalized candidate SWH that are found within 120m of the Project Location is provided in Table 16.

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)										
Seasonal Concentrat	tion Areas																	
WST-001 Waterfowl Stopover and Staging Area (Terrestrial) ₃	41.73	OAGM1	Annual Row Crop Communities	May provide foraging and resting habitat for migrating waterfowl				WT – >120 AR – 21 CL – Overlapping CA – Overlapping SI – >120	5-1	Yes								
WST-002 Waterfowl Stopover and Staging Area (Terrestrial) ₃	80.29	OAGM1	Annual Row Crop Communities (soybeans)				WT – >120 AR – Overlapping CL – Overlapping CA – Overlapping SI – Overlapping	5-1	Yes									
WST-003 Waterfowl Stopover and Staging Area (Terrestrial) ₃	39.67	OAGM1	Annual Row Crop Communities (corn)			WT – >120 AR – 21 CL – Overlapping CA – Overlapping SI – >120	5-1	Yes										
WST-004 Waterfowl Stopover and Staging Area (Terrestrial) ₃	49.68	OAGM1	Annual Row Crop Communities (corn)		May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide foraging and resting habitat for	May provide Ann foraging and wate resting habitat for ag	Annual spring melt water and suitable agricultural field	WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-1	Yes
WST-005 Waterfowl Stopover and Staging Area (Terrestrial) ₃	54.00	OAGM1	Annual Row Crop Communities (soybeans)		with waste grains present	WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-1	Yes										
WST-006 Waterfowl Stopover and Staging Area (Terrestrial) ₃	41.25	OAGM1	Annual Row Crop Communities (corn)			WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-1	Yes										
WST-007 Waterfowl Stopover and Staging Area (Terrestrial) ₃	25.78	OAGM1	Annual Row Crop Communities			rop s		WT = >120 AR = >120 CL = Overlapping CA = Overlapping SI = >120	5-1 5-2	Yes								
WST-008 Waterfowl Stopover and Staging Area (Terrestrial) ₃	60.41	OAGM1	Annual Row Crop Communities (soybeans)			WT - >120 AR - >120 CL - Overlapping CA - Overlapping	5-2	Yes										

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WST-009 Waterfowl Stopover and Staging Area (Terrestrial) ₃	19.70	OAGM1	Annual Row Crop Communities (corn)			SI - >120 WT ->120 AR - >120 CL - Overlapping CA - Overlapping	5-2	Yes
WST-010 Waterfowl Stopover and Staging Area (Terrestrial) ₃	37.03	OAGM1	Annual Row Crop Communities (soybeans)			SI – >120 WT – Overlapping (T17) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-2 5-3	Yes
WST-011 Waterfowl Stopover and Staging Area (Terrestrial) ₃	33.30	OAGM1	Annual Row Crop Communities (soybeans)			WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-2 5-3	Yes
WST-012 Waterfowl Stopover and Staging Area (Terrestrial) ₃	35.87	OAGM1	Annual Row Crop Communities (corn)			WT – Overlapping (T2) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-3 5-4	Yes
WST-013 Waterfowl Stopover and Staging Area (Terrestrial) ₃	62.22	OAGM1	Annual Row Crop Communities (soybeans)			WT – Overlapping (T2) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-3 5-4	Yes
WST-014 Waterfowl Stopover and Staging Area (Terrestrial) ₃	40.48	OAGM1	Annual Row Crop Communities (soybeans)			WT – 60 (T7) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-3 5-4	Yes
WST-015 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.68	OAGM1	Annual Row Crop Communities (soybeans)			WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-3 5-4 5-5	Yes
WST-016 Waterfowl Stopover and Staging Area (Terrestrial) ₃	19.68	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping	5-4 5-5	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WST-017 Waterfowl Stopover and Staging Area (Terrestrial) ₃	9.69	OAGM1	Annual Row Crop Communities (soybeans)			SI = >120 $WT = >120$ $AR = >120$ $CL = Overlapping$ $CA = Overlapping$ $SI = >120$	5-4 5-5	Yes
WST-018 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.56	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-019 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.86	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-020 Waterfowl Stopover and Staging Area (Terrestrial) ₃	26.69	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – 19 CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-021 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.59	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-022 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.35	OAGM1	Annual Row Crop Communities (soybeans)			WT – 45 (T15) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-023 Waterfowl Stopover and Staging Area (Terrestrial) ₃	40.98	OAGM1	Annual Row Crop Communities (soybeans)			WT – Overlapping (T15) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-4 5-5	Yes
WST-024 Waterfowl Stopover and Staging Area (Terrestrial) ₃	40.55	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping	5-4	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
WST-025 Waterfowl Stopover and Staging Area (Terrestrial) ₃	75.54	OAGM1	Annual Row Crop Communities (soybeans)			SI – >120 WT – >120 AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	5-4	Yes
WST-026 Waterfowl Stopover and Staging Area (Terrestrial) ₃	18.58	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – 24 CL – Overlapping CA – Overlapping SI – >120	5-5	Yes
WST-027 Waterfowl Stopover and Staging Area (Terrestrial) ₃	27.65	OAGM1	Annual Row Crop Communities (soybeans)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping SI – >120	5-5	Yes
WST-028 Waterfowl Stopover and Staging Area (Terrestrial) ₃	52.94	OAGM1	Annual Row Crop Communities (corn)			WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	5-5	Yes
WST-029 Waterfowl Stopover and Staging Area (Terrestrial) ₃	33.21	OAGM1	Annual Row Crop Communities (corn)			WT – >120 AR – >120 CL – Overlapping CA – Overlapping SI – >120	5-5	Yes
BMA-001 Bat Maternity Colony ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp		No Site Access; Treated as Candidate SWH	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	5-2 5-3	Yes
BMA-002 Bat Maternity Colony ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	May provide roosting habitat and shelter for raising young	Potential for suitable number of snags/cavity trees (≥10snags/ha) to	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	5-4	Yes
BMA-003 Bat Maternity Colony ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		provide candidate habitat	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1*	5-5	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)								
						SI – >120										
CBT-001 Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) 3	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	May provide nesting and breeding habitat for colonial birds using trees or shrubs									No Site Access:	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	5-2 5-3 5-4	Yes
CBT-002 Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) 3	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		Treated as Candidate SWH Candidate deciduous swamp	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	5-4	Yes								
CBT-003 Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		311003	habitat	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	5-5	Yes							
LMS-001 Landbird Migratory Stopover Area ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	May provide suitable stopover habitat for a significant	Candidate woodland ≥2ha in	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	5-4	Yes								
LMS-002 Landbird Migratory Stopover Area ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	abundance and diversity of migratory landbirds	size and within 5km of Lake Erie	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	5-5	Yes								
Rare Vegetation Con	nmunities and	Specialized Wildlife	e Habitats	.												
ORV-001 Other Rare Vegetation Communities ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	May provide habitat for species of conservation concern and increase vegetation diversity	Presence of provincially rare (S3) Community Type	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	6-2 6-3	Yes								

Table 15.	Summary of Individually	Delineated Candidate Sig	nificant Wildlife Habitats in	n or Within 120m of the Project L	ocation
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Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
AWO-001 Amphibian Breeding Habitat (Woodland) 3	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	May be used for egg laying, breeding and feeding habitat	No Site Access; Treated as Candidate SWH Candidate deciduous forest habitat with the presence of seasonal flooding and/or vernal pools	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	6-2 6-3	Yes
Special Concern and	Rare Wildlife	e Species						
EWP-001 Eastern Wood- Pewee Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WI – 8 (117) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (1) 7-2 7-3	Yes
EWP-002 Eastern Wood- Pewee Habitat ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp			WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (1) 7-2 7-3	Yes
EWP-003 Eastern Wood- Pewee Habitat ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	May be used for breeding, nesting	Candidate deciduous forest	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (1) 7-4	Yes
EWP-004 Eastern Wood- Pewee Habitat ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	habitat	habitat	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (1) 7-5	Yes
		TAGM1	Coniferous Plantation					
EWP-005 Eastern Wood- Pewee Habitat ₂	10.01	TAGM3 SWDM3-3	Deciduous Plantation Swamp Maple Mineral Deciduous Swamp			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-H (1) 7-5	Yes
		FODM7	Fresh – Moist Lowland Deciduous Forest					
Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
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BAL-001 Bald Eagle Habitat ₃	201.03	OAGM1 CVR	Annual Row Crop Communities Residential	May be used by bald eagles for nesting, foraging and perching habitat.	Presence of a bald eagle nest	WT – Overlapping ¹ (T10)** AR – Overlapping** CL – Overlapping** CA – Overlapping** SI – >120**	SCC-F (12) 7-4 7-5	Yes
BAL-002 Bald Eagle Habitat ₃	Size, comp site investig	osition and attributes t ation is completed as commitments for t	o be determined when the part of the pre-construction his feature.	May be used by bald eagles for nesting, foraging and perching habitat.	Record of a possible bald eagle nest	WT - >1202AR - >1202CL - >1202CA - >1202SI - >1202	7-4	Yes
WTH-001 Wood Thrush Habitat₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	May be used for breeding, nesting or foraging habitat	Candidate moist, mature deciduous forest habitat	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (3) 7-2 7-3	Yes
SHS-001 Slightly Hirsute Sedge Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species	Candidate moist deciduous forest and swamp habitat	WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (5) 7-2 7-3	Yes
SHS-002 Slightly Hirsute Sedge Habitat ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp			WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (5) 7-2 7-3	Yes
SHS-003 Slightly Hirsute Sedge Habitat ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	SCC-C (5) 7-3 7-4	Yes
SHS-004 Slightly Hirsute Sedge Habitat ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (5) 7-4	Yes
SHS-005 Slightly Hirsute Sedge Habitat ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (5) 7-5	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
SHS-006 Slightly Hirsute Sedge Habitat ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (5) 7-5	Yes
SHS-007 Slightly Hirsute Sedge Habitat ₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (5) 7-4 7-5	Yes
SQS-001 Squarrose Sedge Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (6) 7-2 7-3	Yes
SQS-002 Squarrose Sedge Habitat ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species		WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (6) 7-2 7-3	Yes
SQS-003 Squarrose Sedge Habitat ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		Candidate moist	WT – >120 AR – 1 CL – 1 CA – 1 SI – >120	SCC-C (6) 7-3 7-4	Yes
SQS-004 Squarrose Sedge Habitat ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		and swamp habitat	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (6) 7-4	Yes
SQS-005 Squarrose Sedge Habitat₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (6) 7-5	Yes
SQS-006 Squarrose Sedge Habitat ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (6) 7-5	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
SQS-007 Squarrose Sedge Habitat ₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (6) 7-4 7-5	Yes
CSE-001 Cattail Sedge Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species		WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (7) 7-2 7-3	Yes
CSE-002 Cattail Sedge Habitat ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp			WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (7) 7-2 7-3	Yes
CSE-003 Cattail Sedge Habitat ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – >120 AR – 1 CL – 1 CA – 1 SI – >120	SCC-C (7) 7-3 7-4	Yes
CSE-004 Cattail Sedge Habitat₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		Candidate moist deciduous forest and swamp habitat	WT - 15 (T8) AR ->0.1* CL ->0.1* CA ->0.1* SI ->120 WT - 15 (T9) AR ->0.1* CL ->0.1* CA ->0.1* SI ->120	SCC-D (7) 7-4	Yes
CSE-005 Cattail Sedge Habitat ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp				SCC-G (7) 7-5	Yes
CSE-006 Cattail Sedge Habitat ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (7) 7-5	Yes
CSE-007 Cattail Sedge Habitat ₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (7) 7-4 7-5	Yes

Table 15.	Summary of Individually D	elineated Candidate Significa	nt Wildlife Habitats in or Withir	120m of the Project Location
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Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
SHH-001 Shellbark Hickory Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species		WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (8) 7-2 7-3	Yes
SHH-002 Shellbark Hickory Habitat₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp			WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (8) 7-2 7-3	Yes
SHH-003 Shellbark Hickory Habitat ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	SCC-C (8) 7-3 7-4	Yes
SHH-004 Shellbark Hickory Habitat ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		Candidate moist deciduous forest and swamp habitat	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (8) 7-4	Yes
SHH-005 Shellbark Hickory Habitat₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		WT – 1 AR – > CL – > CA – > SI – >1	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (8) 7-5	Yes
SHH-006 Shellbark Hickory Habitat ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (8) 7-5	Yes
SHH-007 Shellbark Hickory Habitat ₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (8) 7-4 7-5	Yes
PAS-001 Pumpkin Ash Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote	Candidate moist deciduous forest and swamp habitat.	WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (9) 7-2 7-3	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
PAS-002 Pumpkin Ash Habitat₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	optimal growth and fecundity of this species		WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (9) 7-2 7-3	Yes
PAS-003 Pumpkin Ash Habitat₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – >120 AR – 1 CL – 1 CA – 1 SI – >120	SCC-C (9) 7-3 7-4	Yes
PAS-004 Pumpkin Ash Habitat₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	_		WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (9) 7-4	Yes
PAS-005 Pumpkin Ash Habitat₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (9) 7-5	Yes
PAS-006 Pumpkin Ash Habitat₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (9) 7-5	Yes
PAS-007 Pumpkin Ash Habitat₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (9) 7-4 7-5	Yes
BGU-001 Black Gum Habitat₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties	Candidate moist	WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (13) 7-2 7-3	Yes
BGU-002 Black Gum Habitat₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	that promote optimal growth and fecundity of this species	and swamp habitat.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (13) 7-2 7-3	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
BGU-003 Black Gum Habitat₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	SCC-C (13) 7-3 7-4	Yes
BGU-004 Black Gum Habitat₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (13) 7-4	Yes
BGU-005 Black Gum Habitat₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (13) 7-5	Yes
BGU-006 Black Gum Habitat ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (13) 7-5	Yes
BGU-007 Black Gum Habitat₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest			WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (13) 7-4 7-5	Yes
HLS-001 Halberd-leaved Smartweed ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	Provides suitable		WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (14) 7-2 7-3	Yes
HLS-002 Halberd-leaved Smartweed ₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	 moisture regime, light levels, and soil properties that promote optimal growth 	Candidate moist deciduous forest and swamp habitat.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (14) 7-2 7-3	Yes
HLS-003 Halberd-leaved Smartweed ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	this species		WT – >120 AR – 1 CL – 1 CA – 1 SI – >120	SCC-C (14) 7-3 7-4	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
HLS-004 Halberd-leaved Smartweed ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (14) 7-4	Yes
HLS-005 Halberd-leaved Smartweed ₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (14) 7-5	Yes
HLS-006 Halberd-leaved Smartweed ₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (14) 7-5	Yes
SHO-001 Shumard Oak Habitat ₁	4.23	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-A (10) 7-2 7-3	Yes
SHO-002 Shumard Oak Habitat₃	5.99	SWDM1-2	Bur Oak Mineral Deciduous Swamp	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth		WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	SCC-B (10) 7-2 7-3	Yes
SHO-003 Shumard Oak Habitat ₁	2.61	SWDM3-3	Swamp Maple Mineral Deciduous Swamp		Candidate moist deciduous forest and swamp habitat	WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	SCC-C (10) 7-3 7-4	Yes
SHO-004 Shumard Oak Habitat ₃	4.54	SWDM3-3	Swamp Maple Mineral Deciduous Swamp	this species		WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-D (10) 7-4	Yes
SHO-005 Shumard Oak Habitat₃	2.84	SWDM3-3	Swamp Maple Mineral Deciduous Swamp			WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-G (10) 7-5	Yes

Feature ID	Size (ha)	Composition	Attributes	Functions	Criteria Rationale	Distance to Project Location (m)	Map(s)	EOS Required (Y/N)
SHO-006 Shumard Oak Habitat₂	5.73	SWDM3-3 FODM7	Swamp Maple Mineral Deciduous Swamp Fresh – Moist Lowland Deciduous Forest			WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	SCC-J (10) 7-5	Yes
SHO-007 Shumard Oak Habitat₁	1.02	FODM7-1	Fresh – Moist White Elm Lowland Deciduous Forest	-		WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	SCC-E (10) 7-4 7-5	Yes
CPR-001 Climbing Prairie Rose Habitat₃	31.45	MEMM3	Dry - Fresh Mixed Meadow	Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species	Candidate open moist meadow habitat	WT - >120 AR - 25 CL - >0.1* CA - >0.1* SI - >120	SCC-L (11) 7-5	Yes

* On the mapping, this candidate SWH appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the candidate SWH (>0.1m).

** This distance is measured from the edge of the 800m buffer surrounding the location of the bald eagle nest to infrastructure. The nest itself is located an additional 800m from infrastructure.

¹ The 800m buffer surrounding the nest overlaps with the air space occupied by the turbine blades of T10 and does not overlap the proposed construction disturbance area of the turbine.

² The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, which will be determined by the site investigation completed as part of pre-construction commitments for this feature.

Subscripts:

1: Entire feature delineated on site.

2: Feature delineated via a combination of methods: on site and property line/aerial photograph, where portions were not accessible.

3: Entire feature delineated from property line/ aerial photograph.

Legend

WT: Wind Turbine

AR: Access Road

CL: Collector Lines

CA: Construction Activity/Temporary Infrastructure/Laydown Area

SI: Supporting Infrastructure - Building/Substation/Meteorological Tower/Point of Interconnect

Table 16.	Summary of Generalized Candidate Significant Wildlife Habitat Identified Within 120)m of
the Project	ct Location	

Wildlife Habitat	Criteria Rationale
Seasonal Concentratio	n Areas
Raptor Wintering Areas	One meadow and forest/swamp habitat >20ha is located within 120m of underground lines. This habitat has been considered generalized candidate SWH.
Bat Maternity Colonies	Four Deciduous Forest (FOD) and Deciduous Treed Swamp (SWD) Community Types are located within 120m of underground or overhead lines and/or access roads. These communities have been considered generalized candidate SWH.
Turtle Wintering Areas	Four Open Water (OA) Community Types have been identified as candidate turtle wintering areas since they contain water that is deep enough not to freeze, and have soft mud substrates. As the Project Location does not overlap with these habitats, these communities have been considered generalized candidate SWH.
Colonially – Nesting Bird Breeding Habitat (Tree/Shrub)	Two Deciduous Treed Swamp (SWD) Community Types are located within 120m of underground or overhead lines. These communities have been considered generalized candidate SWH.
Colonially – Nesting Bird Breeding Habitat (Ground)	Two Meadow (ME) Community Types located in close proximity to a watercourse were identified within the Project. These features are located within 120m of underground or overhead lines and will be considered generalized SWH.
Migratory Butterfly Stopover Areas	One Meadow (ME) Community Type located adjacent to a forested habitat (FO, SW, WO) was identified within 120m of the Project Location. This feature is located within 120m of underground lines and will be considered generalized SWH.
Landbird Migratory Stopover Areas	Three Deciduous Forest (FOD) and Deciduous Swamp (SWD) Community Types >2ha and within 5km of Lake Erie are located within 120m of underground or overhead lines and/or access roads. These communities have been considered generalized candidate SWH.
Deer Winter Congregation Area	One deer winter congregation area (stratum 2) habitat has been identified within 120m of the Project Location. As the Project Location does not overlap with this habitat, it has been considered generalized candidate SWH.
Rare Vegetation Comm	unities and Specialized Wildlife Habitats
Other Rare Vegetation Communities	One provincially rare vegetation community, SWDM1-2, is located within 120m of underground or overhead lines. This community has been considered generalized candidate SWH.
Waterfowl Nesting Area	One meadow community wider than 120m and adjacent to a swamp is located within 120m of underground or overhead lines and an access road. This community has been considered generalized candidate SWH.
Amphibian Breeding Habitat (Woodland)	One Treed Swamp (SW) Community Type is located within 120m of underground or overhead lines. This habitat will be considered generalized candidate SWH.
Habitats for Species of	Conservation Concern
Open Country Bird Breeding Habitat	One meadow community greater than 30ha in is located within 120m of underground or overhead lines. This habitat will be considered generalized candidate SWH.
Terrestrial Crayfish	Seven Deciduous Treed Swamp (SWD) Community Types have been identified as candidate terrestrial crayfish habitats. As the Project Location does not overlap with these habitats, these communities have been considered as generalized candidate SWH.
Special Concern and R	are Wildlife Species
Eastern Wood-Pewee	Seven Forest (FO), Deciduous Treed Swamp (SWD), and Plantation (TAGM) Community Types are located within 120m of underground or overhead lines and/or access roads. These habitats will be considered generalized candidate SWH.
Wood Thrush	Two mature Deciduous Forest (FOD) and Deciduous Treed Swamp (SWD) Community Types are located within 120m of underground or overhead lines

Table 16. Summary of Generalized Candidate Significant Wildlife Habitat Identified Within 120m of the Project Location

Wildlife Habitat	Criteria Rationale
	and/or access roads. These habitats will be considered generalized candidate SWH.
Red-headed Woodpecker	Twelve Forest (FO) and Swamp (SW) Community Types containing trees >40cm dbh have been identified where development is not proposed within woodland edges. These habitats will be considered generalized candidate SWH.
Slightly Hirsute Sedge	Five dry-mesic and wet-mesic Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Squarrose Sedge	Five mesic to wet-mesic Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Cattail Sedge	Five mesic to wet-mesic Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Shellbark Hickory	Five wet or wet-mesic deciduous Forest (FOD) and Swamp (SWD) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Pumpkin Ash	Five wet Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Black Gum	Five suitable Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Halberd-leaved Smartweed	Three suitable Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Shumard Oak	Five suitable Forest (FO) and Swamp (SW) Community Types are located within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Climbing Prairie Rose	One Meadow (ME) and one Woodland (WO) Community Type is located within 120m of underground or overhead lines. This habitat will be considered generalized candidate SWH.
Hackberry Emperor	One Forest (FO) Community Type that contains hackberry is within 120m of underground or overhead lines. This habitat will be considered generalized candidate SWH.
Monarch	Three Meadow (ME) Community Types are within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.
Common Sootywing	Two Meadow (ME) Community Types are within 120m of underground or overhead lines. These habitats will be considered generalized candidate SWH.

7.0 Summary of Site Investigation

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive site investigation in and within 120m of the Project Location. The results of the investigation have been discussed in the preceding sections, and are summarized in Table 17. This summary includes woodlands, wetlands, and SWH, some of which will be carried forward to the evaluation of significance phase of this project, as noted in the table. Habitat composition, functions, and distances from each feature to project infrastructure can be found in Table 9 (woodlands), Table 10 (wetlands), and Table 15 (candidate significant wildlife habitat).

Table 18 outlines differences to the summary of the Records Review report, while Table 19 outlines differences to candidate SWH identified in the Records Review report.

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
Woodlands				
WOD-001	No	Yes	Yes	Yes
WOD-002	No	Yes	Yes	Yes
WOD-003	No	Yes	Yes	Yes
WOD-004	No	Yes	Yes	Yes
WOD-005	No	Yes	Yes	Yes
WOD-006	No	Yes	Yes	Yes
WOD-007	No	Yes	Yes	Yes
WOD-008	No	Yes	Yes	Yes
WOD-009	No	Yes	Yes	Yes
WOD-011	No	Yes	Yes	Yes
WOD-012	No	Yes	Yes	Yes
WOD-013	No	Yes	Yes	Yes
WOD-014	No	Yes	Yes	Yes
Wetlands				
WET-001	No	Yes	Yes	Yes
WET-002	No	Yes	Yes	Yes
WET-003	No	Yes	Yes	Yes
WET-004	No	Yes	Yes	Yes
WET-005	No	Yes	Yes	Yes
WET-006	No	Yes	Yes	Yes
WET-008	No	Yes	Yes	Yes
WET-009	No	Yes	Yes	Yes
Individually Delineated Candi	date Significant W	ildlife Habitats		
WST-001	Yes	Yes	Yes	Yes
WST-002	Yes	Yes	Yes	Yes
WST-003	Yes	Yes	Yes	Yes

Table 17. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

	Feature Within	Feature Within	Feature	Evaluation of
Feature ID	Project Location (Y/N)	Project	Individually Delineated* (Y/N)	Required
NACT OD A		Location (Y/N)	X	(Y/N)
	Yes	Yes	Yes	Yes
VS1-005	Yes	Yes	Yes	Yes
VS1-006	Yes	Yes	Yes	Yes
	Yes	Yes	Yes	Yes
VST-008	Yes	Yes	Yes	Vec
WST-009	Yes	Voc	Voc	Voc
WST-010	Vee	Vee	Vee	Voc
WST-012	Voc	Voc	Voc	Voc
WST-012	Ves	Ves	Ves	Ves
WST-013	Voc	Voc	Voc	Vos
	Ves	Ves	Ves	Ves
WST-016	Ves	Ves	Vas	Ves
WST-017	Ves	Ves	Ves	Ves
WST-018	Vec	Ves	Ves	Ves
WST-019	Ves	Ves	Ves	Vos
	Ves	Ves	Ves	Ves
WST-020	Voc	Voc	Voc	Ves
WST-021	Yes	Vee	Vee	Voc
WST-022	Yes	Vee	Vee	Vec
WST-023	Yes	Voc	Voc	Voc
	Yee	Yee	Vee	Vec
VST-025	Yes	Yee	Yes	Vec
VST-020	Yes	Yee	Yes	Vec
VST-027	Yes	Yes	Yes	Vec
VST-026	Yes	Yee	Yes	Vec
VS1-029	res	Yee	Yes	Vec
	No	Yes	Yes	Vec
BMA-002	NO	Yes	Yes	Yes
BIMA-003	NO No	Yes	Yes	Yee
CB1-001	INO No	Yes	Yes	Yee
CBT-002	NO No	Yes	Yes	Yee
CB1-003	INO NI-	Yes	Yes	Yes
LMS-001	NO	Yes	Yes	Yes
	INO No	Yes	Yes	Yee
	NO No	Yes	Yes	Yes
AWO-001	NO No	Yes	Yes	Yee
EWP-001	NO No	Yee	Yes	Vec
	INO No	res	res Vec	Vec
EWP-003	NO No	Yee	Yes	Yee
EWP-004	INU No	Yes	Yes	Yee
EWP-005	INO	Yes	Yes	Yee
BAL-001		res Deceible**	res	Tes
	PUSSIDIE""	PUSSIDIE""	res	Tes
	INO No	res	res	Tes
	INO No	res	res	Tes
	INO No	res	res	Tes
5H3-UU3	INO N I -	res	res Vc-	Tes
505-004	INO No	res	res	Tes
	INO No	res	res	Tes
212-006	INO	res	res	res

Table 17. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
SHS-007	No	Yes	Yes	Yes
SQS-001	No	Yes	Yes	Yes
SQS-002	No	Yes	Yes	Yes
SQS-003	No	Yes	Yes	Yes
SQS-004	No	Yes	Yes	Yes
SQS-005	No	Yes	Yes	Yes
SQS-006	No	Yes	Yes	Yes
SQS-007	No	Yes	Yes	Yes
CSE-001	No	Yes	Yes	Yes
CSE-002	No	Yes	Yes	Yes
CSE-003	No	Yes	Yes	Yes
CSE-004	No	Yes	Yes	Yes
CSE-005	No	Yes	Yes	Yes
CSE-006	No	Yes	Yes	Yes
CSE-007	No	Yes	Yes	Yes
SHH-001	No	Yes	Yes	Yes
SHH-002	No	Yes	Yes	Yes
SHH-003	No	Yes	Yes	Yes
SHH-004	No	Yes	Yes	Yes
SHH-005	No	Yes	Yes	Yes
SHH-006	No	Yes	Yes	Yes
SHH-007	No	Yes	Yes	Yes
PAS-001	No	Yes	Yes	Yes
PAS-002	No	Yes	Yes	Yes
PAS-003	No	Yes	Yes	Yes
PAS-004	No	Yes	Yes	Yes
PAS-005	No	Yes	Yes	Yes
PAS-006	No	Yes	Yes	Yes
PAS-007	No	Yes	Yes	Yes
BGU-001	No	Yes	Yes	Yes
BGU-002	No	Yes	Yes	Yes
BGU-003	No	Yes	Yes	Yes
BGU-004	No	Yes	Yes	Yes
BGU-005	No	Yes	Yes	Yes
BGU-006	No	Yes	Yes	Yes
BGU-007	No	Yes	Yes	Yes
HLS-001	No	Yes	Yes	Yes
HLS-002	No	Yes	Yes	Yes
HLS-003	No	Yes	Yes	Yes
HLS-004	No	Yes	Yes	Yes
HLS-005	No	Yes	Yes	Yes
HLS-006	No	Yes	Yes	Yes
SHO-001	No	Yes	Yes	Yes
SHO-002	No	Yes	Yes	Yes
SHO-003	No	Yes	Yes	Yes
SHO-004	No	Yes	Yes	Yes
SHO-005	No	Yes	Yes	Yes
SHO-006	No	Yes	Yes	Yes
SHO-007	No	Yes	Yes	Yes
CPR-001	No	Yes	Yes	Yes

Table 17. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
Generalized Candidate Signifi	cant Wildlife Habit	ats		
Raptor Wintering Areas	No	Yes	No	Yes
Bat Maternity Colonies	No	Yes	No	Yes
Turtle Wintering Areas	No	Yes	No	Yes
Colonially – Nesting Bird Breeding Habitat (Tree/Shrub)	No	Yes	No	Yes
Colonially – Nesting Bird Breeding Habitat (Ground)	No	Yes	No	Yes
Migratory Butterfly Stopover Area	No	Yes	No	Yes
Landbird Migratory Stopover Areas	No	Yes	No	Yes
Deer Winter Congregation Area	No	Yes	No	Yes
Other Rare Vegetation Communities	No	Yes	No	Yes
Waterfowl Nesting Area	No	Yes	No	Yes
Amphibian Breeding Habitat (Woodland)	No	Yes	No	Yes
Open Country Bird Breeding Habitat	No	Yes	No	Yes
Terrestrial Crayfish	No	Yes	No	Yes
Eastern Wood-Pewee	No	Yes	No	Yes
Wood Thrush	No	Yes	No	Yes
Red-headed Woodpecker	No	Yes	No	Yes
Slightly Hirsute Sedge	No	Yes	No	Yes
Squarrose Sedge	No	Yes	No	Yes
Cattail Sedge	No	Yes	No	Yes
Shellbark Hickory	No	Yes	No	Yes
Pumpkin Ash	No	Yes	No	Yes
Black Gum	No	Yes	No	Yes
Halberd-leaved Smartweed	No	Yes	No	Yes
Shumard Oak	No	Yes	No	Yes
Climbing Prairie Rose	No	Yes	No	Yes
Hackberry Emperor	No	Yes	No	Yes
Monarch	No	Yes	No	Yes
Common Sootywing	No	Yes	No	Yes

Table 17. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

*All woodlands and wetlands were individually delineated. Candidate SWH was individually delineated as per Table 19 of the NHA Guide (OMNR 2012). **The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to

**The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, which will be determined by the site investigation completed as part of pre-construction commitments for this feature.

Criteria	Result	Corrections Based on Site Investigation
1. In or within 120m of a Provincial Park or Conservation Reserve	The Project is not located in or within 120m of a Provincial Park or Conservation Reserve.	No changes.
2. In a Natural Feature	The results of this records review indicate the Project Location (i.e. disturbance area, collector lines, access roads, etc.) overlaps with 8 woodlands. Species associations and distances of these habitats to the Project Location will be confirmed during the site investigation phase of this NHA. The intention of the proposed Project Location is to avoid overlap with natural features, including woodlands, wherever possible.	The results of the site investigation have confirmed that the Project Location does not overlap with any woodlands or wetlands.
3. Within 50m of a Provincially Significant ANSI-Earth Science (ES)	No Provincially Significant ANSI-ES is located within 50m of the Project Location.	No changes.
4. Within 120m of a Natural Feature		
Provincially Significant ANSI- Life Science (LS)	No Provincially Significant ANSI-LS is located in or within 120m of the Project Location.	No changes.
Coastal Wetland	No coastal wetlands are located in or within 120m of the Project Location.	No changes.
Northern Wetland	No northern wetlands are located in or within 120m of the Project Location.	No changes.
Southern Wetland	No known southern wetlands are located in or within 120m of the Project Location. There are 23 woodlands in or within 120m of the Project Location, each of which has the potential to contain unevaluated wetland habitat. All of the potential wetland habitats in or within 120m of the Project Location will be further examined during the site investigation phase of this NHA.	A total of 8 wetlands are located within 120m of the Project Location.
Wildlife Habitat	 One possible bald eagle nest record may be present within the vicinity of the Project. This record will be carried forward to the Site Investigation phase of the project. A total of 23 woodlands are located in or within 120m of the Project Location and could provide several types of Significant Wildlife Habitat (SWH). Other natural features such as naturalized drainage ditches, hedgerows and meadows have been identified in or within 120m of the Project Location and could also provide SWH. These features will be surveyed to determine if they are used for animal movement corridors or provide habitat for species of conservation concern. All of these wildlife habitats will be examined during the site investigation phase and, if applicable, the evaluation of significance phase of this project to confirm presence of candidate significant wildlife habitat and determine the significance of each candidate significant wildlife habitat. 	A total of 103 candidate wildlife habitats have been identified in or within 120m of the Project Location. These wildlife habitats include seasonal concentration areas (37), rare vegetation communities and specialized wildlife habitats (2), and no habitats for species of conservation concern. A number of habitats for special concern and rare wildlife species have also been identified (64) in and within 120m of the Project Location.

Table 18. Summary of Corrections to the Records Review for the Project

Table 18.	Summary of	Corrections	to the Records	Review for	the Project
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Criteria	Result	Corrections Based on Site Investigation
Woodland	A total of 23 woodlands are located in or within 120m of the Project Location. Basemapping indicates these habitats range in size from 0.19- 15.95ha. These woodlands are expected to be primarily dominated by mid-aged to mature deciduous tree species; however, young woodlands, treed plantations, or occasional coniferous woodlands may also be present in or within 120m of the Project Location.	A total of 13 woodlands are located within 120m of the Project Location. Woodlands range in size from 0.74ha to 22.4ha.

Wildlife Habitat	Present Within 120m of Project Location	Present Within Project Location	Carried Forward to Site Investigation (Y/N)	Carried Forward to Evaluation of Significance (Y/N)	
Seasonal Concentration Areas					
Waterfowl Stopover and Staging Areas (Terrestrial)	Unknown	Unknown	Yes	Yes	
Waterfowl Stopover and Staging Areas (Aquatic)	Unknown	Unknown	Yes	No	
Shorebird Migratory Stopover Area	Unknown	Unknown	Yes	No	
Raptor Wintering Area	Unknown	Unknown	Yes	Generalized Candidate SWH only	
Bat Hibernacula	Unknown	Unknown	Yes	No	
Bat Maternity Colonies	Unknown	Unknown	Yes	Yes and generalized candidate SWH	
Bat Migratory Stopover Area	N/A	N/A	No	N/A	
Turtle Wintering Areas	Unknown	Unknown	Yes	Generalized candidate SWH only	
Reptile Hibernaculum	Unknown	Unknown	Yes	No	
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	Unknown	Unknown	Yes	No	
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	Unknown	Unknown	Yes	Yes and Generalized Candidate SWH	
Colonially – Nesting Bird Breeding Habitat (Ground)	Unknown	Unknown	Yes	Generalized Candidate SWH only	
Migratory Butterfly Stopover Areas	Unknown	Unknown	Yes	Generalized Candidate SWH only	
Landbird Migratory Stopover Areas	Unknown	Unknown	Yes	Yes and Generalized Candidate SWH	
Deer Winter Congregation Areas	Yes	Yes	Yes	Generalized Candidate SWH only	
Rare Vegetation Communities					
Cliffs and Talus Slopes	Unknown	Unknown	Yes	No	
Sand Barren	Unknown	Unknown	Yes	No	
Alvar	Unknown	Unknown	Yes	No	
Old Growth Forest	Unknown	Unknown	Yes	NO	
	Unknown	Unknown	Yes	No	
Other Rare Vegetation Communities	Unknown	Unknown	Yes	Yes and Generalized Candidate SWH	
Specialized Wildlife Habitats					
Waterfowl Nesting Area	Unknown	Unknown	Yes	Generalized Candidate SWH only	
Bald Eagle Nesting, Foraging and Perching Habitat	Possible*	Possible*	Yes	No	
Woodland Raptor Nesting Habitat	Unknown	Unknown	Yes	No	
Turtle Nesting Areas	Unknown	Unknown	Yes	No	
Seeps and Springs	Unknown	Unknown	Yes	No	

 Table 19. Summary of Corrections to the Wildlife Habitats Records Review for the Project

Table 19.	Summary of	Corrections to th	e Wildlife Habitats	Records Review	for the Project
-----------	------------	-------------------	---------------------	-----------------------	-----------------

Wildlife Habitat	Present Within 120m of Project Location	Present Within Project Location	Carried Forward to Site Investigation (Y/N)	Carried Forward to Evaluation of Significance (Y/N)
Amphibian Breeding Habitat (Woodland)	Unknown	Unknown	Yes	Yes and Generalized Candidate SWH
Amphibian Breeding Habitat (Wetlands)	Unknown	Unknown	Yes	No
Woodland Area-Sensitive Bird Breeding Habitat	Unknown	Unknown	Yes	No
Habitat for Species of Conserv	ation Concern			
Marsh Bird Breeding Habitat	Unknown	Unknown	Yes	No
Open Country Bird Breeding Habitat	Unknown	Unknown	Yes	Generalized Candidate SWH only
Shrub/Early Successional Bird Breeding Habitat	Unknown	Unknown	Yes	No
Terrestrial Crayfish	Unknown	Unknown	Yes	Generalized Candidate SWH only
Special Concern and Rare Wildlife Species	Possible	Possible	Yes	Yes and Generalized Candidate SWH
Animal Movement Corridors				
Amphibian Movement Corridors	Unknown	Unknown	Yes	No

*The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, as determined in the Site Investigation and Evaluation of Significance phases of the Project.

8.0 References

Publications

- Gleason, H.A., and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada (2nd ed). The New York Botanical Garden Press: Bronx, NY.
- Lee, H.T. 2008. Southern Ontario Ecological Land Classification: Vegetation Type List. Southern Information Management and Spatial Analysis Section, OMNR.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Ministry of Natural Resources and Forestry (MNRF). 2015a. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. January 2015.
- Oldham, M.J. 1993. Distribution and Status of the Vascular Plants of Southwestern Ontario. Ontario Ministry of Natural Resources, Aylmer. 150 pp.
- Ontario Agricultural College. 1930. County of Kent Soil Map: Soil Survey Report No. 3. Department of Chemistry, Ontario Agricultural College. The Experimental Farms Branch, Ottawa. [map].
- Ontario Ministry of Natural Resources (OMNR). 2012. Natural Heritage Assessment Guide for Renewable Energy Projects. November 2012.
- Ontario Ministry of Natural Resources (OMNR). 2011. Bat and Bat Habitats: Guidelines for Wind Power Projects. July 2011.
- Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat: Technical Guide. October 2000.

Internet Sources

- Barr, Jack F., Christine Eberl and Judith W. Mcintyre. 2000. Red-throated Loon (Gavia stellata), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Available at: http://bna.birds.cornell.edu/bna/species/513 (Accessed September 15, 2016).
- Butterflies and Moths of North America. 2014. Habitat Descriptions (Various Species). Available at: http://www.butterfliesandmoths.org/species (Accessed October 3, 2016).
- Cornell Lab of Ornithology. 2016. All About Birds (Various Species). Available at: http://www.allaboutbirds.org/guide (Accessed October 4, 2016).

- Hothem, R.L., B.E. Brussee, and W.E. Davis, Jr. 2010. Black-crowned Night-Heron (Nycticorax nycticorax). The Birds of North America Online (A. Poole, Ed.). Ithaca, NY: Cornell Lab of Ornithology. Available at: http://bna.birds.cornell.edu/bna/species/074 (Accessed October 4, 2016).
- Ministry of Natural Resources and Forestry (MNRF). 2016a. Land Information Ontario (LIO). Available at: https://www.ontario.ca/page/land-information-ontario (Accessed September 15, 2016).
- Ministry of Natural Resources and Forestry (MNRF). 2016b. Natural Heritage Information Centre: Species of conservation concern [Data file]. Available at: https://www.ontario.ca/page/get-natural-heritage-information (Accessed June 22, 2017).
- Ministry of Natural Resources and Forestry (MNRF). 2015b. Climbing Prairie Rose. Available at: https://www.ontario.ca/page/climbing-prairie-rose (Accessed September 15, 2016).
- Ministry of Natural Resources and Forestry (MNRF). 2015c. Shumard Oak. Available at: https://www.ontario.ca/page/shumard-oak-species-risk (Accessed October 6, 2016).
- Reznicek, A.A., E.G. Voss, and B.S. Walters. 2011. Michigan Flora Online. University of Michigan, February 2011. Available at: http://www.michiganflora.net/home.aspx (Accessed October 6, 2016).
- Woodin, M.C. and T.C. Michot. 2002. Redhead (Aythya Americana). The Birds of North America Online (A. Poole, Ed.). Ithaca, NY: Cornell Lab of Ornithology. Available at: http://bna.birds.cornell.edu/bna/species/695 (Accessed October 4, 2016).

Personal Communication

Bird Studies Canada, pers. comm. 2017. Email correspondence to C. Teat. Romney Wind Energy Centre; Bald Eagle Nest Locations. June 26, 2017.

Map 1
Project Location and Natural Features



Map 2 Key Map



Maps 3-1 to 3-5 Vegetation Communities



_Map3-1toMap3-5_ELC_19K_2017_06_14_KEF.mxd




y_WEC\NRSI_1736_SI_Map3-1toMap3-5_ELC_19K_2017_06_14_KEF.mxd





ey_WEC\NRSI_1736_SI_Map3-1toMap3-5_ELC_19K_2017_06_14_KEF.mxd








ap3-5_ELC_19K_2017_06_14_KEF.mxd



Maps 4-1 to 4-5 Woodlands and Wetlands



377000 378000 Path: X:\1736_Romney_WEC\NRSI_1736_SI_Map4-1toMap4-5_WOD_WET_19K_2017_06_14_KEF.mxd 380000











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Queen's Printer Ontario. Imagery: DNV G	L (2016) & First Base Solutions (201
Project:1736	NAD83 - UTM Zone 17 Size: 11x17"

Project:1736 Date: June 15, 2017	

1,200 Meters

1:18,500





1,200 Meters




Maps 5-1 to 5-5 Candidate Seasonal Concentration Areas



380000

381000



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380000

381000



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Project:1736 Date: June 15, 2017

400

800

1,200 Meters

NAD83 - UTM Zone 17 Size: 11x17" **1:18,500**









Maps 6-1 to 6-5 Candidate Rare Vegetation Communities and Specialized Wildlife Habitats



377000 378000 Path: X:\1736 Romney WEC\NRSI 1736 SI Map6-1toMap6-5 CandidateSpecializedWH 19K 2017 06 15 KEF.m: 380000

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*The distances from the project location to candidate significant wildlife habitats are outlined within the body of the report in Table 15.

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Project:1736 Date: June 15, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500	N
0 400 L I I	800 1,200 Meters	



WH_19K_2017_06_15_KEF.mxd





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381000



*The distances from the project location to candidate significant wildlife habitats are outlined within the body of the report in Table 15.

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Project:1736 Date: June 15, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500	ĥ
	800 1,200 Meters	



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1,200 Meters





Maps 7-1 to 7-6 Candidate Habitats for Species of Conservation Concern





*The distances from the project location to candidate significant wildlife habitats are outlined within the body of the report in Table 15.

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Project:1736 Date: June 29, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500	Ņ
0 400 L I I	800 1,200 Meters	







377000 378000 Path: X:\1736_Romney_WEC\NRSI_1736_SI_Map7-5_Candidate_SCC_19K_2017_06_29_KEF.mxd


*The distances from the project location to candidate significant wildlife habitats are outlined within the body of the report in Table 15.

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Project:1736 Date: June 29, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500
0 400 L I I	800 1,200 Meters



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383000

386000



*The distances from the project location to candidate significant wildlife habitats are outlined within the body of the report in Table 15.

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Project1736 Date: June 29, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500	, N
0 400	800 1,200 Meters	





Species of Conservation Concern Habitat



SCC-A

Eastern Wood Pewee: EWP-001 Slightly Hirsute Sedge: SHS-001 Squarrose Sedge: SQS-001 Cattail Sedge: CSE-001 Shellbark Hickory: SHH-001 Pumpkin Ash: PAS-001 Shumard Oak: SHO-001 Black Gum: BGU-001 Halberd-leaved Smartweed: HLS-001

SCC-B

Eastern Wood Pewee: EWP-002 Wood Thursh: WTH-001 Slightly Hirsute Sedge: SHS-002 Squarrose Sedge: SQS-002 Cattail Sedge: CSE-002 Shellbark Hickory: SHH-002 Pumpkin Ash: PAS-002 Shumard Oak: SHO-002 Black Gum: BGU-002 Halberd-leaved Smartweed: HLS-002

SCC-C

Slightly Hirsute Sedge: SHS-003 Squarrose Sedge: SQS-003 Cattail Sedge: CSE-003 Shellbark Hickory: SHH-003 Pumpkin Ash: PAS-003 Shumard Oak: SHO-003 Black Gum: BGU-003 Halberd-leaved Smartweed: HLS-003

SCC-D

Eastern Wood Pewee: Slightly Hirsute Sedge: Squarrose Sedge: SQS-Cattail Sedge: CSE-004 Shellbark Hickory: SHH Pumpkin Ash: PAS-004 Shumard Oak: SHO-004 Black Gum: BGU-004 Halberd-leaved Smarty

SCC-F

Bald Eagle: BAL-001

Eastern Wood Pewee: EWP-004 Slightly Hirsute Sedge: SHS-005 Squarrose Sedge: SQS-005 Cattail Sedge: CSE-005 Shellbark Hickory: SHH-005 Pumpkin Ash: PAS-005 Shumard Oak: SHO-005 Black Gum: BGU-005 Halberd-leaved Smartweed: HLS-005

SCC-H

Eastern Wood Pewee: EWP-005

SCC-J

Slightly Hirsute Sedge: SHS-006 Squarrose Sedge: SQS-006 Cattail Sedge: CSE-006 Shellbark Hickory: SHH-006 Pumpkin Ash: PAS-006 Shumard Oak: SHO-006 Black Gum: BGU-006 Halberd-leaved Smartweed: HLS-006 Map 7 - 6

Romney WEC

Project: 1736

Date: June 23, 2017

NATURAL RESOURCE SOLUTIONS INC. Aquatic, Terrestrial and Wetland Biologists

SCC-E
Slightly Hirsute Sedge: SHS-007
Squarrose Sedge: SQS-007
Cattail Sedge: CSE-007
Shellbark Hickory: SHH-007
Pumpkin Ash: PAS-007
Shumard Oak: SHO-007
Black Gum: BGU-007
SCC-L
SCC-L Climbing Prairie Rose: CPR-001
SCC-L Climbing Prairie Rose: CPR-001

Maps 8-1 to 8-5 Generalized Candidate Significant Wildlife Habitat







1,200 Meters



at_19K_2017_06_15_KEF.mxd









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Project:1736 Date: June 15, 2017	NAD83 - UTM Zone 17 Size: 11x17" 1:18,500			

1,200 Meters









abitat_19K_2017_06_15_KEF.mxd





Appendix I Site Investigation Field Notes



NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: Romney WF (#17566	1
Polygon: PIN 750810055	
UTM:	
Date: May 11/16	Time: 0820 - 0935
Surveyor(s): AMD, CEP	10 - 10 1979 - 55
Weather: 120(, wind 3-4/E	100% CC

Page __ of

Community Classification

v	egetation Type:	Suamo	Maple	Mineral	DECIDUULS Swamp	SWDM3-3
	Inclusion:		4		,	
	Complex:					

Polygon Description

Syst	tern	Su	Ibstrate	То	po Feature	Г		Co	mmunity			
1	Terrestrial	Т	Organic	Γ	Lacustrine		Talus		Lake	Т	Barren	
XV	Vetland	X	Mineral Soil	Γ	Riverine		Crevice/Cave	F	Pond		Meadow	
T.	quatic		Parent Min	V	Bottomiand		Aivar		River		Prairie	
			Acidic Bedrock	h	Terrace		Rockland	Г	Stream		Thicket	
Hist	ory		Basic Bedrock	Γ	Valley Slope		Beach/Bar	F	Marsh		Savannah	
X	Natural		Carb Bedrock	F	Tableland	Γ	Sand Dune	X	Swamp		Woodland	
C	Cultural				Roll_Upland		Bluff	F	Fen		Forest	
-		Si	te	Γ	Cliff		Í	Γ	Bog		Plantation	
Cov	er		Open Water	PI	ant Form					Т		
0	Open		Shallow Water	Г	Plankton		Forb		Coniferous	٦.		
9	Shrub	X	Surficial Dep	Γ	Submerged		Lichen		Mixed	L	D	mineral folius =
X	freed		Bedrock	Г	Floating-Lvd		Bryophyte			Е	٢.	daulie
				Г	Graminoid	X	Deciduous					

Stand Description

	Layer	нт	Cover	Species
•	Super-canopy			
1	Canopy	2	4	freemansmaple>bur o. K > wh. elm>shaq. hickory
2	Sub-canopy	3	4	basswood > whe elm > shaq. Lickory > green ash
3	Understorey	5	4	choke cherry - gray bogwood - green ash
4	Groundcover	6-7	4	Siniculasp > spring avens > woodbind

 HT Codes:
 1:>25m
 2:25-10m
 3:10-2m
 4:2-1m
 5
 -0.5m
 6:05-0.2m
 7:<02m</th>

 Cover Codes:
 0:none
 1:0-10%
 2:10-25
 3:25-60%
 4:>60%

Community Age	Pioneer	1	Young	X	Mid-age		Mature		Old Growth
Abundance Codes:		N:	None 🔨	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs		0	< 10	0	10 - 24	0	25 - 50	K	> 50
Snags		R	< 10	0	10 - 24	0	25 - 50	R	> 50
Size Class Analysis		0	< 10	A	10 - 24	A	25 - 50	0	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

 Site:

 Polygon:

 UTM:

 Date:

 Surveyor(s):

 Weather:

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

ų,	Abundance Codes:	R=ra	are C)=oçc	asiona	A=abund	ant	D=dominant				_		
	Species	ecies Layer Sampl		Sample	Ľ	Species		La	уег		Sample			
	openice	1	2	3	4	Campie		optoite	1	2	3	4	Campie	
	basswood	R	0	0			-	Carex radiata				A		
	Shad hickory	0	0	0			-	spring beauty (vice		1		A		
ĺ	whill 18	0	A	0				jack rul off				0		
	hur vak	0	R					trait life				0		
	cloke cherry	1		A	0			Con-blue Violet			+	0		
	Freemans mobile	A	0	0	1			Corex blanda				0		, in
	green ash !!	R	0	0]_	Spring overs				A		Locally 16
	Baison ivy (ini)			8.1	0		-	Samicula sp.				A		,
	gray dogwood)			A	0			dowing vel, violet				R		
	nannyberry			R	R			cardon flower				R		
	woodbing				A			wild Strauberry				0		
İ	Ribes Cynosbati		-		0		1	Calium opping				K		
I	Vira creeper			0				Rangonalusarbert				R		
	malfiflora are		0	0			1	enchat night hade				0		
	orickly ash			6	R		1	wild aeranium				2		
	Ribes amer.			0	0		1	Glyceria Striata			-	0		
	red raspberry	ľ.			6			curly dock				0		
Ì	H. rasoberm				0		1	Carty rivita				R		
	shunard oak	R	R					Little nighthall				0		
İ			3.					Cacex radiada						
			120	2-			1							
			1	- Star			1							
		1		3					r.					
l		I	1		1				_	_	1			

Wildlife and Other Notes

2

-photos 1050 - 1054	
- feature used for hunting	
-good amount of dead to leverash especially 2 SE corner	
* exists floughout feature, ID to be confirmed	

-BLTA HOWR SOFF TRSW. cothing HOFE, HAWD

Page ____of___

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

1

Site: Rommey WF (#17	366)
Polygon:	
UTM:	
Date: May 11/16	Time:
Surveyor(s):	
Weather:	

Ve	getation Type:	
	Inclusion:	
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community			
History Natural	Organic Mineral Soil Patent Min Acidic Bedrock Basic Bedrock Carb, Bedrock	Lacustrine Riverine Bottomland Terrace Valley Slope Tableland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune	Lake Pond River Stream Marsh Swamp	Barren Meadow Prairie Thicket Savannah Woodland		
Cultural	Site Onen Water	Roll Upland	Bluff	Fen Bog	Forest Plantation		
Open Shrub Treed	Shallow Water Surficial Dep. Bedrock	Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Coniferous Mixed			

Stand Description

	Layer	HT Cover	Species
	Super-canopy		
1	Canopy		
2	Sub-canopy		
3	Understorey		
4	Groundcover		

 HT Codes:
 1. >25m
 2: 25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 0.5m
 6: 0.5 - 0.2m
 7: <0.2m</th>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Community Age	Pioneer		Young		Mid-age		Mature		Old Growth
Abundance Codes		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs	_		< 10		10 - 24		25 - 50		> 50
Snags		1	< 10		10 - 24		25 - 50		> 50
Size Class Analysi	5	_	< 10		10 - 24		25 - 50	12	> 50

Modified ELC Community Description

Page __ of __

Soils		1 2	3				
Position:		5		Polygon:	OCLOSE	-	
spect:		NIA		PIN 15	081005	5	
6		0					
уре:		S	-	Tree Tally			
Class:		A		Species	Tally 1	Tally 2	Tally 3
	_						
Strata:	Texture	CL					
	Depth	0-13					
Strata:	Texture	SIC					
	Depth	14 - 44					
Strata:	Texture						
	Depth						
Strata:	Texture						
	Depth						
Effective T	exture	SiC					
Surface St	oniness						
Surface Ro	ockiness				1		
epth to:							
	Mottles	14					
	Gley						
	Bedrock	-					
	Water table	-					
	Carbonates	-			_	7	
epth of C	rganics				_	\rightarrow	
Pore Size	Disc #1				_	\rightarrow	
Pore Size I	Disc #2				_		
Pore Size I	Disc #3			Total:		1	
Moisture R	egime	6		Basal Area	_		
				Snags			

Aquatic, Terrestrial and Wetland Biology	SOLUTIONS INC.	(Office use only) Commu WET-001	unity ID:	SI
Wetland Vegetation Communit	ine			
Project Name: Ramandar VyF	Project #: \	1266	Parcel #: 7508	100 55
Observer(s): AMD CEP		E	ELC Code: SVDI	M3-3
	(24h): 920-935			19 -
Wetland #: WET-op / Wea	ther: Precipitation: Nove	Temp (° C): 1 Z	-	
Veg Community #: 5) Wind	Speed & Direction: 3-4/ 6	Cloud %: 100	0	
Wetland Type: Sydem Site	Type: P Dominant For	rm: h		
Permanent Open Water: More %	Check one: O central are	a O spread out in ponds		
Photos: 1050-1054				
Forms (>25% absolute cover)	Dominant Species (give %	relative cover)	Seattle States Sys	Contraction of the second
h (%: 70) Freeman's maple (40	70) > while (30%)	> shag hickory (159	()> bur (6ak (15%)
c (%:)				
옹 dc (%:)				and the second second
^{⊼i} dh (%:)				
ds (%:)				
ts)(%:40) which (40%) > bass	vood (2691) > Shaqil	-ictory (2090)?	green ath (2-091
ls (%:)			(50) 1	
gc)(%:50) Sanicula sp. (40%)	· Virg. Spring beauty (30%) > spring and	ms(some)	
ne (%:)	, , , ,			
be (%:)				
re (%:)				
<pre>% ff (%:)</pre>				
ℜ <mark>f(%:)</mark>				
su (%:)				
m (<u>%:</u>)				
			(-)	1.1/0
Soil type: 3 C Mineral Soil type: Codey Loop Seand Statistic (or an	anic Depth of organics:	Cm Organic Type: F	(M) H Depth t	o bedrock: <i>M/</i> /+ cm
Organic= ≥40cm humic or mesic over mineral; ≥	260cm fibric over mineral; ≥10cm orç	janic over bedrock		
Rare Species (Local, Regional,	Wildlife Notes:			
Provincial):				
-She Jack (bartin	retur to incident	al wildlife observ	(A (16 ()	
Shum and Succession				-
1D) - exists throughout				
Wally Somificant Specie				
Spring toreway (P2)				
Olator (773				
SAR observations must also include a su				
Forms: h=deciduous trees (>6m); c=coniferous	trees (>6m); dh, dc, ds=dead trees.	/shrubs; ts= tall shrubs (1-6m); Is= lo	ow shrubs (<1m); gc =g	round cover; ne =narrow
emergents; be =broad emergents; re =robust em	ergents; ff=free-floating plants; f=floa	ating plants; su =submerged plants	; m =mosses; u =unve	getated water <2m deep on
Wetland Type; S=swamp: M=marsh: W=onen w	vater marsh; B=boo: F=fen			
Site Type: L=lacustrine (lake at least 8ha); P=p	alustrine; R=riverine; IS=isolated			

Features to look for in the field:
O active beaver lodges/dams No A
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
shumand oak (to confirm ID) - exists throughout flature
Wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
retur to incidental wildlife observations
O plant species (wild rice, cranberries)
None
○ location of and directions of water flow at all inflows and outflows (mark whether permanent → or intermittent> where for field map
ິ⊖ human related disturbances (fill, docks, houses, etc) Noພ
evidence of recreational activities (nature appreciation, fishing, hunting)
Yes-huntley
O locations of seeps or springs, lagg
Nore
O iron precipitates, marl deposits
None
○ winter cover for wildlife
Nore
 ungulate summer habitat, moose aquatic feeding habitat
725 NO
Suitability for waterfowl breeding, staging, moulting
limited - no permanent mater
Surrounding topography (flat, rolling, hilly, steep)
 Surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; O utility corridor; Ø dec. forest; O recent cutover or clearcut (<5yr); O conif. forest; O mixed forest; Ø crops; Ø row crop; O abandoned pit/quarry; O pasture; O ravine; O terrain appreciatbly undulating, hilly or with ravines; Ø fence rows; O fence row with deep cover or shelterbelt; O open lake or deep river; Ø creek floodplain; O rock outcrop
⊖ fish habitat present: Yes (No) (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
O vernal pools NCS - although likely not suitable for an ohibian breeding
O invasive species (plant, aquatic)
Norl
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to provide fisheries habitat except during high water conditions)
Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water
Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland
Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation
Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.

Wildlife Habitat Field Data Collection

Windine Habitat Field Data Collection	n							G	NATHRAL RESOURCE SOLUTIONS INC.		
Project Name: Ronnaywic			Project #: 19366	Are	a and/or Polygon	ID: 76081	10055	5	Aquatic Terrestrial and Wetland Biologists		
Date: May 11/16	Start	Time:	e: 9:34 End Time: 9:50 Observers: DWD/EP						- Page 1 of 2		
Weather Conditions: 12° (wind 3/ E, 10	1070	CC		1.00							
Indicate whether or not the following habitat feature	es are	preser	t within the polygon. If Yes t	o any, fill in Page 2.	. Incidental Wildlif	e Observations of	on Page 2.				
Habitat Features	Pres	sent				Informatio	on to Record on Page 2	the state of	and the second second second second second second second second second second second second second second second		
Water Spring Flooded Field Vernal Pool Pond Shallow Marsh (MAS) or Open Water	Yes	NO X XX	Applicable to All: Draw extent of all water if no Dimensions (length, width, a Vegetation species, woody o Presence of fish	t indicated through nd depth). Jebris/basking logs	ELC,		Longevity of site (if known, o Sources of disturbance, cur Evidence of wildlife use incl	or estimate) rent use, origin (natur uding waterfowl, turtle	al or anthropogenic). s, amphibians		
Swamp	V.	1	All Swamps: Always searc	a for Heron Nest Bo	owis. Record if ac	ive (April-June d	oniy) - Evidence includes eg	g snells, guano, dead	young, map colony/nests if found.		
Fields Non-rotational Hay or Weakly Grazed Pasture Meadow Thicket, Woodland, Hydro Corridor	Yes	No X X	Applicable to All: Height of vegetation Evidence of small mammals	Size Fre Loc	e of site equency and source cation and abundar	e of disturbance ace of raptor per	Abundance of necta Adjacency to forest ches (scattered trees, snag	ar-producing plants (e and forest size s, fenceposts)	g, goldenrods and asters)		
Substrate and Topography	Voc	No									
Substate Fine/Loose Gravel Banks, Steep Slopes, Sand Piles Cliffs Karst Cave Natural Rock Piles / Talus Slopes Exposed Unvegetated Lake/River/Wetland Edge Seeps or Springs Islands or Peninsulas in Open Water		X X X X X X X X X X X X X X X X X X X	Evidence of use (turtles in or Count swallow nest holes an Height of cliff, Rock type, F Depth of crevices Depth of cave, bedrock type Age, Rock/soil type, Draw Source of disturbances. Pre Ecosite, Number or area of Natural or artificial. Record	near the area, turtl d indicate location. resence of ledges extent of talus slope sence of shorebird extent. Presence of any guils or terns of	Ile tracks, raided ne Estimate number or crevices and the estif not indicated to food sources (sna of indicator plants, observed. Draw ex	sts). Proximity t of breeding pair ir size. Draw ex y ELC. Adjacer ils, worms, clam ron staining. Wa ent of island or p	to Shallow Marsh (MAS) or 0 rs. Sources of disturbance, ktent of cliffs if not indicated ncy to large water body with is, insects). Percent vegeta ater temperature. Degree a peninsula if not indicated thr	Open Water Draw extent if not ind through ELC. productive fish popula ation cover. Distance and length of slope. Si rough ELC.	icated through ELC. ation (otters). to a Great Lake. oil types.		
Antheness in Protocol	Ver										
Abandoned Mine Shaft Old Rock or Debris Pile, Old Stone Fence Abandoned Road or Rail Bed Abandoned Well Old Foundation		XXXXX	Age Dept Rock size Vege Evidence of Use Abandoned Wells Only: Pr Abandoned Road or Rail B	n into the ground tation present esence and type of red Only: Extent in	Amoun Substra Proximi f capping t the landscape. C	of sun exposure te composition (ty to water and e connectivity to oth	e (or direction the slope face (or bedrock type) estimated subterranean influ her natural features. Overhe	es) ience or potential for v ad vegetation cover.	vinter water fluctuation.		
Purroup of Dana	Vee	No	Annelis a blance of Due								
Small - Rodent or Snake Medium Large Log Jams, Old Beaver Lodges Crayfish Chimney (7E only)		XXXXX	Applicable to Mamma Bur Diameter of entrance Ecosite of location Adjacency to large water box Ecosite of location. Soil type	Soil Soil Soil Source of site	il Type oximity to water and fish population. Ev moisture (meadow	type of water dence of otter (o marsh, creek/riv	Availability of aquati Evidence of use, or observed, tracks, scat, prediver edge, swamp etc).	c vegetation or fish tracks or digging marl ated fish, turtles, eggs	ks s, frogs).		
Fvidence	Voc	No									
Extensive Browse and/or Ungulate Scat Nest Bowl or Stick Nest (herons or raptors)		X	Vegetation species browsed Quantity. Ecosite of location	Ecosite: Other ev . Evidence of use	vidence of ungulate e. Species if know	use. Presence vn or bird group.	of seeps/springs. Barriers Size. Height in tree. 1	to movement to and fi Free species.	rom the area.		
Outstanding Trees	N										
Large DBH, Outstanding Tall Snag Large DBH Cavity Tree (Live or Dead)		X	Tree species, Evidence of p Tree species, DBH, Numb	erch usage or nest ar of cavities. Size	ting. DBH, height. and type of cavitie	Exposure abo s. Evidence of	ve canopy. Distance from use by bats (abundant gua	surrounding forest (m no) or other mammals	1) or within: s or wood ducks.		
Rare Communities or Species	Yes	No									
Old-Growth Forest Tallgrass Prairie or Savannah Bog Red Spruce or White Oak Forest Coastal Marshes (Great Lakes/Shallow Atlantic) Dunes / Beaches / Bars / Ridges Sand Barren Alvar		XXXXXXX	Average age of trees. Rang Soil type, Percent cover of t Soil type and depths. Soil type and drainage regim Substrate type (bedrock or s Soil or substrate type. Sand Sand class. Sources of distt Bedrock type. Soil type and	e of DBH or prism ees, shrubs, forbs, e. DBH range or p oil type). Water lev class. Sources of c urbance (includes p lenth. Percent arc	sweep. Sources c , and grasses. So prism sweep. Appr vel. Evidence of wa disturbance (includ presence of exotics a of expresed rock	f disturbance (in urces of disturba oximate Canopy iter fluctuation. as presence of e). Percent area and venetation	actudes presence of exotics) ance (includes presence of e y Cover. Source of disturba Presence of Beaver Pond. exotics). Percent cover of tr of exposed rock, vegetation Sources of disturbance (inc	exotics). nce or evidence of for Amount of exposed s ees, shrubs, forbs, an i, and sand. Sources	restry. horeline. d grasses. of erosion or fire.		
Rare Species (Not Species At Risk) Rare Venetation Community	V	Ě	Number of individuals and lo Sources of disturbance (inclu	cations. Ecosite or	r Vegetation Type.	and regelation.		and the presence of ex	ouco ₂ ,		

Characteristics of Identified Wildlife Habitat

Project Name: Ronneyl~U

Project #: 1794

Date: 11/05/206

Area and/or Polygon ID: 750 810055



Indicate the location of the habitat feature on the Field Map Associated Wildlife Observed # Observed: UTM(s) Photo Numbers Habitat Details (refer to Page 1) **Identified Habitat Feature** and Evidence - will likely dry up in May/June-propably not suitable for anphil. breeding - refer to map for extent - lots of downed trees - many ash sp. refer to field map NIA 1054 vernal pool -no fish observed refer to incidental -no evidence of Levon nesting -no fish observed 1050-1054 N/A-entire Swamp (2) wildlife observations feature exists throughout feature - Shumard oak, ID to be confirmed 1052 NIA 3) rare spp (non-SAR) TY Notes TY EV Notes Species EV # Species # Horacian Woodope Kerson (Hoin.) restante. Taur in wh hite-tailed deer toutly KAL-1000000 have int t contrumiistadd cultion da Drun 1 vellen Du det ble have Hugh iten AMENDINH Sund Souma 9 1 COOR Leente Carller & 28 T Sharbark K. (Kone NI Plicker Faunal Type Codes (TY) Evidence Codes (EV) B=Bird Breeding Birds **Other Wildlife** M=Mammai H- Suitable Habitat V- Visiting Nest NU- Used nest FS- Food/Fecal Sac **OB- Observed** FE- Feeding Evidence S- Singing Male H=Herpetofauna A- Anxienty Behavior FY- Fledged Young CF- Adult carrying food DP- Distinctive Parts CA- Carcass/Bones L=Lepidoptera P- Pair N- Nest Building (not wren or woodpecker) NE- Nest with eggs TK- Tracks FY- Eggs or young F=Fish T- Territory NB- Nest Building (not wren or woodpecker) NY- Nest with young VO- Vocalization SC- Scat D=Dragonfly or Damselfly D- Courtship Display **DD-** Distraction Display AE-Adult entering/leaving nest HO- House/Den SI- Other Signs (Specify)

Candidate Bat Maternity Roost Data Form					Project Manager Use Only:			
Use this form in FOD, FOM			L RESOURCE SULUTIONS INC.	Woodland Numb	er:	ALL ALL ALL ALL ALL ALL ALL ALL ALL ALL	25	
Project Name:	Romanu	Project #:				Page 1 of 2		
Start Time	24	End Time	Date: 11/13/Realb	Observer(s):	AUDICEP			
Polygon or Area ID (1908/0055)		Weather Conditions:	TIME N. 3E CC 10010 QUELT	50				
	# live or dead		AND MONTHER 205 - DE	A . your focus	1			
Plot Number	cavity trees ≥	Plot Center UTM (Zone: 101)	<i>v</i>	Comments				
Plot 1				connents			-	
Plot 2		4 C C 22 L 20 11 7 C 318					-	
Plot 3	1 6	180031341410021						
Plot 4	0	16. 124 253 41-006					-	
Plot 5	1 0						-	
Plot 6	0	14CL 02062-071100105		2			-	
Plot 7	6	+ C 021-260 51-01-5					-	
Plot 8		4 6m 6231.275 HI 30914						
Plot 9	0	1300 620 CHO3 463 09709						
Plot 10	0	1 top 0 3:1 off(1) 41.1032						
Plot 11							-	
Plot 12							-	
Plot 13		11					_	
Plot 14							_	
Plot 15								
Plot 16								
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Plot 27								
Plot 28								
Plot 29							_	
Plot 30								
Plot 31								
Plot 32								
Plot 33							_	
Plot 34							_	
Plot 35							_	

Number of Plots: Sites ≤10ha: 10 plots (minimum); each extra ha: 1 plot (up to max 35 plots)

=

Plots = 0.05ha or 12.6m radius

Select plots randomly

Preparation for EOS Bat Monitoring: Identification of High Quality Potential Roost Trees >10ha in size = 1 additional for each ha up to 30 Identify the best potential roost trees in the applicable woodland/polygon: <10ha in size = up to 10 # of Cavities DBH (cm) UTM Photo Number(s) Tree # Species 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

This Section Project Manager Use Only

Formula: Total # Cavity Trees / (# Plots x 0.05ha)

\$

If >10/ha:



ite in the Rain


Modified ELC Community Description

Page L of Z

Polygon:	(Conc. Road !! at bend in wheat low Ro
UTM:	woodlot on adj parcel to T- NH
Date: May 30, 201	5 Time: 14:54
Surveyor(s): FWD	

Community Classification

Ve	getation Type:	FODN9-3 F-M Bur Oak Der. Format Type.
Х	Inclusion:	SWDM1-2 Bur Oak Min Der. Sworip (likely present)
	Complex:	1 /1

Polygon Description

System	Substrate	Topo Feature		Community	
Vetrand Aquatic History Netural Cultural	Organic Mineral Soil Parent Min. Acidic Bedrock Basic Bedrock	Lacustrine Riverine Bottomland Terrace Valley Slope Xatley Slope Roll. Upland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune Bluff	Lake Pond River Stream Marsh Swamp Fen	Barren Meadow Prairie Thicket Savannah Woodland
	Site	Cliff		Bog	Plantation
Cover	Open Water	Plant Form			
Stirub Treed	Shallow Water	Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Mixed	

Stand Description

	Layer	нт	Cover	Species
	Super-canopy	-		-
1	Canopy	2	4	Bur Oak > Shenbark Hickory > An Basswood
2	Sub-canopy	3	2	Bur Dak=Shaqloorix Hickory=AnEim
3	Understorey	4	2	Am Bressword = klu. Elin = Green Ash
4	Groundcover	7	?	Unable to see groundcover

 HT Codes:
 1:>25m
 2:25-10m
 3:10-2m
 4:2-1m
 5:1-0.5m
 6:0.5-0.2m
 7:<0.2m</th>

 Cover Codes:
 0:none
 1:0-10%
 2:10-25
 3:25-60%
 4:>60%

Size Class Analysis	5	6	< 10	C	10 - 24	0	25 - 50	0	> 50
Snags		þ	< 10	C	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs		0	< 10	0	10 - 24	N	25 - 50	1	> 50
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Community Are	Pinneer	T	Young		Mid-age	IX	Mature	Т	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description



PLANT SPECIES LIST

Layers:

Site:		
Polygon:		
UTM:		
Date:	Time:	
Surveyor(s):	115 (22)	
Weather:		

1=canopy 2=sub-canopy 3=understorey 4=ground layer

	La	ver					La	VOT		
1	2	3	4	Sample	Species		2	3	4	Sample
1	0	0	-				-		-	
0	0	C								
	0	0								
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			Layer 1 2 3 A 0 0 C 0 0 K 0 K 0 C 0 C 0 C 0 C 0 C 0 C 0 C 0 C	Layer 1 2 3 4 A O O O O O O O K O O O K O O O K O O O K O O O K O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O V O O O	Layer Sample 1 2 3 4 A O O O O O O O C O O O R O O O A O O O C O O O R O O O A O O O R O O O A O O O R O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O O A O O A O O <	Layer Sample Species 1 2 3 4 A O O O O O O C O O K O O K O O K O O K O O C <td>Layer Sample 1 2 3 4 A O O 0 O O O K O O K O O K O O K O O K O O V O <</td> <td>Layer Sample La 1 2 3 4 A O O 1 2 A O O O O O O O O O R O O O O R O O O O I I O O O I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I <</td> <td>Layer Sample Species Layer 1 2 3 4 1 2 3 A O<!--</td--><td>Layer Sample Species Layer 1 2 3 4 A O O O O O O O O O O O O O O R O O O O R O O O O R O O O O R O O O O I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I</td></td>	Layer Sample 1 2 3 4 A O O 0 O O O K O O K O O K O O K O O K O O V O <	Layer Sample La 1 2 3 4 A O O 1 2 A O O O O O O O O O R O O O O R O O O O I I O O O I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I <	Layer Sample Species Layer 1 2 3 4 1 2 3 A O </td <td>Layer Sample Species Layer 1 2 3 4 A O O O O O O O O O O O O O O R O O O O R O O O O R O O O O R O O O O I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I</td>	Layer Sample Species Layer 1 2 3 4 A O O O O O O O O O O O O O O R O O O O R O O O O R O O O O R O O O O I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I

Wildlife and Other Notes

E. Word- perse SM
An Robin SM
Reduced Blackhard ; SI
Della I Han 1510
FROM FYDD VICEO JN

Phales 145415, 145421, 145919 150740

Wildlife Habitat Field Data Collection	1						As asses	Ted from reve	abade	Satural Resource So	lutions Inc.
Project Name: Rommer WEC		Project #:	736 c		Area and/o	r Polygon ID:	Cone Rd. 11 -1	L hend in wheel	Hay Rd.	Aquatic, Terrestrial and Wetland Biologist	S
Date: May 30,2016	Start Tin	ne: (454	E	nd Time: 15	512		Observers:	PWD		Page 1 of 2	
Weather Conditions: 25°C, wind 2 /Sw.	cland	10% NO PI	ecip :								
Indicate whether or not the following habitat feature	s are pre	sent within the	olygon. If Ye	es to any, fill in	1 Page 2. Incide	ental Wildlife Ob	servations on	Page 2.			and the second second
Habitat Features	Preser	it Io Applicable	to All:	A PATRICE	and the state		Information	to Record on Page	e 2		
Spring Flooded Field Vernal Pool Pond Shallow Marsh (MAS) or Open Water Swamp		Draw exter Dimension Vegetation Presence of All Swamp	of all water if (length, width species, wood fish Chive se	not indicated h, and depth), dy debris/bask arch for Herou	through ELC king logs within w n Nest Bowls, R	vater. lecord if active (Lor So Evi April-June only	ngevity of site (if kno urces of disturbance idence of wildlife us y) - Evidence includ	own, or estima ce, current use, se including wat des egg shells,	ie), origin (natural or anthropogenic), erfowl, turtles, amphibians guano, dead young. Map colony/nests if fo	ound.
Fields Non-rotational Hay or Weakly Grazed Pasture Meadow Thicket, Woodland, Hydro Corridor	Yes N	Applicable Height of v Evidence c	to All: getation small mamm	nals	Size of site Frequency Location ar	and source of ond abundance of	disturbance of raptor perch	Abundance of Adjacency to f es (scattered trees,	f nectar-produc forest and fores , snags, fencep	ing plants (e.g. goldenrods and asters) t size osts)	
Substrate and Topography Sand or Fine/Loose Gravel Banks, Steep Slopes, Sand Piles Cliffs Karst Cave Natural Rock Piles / Talus Slopes Exposed Unvegetated Lake/River/Wetland Edge Seeps or Springs Islands or Peninsulas in Open Water	Yes N	Evidence of Count swa Count swa Count swa Height of co Depth of co Age, Rock Source of Ecosite, N Natural or	use (turtles i ow nest holes f. Rock type vices ve, bedrock t soil type. Dr sturbances. mber or area rtificial. Rec	n or near the a s and indicate Presence o ype aw extent of ta Presence of s a of extent. Pr ord any gulls o	area, turtle tracks location. Estima of ledges or crevin alus slopes if not shorebird food sc resence of indica or terns observed	s, raided nests), ate number of b ces and their si indicated by El purces (snails, w tor plants, Iron d, Draw extent	Proximity to s preeding pairs, ze, Draw exter 	Shallow Marsh (MA: Sources of disturba nt of cliffs if not indic y to large water bod insects). Percent v er temperature. Deg ninsula if not indicat	S) or Open Wa ance. Draw ex icated through I dy with production vegetation cove gree and length ted through EL	ter tent if not indicated through ELC, ELC, ve fish population (otters), ar. Distance to a Great Lake, n of slope, Soil types, C,	
Anthropogenic Features Abandoned Mine Shaft Old Rock or Debris Pile, Old Stone Fence Abandoned Road or Rail Bed Abandoned Well Old Foundation	Yes M	Io Applicable ✓ Age ✓ Rock size ✓ Evidence of ✓ Abandone ✓ Abandone	to All: D V Use I Wells Only I Road or Ra	epth into the g egetation pres : Presence an ail Bed Only :	ground sent id type of cappini Extent in the lan	Amount of s Substrate co Proximity to g dscape_ Conne	un exposure (omposition (or water and esti activity to other	or direction the slop bedrock type) imated subterranea r natural features. C	pe faces) an influence or Overhead vege	potential for winter water fluctuation,	
Burrows or Dens Small - Rodent or Snake Medium Large Log Jams, Old Beaver Lodges Crayfish Chimney (7E only)	Yes	Applicable Diameter of Ecosite of Adjacency Ecosite of	to Mammal I entrance ication o large water ocation. Soil	body with pro	Pens: Soil Type Proximity to aductive fish popi ce of site moistur	o water and type ulation. Eviden re (meadow ma	e of water ce of otter (obs rsh, creek/rive	Availability of a Evidence of us served, tracks, scat r edge, swamp etc).	aquatic vegeta ise, or tracks or t, predated fish).	tion or fish digging marks turtles, eggs, frogs).	
Evidence Extensive Browse and/or Ungulate Scat Nest Bowl or Stick Nest (herons or raptors)	Yes M	Vegetation Quantity.	species brow cosite of loc	sed. Ecosite. ation. Evider	Other evidence nce of use. Spe	of ungulate use ecies if known o	Presence of r bird group.	f seeps/springs. Ba Size. Height in tra	arriers to mover ee. Tree spec	nent to and from the area. ties.	
Outstanding Trees Large DBH, Outstanding Tall Snag Large DBH Cavity Tree (Live or Dead)	Yes 1	No Tree speci Tree speci	s. Evidence s. DBH. Nu	of perch usag imber of caviti	e or nesting. Di ies. Size and ty	BH, height. Ex pe of cavities.	posure above Evidence of us	e canopy Distance se by bats (abundar	e from surroun int guano) or ot	ding forest (m) or within, her mammals or wood ducks.	
Rare Communities or Species Old-Growth Forest Tallgrass Prairie or Savannah Bog Red Spruce or White Oak Forest Coastal Marshes (Great Lakes/Shallow Atlantic) Dunes / Beaches / Bars / Ridges Sand Barren Alvar Rare Species (Not Species At Risk)	Yes	No ✓ Average a ✓ Soil type. ✓ Soil type a ✓ Soil type a ✓ Substrate ✓ Soil or sub ✓ Sand class ✓ Bedrock ty Number of	e of trees. R ercent cover d depths. d drainage re pe (bedrock trate type. Sa Sources of e. Soil type a ndividuals ar	tange of DBH of trees, shrut gime. DBH ra or soil type). 1 and class. Soi disturbance (ir and depth. Pe di locations. E	or prism sweep. bs, forbs, and gra ange or prism sw Water level. Evin urces of disturba ncludes presence ercent area of ex Ecosite or Vegeta	Sources of dis asses Source veep. Approxin dence of water ince (includes p e of exotics). P posed rock and ation Type.	turbance (incluse s of disturbance nate Canopy C fluctuation. Pro- resence of exc ercent area of vegetation. Se	udes presence of ex ce (includes presen Cover, Source of dis esence of Beaver P blics). Percent cove exposed rock, vege ources of disturban	exotics). Ince of exotics). Pond. Amount er of trees, shru etation, and sa ince (includes pr	vidence of forestry. of exposed shoreline. ubs, forbs, and grasses. nd. Sources of erosion or fire. esence of exotics).	

Note E Wood-perce calling in woodlot.

Project Name: Rommey WEC

Project #: 1736C

Date: May 30. 201 b Area and/or Polygon ID: See over,



Page 2 of 2

Indicate the location of the habitat feature on the Field Map.

	Identified Habitat Feature	e	# Obs	erved:	UTM(s)	Photo M	Numbo	ers	Habitat Det	alls (refe	er to Pa	ige 1)	Associated Wildlife Observed and Evidence
Ros (e species E. Wood-peur	ee)	1 cel	ling	Entire wooded feature	N/A			Bur Oak de Bur Oak de	ec -	Fore	est 3 anys inclusion (likely)	N /A ,
TY	Species		EV	#	Notes		TY		Species	EV	#		Notes
0	E. Wind - pewer	-	SM	1									
	•							1		1			
			1										
		-							35	-			
										-			
Fauna B=Biro M=Ma H=Her L=Lep F=Fish D=Dra	II Type Codes (TY) Ev i Br mmal H- petofauna S- idoptera P- 1 T- igonfly or Damselfly D-	Idence C eeding B Suitable I Singing N Pair Territory Courtship	odes (E irds Habitat Aale Display	EV)	V- Visiting Nest NU- Used n A- Anxienty Behavior FY- Fledged N- Nest Building (not wren or woodpeck NB- Nest Building (not wren or woodpec DD- Distraction Display	lest d Young er) sker)		FS- Food/F CF- Adult c NE- Nest w NY- Nest w AE-Adult er	ecal Sac arrying food ith eggs ith young ntering/leaving nest	Other OB- C DP- D TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza ouse/[fe FE-Feedin re Parts CA-Carcas FY-Eggs o tion SC-Scat Den SI-Other Si	g Evidence s/Bones r young gns (Specify)



Modified ELC Community Description



Site: 1736C Romney WEC	
Polygon: 009300018	· · · · · · · · · · · · · · · · · · ·
UTM:	
Date: May 30, 2016	Time: 1520
Surveyor(s): PWD	
Weather: 25°C, wind 2/SW,	10% cc. no precip
Community Classification	1 1

Vegetation Type: SWDM1-Z Bur Oak Mirond Dec. Swomp Type, Inclusion: Complex:

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial Wetland Aquatic History	Organic Mineral Soil Parent Min, Acidic Bedrock Basic Bedrock Carb, Bedrock	Lacustrine Riverine Bottomland Terrace Valley Slope Tabletand	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune	Lake Pond River Stream Marsh Xswamp	Barren Meadow Prairie Thicket Savannah Woodlend
Cullural	Site Open Water	Ciff Plant Form	Bluff	Fen Bog	Forest Plantation
Open Shrub Treed	Shallow Water Surficial Dep. Bedrock	Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Coniferous Mixed	

Stand Description

	Layer	нт	Cover	Species
	Super-canopy	-	-	-
1	Canopy	2	4	Bur Oak Shartork Hickory Streeman Might
2	Sub-canopy	3	2	Shegberk Hickory > Eur Ock - Freenum Hate
3	Understorey	4	2	Shoobark Hickory = Green Ach
4	Groundcover	Ś	7.	Cannot assess from property edge.

 HT Codes:
 1:>25m
 2:25 - 10m
 3:10 - 2m
 4:2 - 1m
 5:1 - 0.5m
 6:0.5 - 0.2m
 7: <0.2m</th>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Community Ann	Pioneer	T	Young		Midlage	T _×	Mature	1	Old Growth
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs			< 10	7	10 - 24	7	25 - 50	3	> 50
Snags	0	< 10	7	10 - 24	7	25 - 50	2	> 50	
Size Class Analysi	s	C	< 10	0	10 - 24	0	25 - 50	C	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page <u>2 of 2</u>

PLANT SPECIES LIST

Site:		
Polygon:		
UTM:		
Date:	Time:	
Surveyor(s):	· · · · · · · · · · · · · · · · · · ·	
Weather:		

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

	Laura										
Species	-	La	lyer	-	Sample	Species		La	yer	-	Samp
	1	2	3	4			1	2	3	4	
us Dalk	A	U	p				_				
raw bark Hicken	0	0	0						_		
coman Maple	0	0									
alliflora Rose			R								
-Ind Damo	S		R								
Receiped	R	0	0								
ver Ael	R	R	0								
500 1.523	1	1									
	-										-
	-	1									-
	-	\vdash	-				-		-	-	-
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	-	-	\vdash	-			-	-	-	-	
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	-	-	-	-				-	-	-	
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	-	-					-		-	-	-
								0.1			
		-								1	

Wildlife and Other Notes

Red eyed Virec Sh	
E. Wood-permean "SM	
M. Cadinal "SM	
An Reloin: SM	
Mennin Dave SH	
Red-Wingerd Blackbird :: SK.A	

Wildlife Habitat Field Data Collection	n			Solutions Inc.
Project Name:			Project #: 1726 Area and/or Polygon ID: 00830001	Aqualic Terrestrial and Wetland Biologists
Rommey WEC	Chart	Timer		
Weather Conditions 25°C 1 2 (S. 1 10)	Start	rane.	1320 End Time: (342 Observers: FWD	Page 1 01 2
Indicate whether or not the following babilat feature	ACC.	NOF	(#C) p-	
indicate whether of hot the following habitat reading	esare	Jiesei	within the polygon, it tes to any, in in Page 2. Incidental Wildine Observations on Page 2.	
Habitat Features	Pres	sent	Information to Record on Page 2	
Spring Elooded Field	res	NO	Applicable to All:	0)
Vernal Pool		1	Dimensional watch in dentated in organized. Conjectus of disturbance current use of	e). prigin (natural or anthropogenic).
Pond		1	Vegetation species, woody debris/basking logs within water. Evidence of wildlife use including water	erfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water		1	Presence of fish	
Swamp	V		All Swamps: Always search for Heron Nest Bowls. Record if active (April-June only) - Evidence includes egg shells, g	uano, dead young. Map colony/nests if found.
(m				
Fields	Yes	No	Applicable to All:	
Meadow	\vdash	17	Teignion vegetation Size of small mammals Errogenous and source of disturbance Adjacency to forest and forest	t size
Thicket, Woodland, Hydro Corridor	\vdash	1	Location and abundance of raptor perches (scattered frees, snags, fenceore)	osts)
	1			
Substrate and Topography	Yes	No		NY -
Sand or Fine/Loose Gravel	\vdash	~	Evidence of use (turtles in or near the area, turtle tracks, raided nests). Proximity to Shallow Marsh (MAS) or Open Wat	ter
Banks, Steep Slopes, Sand Piles	\vdash	2	Count swallow nest noise and indicate location. Estimate number of breeding pairs, sources of disturbance. Draw exit	ent if not indicated through ELC.
Karst	\vdash	V	height of cirr, Kock type. Presence of ledges of crevices and their size. Draw extent of cirrs in not indicated through E	LC.
Cave	\square	1	Depth of cave bedrock type	
Natural Rock Piles / Talus Slopes		1	Age. Rock/soil type. Draw extent of talus slopes if not indicated by ELC. Adjacency to large water body with productiv	e fish population (otters).
Exposed Unvegetated Lake/River/Wetland Edge		V	Source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation cove	r. Distance to a Great Lake.
Seeps or Springs		V	Ecosite. Number or area of extent. Presence of indicator plants. Iron staining. Water temperature. Degree and length	of slope. Soil types.
Islands or Peninsulas in Open Water		V	Natural or artificial. Record any gulls or terns observed. Draw extent of island or peninsula if not indicated through ELC	D
Anthronogenic Festures	Voc	No	Applicable to All	
Abandoned Mine Shaft	103	V	Applicable to An. Depth into the ground Amount of sun exposure (or direction the slope faces)	
Old Rock or Debris Pile, Old Stone Fence		V	Rock size Vegetation present Substrate composition (or bedrock type)	
Abandoned Road or Rail Bed		1	Evidence of Use Proximity to water and estimated subterranean influence or p	otential for winter water fluctuation.
Abandoned Well		V	Abandoned Wells Only: Presence and type of capping	
Old Foundation	11	0	Abandoned Road or Rail Bed Only: Extent in the landscape. Connectivity to other natural features. Overhead vegeta	ation cover
Burrows or Dens	Yes	No	Applicable to Mammal Burrows or Dens:	
Small - Rodent or Snake		TV	Diameter of entrance Soil Type Availability of aquatic vegetati	on or fish
Medium		V	Ecosite of location Proximity to water and type of water Evidence of use, or tracks or	digging marks
Large		1		
Log Jams, Old Beaver Lodges		1	Adjacency to large water body with productive fish population. Evidence of otter (observed, tracks, scat, predated fish,	turtles, eggs, frogs),
Crayfish Chimney (7E only)		11	Ecosite of location. Soil type. Source of site moisture (meadow marsh, creek/river edge, swamp etc).	
Fyidence	Yes	No		
Extensive Browse and/or Ungulate Scat		V	Vegetation species browsed. Ecosite. Other evidence of unquiate use. Presence of seeps/springs. Barriers to movern	nent to and from the area.
Nest Bowl or Stick Nest (herons or raptors)		0	Quantity, Ecosite of location. Evidence of use. Species if known or bird group. Size. Height in tree. Tree speci	ies
O tota dias Tasa	Vaa	Ma		
Large DBH Outstanding Tall Spag	res	NO	Tree species. Evidence of perch usage or pesting. DBH beinht Exposure above capony. Distance from surround	ting forest (m) or within
Large DBH Cavity Tree (Live or Dead)		-	Tree species. DBH. Number of cavities. Size and type of cavities. Evidence of use by bats (abundant guano) or oth	er mammals or wood ducks.
Rare Communities or Species	Yes	No		
Old-Growth Forest		Ľ,	Average age of trees. Range of DBH or prism sweep. Sources of disturbance (includes presence of exotics).	
Roa	\vdash	H	Soli type, Percent cover of trees, shrubs, forbs, and grasses. Sources of disturbance (includes presence of exotics).	
Red Spruce or White Oak Forest	\vdash	H	Soli type and depina. Soli type and drainage regime. DBH range or prism sweep. Approximate Canopy Cover. Source of disturbance or ev	idence of forestry
Coastal Marshes (Great Lakes/Shallow Atlantic)	\square	17	Substrate type (bedrock or soil type). Water level, Evidence of water fluctuation. Presence of Beaver Pond. Amount of	of exposed shoreline
Dunes / Beaches / Bars / Ridges		1	Soil or substrate type, Sand class, Sources of disturbance (includes presence of exotics), Percent cover of trees, shru	bs, forbs, and grasses
Sand Barren		~	Sand class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and san	nd. Sources of erosion or fire.
Alvar		1	Bedrock type. Soil type and depth. Percent area of exposed rock and vegetation. Sources of disturbance (includes pre	esence of exotics).
Rare Species (Not Species At Risk)			Number of individuals and locations. Ecosite or Vegetation Type.	
Rare vegetation Community		1	Sources of disturbance (includes presence of exotics).	

Project Name:	P.	LUEC
	normound	WEL

Project #: 1736C

Date: May 30, 2016

Area and/or Polygon ID: 0083000 | 3



Page 2 of 2

Indicate the location of the habitat feature on the Field Map.

Identified Habitat Feature	# Observed:	UTM(s)	Photo Numbe	rs Habitat	Details (refe	r to Pa	ige 1)	Associated Wildlife Observed and Evidence
No condictate Sult identified from property line.								and Evidence
TY Species	EV #	Notes	TY	Species	EV	#		Notes
O E. Moor-permeet	om							
Faunal Type Codes (TY) Evidence B=Bird Breeding M=Mammal H- Suitable H=Herpetofauna S- Singing L=Lepidoptera P- Pair F=Fish T- Territory D=Dragonfly or Damselfly D- Courtsh	Codes (EV) Birds Habitat Male , ip Display	V- Visiting Nest NU- Used nest A- Anxienty Behavior FY- Fledged You N- Nest Building (not wren or woodpecker) NB- Nest Building (not wren or woodpecker) DD- Distraction Display	ung (FS- Food/Fecal Sac CF- Adult carrying food NE- Nest with eggs VY- Nest with young AE-Adult entering/leaving nest	Other OB- O DP- Di TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza ouse/E	fe FE- Feedin ve Parts CA- Carca FY- Eggs c tion SC- Scat Den SI- Other S	ng Evidence ss/Bones or young Signs (Specify)

RATURAL RESOURCE Aquatic, Terrestrial and Wetland Biology	SOLUTIONS INC.	(Office use only) Com WET-002	munity ID:
Wetland Vegetation Communi	ties		
Project Name: Rommey WEC	Project #:	736C	Parcel #: West of 008300018
Observer(s): PWD			ELC Code: SWD H 1-2
Date: May 30, 2016 Time	e (24h): 1520		
Wetland #: WET-002 Wea	ther: Precipitation: Non	e Temp (° C):	25
Veg Community #: 51 Wind	d Speed & Direction: 2/	SW Cloud %:	1
Wetland Type: S Site	Type: P Dominant Fo	rm: h	
Permanent Open Water: 0 %	Check one: O central are	ea () spread out in pond	S
Photos: N/A (Preneduline /m	(and a failing)		
Forms (>25% absolute cover)	Dominant Species (give	/ relative cover)	
h (%160) Bur Oak (50%) Shappenk	Hickory (20%) Freeman	Maple (200) Am. Br	55upod (10%)
c (%:)		<i>r 2</i> 1	
<pre></pre>			
7 dh (%;)			
ds (%:)			
ts (%:)			
ls (%:)			
ac (%:)			
po (%:)			
ho(%)			
8 (10,)			
[su (%:)			
m (%:)			
u (%:)		2	
Soil type: Mineral I Org	ganic Depth of organics:	cm Organic Type:	F M H Depth to bedrock 🤇 cm
Organica >40cm humic or maric over minoral:	>60cm fibric over mineral' >10cm or	danic over bedrock	
Dem Creation // cool. Demicrool		game over bedrock	
Rare Species (Local, Regional, Provincial):	wildlife Notes:		
	See ELC Sheet	3	
LE, Wood-pervere (SM)			
in NE woodland block.			
SAR observations must also include a s	pecific UTM location.		
Forms: h=deciduous trees (>6m); c=coniferous	s trees (>6m); dh, dc, ds=dead trees	s/shrubs; ts=tall shrubs (1-6m); Is	=low shrubs (<1m); gc=ground cover; ne=narrow
emergents; be =broad emergents; re =robust em	ergents; ff=free-floating plants; f=flo	ating plants; su=submerged pla	nts; m=mosses; u=unvegetated water <2m deep on
Wetland Type: S=swamp: M=marsh: W=open	water marsh: B=boo: F=fen		
Site Type: L=lacustrine (lake at least 8ha); P=p	palustrine; R=riverine; IS=isolated		

Features to look for in the field:
⊖ active beaver lodges/dams No~e_
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
E wood perse (Ahrayahand NE wood and (Swamp) teature I singing male
 wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
None dos (proportyline).
○ plant species (wild rice, cranberries)
None obs.
○ location of and directions of water flow at all inflows and outflows (mark whether permanent
See field map (drainage ditch to west flows int. toward Whenthey
○ human related disturbances (fill, docks, houses, etc)
None abs.
 evidence of recreational activities (nature appreciation, fishing, hunting)
None
○ locations of seeps or springs, lagg
None obs. (property line)
○ iron precipitates, marl deposits
None obs. (property line)
⊖ winter cover for wildlife
No
 ungulate summer habitat, moose aquatic feeding habitat
No
 suitability for waterfowl breeding, staging, moulting
No
surrounding topography (flat, rolling, hilly, steep)
○ surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; O utility corridor; Ø dec. forest.
O recent cutover or clearcut (<5yr); O conif. forest; O mixed forest; O crops; Ø row crop; O abandoned pit/quarry; O pasture;
lake or deep river: O creek floodplain: O rock outgrop
lake of deep fiver, o creek hoodplain, o fock outcrop
fish habitat present: Yes (No)(circle)
If ves describe: low or high marsh seasonal or permanent swamp fish or habitat observed
n yee, deedhed. Iow of high march, deabenal of permanent owarrp, non of habitat observed
Norre dos,
Eucpein Buckthorm at edges of feature
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries habitat except during high water conditions)
Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding

Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water

Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.



Modified ELC Community Description

Page __ of __

Site: Romney WF (#1-	736C)
Polygon: PIN 8310010	
UTM:	
Date: Mory 10/16	Time: 1600-1720
Surveyor(s): AMD CEP	
Weather: 11°C, wind 4/E.I	00% CC, light internitient rain
Or any the off the state	

Community Classification

Ve	getation Type:	Swamp	Maple Mineral	Decidmons	Swamo	(SWDM3-3)	
	Inclusion:						
	Complex:			_			1

Polygon Description

System		Substrate			po Feature	Γ		Community					
Г	Terrestnal	Т	Organic	Г	Lacustrine	T	Talus	Г	Lake	Т	Barren		
X	Wetland	x	Mineral Soil		Rivenne		Grevice/Cave	F	Pond	F	Meadow		
	Aquatic		Parent Min	1	Bottomland		Atvar	Г	River	Γ	Prairie		
			Acidic Bedrock	Γ	Terrace		Rockland	F	Stream	F	Thicket		
Hi	story		Basic Bedrock		Valley Slope		Beach/Bar		Marsh	Γ	Savannah		
X	Natural		Carb. Bedrock	Γ	Tableland		Sand Dune	×	Swamp		Woodland		
	Cultural		·	Γ	Roll Upland		Bluff		Fen	Г	Forest	-	
	-	Si	te	1	Cliff		· · ·		Bog	Γ	Plantation	Paulingvetol	i vi
Co	over		Open Water	Pl	ant Form					Т			
Г	Open		Shallow Water	Г	Plankton		Forb		Coniferous	1			
	Shrub	×	Surficial Dep	Γ	Submerged		Lichen	Γ	Mared	L			
x	Treed		Bedrock		Floating-Lvd	Γ	Bryophyte	_					
				Г	Graminoid	X	Deciduous	•					

Layer	нт	Cover	Species
· Super-canopy	4		
1 Canopy	12	Ч	freeman's maple 7 while limit green ash
2 Sub-canopy	3	4	freeman's maple = whill m> shaq hickory
3 Understorey	4	4	gray dogwood > choke cherry > green ash
4 Groundcover	5.	4	Spring beauty (virg.) > Sanicula sp. > jumpsee

HT Codes: 1:>25m 2:25-10m 3:10-2m 4:2-1m 5:1-05m 6:05-02m 7:<02m Cover Codes: 0:none 1:0+10% 2:10-25 3:25-60% 4:>60%

Community Age	Pioneer		Young	X	Mid-age		Mature		Old Growth
Abundance Codes:		N;	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs		0	< 10	0	10 - 24	R	25 - 50	N	> 50
Snags		R	< 10	R	10 - 24	R	25 - 50	N	> 50
Size Class Analysis	5	H	< 10	A	10 - 24	A	25 - 50	R	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST Site: Polygon: UTM: Time: Date: Surveyor(s): Weather:

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

Species		La	yer	_	Sample		Species	1	.ayer		Sample	
Opecies	1	2	3	4	oumpic		1	1	2 3	4	Campie	
eemans maple	A	A	0			-	spring beauty (Ving)			A		
helm	A	A	0			-	Sanicula sp.			A		-
ickly ash			0	0			Michigan lily			R		
roke cherry		Ì.,	A	0		1	com flue violet			0		1
assured	R	R					wild geranjum			0		
reen ash	0	0	0				larex vadiata			0		
ray dog wood			A	0			enchant nightshade			0		
ison ivy (ryd)				A			wild strawberry			D		
ha hickory	0	0	0				wild lek 1			R		
ina creeper				R			starn fake sol scal			A		
is on iny (rad)				0			jack pulpit			0		
l. rasp berry		1	0	0			Vira Waterloof			0		
Her hickory		R					downy velviolet			R		
ibes cynosholti				R			calico aster			R		
colline				A			purple cress			R	check "	F
1. cherry		R	R			-	iumpseed			A		
immand bak	R	R					spring quens		7	A	-	+
burnum spullis			R	R			Calium aparine			0		
a topá maple		R					Phraamines .			R	1	
with with the	1	1		\vdash		1	rat va	T	-	10		
	-	-		+			in all	+	-	IN		
							Carly blanda			K		
							Chueria Striata			R		

Wildlife and Other Notes

- photos 1047-1049

- reature used for hunting

* exists throughout south partion of feature, to be continued (ID)

-BLJA NOCA AMRO Jeer

Page ____of____

Modified ELC Community Description

Page __ of __

\		
Site:		
Polygon:		
UTM:		
Date:	Time:	
Surveyor(s):		
Weather:		
Community Classification		
Vegetation Type:		

Vegetation Type:		
Inclusion:		
Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacuttino	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Stope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll, Upland	BIDA	Fen	Forest
	Site	Cim	_ \	Bog	Plantation
Cover	Open Water	Plant Form	. \		1
Open	Shallow Water	Plankton	Forb	Coniferous	1
Shrub	Surficial Dep	Submerged	Lichen	Mixed	
Treed	Bedrock	Floating-Lvd	Bryophyte	7	
	F	Graminoid	Deciduous		

Stand Description

Layer	НТ	Cover	Species			
• Super-canopy					/	
1 Canopy						/
2 Sub-canopy						
3 Understorey						
4 Groundcover HT Codes: Cover Codes:	1 > 0:nd	25m 2:25-1 one 1:0-10%	10m 3: 10 - 2m 6 2: 10 - 25 3:	4:2-1m 5:1-05 25-60% 4:>60%	nn 6:05-02nn 7:<⊄ %	0.2m
Size Class Analys	is		< 10	10 - 24	25 - 50	> 50
Snags			< 10	10 - 24	25 - 50	> 50
Deadfall/Logs			< 10	10 - 24	25 - 50	> 50
Abundance Codes:			N: None	R: Rare	O: Occasional	A: Abundant
Community Age	T	Pioneer	Young	Mid-age	Mature	Old Growth

Modified ELC Community Description

Page __ of __

tion			3				_
	5			Polygon: D	azionia		
st:	NIA			r i N	8210010		
	0						
	S			Tree Tally			
:	A			Species	Tally 1	Tally 2	Tally
				1			
ata: Texture	CL						
Denth	0-11						
ata: Toxturo	SILL	-					1
Depth	20-48					-	
ata: Texture		1					
Depth	-						
rata: Texture			-1				
Depth				, ,			
tive Texture	SILL						
ce Stoniness	1				V		
ce Rockiness							
h to:							Ĩ
Mottles	20						
Glev	-						
Bedrock	-						
Water table	-						
Carbonates	-						
h of Organics	2						
e Size Disc #1							0
Size Disc #2							1
Size Disc #3				Total:			1
ture Regime	6			Basal Area			1
				Snags			

Aquatic, Terrestrial and Wetland Bio	SOLUTIONS INC.	e use only) Community ID: ゴーロのろ	51
Wetland Vegetation Commun	ities		
Project Name: Rumply VIF	Project #: \736 (Parcel #: 😚 (00 (0
Observer(s): AMO LEP		ELC Code: SwDM	3-3
Date: May 10/16 Tim	ne (24h): \600		
Wetland #: Wet-003 We	ather: Precipitation: (ight roin	Temp (° C): \	
Veg Community #: S\ Wir	Id Speed & Direction: 4/E	Cloud %: \00	
Wetland Type: Sulam P Site	∋ Type:		
Permanent Open Water: Nove %	Check one: () central area () spre	ead out in ponds	
Photos: 1047-1049			
Forms (>25% absolute cover)	Dominant Species (give % relative	cover)	and a second second second second second second second second second second second second second second second
b (%:50) freeman's maple (5	0%) > whelm (20%) > gree	n gih (1570) > shag Lark	hickory (1570)
с (%:)	<i>,</i>	,	l.
종 dc (%:)			
⊼ dh (%:)			
ds (%:)			
ts (%:30) where (~ (0%) >0	preen ask (30%) > shaqba	rk hickory (2090) > Freen	an's maile (10%)
ls (%:)			
go (%:60) spring beauty (30%))= Sanicula sp. (30%) = ju	mpseed (30%) > spring ave	vis (090)
ne (%:)		. ,	
be (%:)			
re (%:)			
∞ ff (%:)			
01 f(%:)			
su (%:)			
m (<u>%:</u>)			
u (%:)			
Soil type: SiCL Mineral 🖄 Or	ganic Depth of organics: 2 cm	Organic Type: F (M) H Depth tc	bedrock: N/A cm
Soil type: C-clay, L-loam, S-sand, SI-silt (or a	any combination)		
Organic= ≥40cm humic or mesic over mineral;	, ≥60cm fibric over mineral; ≥10cm organic over be	edrock	
Rare Species (Local, Regional,	Wildlife Notes:		
		10 Joleur Lines	
d Joak	refer to incidental wild	THE OWSANDAL LOVES	
Shumaro			
GID to be continued.			
SAR observations must also include a s	specific UTM location.		
Forms: h=deciduous trees (>6m); c=coniferou	s trees (>6m); dh, dc, ds =dead trees/shrubs; ts =	tall shrubs (1-6m); Is =low shrubs (<1m); gc =gr	ound cover; ne =narrow
emergents; be ≕broad emergents; re ≃robust er the outer edge of a wetland or completelv surro	nergents; π =tree-tioating plants; f=floating plants; bunded by wetland	su=submerged plants; m=mosses; u=unveg	etated water <2m deep on
Wetland Type: S=swamp; M=marsh; W=open	water marsh; B=bog; F=fen		
Site Type: L=lacustrine (lake at least 8ha); P=	palustrine; R=riverine; IS=isolated		

N/O ; not observed

Features to look for in the field:
◯ active beaver lodges/dams N/O
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
yes - refer to swith assessment form
 wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
reter to incidental wildlife observations
O plant species (wild rice, cranberries)
N/O
○ location of and directions of water flow at all inflows and outflows (mark whether permanent> or intermittent>
refer to ELC map
O human related disturbances (fill, docks, houses, etc)
NO
O evidence of recreational activities (nature appreciation, fishing, hunting)
ves-hunting (tree stand)
O locations of seeps or springs, lagg
NIO
⊖ iron precipitates, marl deposits
NO
O winter cover for wildlife
Norl
ungulate summer habitat, moose aquatic feeding habitat
YES None
suitability for waterfowl breeding, staging, moulting
None
surrounding topography (flat, rolling, hilly, steep)
Flat
○ surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; O utility corridor; Ø dec. forest;
O recent cutover or clearcut (<5yr); 🛛 conif. forest; O mixed forest; 🖉 crops; 🖉 row crop; O abandoned pit/quarry; O pasture;
O ravine; O terrain appreciatbly undulating, hilly or with ravines; 🕸 fence rows; O fence row with deep cover or shelterbelt; O open
lake or deep river; O creek floodplain; O rock outcrop
○ fish habitat present: Yes No (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
N/O
O invasive species (plant, aquatic)
(hran mite)
Definitions:
Flow = now in a defined channel High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries habitat except during high water conditions)

Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water

Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.

Wildlife Habitat Field Data Collection	n							Solutions Inc.
Project Name: Rommuy WU			Project #: 1736	C	Area and/or F	Polygon ID: Bandol		Aquatic Terresirial and Wetland Biologists
Date: /0/105//Anila	Start T	ime:	10:10	End Time: 17	42	Observere	· AVUD UEP	Page 1 of 2
Weather Conditions: TID C LINCH : 418	100	900	Pre Con Nune					
Indicate whether or not the following habitat feature	es are p	resen	t within the polygon,	If Yes to any, fill in F	Page 2. Incident	al Wildlife Observations	on Page 2.	
11 Kin a Producer	Dron	and I	and the second	Collins and the	and the second second	Informat	ion to Record on Page 2	
Habitat Features	Voc	No	Applicable to All:	And the second second second	A CONTRACT OF THE OWNER OF THE OWNER	And a second discontinue		
water Series Elected Field	Tes	1X	Draw extent of all w	ater if not indicated th	hrough ELC.		Longevity of site (if known, or estin	nate).
Vernal Pool		X	Dimensions (length	width, and depth)			Sources of disturbance, current us	se, origin (natural or anthropogenic).
Pond	H	Y	Vegetation species	woody debris/baskir	na loas within wat	er.	Evidence of wildlife use including v	vaterfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water		X	Presence of fish					
Swamp		1	All Swamps: Alwa	vs search for Heron	Nest Bowls. Rec	cord if active (April-June	only) - Evidence includes egg shell	s, guano, dead young. Map colony/nests if found.
onanip						sector and the sector of the s		
Fields	Yes	No	Applicable to All:					
Non-rotational Hay or Weakly Grazed Pasture		X	Height of vegetation	6	Size of site		Abundance of nectar-prod	ucing plants (e.g. goldenrods and asters)
Meadow		X	Evidence of small m	ammals	Frequency ar	nd source of disturbance	e Adjacency to forest and to	rest size
Thicket, Woodland, Hydro Corridor	-	X			Location and	abundance of raptor pe	erches (scattered trees, snags, tend	eposts)
Substrate and Topography	Yes	No	P	dies in as see the se	on hudle tracks	raided neets) Dravimit	to Shallow Marsh (MAS) or Open	Water
Sand or Fine/Loose Gravel	-	-	Evidence of use (tu	tues in or near the ar	ea, turtie tracks, i	audeo nesis). Proximity	airs Sources of disturbance. Draw	extent if not indicated through ELC.
Banks, Steep Slopes, Sand Piles	-	A	Count swallow nest	noies and indicate id	Independent of archite	e number of breeding pr	extent of cliffs if not indicated through	h FI C
Cliffs		X	Height of cliff. Kock	type. Presence of	leages of crevice	s and their size. Draws	extent of calls if not indicated throug	
Karst	\vdash	X	Depth of crevices	ock tupo				
Lave		X	Ana Rock/soil type	Draw extent of tal	us slopes if not in	dicated by ELC. Adiac	ency to large water body with produ	ctive fish population (otters).
Natural Rock Piles / Talus Slopes	-	13	Source of disturban	ces Presence of sh	orebird food sour	rces (snails, worms, clai	ms, insects). Percent vegetation of	over. Distance to a Great Lake.
Exposed Onvegetated Lake/Nivel/Wetland Edge	-	1	Ecosite Number o	area of extent. Pre	sence of indicator	r plants. Iron staining. V	Nater temperature. Degree and len	igth of slope. Soil types.
Islands or Peninsulas in Open Water	-	X	Natural or artificial.	Record any gulls or	terns observed.	Draw extent of island o	r peninsula if not indicated through	ELC.
	1-1-	1						
Anthropogenic Features	Yes	No	Applicable to All:					
Abandoned Mine Shaft		X	Age	Depth into the gr	ound	Amount of sun exposi	ure (or direction the slope faces)	
Old Rock or Debris Pile, Old Stone Fence		X	Rock size	Vegetation prese	ent	Substrate composition	(or bedrock type)	
Abandoned Road or Rail Bed		X	Evidence of Use			Proximity to water and	estimated subterranean influence	or potential for winter water nucluation.
Abandoned Well		X	Abandoned Wells	Only: Presence and	type of capping		the sector of factors and the	actalian aquar
Old Foundation		X	Abandoned Road	or Rail Bed Only: E	xtent in the lands	scape. Connectivity to t	other hatural leatures. Overhead ve	getalion cover.
8	Vac	No	Anationhio to Man					
Burrows or Dens	Tes	NO IX	Applicable to Man	IMai burrows or De	Soil Type		Availability of aquatic year	etation or fish
Small - Rodent of Shake	-	Ŷ	Ecosite of location	<i>,</i> e	Provimity to y	water and type of water	Evidence of use, or tracks	or digging marks
		X	Ecosile of location		T TOATTILY TO T	nator and type of mater		
Log Jams Old Beaver Lodges		X	Adjacency to large	water body with prod	luctive fish popula	ation. Evidence of otter	(observed, tracks, scat, predated fi	ish, turtles, eggs, frogs).
Cravfish Chimney (7E only)		X	Ecosite of location.	Soil type. Source	e of site moisture	(meadow marsh, creek	/river edge, swamp etc).	
Evidence	Yes	No						the design of the second
Extensive Browse and/or Ungulate Scat		X	Vegetation species	browsed. Ecosite. (Other evidence of	fungulate use. Present	ce of seeps/springs. Barriers to mo	vement to and from the area.
Nest Bowl or Stick Nest (herons or raptors)		X	Quantity. Ecosite	of location. Evidence	ce of use. Spec	cies if known or bird grou	ip. Size. Height in tree. Tree s	pecies.
	Mar		1					
Outstanding Trees	Yes	NO	Tree energies Evid	anan of parch usage	or pecting DB	H height Exposure a	hove canony Distance from surro	ounding forest (m) or within.
Large DBH, Outstanding Tali Shag		X	Tree species. Evid	Number of cavitie	Size and type	of cavities Evidence	of use by bats (abundant quano) or	other mammals or wood ducks.
[Large DBH Cavity Tree (Live of Dead)	1 1	10	Thee species, DBI	, Number of Gavine	a. Once and type	or currico. Eridende		
Rare Communities or Species	Yes	No	1					
Old-Growth Forest		X	Average age of tree	es. Range of DBH of	or prism sweep. S	Sources of disturbance	(includes presence of exotics).	
Tallorass Prairie or Savannah		X	Soil type. Percent	cover of trees, shrub	s, forbs, and gras	sses. Sources of distur	bance (includes presence of exotic	s).
Bog		×	Soil type and depth	5.				
Red Spruce or White Oak Forest		×	Soil type and drain:	age regime. DBH ra	nge or prism swe	ep. Approximate Cano	ppy Cover. Source of disturbance of	r evidence of forestry.
Coastal Marshes (Great Lakes/Shallow Atlantic)		X	Substrate type (ber	frock or soil type). V	Vater level. Evide	ence of water fluctuation	. Presence of Beaver Pond. Amount	unt of exposed shoreline.
Dunes / Beaches / Bars / Ridges		X	Soil or substrate typ	be. Sand class. Sou	rces of disturband	ce (includes presence o	of exotics). Percent cover of trees, s	shrubs, forbs, and grasses.
Sand Barren		X	Sand class. Sourc	es of disturbance (in	cludes presence	of exotics). Percent are	a of exposed rock, vegetation, and	sand. Sources of erosion or fire.
Alvar		×	Bedrock type. Soil 1	ype and depth. Per	rcent area of expo	osed rock and vegetatio	on. Sources of disturbance (includes	s presence of exotics).
Rare Species (Not Species At Risk)	V	-	Number of individu	als and locations. E	cosite or Vegetati	ion Type.		
Rare Vegetation Community		X	Sources of disturba	ince (includes prese	nce of exotics).			

.

.

Ronney WC

Project Name:

Date: 10/05/2016 Project #: 1736C Area and/or Polygon ID:

8310010

RATURAL RESOURCE SOLUTIONS INC.

Page 2 of 2

Indicate t	the	location	of the	habitat	feature	on	the	Field	Map.	
								1010	THE PLANE	

E CAN	Identified Habitat Fe	eature	# 05	served:	UTM(s)	Photo N	umbe	ME	Habitat D	talls (ref	fer to S	Paga 11	Associated Wild	life Observed
	Swamp				N/A-entire feature	1047-1	04	9	- no evidence observed, limi not suitable no fish habitat	of Ll fed st for a or fi	and with sh o	resting ing water - ib. breeding, bsorved	and Evic	lence
),	rare species (non-SAR) (shumard oak, confirm ID)	fo			N/A- exists throughout southern portion of polygon	None.			- several trees to south boun Sin SUDM3. - ID to be co.	obs dorg - 3	ervi of l	el close leature,	NIA	
								-						
Т	Y Species	-	EV S S	# \ \	Notes		TY	wh.	Species Lailed delar	EV	#	-	Notes	
	Constant and a consta	vicilet										*		
Fai B=1 M= H= L=L F=F D=1	Am- cobin unal Type Codes (TY) Bird Mammal Herpetofauna Lepidoptera Fish Dragonfly or Damselfly	Evidence (Breeding E H- Suitable S- Singing I P- Pair T- Territory D- Courtshi	Codes (I Birds Habitat Male p Displa	EV) y	V- Visiting Nest NU- Used n A- Anxienty Behavior FY- Fledged N- Nest Building (not wren or woodpeck NB- Nest Building (not wren or woodpec DD- Distraction Display	est I Young er) ker)	F	S-Food/Fe F-Adult ca IE-Nest with IY-Nest with E-Adult en	ecal Sac arrying food th eggs th young tering/leaving nest	Other OB- O DP- Di TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza	fe d FE-Feeding re Parts CA- Carcass FY-Eggs or tion SC- Scat ren SI- Other Sic	Evidence s/Bones - young	

	Romand K	Project # 1736C	and Welland Biologists			Page	1 of 5
oject Name:	- normegice	Project #:	in a stack		ALDUFP	1 dBC	1 01 2
art Time <u>16.</u>	<u>IV _</u>	End Time <u>13 32</u>	Date:	Observer(s):	TIMOCLY		
olygon or Area II	(231000)	Weather Conditions: 7-11	Y Which HE CR. 100+= 17	up: Nones			
ot Number	# live or dead cavity trees ≥ 25cm dbh	Plot Center UTM (Zone: [7])		Comments			
lot 1	0	16m 0381004 4668976					
ot 2	0	16m 0381003 41668135					
lot 3	0	for (1381036 4668908					
lot 4	0	* Sm 038 082 4166 3831					
ot 5	0	1-6m 038 109 4668869					
ot 6	6	1 100 (D38) 090 4668908					
lot 7	0	±5m 038/109 4668949				-	
lot 8	0	14 0331092 4489.72					
lot 9	0	1 5m 0381077 4669007					-
ot 10	6	1 16M 038144 4668970					
lot 11							
ot 12							
ot 13		and the second se					
ot 14							
ot 15			- Charles and the second second second second second second second second second second second second second se				
lot 16							
lot 17							-
lot 18							
lot 19						-	
lot 20							
lot 21							-
lot 22							
lot 23		-					
lot 24							
lot 25							-
lot 26			and the second second second second second second second second second second second second second second second				
lot 27							
lot 28							
lot 29							
lot 30							
lot 31							
lot 32							
Plot 33							-
Plot 34							
Plot 35							

ree #	Species	# of Cavities	DBH (cm)	UTM	Photo Number(s)
1			4		
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

This Section Project Manager Use Only

Formula: Total # Cavity Trees / (# Plots x 0.05ha)

Final Woodland Tally

if >10/ha: BMA-_


Survey,

the use of, or reliance upon, this map or any information on this map. This man not be used for: navigation, a plan of survey, routes, nor locations.

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Modified ELC Community Description

* assessed from property line. *

Site: Romby WF (* 1736	5C)
Polygon: 1 TH B/T- 50	
UTM:	
Date: May 10/16	Time: 0815-0845
Surveyor(s): AMD. CEP	
Weather: 9.C. light intermit	lent roin wind 4/E 100% CC.
111111111111	pt the pt

Page __ of __

Community Classification

Ve	getation Type:	Swamp Maple Minhal D	Reiduous Swamp (SUDM3-3)
X	Inclusion:	Conterous Plantation (T	AGMI
	Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial Wetland Aquatic History X Natural	Organic Mineral Soil Parent Min Acidic Bedrock Basic Bedrock Carb Bedrock	Lacustrine Riverine X Bottomland Terrace Valley Slope Tableland Poll Upland	Tałus Crevice/Cave Alvar Rockland Besch/Bar Sand Dune Buur	Lake Pond River Stream Marsh Swamp Fen	Barren Meadow Prairie Thicket Savannah Woodland
	Site	Cliff		Bog	Plantation
Cover	Open Water	Plant Form			
Open Shrub X	Shallow Water Surficial Dep. Bedrock	Plankton Submerged Floating-Lvd Graminoid	Farb Lichen Bryophyte Deciduous	Coniferous Mixed	

Stand Description

	Layer	нт	Cover	Species	
	Super-canopy	+	1		
1	Сапору	2	4	Freemon's maple > whelm > shop hickory	
2	Sub-canopy	3	4	freemon's malle = whelm=shellbark hickory	
3	Understorey	4	4	Choke there > Ribes americanum > green ois	n
4	Groundcover	5-7	4	Viry spring beauty > Ving-water leaf > starry-	alse sol. sea
нт	Codes:	1:>	25m 2:25	-10m 3:10-2m 4:2-1m 5:1-05m 6:05-02m 7:<02m	

 HI Codes:
 1:>25m
 2: 25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 0.5m
 6: 0.5 - 0.2m
 7: <</th>

 Cover Codes:
 0:none
 1 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Size Class Analysis	A	< 10	A	10-24	A	25 - 50	R	> 50
Snags	R	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	0	< 10	G	10 - 24	R	25 - 50	N	> 50
Abundance Codes	N	Nano	D.	Para	0	Oceanional	۵.	Abundant

			Marking Street Stre		
Community Age	Pioneer	Young	X Mid-age	Mature	Old Growth

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Modified ELC Community Description

Page ____of____

PLANT SPECIES LIST



Layers: 1=canopy 2=sub-canopy 3=underslorey 4=ground layer

Spacing		La	yer		Sample	Species		La	yer		Sar
Species	1	2	3	4	Sample	Species	1	2	3	4	
passivood	0	0				fall goldenind				R	
ubelm	A	A	0			virg. water loaf				A	
noodLine				0		spring beauty (vi,	()			A	
Lellbark hickory	R	0	0			wood straubling	P' .			0	_
relmans maple	A	A	6			stary false sol. stal				A	
areen ash	D	0	D			com-blue violet				0	
nauthorn st.		0	0			garlic mustard			Ĩ	0	
aison ivy (rud)				A		5			Ĩ		
poison iny (rad)				0							
choke cherry			A	0							
at elm 1	A	A	0						1		
has hickon	0	0	0								-
						1					
Rills andricanum			0	A							
bl.varpberry				0							
humard oal	6										
	1										
	-		-	-			-		-	-	-
	_			-			-		_		-
	+-	+	-	-	-		-	-	-	-	

Wildlife and Other Notes

-Photo 082943

- drainage ditch/swale along North boundary offecture - possible shumand oak throughout, but unconfirmed

Xindividual observed on edge, confirmed (several individuals) (north edge,

Resource Solutions Inc. Aquatic, Terrestrial and Wetland Biologists	(Office use only) Community ID: WET-004
Wetland Vegetation Communities	
Project Name: Romney WF Project #: 1731	6C Parcel #: 8310058
Observer(s): AM(), CEP	ELC Code: SUD M3-3
Date: May 10/16 Time (24h): 815	
Wetland #: WET -004 Weather: Precipitation: light rain	Temp (° C): 9
Veg Community #: 5 Wind Speed & Direction: 4/E	Cloud %: 100
Wetland Type: ເປັນ ຊາກກຸ Site Type: P Dominant Form	n: h
Permanent Open Water: Norl % Check one: O central area	⊖ spread out in ponds
Photos: 082943	
Forms (>25% absolute cover) Dominant Species (give % I	relative cover)
hx%:80) framan's maple (50%) > which (30%) > s	hagbark hickory (10%) > shellbark hickory (10°
c (%:)	3 1
8 dc (%:)	
₩ dh (%:)	
ds (%:)	
13 (%:30) whelm (40%) ? shappark hiltory (30%)	70) "greenash (20070) 7 basswood (107)
ls (%:)	
gg (%:50) Virg. spring beauty (50%) > Virg. water leaf	(30%) > starry talse sol. sea (20%)
ne (%:)	1
be (%:)	
re (%:)	
» ff (%:)	
Č f (%:)	
su (%:)	
m (<u>%:</u>)	
u (%:)	
Soil type: unkineral Depth of organics:	cm Organic Type: F M H Depth to bedrock: cn
Soil type: C-clay, L-loam, S-sand, SI-silt (or any combination)	
Organic= ≥40cm humic or mesic over mineral; ≥60cm fibric over mineral; ≥10cm organ	nic over bedrock
Rare Species (Local, Regional, Wildlife Notes:	
Provincial):	al wildlife observations
-Shellbark Lickory (confirmed)	
-shumedoak (IDtobe	
Confirmed)	
SAR observations must also include a specific UTM location.	
Forms: h=deciduous trees (>6m); c=coniferous trees (>6m); dh, dc, ds=dead trees/si	hrubs; ts= tall shrubs (1-6m); Is =low shrubs (<1m); gc =ground cover; ne =narrow
emergents; be=broad emergents; re=robust emergents; ff=free-floating plants; f=floati	ing plants; su =submerged plants; m =mosses; u =unvegetated water <2m deep
Wetland Type: Saswamp: Mamarsh: Wappen water morth: Bahar: Safen	
Site Type: L=lacustrine (lake at least 8ha); P=palustrine: R=riverine; IS=isolated	

N	1	0	· •	not	observed
---	---	---	--------	-----	----------

Features to look for in the field:
⊖ active beaver lodges/dams N / 0
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
O wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
O plant species (wild rice, cranberries)
N(O)
○ location of and directions of water flow at all inflows and outflows (mark whether permanent → or intermittent>
rlfbr to ELC map
human related disturbances (fill, docks, houses, etc)
None
 evidence of recreational activities (nature appreciation, fishing, hunting)
Norl
O locations of seeps or springs, lagg
NIO
iron precipitates, marl deposits
NO
O winter cover for wildlife YES-limited to TAGMI community
 ungulate summer habitat, moose aquatic feeding habitat
Yes Nore
⊖ suitability for waterfowl breeding, staging, moulting
⊖ surrounding topography (flat, rolling, hilly, steep)
 Surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; O utility corridor; Ø dec. forest; O recent cutover or clearcut (<5yr); Ø conif. forest; O mixed forest; Ø crops; Ø row crop; O abandoned pit/quarry; O pasture; O ravine; O terrain appreciatbly undulating, hilly or with ravines; Ø fence rows; O fence row with deep cover or shelterbelt; O open lake or deep river; O creek floodplain; O rock outcrop
∫ fish habitat present: Yes (No) (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
○ vernal pools
O invasive species (plant, aquatic)
garlic multard
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to provide fisheries habitat except during high water conditions)
Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water
Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.

*assessed from property line *

Wildlife Habitat Field Data Collection

9	NATURAL	RESOURCE	SOLUTIONS	INC
100	Aquatic, Terrestr	al and Wetland Bic	logists	

Project Name:			Project #: 1736 / Area and/or Polygon ID: Plat \$31.005%
Komney WF			
Date: 10/16	Start	Time:	S End Time: 615 Observers: TIMP Cor
Weather Conditions: 90(, 119ht win, wind	4/E,	100%	
Indicate whether or not the following habitat feature	es are p	present	within the polygon. If Yes to any, hill in Page 2. Incidential which e Observations on Page 2.
Habitat Features	Pres	ent	Information to Record on Page 2
Water	Yes	No	Applicable to All:
Spring Flooded Field		X	Draw extent of all water in not indicated through ELC. Conjective of all water in not indicated through ELC.
Vernal Pool		T	Jimensions (length, wuth, and depuis).
Pond		Ŷ	
Swamp	1	C	All Swamps: Always search for Heron Nest Bowls. Record if active (April-June only) - Evidence includes egg shells, guano, dead young. Map colony/nests if found.
owanip		1	
Fields	Yes	No	Applicable to All:
Non-rotational Hay or Weakly Grazed Pasture		X	Height of vegetation Size of stree and source of disturbance Adjacency to forest and forest size
Meadow		×	Location and abundance of raptor perches (scattered frees, snags, fenceposts)
Thicket, Woodland, Hydro Corridor		1.1	
Substrate and Topography	Yes	No	
Sand or Fine/Loose Gravel		X	Evidence of use (turtles in or near the area, turtle tracks, raided nests). Proximity to Shallow Marsh (MAS) or Open Water
Banks, Steep Slopes, Sand Piles		×	Count swallow nest holes and indicate location. Estimate number of breeding pairs. Sources of disturbance. Draw extent if not indicated inrodgin ECC.
Cliffs		×	Height of cliff. Rock type. Presence of ledges or crevices and their size. Draw extent of cliffs in hocholicated through EEC.
Karst		X	Depth of crevices
Cave		X	Depirior cave, bendok type how Rock (coll type) Draw extent of falus slopes if not indicated by ELC. Adjacency to large water body with productive fish population (otters).
Natural Rock Piles / Talus Slopes	-	X	Source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation cover. Distance to a Great Lake.
Seeps or Springs		X	Ecosite. Number or area of extent. Presence of indicator plants. Iron staining. Water temperature. Degree and length of slope. Soil types.
Islands or Peninsulas in Open Water		>	Natural or artificial. Record any gulls or terns observed. Draw extent of island or peninsula if not indicated through ELC.
Kenterrenterrenter			
Anthropogenic Features	Yes	No	Applicable to All:
Abandoned Mine Shaft		X	Age Department Substrate composition (or bedrock type)
Abandoned Road or Rail Bed	\vdash	10	Proximity to water and estimated subterranean influence or potential for winter water fluctuation.
Abandoned Well	\square	x	Abandoned Wells Only: Presence and type of capping
Old Foundation		X	Abandoned Road or Rail Bed Onty: Extent in the landscape. Connectivity to other natural features. Overhead vegetation cover.
Burrows or Dens	Yes	No	Applicable to Marmal Burrows or Dens:
Smail - Rodent or Snake	\vdash	X	Diameter of entrance Sour Type Forsities of leastion Provinity to water and type of water Evidence of use, or tracks or digging marks
Medium	-	1	
l og Jams. Old Beaver Lodges		X	Adjacency to large water body with productive fish population. Evidence of otter (observed, tracks, scat, predated fish, turtles, eggs, frogs).
Crayfish Chimney (7E only)		×	Ecosite of location. Soil type. Source of site moisture (meadow marsh, creek/river edge, swamp etc).
Evidence	Yes	NO	Vegetation species browsed. Ecosite, Other evidence of ungulate use. Presence of seeps/springs. Barriers to movement to and from the area.
Extensive Browse and/or Ungulate Scat	-	×	Vegetator species browsed. Ecosite of control of the species if known or bird group. Size. Height in tree. Tree species.
INEat DOW OF Stick Neat thereine of hereine		16	
Outstanding Trees	Yes	No	Public of orch users - contar OPU height Evenesus above agrees. Distance from surrounding forest (m) or within
Large DBH, Outstanding Tall Snag		X	Tree species, Evidence of perch usage or nesting. DBH, neight. Exposure above canoby. Distance from sunouroung lotes (m) or winnin.
Large DBH Cavity Tree (Live or Dead)	1	X	Tree species, DBH, Number of cavities. Size and type of cavities. Evidence of use by bats (abundant guano) of other manimum of wood datase.
Rare Communities or Species	Yes	No	
Old-Growth Forest		X	Average age of trees. Range of DBH or prism sweep. Sources of disturbance (includes presence of exotics).
Tallgrass Prairie or Savannah		X	Soil type. Percent cover of trees, shrubs, forbs, and grasses. Sources of disturbance (includes presence of exotics).
Bog		X	Soil type and depths.
Red Spruce or White Oak Forest		X	Soil type and grainage regime. DBH range or prism sweep. Approximate Canopy Cover. Solice of disturbance or evidence or torestry.
Dupes / Reaches / Bars / Pidges	H	X	Substrate type (declock or soll type). Water level, Evidence or water inducation, riesence or beaver rond. Amount or exposed shoreine,
Sand Barren	H	X	Sand class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and sand. Sources of erosion or fire.
Alvar		X	Bedrock type. Soil type and depth. Percent area of exposed rock and vegetation. Sources of disturbance (includes presence of exotics).
Rare Species (Not Species At Risk)	1		Number of individuals and locations. Ecosite or Vegetation Type.
Rare Vegetation Community		X	Sources of disturbance (includes presence of exotics).

Project Name:		Project #:	Area a	nd/or Polygo	ı ID:		- S NA	ation Terrestral and Welland Biologists
indicate the location of the habitat feature	e on the Field M	ap.						Page 2 of 2
Identified Habitat Feature	# Observed	UTM(s)	Photo	Numbers	Habitat	Details (refer to	o Page 1)	Associated Wildlife Obs
swamp	1	N/A-entire feature	68294	3	- no evidence standing mater fish habitat o	of heron r r observed ibserved,	esting, no , no fish or	N/A
rare species (non-SAR) Lyshellbarkhickory- confirmed	Z SPP.	NIA - several individuals observed along north edge officiture	None		- 5WDM3-3	Commun	ity	NIA
ID to be confirmed								
Species	EV #	Notes		TY	Species	EV #	4]	Notas
have been with Sang Spanous N. Flicker Jub tailed delm 3 blue jay								
Find Evidence (FY) Bird Breeding B *Mammal H- Suitable *Herpetofauna S- Singing Lepidoptera P- Pair Fish T- Territory Dragonfily or Damselfly D. Counterling	Codes (EV) Birds Habitat Male	V- Visiting Nest NU- Used m A- Anxienty Behavior FY- Fledged N- Nest Building (not wren or woodpeck NB- Nest Building (not wren or woodpeck	est I Young er) ker)	FS- Foo CF- Adu NE- Ne: NY- Ne:	d/Fecal Sac It carrying food t with eggs t with young	Other Wild OB- Obser DP- Distind TK- Tracks VO- Vocali	Ilife ved FE- Fee tive Parts CA- Car FY- Egg zation SC- Sea	eding Evidence rcass/Bones Is or young at





Modified ELC Community Description *assessed from property line *

Page __ of __

Site: RUMMEY WF (*1736 (
Polygon: PIN 8330041	
UTM:	
Date: May 11/16	Time: 1000-1050
Surveyor(s): AMD, CEP	
Weather: 12°C, wind 3-4/E, 1	0070 CC

Community Classification

Ve	getation Type:	Swamp Mapia	Mineral	Decimons	Swamp	SWDM3-3
L	Inclusion:					
	Complex:					

Polygon Description

System	Substrate	Topo Feature Community			
Terrestrial Wetland Aquatic History V Natural Cultural	Organic Minetal Soil Parent Min Acidic Bedrock Basic Bedrock Carb, Bedrock	Lacustine Riverine Bottomiand Terrace Valley Slope Tableland Röll Upland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune Bluff	Lake Pond River Stream Marsh Xe Swamp Fen	Barren Meadow Prairie Thicket Savannah Woodland Forest
Course	Site	Citt		Bog	Plantation
Open Shrub Treed	Shallow Water Shallow Water Surficial Dep Bedrock	Plankton Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte	Coniferous Mixed	

Stand Description

Layer	нт	Cover	Species
· Super-capopy	-		
1 Canopy	2	Ц	Freeman's maple > shaq bark hickory > wheeling
2 Sub-canopy	1.12	Ч	basswood ruh. (In rshaq bark hickory
3 Understorey	15	3	choke chern's bl. raspberry & green ash
4 Groundcover	57	4	Ving waterleaf + trait lily > spring beauty

HT Codes: 1:>25m 2:25-10m 3 10-2m 4:2-1m 5:1-05m 6:05-02m 7:<02m Cover Codes: 0:none 1:0-10% 2:10-25 3:25-60% 4:>60%

Size Class Analysis	H < 10	A 10 - 24	A 25 - 50	0 > 50
Snags	R < 10	R 10 - 24	R 25 - 50	N > 50
Deadfall/Logs	0 < 10	0 10 - 24	25 - 50	N > 50
Abundance Codes:	N: None	R: Rare	O: Occasional	A: Abundant

	and the second se	

Community Age	Pioneer	Young	X	Mid-age	Mature	010	Growt
	Committee and the second second second second second second second second second second second second second se			and the second division of the second divisio	and the second se	and the second se	the second second second

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Modified ELC Community Description

PLANT SPECIES LIST

Layers:



1=canopy 2=sub-canopy 3=understorey 4=ground layer

Species	-	La	yer		Sample	Species		La	yer		Samela
Species	1	2	3	4	Sample	Species	1	2	3	4	Sample
bassured	0	A				agric mustard				0	
Shelm	0	A				Carexrodiata				0	X (Sal
reemans mada	A	8	0			Sanicula ro.			1	D	
choke cherry			A	0	12	wild strander				n	
shad hickory	0	0				downy vel inldt				0	
she (Pharle hickory	R	R	R			A tout lily				Ă	
milliflara rase		0	0			Soirs plaine Vin	1			A	
bl. casplacking			0	0		Vicewaterlaat	1			A	
Answand	0					J. B. B. B.					
Andresh	R										-
who pine	R	K									
- cottonwood	R	R									
9 woon ash	0	0	0								
3											
					-						
											-
								10			
											-
				-	-			-	-		
										1	
	_		-	-				_	-	-	

Wildlife and Other Notes

- photos 1059-1061 -garbage/brush dumping a SE corner * reter to map for locations - Observed only in adjoining hedderon 15

notes on Lodgeron

Page ____of____

hedgerow & north boundary of parcel - now row teature. <= 10 m vidth - drainage svale in centre - dominart spp: green ash. shag. hickory, which is have there is respectively, bur Oak, those cherry - photos 1055-1058 - shellbark hickory abserved: (3) Is 17T 0380015 4664282 E 4m, 10 cm dbh Is 17T 0380015 4664287 E 4m, 15-20 cm dbh Is 17T 0380015 4664207 Ism, 15-20 cm dbh Is 17T 0380015 4664207 Ism, 15-20 cm dbh Is 17T 0380015 4664207 Ism, 15-20 cm dbh Is 18 the hickory throughout hedgerow - shellbark hickory throughout hedgerow - surveyed trees for cavities (bats), looking 2 trees from south side Is no suitable (avity frees observed

Resource Aquatic, Terrestrial and Wetland Wetland Vegetation Commu	E SOLUTIONS INC. Biologists	(Office use only) Community ID: WET-005	51
Project Name: Rompuy WF	Project #: 173	Parcel #: 833004	
Observer(s): AMD CEP		ELC Code: SWDM3-	3
Date: May WIG 1	Time (24h): 1000-1050		
Wetland #: WFT_005 V	Veather: Precipitation: None	Temp (° C): \2	
Veg Community #: S1 V	Vind Speed & Direction: 3-4/E	Cloud %: 100	
Wetland Type: Culture D	Site Type: P Dominant Form	n: h	
Permanent Open Water: None	Check one: O central area	O spread out in ponds	
Photos: 1059-1061			
	Deminant Species (shus %		
$\frac{b}{2} \left(\frac{6}{2} + \frac{6}{2} \right) + \frac{b}{2} \left(\frac{6}{2} +$	> basswood (30%) > a > basswood (30%) > a H0%) > froat lify (30 Y Organic Depth of organics: N	(hoke cherry (20%) > Lasswood (1 choke cherry (20%) > green as 20) > Virg. spring beauty (30%) /Acm Organic Type: F. M. HNI/A Depth to bea	376) h (15%))
Soil type: C-clay, L-loam, S-sand, SI-silt ((or any combination)		
Organic= ≥40cm humic or mesic over mine	eral; ≥60cm fibric over mineral; ≥10cm orga	nic over bedrock	
Rare Species (Local, Regional, Provincial): -Skell bark hickory Lareter to map for locali adjoining tedgerows on did not observe in Swamp teature.	Wildlife Notes: - refer to incidento wns- ly,	el wildlife observations	
SAR observations must also include Forms: h=deciduous trees (>6m); c=conife emergents; be=broad emergents; re=robus	a specific UTM location. prous trees (>6m); dh, dc, ds=dead trees/sl at emergents; ff=free-floating plants; f=floating plants; f=floating plants; f=floating f	hrubs; ts =tall shrubs (1-6m); Is =low shrubs (<1m); gc =ground ng plants; su =submerged plants; m =mosses; u =unvegetate	cover; ne =narrow ad water <2m deep on
Wetland Type: Seswamp: Memorsh:	en water marsh: B=bog: E=fon		
Site Type: L=lacustrine (lake at least 8ha):	P=palustrine; R=riverine: IS=isolated		

Features to look for in the field:
O active beaver lodges/dams Norl
○ locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
refer to field map
 wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
Heler to incidental vildlite observations
○ plant species (wild rice, cranberries)
Norl
○ location of and directions of water flow at all inflows and outflows (mark whether permanent> or intermittent>
human related disturbances (fill, docks, houses, etc)
garbage dunping
 evidence of recreational activities (nature appreciation, fishing, hunting)
None observed
◯ locations of seeps or springs, lagg
Nore
iron precipitates, marl deposits
Norl
Winter cover for wildlife
None
Ungulate summer habitat, moose aquatic feeding habitat
Suitability for waterfowl breeding, staging, moulting
i ilet = real of a national under
Surrounding topography (flat, rolling, hilly, steep)
flat
 Surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); Q abandoned ag. field; O utility corridor; Q dec. forest; O recent cutover or clearcut (<5yr); Q conif. forest; Q mixed forest; Q rows; Q row crop; O abandoned pit/quarry; O pasture; O ravine; O terrain appreciatbly undulating, hilly or with ravines; Q fence rows; O fence row with deep cover or shelterbelt; O open lake or deep river; O creek floodplain; O rock outcrop
⊖ fish habitat present: Yes /No (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
Norl
⊖ invasive species (plant, aquatic)
Nonl
Definitions:
Flow = flow in a defined channel High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries habitat except during high water conditions)
Lagg = the depressed zone or most that develops at the periphery of some bogs and fens which is generally wetter than the surrounding
area and often contains water
Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland
Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation
Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = \geq 25% live trees or tall shrubs; \geq 70% dead trees; \geq 50% low shrubs

Attach full species list and wetland map.

Wildlife Habitat Field Data Collection	n							Solutions Inc.
Project Name: Boomer Half		Project #	17360	Area an	id/or Polygon ID	D: 2830041		Adjuatic, Terrestrial and Wetland Biologists
Date: 11/05/2010	Start	Time: 10:05	End T	me: //21/51		Observers: m	WTD (CP	Page 1 of 2
Weather Conditions: T. Vor Lawrence Cr		Panik				Custon Contractory (
Indicate whether or not the following habitat feature	es are	present within th	e polygon If Yes to	any, fill in Page 2. In	cidental Wildlife	Observations on P	Page 2	
Habitat Fostures	Dear		1.13			Information	- Record on Press 2	all the second second second second second second second second second second second second second second second
Water	Vos	No Applicab	le to All	and the second se	And the California State	mormation t	o Record on Fage 2	
Spring Flooded Field	103	S Draw exte	ent of all water if not i	ndicated through ELC		Lon	aevity of site (if known, or estimated	ate)
Vernal Pool		× Dimensio	ns (length, width, and	d depth).		Sou	irces of disturbance, current use	e, origin (natural or anthropogenic).
Pond		× Vegetatio	n species, woody de	bris/basking logs with	in water,	Evid	dence of wildlife use including wa	aterfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water	-	> Presence	of fish			the state of the state of the		
Swamp	V	All Swan	ps: Always search	for Heron Nest Bowls	Record if activ	e (April-June only)) - Evidence includes egg shells,	, guano, dead young. Map colony/nests if found.
Fields	Yes	No Applicab	le to All		_			
Non-rotational Hay or Weakly Grazed Pasture	1	K Height of	vegetation	Size of	site		Abundance of nectar-produ-	cing plants (e.g. goldenrods and asters)
Meadow		X Evidence	of small mammals	Freque	ncy and source	of disturbance	Adjacency to forest and fore	est size
Thicket, Woodland, Hydro Corridor		X		Locatio	n and abundanc	e of raptor perche	es (scattered trees, snags, fence	posts)
Substrate and Topography	Yes	NO Evidonce	of use (turtles in or r	ear the area turtle tr	acks raided nes	ts) Provimity to S	ballow Marsh (MAS) or Open W	later
Banks Steep Slopes Sand Piles	-	X Count sw	allow nest holes and	indicate location. Es	stimate number of	of breeding pairs	Sources of disturbance. Draw e	xtent if not indicated through ELC.
Cliffs		Height of	cliff, Rock type, Pro	esence of ledges or c	revices and their	r size, Draw exten	t of cliffs if not indicated through	ELC.
Karst		+ Depth of	crevices					
Cave		× Depth of	ave, bedrock type				4 L 4 L 4 20 L	C F. L And Son (. H)
Natural Rock Piles / Talus Slopes		Age Ro	k/soil type Draw ex	tent of talus slopes if	not indicated by	ELC. Adjacency	to large water body with product	rer Distance to a Great Lake
Seens or Springs	\square	- Ecosite	Number or area of e	dent. Presence of in	dicator plants. Irc	on staining. Water	r temperature Degree and leng	th of slope. Soil types.
Islands or Peninsulas in Open Water		Natural o	artificial Record a	ny gulls or terns obse	rved. Draw exte	ent of island or pen	insula if not indicated through E	LC.
	d	1.61		1.4				
Anthropogenic Features	Yes	No Applicat	le to All:					
Abandoned Mine Shaft	1	Age	Depth	into the ground	Amount o	of sun exposure (c	or direction the slope faces)	
Abandoned Road or Rail Red	M	ROCK SIZE	of Lise	ation present	Provimity	to water and estir	mated subterranean influence or	r potential for winter water fluctuation
Abandoned Well	H	Abandor	ed Wells Only: Pres	sence and type of car				
Old Foundation		Abandor	ed Road or Rail Be	d Only: Extent in the	landscape. Cor	nnectivity to other	natural features, Overhead vege	etation cover.
					_			
Burrows or Dens	Yes	No Applicat	le to Mammal Burro	ows or Dens:			Availability of aquatic yearst	ation or fish
Medium	H		of entrance	Provim	pe ity to water and t	ivne of water	Evidence of use or tracks of	adon of fish
Large	H	X	location	TIONIN	ity to water and t	appe of mater		
Log Jams, Old Beaver Lodges		× Adjacent	y to large water body	with productive fish	population. Evid	ence of otter (obs	erved, tracks, scat, predated fisi	h, turtles, eggs, frogs).
Crayfish Chimney (7E only)		K Ecosite c	flocation. Soil type	Source of site moi	sture (meadow r	marsh, creek/river	edge, swamp etc)	
le martine de la companya de la companya de la companya de la companya de la companya de la companya de la comp	Vee	Nel						
Evidence Extensive Browse and/or Lingulate Scat	Tes	Venetatio	n species browsed	Ecosite Other evider	nce of unoulate u	use. Presence of	seeps/springs. Barriers to move	ement to and from the area.
Nest Bowl or Stick Nest (herons or raptors)		× Quantity	Ecosite of location.	Evidence of use.	Species if know	n or bird group.	Size. Height in tree. Tree spe	acies.
And the second second	- i i							
F								
Outstanding Trees	Yes	NO	nine Euldonne of pa	reh usena er nastina	OPH height	Exposuro aboue	canony Distance from surrou	nding forest (m) or within
Large DBH, Outstanding Tail Snag	\vdash	Tree spe	ties DBH Number	of cavities Size an	d type of cavities	Evidence of use	e by bats (abundant guano) or o	ther mammals or wood ducks.
Large DBH Gavity Hee (Live of Dead)	1_1	TX THE SPE	NOS. CONT. HUMBER	of our files. Only un	a type of outlined			
Rare Communities or Species	Yes	No						
Old-Growth Forest		X Average	age of trees. Range	e of DBH or prism swe	ep. Sources of	disturbance (inclu	des presence of exotics).	
Taligrass Prairie or Savannah		X Soil type.	Percent cover of tre	es, shrubs, forbs, an	d grasses Sou	rces of disturbanc	e (includes presence of exotics)	4
Bog Red Spruce or White Oak Earost	-	X Soil type	and deptns.	DBH range or price		vimate Canony C	over Source of disturbanco or	evidence of forestry
Coastal Marshes (Great Lakes/Shallow Atlantic)	-	X Substrate	type (bedrock or so	I type). Water level	Evidence of wat	er fluctuation. Pre	esence of Beaver Pond. Amoun	t of exposed shoreline
Dunes / Beaches / Bars / Ridges		X Soil or su	bstrate type. Sand c	ass. Sources of distu	urbance (include:	s presence of exol	tics). Percent cover of trees, sh	rubs, forbs, and grasses
Sand Barren		X Sand cla	s. Sources of distur	bance (includes pres	ence of exotics).	Percent area of e	exposed rock, vegetation, and s	and, Sources of erosion or fire.
Alvar		X Bedrock	ype. Soil type and de	epth. Percent area o	f exposed rock a	and vegetation. Sc	purces of disturbance (includes p	presence of exotics).
Rare Species (Not Species At Risk)	V	Number	of individuals and loc	ations. Ecosite or Ve	getation Type.			
Rare vegetation Community		X Sources	or disturbance (includ	ies presence of exoti-	CS).			

Date: 11/05/2016

Area and/or Polygon ID: 9330041

RATURAL RESOURCE SOLUTIONS INC.

Page 2 of 2

Project Name: Ronney

Project #: 173bC

	Indicate the location of the habit	at feature on the Fie	eld Map.											
	Identified Habitat Featu	ire #Obse	rved:	UTM(s)	Photo N	umbe	115	Habitat	Details (refe	r to Pa	ige 1)	Associated Wild and Evi	dilfe Observed dence	
0	Swanp	(1	NIA, entire feature	1059-10	61		-no evidence -Some human dunpingater -no open dater -no fish observe	e of Hurb disturb	en Ghu	resting < - garboge	vildlife list		
2)	Debris rile			rifer to map	1061		- some vlaetation pr - some vlaetation pr - does not extend int - catial/fall canopy - silteday subter table		appears ion pres not into s anopy cou table	i no: enf grou rero	ge ge	N/A		
3	rare sp. (non-sAk	2) (Y	eller to map	Norl			- shellbark hi along hidgeron feature - her SE of featur - I individual i hedgerow, ser observed alo	Chury i us exte dallo-s observe veral young NE	ndi ti d al Let	g from NE and ong SE individuals	N/A		
	TY Species	EV	#	Notes		TY		Species	EV	#		Notes		
	(Cicoon	TK		are brinky										
	Villdoer			Am Depth										
	Un te talod does	TK		E. MODIC						0				
	Shakbarty huk on 1		-	(N'd Write, TV			-							
	Theoper hillon													
	Madimisturd						-							
	Faunal Type Codes (TY) F B=Bird F M=Mammal F H=Herpetofauna S L=Lepidoptera F F=Fish T D=Dragonfly or Damselfly T	Vidence Codes (E Breeding Birds 4- Suitable Habitat S- Singing Male P- Pair 1- Territory D- Courtship Display	V) A- N	- Visiting Nest NU- Used r Anxienty Behavior FY- Fledge - Nest Building (not wren or woodpeck B- Nest Building (not wren or woodpec D- Distraction Display	nest d Young er) cker)		FS- Food/F CF- Adult c NE- Nest w NY- Nest w AE-Adult er	ecal Sac arrying food ith eggs ith young atering/leaving nest	Other OB- OI DP- Di TK- Tra VO- Vo HO- Ho	Wildlin bserve stinctiv acks ocaliza ouse/E	re d FE-Feedir re Parts CA-Carca FY-Eggs c tion SC-Scat Den SI-Other S	ig Evidence ss/Bones or young iigns (Specify)		





perm. flows ---> int. flows



->> perm. flous --- > int. flows

Modified ELC Community Description

Page ____ of ____

PIN 247250 CHIODSE	TAIDA OC	
Polygon: 1 1 N 8 7 / 000 8 7 / 0055	MOD-00	
UTM:		
Date: May 11/16	Time: 1315-1400	1
Surveyor(s): AMD, CEP		187
Weather: 120 C wind 31E 10070 CC		

Community Classification

Ve	getation Type:	Swamp	Maple	Mirlyn	Dec.	JULUS .	Swarp	SUDM3-3
	Inclusion:						3	
	Complex:							

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
X Wetland	Mineral Soil	XRiverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	X Swamp	Woodland
Cultural	F	Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation
Cover	Open Water	Plant Form			
Open	Shallow Water	Plankton	Forb	Coniferous	
Shrub	Surficial Dep	Submerged	Lichen	Mixed	
Treed	Bedrock	Floating-Lvd	Bryophyte		
		Graminoid	X Deciduous		

Stand Description

Layer	HT	Cover	Species	
• Super canop	-			
1 Canopy	1- Z	4	treeman's maple = bl. walnut = wh. elm	
2 Sub-canopy	3	4	freeman's maple = while im = bl. walnut	
3 Understorey	4	3	gray dogroud = Ribes anericanum = multifl	10 125
4 Groundcover	5-1	4	Spring avens > dame's rocket > (anada wild a	non

HT Codes: 1:>25m 2:25-10m 3:10-2m 4:2-1m 5:1-05m 6:05-02m 7:<02m Cover Codes: 0:none 1:0-10% 2:10-25 3:25-60% 4:>60%

Size Class Analys	is	0	< 10	A	10 - 24	A	25 - 50	R	> 50
Snags		N	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs		õ	< 10	0	10 - 24	Ř	25 - 50	R	> 50
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Community Age	Pioneer		Young	X	Mid-age		Mature	1	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description



PLANT SPECIES LIST

Site: Polygon: UTM: Date: Time: Surveyor(s): Weather:

2. 3

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

Causing		La	yer		Comple	Layer		0
Species	1	2	3	4	Sample	1 2 3	4	Samp
filemans maple	A	A				Sanicula sp.	A.	
61. walnut	A	A				aarlic musican	H	
wh nine	R	R				aight ragines	0	
bl. raspherry			Ō	0		Allium rangense	A	
multiflere itse			0	0		dandetion	0	
poison iny (rad)				0		Sp. jeneluce	A	
haw there sp		ð	0			Coul Porsulp .	K	
whill i	A	A				dames rocket	A	
Legisswood	0	0	0			downy yel vislet	R	
prickly ash			0	0		Com. blue violet	0	
rough loof dogwar	9		0	0		(artx granularis	0	
aray dogwood			A	0		Spring avens	A	
Ribes and ritanium			0	0		Faste soliseal	R	
						CarexCadiata	0	K
						Swamp parimony	R	
						Lanium perjuskum	R	Heck
						Viasticksed	R	
						Mayapp	R	
						Glyceria stylata	0	
						formed lasesting	0	
						Carlxoloula	R	
×								

Wildlife and Other Notes

otos 1085-87

-teature used for hunting -small areas of invaluet plant ation this feature and naturalizing along watercourse - blowalout throughout floodplain, mixed = treeman's maple thraces

Locally Kar

Modified ELC Community Description

Page \ of

Site: Rommey WF (#1736() Polygon: PIN 8470050, 8470055 WOD-007 UTM: Date: May 11/16 Time: 1245-1315 Surveyor(s): AMD CEP Weather: 1200, 100 3-4/E, 10090 CC

Community Classification

Ve	getation Type:	Coniferons Plantation TAGMI						
X	Inclusion: (U	open water (OA)						
X	Gemplex: (2)	Diciduous Plantation TAGM3						

Polygon Description

incl.

System	Substrate	Topo Feature		Community				
X Terrestrial Wetland Aquatic	Organic Mineral Soil Parent Min Acidic Bedrock	Rivenne Bottomland Terrace	Talus Crevice/Cave Alvar Rockland	Lake Pond River Stream	Barren Meadow Prairie Thicket			
History Natural Cultural	Carb Bedrock	X Valley Slope X Tabloland Roll Upland Cliff	Beach/Bar Sand Dune Bluff	Marsh Swamp Fen Bog	Savannah Woodland Forest X Plantation			
Open Shrup Treed	Open Water Shallow Water Surficial Dep. Bedrock	Plant Form Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Coniferous				

Stand Description

c

- 1	Layer	HT	Cover	Species
	Энрег сапору	-		
1	Canopy	2	4	whipine > Nurvay spruce
2	Sub-canopy	3	4	whipine > Norway's pruce > common apple
3	Understorey	4	3	bl. raspberry & choke chevry & multitlora vose
4	Groundcover	57	3	Dr chard grass swill strouberry > spring aver

 HT Codes:
 1
 2: 25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 0.5m
 6: 0.5 - 0.2m
 7: <0.2m</th>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Size Class Analysis	R < 10	A 10 - 24	R 25 - 50	N > 50
Snags	N < 10	0 10 - 24	N 25 - 50	N > 50
Deadfall/Logs	R < 10	0 10-24	N 25-50	N > 50
Abundance Codes:	N: None	R: Rare	O: Occasional	A: Abundant

mmunity Age Ploneer Young X Mid-age Mature Old	Growth
--	--------

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page _____of ____

PLANT SPECIES LIST

Site: Polygon: UTM: Date: Surveyor(s): Weather:

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes:	R=ra	re C	=occa	asiona	A=abundant	D=dominant					
Species	Layer				Sample	Species	Layer				Sample
	1 2 3 4					2	3	4			
who pine	A	A				auric mustard				0	
gray deawood			0	0		Jandelion				0	_
Choke derry			1-1	0		Dichard grass				H	
Freemans maple	R	R				spring and i				A	
bl.raspberry			0	A		will's railern				A	
Norway Sprace	A	0				dandelion				0	
61. nospherny			0	A		reed canary				R	
blicherm	R	0	0			spieweluced				R	
wh.ash	R	0	0			with dock				0	
bl.locust	R	R				vellow rocket				0	
Com-apple		0	R			Linothy				R	
61, walnut	R	R	R			annual fleebane				0	
multiflera rose			A	0		cleavers				0	
a ray dorasond			0	0		Wast an rimont				R	
whielm	R	R	R			front Kly				0	
hawthom TD.		R	K			1					
1											
	-		-				-		-	-	-
			1	-			-			-	
					1						

Wildlife and Other Notes

-photos 1084-1097 -tile draining into feature Dimultiple locations - naturalizing or adjacent natural communities
Modified ELC Community Description

Page	L	of	

Polygon: PIN 8470050 5	470055 WOD-007
UTM:	
Date: May (1/16	Time: 1100-1520
Surveyor(s): AMD, CEP	
Weather: 140C, wind 3/E	007, CC

Community Classification

Vegetation Type:	Frish-Moist Low and Dec. Juous Forest	FODMT
Inclusion:	Open water (OA)	
Complex:		

Polygon Description

System	Substrate	Topo Feature	Community	
Vetland Aquatic History	Organic Mineral Soil Parent Min Acidic Bedrock Basic Bedrock Carb, Bedrock	Lacustrine Talus X Riverine Crevice/Cave X Bottomland Alvar Terrace Rockland Valley Slope Beach/Bar Tableland Send Dune	Lake Barren Pond Meadow River Prairie Stream Thicket Marsh Savannah Swamp Woodland	
Cultural	Site Open Water	Cliff	Bog Plantation	
Open Shrub Y Treed	Shallow Water Surficial Dep. Bedrock	Plankton Forb Submerged Lichen Floating-Lvd Bryophyte Graminoid X Deciduous	Coniferous	

Stand Description

Layer	нт	Cover	Species
· Super-canopy			
1 Canopy	- Z	4	whielm > blivaluut > green ash > E. Loffor
2 Sub-canopy	3	4	bl. walnut > wh. elm > basswood = green ash
3 Understorey	4	4	gray doguood > Choke cherry > mulfiflora ross
4 Groundcover	57	4	Sanicula sp. > spring avens > garlic muitars

HT Codes: 1:>25m 2:25-10m 3:10-2m 4:2-1m 5:1-0.5m 6:05-0.2m 7:<0.2m Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Community Age	Pioneer		Young	X	Mid-age		Mature		Old Growth
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs		0	< 10	0	10 - 24	R	25 - 50	N	> 50
Snags		0	< 10	D	10 - 24	R	25 - 50	N	> 50
Size Class Analysi	5	0	< 10	A	10 - 24	A	25 - 50	2	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST



Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

0	1	La	iyer				-	La	ver		
Species	1	2	3	4	Sample	Species	1	2	3	4	Sample
6 walnut	0	A				dudny yel. Violet				R	
whelm	A	A				- garlie mustard				A	
gray dogwood			A	U		gipstrapulled				A	
multiflore rose			A	0		A liven consense				0	
shaq Lickory	0	0				cow parsnip				O	
Either Lickon	R	0				Sp. ; excluded				0	
green osh	0	0	0			- Sanicula sp.				A	
paison in (rud)				0		enchant nightshadd				0	
choke chira			A	0		-Spring avents				A	
bassimil	R	Õ	0			damps rock of				0	
Am Sucamic	R	R				reed canan				0	
wonwhet		R	R			will or rominim				0	
stag. subor		0	0			mayopple				R	
round loss you was		R	R			1 mul 1114				0	
Manitopamople	R	0	0			Socia beauty (vin)			0	
E. Cottonwood	R					- Carex granularis				0	
buroak	R	R				rugelly plantain				R	_
						Financial Strouberry				R	
						JI					
		-	-	-			-	-	-	-	
			-	-			_	_			
										-	

Wildlife and Other Notes

-photos 1087, 1090

- bl. walnut plantations nearby-naturalizing in flood plain-not rare vcg. community type -tile drains directed into floature -some swampy depressional areas = in feature, but all very small, to a small

to map

not in Scuit, SP unknown

Page ____of (

Modified ELC Community Description

Page of

MEGM3-5

Polygon: PIN 8470050,84	17 0055	WOD-007
UTM:		
Date: May 11/16	Time: 1520	0-1540
Surveyor(s): AMD, CEP		
Weather: 15°C, wind 3/E, 409	0 ((

Community Classification

Ve	getation Type:	Smooth	Brome	Graminoid	Meadow	
	Inclusion:					
	Complex:					

Polygon Description

System	Substrate	Topo Feature	Community	
Vetiand Aquatic History	Organic X Mineral Soil Parent Min Acidic Bedrock Basic Bedrock Carb Bedrock	Lacustrine Ta Riverine Cr Bottomland Al Terrace Ro Valley Slope Be Tableland Sa	IUS Lake evice/Cave Pond var River ockland Stream and Dune Swamp uff	Barren Meadow Prairie Thicket Savannah Woodland
Cause	Site		Bog	Plantation
Cover Cover Shrub Treed	Shallow Water Shallow Water Surficial Dep. Bedrock	Plankton Fo Submerged Lic Floating-Lvd Br Graminoid Do	rb Coniferous chen Mixed yophyte eciduous	

Stand Description

	Layer	нт	Cover	Species
•	Super-canopy	-		
1	Ganopy			
2	Sub-canopy			23
3	Understorey-	_		
4	Groundcover	5	4	Smooth brome > wild stranberry > fall golden ro

 HT Codes:
 1: >25m
 2: 25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 0.5m
 6: 0.5 - 0.2m
 7: **40 2m**

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Community Age	Pinneer	X Young	Mid.ana	Matura	Old Growth
Abundance Codes:		N: None	R: Rare	O: Occasional	A: Abundant
Deadfall/Logs		N < 10	N 10 - 24	N 25 - 50	N > 50
Snags		N < 10	10 - 24	N 25 - 50	N > 50
Size Class Analysi	s	R < 10	N 10-24	N 25-50	N > 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Page of

Layers: 1=canopy

1=canopy 2=sub-canopy 3=understorey 4=ground layer

	Layer					La	ver				
Species	1	2	3	4	Sample	Species	1	2	3	4	Sample
Auno live				R		Carex granulais				0	
			07			dandelijen				0	
						Su lobur river 2til				R	
						reed caran grass				R	
			J.			wild stra berry				A	
						annual fleebane				R	
						Calico aster				R	
						smooth biome				A	
						wild carrot				0	
						Southistle				0	
						timothy 1				0	
						+all goldenrod				0	
						Can thistle				0	
						garlic mustard			_	R	
						2			_		
	-								_		
			_					_			
								_	_		
			1								
	+								-		
	-	-		-					-	-	
							11				

Wildlife and Other Notes

-photos 1097	0
- Koldennu)	5
- not a metland, despile soils (:. e. MR=6)	

Modified ELC Community Description

Site:	W07-007
Polygon:	<u></u>
ИТМ:	
Date:	Time:
Surveyor(s):	
Weather:	
Community Classification	

Page _____ of ____

Vegetation Type:	
Inclusion:	
Complex:	
	2

Polygon De	scription
------------	-----------

System	Substrate	Topo Feature		Community	
Terrestrial Welland Aquabc History Natural	Acidic Bedrock Basic Bedrock Carb. Bedrock	Lacustrine Riverine Bottomland Terrace Valley Slope Tableland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune	Lake Pond River Stream Marsh Swamp	Barren Meadow Prairie Thicket Savannah Woodland
Cultural	Site	Roll Upland	Bluff	Fen Bog	Forest Plantation
Open Shrub Treed	Shallow Water Surficial Dep Bedrock	Plant Form Plankton Submerged Floating-Lvd Graminoid	Farb Dichen Brydphyte Deciduous	Coniferous Mixed	

Stand	Description
-------	-------------

community Age

Pioneer

Layer	HTCover	Species
 Super-canopy 		
1 Canopy		
2 Sub-canopy		
3 Understorey	_	
4 Groundcover		

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
Snags		< 10		10 - 24		25 - 50		> 50
Deadfail/Logs		< 10		10 - 24		25 - 50		> 50
Abundance Codes:	N:	None	R:	Rare	0:	Occasional	A:	Abundant

Young

Mid-age

Mature

Old Growth

Modified ELC Community Description

Page _ of _

Soils		1	2	3				
4 Position:		4	6	4	Polygon: DIN S	476750 8	17.0055	
5 Aspect:		315	85	320	FIN 0	1100210	11052	_
1 %		2	1	2				
Туре:		S	5	2	Tree Tally			
Class:		B	B	B	Species	Tally 1	Tally 2	Tally 3
		_					_	
L Strata:	Texture	SIL	C.L.	SICL			_	
13	Depth	0-15	0-1-4	0-36				
Strata:	Texture	SAL	SIL	Sic				
	Depth	15-45	15-31	37-51				
Strata:	Texture							
	Depth							
Strata:	Texture							
	Depth			-				
Effective	Texture	Sich	SILL	Sic		X		
Surface S	toniness							
Surface R	ockiness							1
Depth to:								
	Mottles	29	15	37				
	Gley	/	/	-			1	
	Bedrock	/	1	-				
	Water table	17	1	-				
	Carbonates	1	/	-				
Deoth of	Organics	1	/	-				
Pore Size	Disc #1							
Pore Size	Disc #2							
Pore Size	Disc #3				Total:			
Moisture	Reaime	6	6	5	Basal Area			
	-		di		Snags			
NOTE	S:							-
			1		121 SHI 1	1.		
-<	i Samp	le 1	aken	in 1	Conifer plast	ation		
3	Contra	- C		110 11	most Site			
	TA LEGIL N	11 21	DE-M	A. 16 1				
	2) 50%	Q at	take	1 7		-		
1	1	1.2	1 - ha	1 1	1 it al			
-2	oil samp	2	tusan	10 100	land Torest			
1			(Lasto	Sec. 5	marth hours	madow		
-	une loc	771 -	1900	() - J	in a wear in the starting	1. Col 0 0 -		
	1> feetus	C.S.M	360 16	515Q	deepre solis	,		
1								
1								
1								

RATURAL RESOURCE S	OLUTIONS INC.	(Office use only) Com	nmunity ID:	
Wetland Vegetation Communitie	es			
Project Name: Romney WF	Project #:	36 C	Parcel #: 8470	(20)
Observer(s): AMD CEP			ELC Code: SviD	M3-3
Date: May 11/16 Time	(24h): \3 5			
Wetland #: WET-006 Weath	ner: Precipitation: Non	Temp (° C):	12	
Veg Community #: Wind :	Speed & Direction: 3/E	Cloud %:	00	
Wetland Type: Stdown Site T	ype: R Dominant Forr	n: h		
Permanent Open Water: 55 %	Check one: Ø central area	O spread out in pone	ds associated T	materianise
Photos: 1085 -1087				
Forms (>25% absolute cover)	Dominant Species (give %	relative cover)	A Share Sheets	
h (%:70) Freeman's maple (50%)	> black walnut (30%)	17 white elm (20%)	/ ()	
с (%:)				
√ dh (%:)				
ds (%:)				
ts 1%:30) white elm (40%) > bl	alt walnut (40%)	> basswood (20%))	
ls (%:)				
acies (0) (Puls avens (407.)	> dowe's rocket (309)) > Canada will unio	n (2090) > 50	ieneliced (1090)
no (%:)	owner allow to of			
ho (%:)				
su (%:)				
m (<u>%:</u>)				
u (%:)		14	14	4
Soil type: SICL Mineral A Orga	nic Depth of organics: N/	A cm Organic Type:	F M H M// Depth	to bedrock: N/A cm
Soli type: C-ciay, L-loam, S-sano, SI-siit (or any	Comoinauon)	nic over bedrock		
Rare Species (Local Regional	Wildlife Notes:			
Provincial):				
1 mille lane:	Cart i citantal als	convations list		
Local y unausura (123)	retur to inclosing	30. 4.11.1		
- Beum vernier				
Ganan 1312,				
SAR observations must also include a spe	L ecific UTM location.			
Forms: h=deciduous trees (>6m); c=coniferous tr	ees (>6m); dh, dc, ds=dead trees/s	hrubs; ts =tall shrubs (1-6m);	Is=low shrubs (<1m); gc:	=ground cover; ne =narrow
emergents; be =broad emergents; re =robust emer	gents; ff=free-floating plants; f=float	ing plants; su =submerged pl	ants; m=mosses; u=un	vegetated water <2m deep on
the outer edge of a wetland or completely surroun	ded by wetland			
Site Type: L=lacustrine (lake at least 8ha): P=pal	ustrine: R=riverine: IS=isolated			
	active to the soluted			

N10: none observed
Features to look for in the field:
⊖ active beaver lodges/dams N/O
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
N/O
 wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
refer to incidental obs. list
O plant species (wild rice, cranberries)
NIO
○ location of and directions of water flow at all inflows and outflows (mark whether permanent → or intermittent>
reter to ELC map
human related disturbances (fill, docks, houses, etc)
N/0
 evidence of recreational activities (nature appreciation, fishing, hunting)
yes - hunting
 locations of seeps or springs, lagg
N/0
○ iron precipitates, marl deposits N / 0
O winter cover for wildlife
yes - oller, turkeys
 ungulate summer habitat, moose aquatic feeding habitat
yes None
 suitability for waterfowl breeding, staging, moulting
Nonl
surrounding topography (flat, rolling, hilly, steep)
Flat
○ surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); & abandoned ag. field; O utility corridor; Ø dec. forest;
O recent cutover or clearcut (<5yr); & conif. forest; O mixed forest; Ø crops; Ø row crop; O abandoned pit/quarry; O pasture;
Q ravine; O terrain appreciatbly undulating, hilly or with ravines; O fence rows; O fence row with deep cover or shelterbelt; Q open loke or doop fiver. A great flood lain O rock outgrap
lake of deep fiver, & creek hoodplain, O fock outcrop
fish habitat present: Ves) No. (circle)
If ves, describe: low or high marsh, seasonal or permanent swamp, fish or babitat observed
Seasonal swame - watercourse may flood in spring little (it and suitable fict habitatio swame, districted to water course
O vernal pools
N/O
invasive species (plant, aquatic)
multiflara rose, garlic mustard, dane's vocket.
Demnitions.
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to $\frac{1}{2}$
provide fisheries habitat except during high water conditions)

Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water

only,

Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.

Wildlife Habitat Field Data Collectio	n			S NATURAL RESOURCE SOLUTIONS INC
Project Name: Konny WC			Project #: 17360 Area and/or Polygon ID: 807-0050/847-0055	Aqualic, Terrestinal and Welland Biologists
Date: 1/05/16	Start	Time:	12:44 End Time: 15:40 Observers: AMDLEP	Page 1 of 2
Weather Conditions: THE HADAL HE FI	100	1.17		1 293 1 01 2
Indicate whether or not the following habitat feature	es are	preser	t within the polygon If Yes to any fill in Page 2 Incidental Wildlife Observations on Page 2	
		produi	t minimit the polygon. In the to daily, minit age 2. Indicated them to be a transition of the ge 2.	NEW YORK STATES AND AND AND AND AND AND AND AND AND AND
Habitat Features	Pres	sent	Information to Record on Page 2	
Spring Elopded Eield	Yes	NO	Applicable to All:	
Vernal Rool	\vdash	12	Draw extent of an water in hot indicated through ELC. Longevity of site (if known, or estim	ate)
Pond	1	1	Denotation species wordy debris/basking lons within water Evidence of wildlife use including w	e, origin (natural of anthropogenic).
Shallow Marsh (MAS) or Open Water	1T	-	Presence of fish	atenowi, turties, amphibians
Swamp	1		All Swamps: Always search for Heron Nest Bowls. Record if active (April-June only) - Evidence includes eoo shells	quano dead young. Map colony/nests if found
	1.0.1	-		
Fields	Yes	No	Applicable to All:	
Non-rotational Hay or Weakly Grazed Pasture	X		Height of vegetation Size of site Abundance of nectar-produ	cing plants (e.g. goldenrods and asters)
Meadow	X		Evidence of small mammals Frequency and source of disturbance Adjacency to forest and for	est size
Thicket, Woodland, Hydro Corridor		X	Location and abundance of raptor perches (scattered trees, snags, fence	eposts)
Substrate and Tanagraphy	Vec	No		
Sand or Fine/Loose Gravel	Tes	NO	Evidence of use (turtles in or near the area, turtle tracks, raided nests). Proximity to Shallow Marsh (MAS) or Onen M	/ater 1
Banks Steep Slopes Sand Piles		12	Evidence of each of the second s	extent if not indicated through ELC
Cliffs		X	Height of cliff. Rock type Presence of ledges or crevices and their size. Draw extent of cliffs if not indicated through	ELC.
Karst		X	Depth of crevices	
Cave		X	Depth of cave, bedrock type	
Natural Rock Piles / Talus Slopes		X	Age. Rock/soil type. Draw extent of talus slopes if not indicated by ELC. Adjacency to large water body with produc	tive fish population (otters).
Exposed Unvegetated Lake/River/Wetland Edge		X	Source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation co	ver. Distance to a Great Lake.
Seeps or Springs		X	Ecosite, Number or area of extent. Presence of indicator plants, Iron staining, Water temperature, Degree and leng	th of slope. Soil types.
Islands or Peninsulas in Open Water		×	Natural or artificial. Record any gulls or terns observed. Draw extent of island or peninsula if not indicated through E	LC.
				1
Anthropogenic Features	Yes	No	Applicable to All:	
Abandoned Mine Snan		X	Age Deptri into the ground Amount of sun exposure (of direction the slope faces)	
Abandoned Road or Rail Red	-	K	Rock size vegetation present Substrate composition (or bedrock type)	r potential for winter water fluctuation
Abandoned Well		X	Evidence of Ose Proximity to water and estimated subtranear minuence of Abandonad Walls Only: Dresence and type of capping	potential for winter water nuctuation,
Old Foundation		X	Abandoned Road or Rail Bed Only: Extent in the landscape. Connectivity to other natural features. Overhead year	etation cover.
Burrows or Dens	Yes	No	Applicable to Mammal Burrows or Dens:	
Small - Rodent or Snake		K	Diameter of entrance Soil Type Availability of aquatic veget	ation or fish
Medium		X	Ecosite of location Proximity to water and type of water Evidence of use, or tracks of	or digging marks
Large		X		
Log Jams, Old Beaver Lodges	\vdash	14	Adjacency to large water body with productive tish population. Evidence of other (observed, tracks, scat, predated tis	n, turties, eggs, trogs).
Crayish Chimney (/E only)	با	IX	Ecosite of location. Solitype. Source of site moisture (meadow marsh, creekinver edge, swamp etc).	
Evidence	Yes	No		
Extensive Browse and/or Ungulate Scat		X	Vegetation species browsed, Ecosite, Other evidence of ungulate use. Presence of seeps/springs. Barriers to move	ement to and from the area
Nest Bowl or Stick Nest (herons or raptors)	_	X	Quantity. Ecosite of location. Evidence of use. Species if known or bird group. Size. Height in tree. Tree spi	ecies.
Outstanding Trees	Vor	Ma		
Large DBH, Outstanding Tall Spag	Tes	X	Tree species Evidence of perch usage or pesting DRH beinht Exposure above canony. Distance from surrou	nding forest (m) or within
Large DBH Cavity Tree (Live or Dead)		X	The species DBH Number of cavities Size and two of cavities Evidence of use by bats (abundant guano) or c	other mammals or wood ducks.
	4	1/3		
Rare Communities or Species	Yes	No		
Old-Growth Forest		X	Average age of trees. Range of DBH or prism sweep. Sources of disturbance (includes presence of exotics).	
Tallgrass Prairie or Savannah	-	×	Soil type. Percent cover of trees, shrubs, forbs, and grasses. Sources of disturbance (includes presence of exotics)	,
Bog		×	Soil type and depths.	
Red Spruce or White Oak Forest		×	Soil type and drainage regime, DBH range or prism sweep. Approximate Canopy Cover. Source of disturbance or	evidence of forestry.
Coastal Marshes (Great Lakes/Shallow Atlantic)		X	substrate type (bedrock or soil type). Water level. Evidence of water fluctuation. Presence of Beaver Pond. Amoun	t of exposed shoreline.
Sond Porces		7	Son or substrate type. Sand class. Sources or disturbance (includes presence of exotics). Percent cover of trees, sh	rubs, torbs, and grasses.
	-	X	Sand Gass. Sources or disturbance (includes presence or exolocs). Percent area or exposed rock, vegetation, and s	anu, Sources of erosion of file,
Rare Species (Not Species At Risk)		X	beurous type, son type and deput, referent area or exposed rock and vegetation. Sources of disturbance (includes p Number of individuals and locations. Ecosite or Vigoetation Tune.	Diesence of exolics).
Rare Vegetation Community	\vdash	Ś	Sources of disturbance (includes presence of evolution Type.	
Line - a generation o on maniny	di di di di di di di di di di di di di d	10	Service of analysing interactor products of exercise.	

K. . . .

Characteristics of Identified Wildlife Habitat

Project Name: Komnaywe

Date: 1/05/16 Project #: 17360

Area and/or Polygon ID: 8470059/8470055



Resource Solutions Inc.

Page 2 of 2

Indicate the location of the habitat feature on the Field Map.

	Identified Habitat Feature	# Observed:	UTM(s)	Photo N	umbers	Habita	t Details (refer to Page 1)	1	Associated Wildlife Observed and Evidence		
)	pond N/A TAGMIG OA Inclus pond N/A FODM7 CC OA inclus Open mater N/A watercounthroughon		N/A TAGMI community - DA Inclusion	1034		depih unknown; ((dug-outpons), n Acatures, rubble	wate the turbal, and a vice no fish or bis dup E of frature	h Acotore suitable 19mphilo-	An toria, appears to be suitable for amphibaced in Reduces flushed (not not an lord)		
			FODM7 community- OA inclusion	1 community - 1096 depin on chan Sign or beaking			depin on chain water to turbed, noveg, no Also or booking features with Active august and suit-ute among or pressure				
			water I NIA watercourse flowing throughout			depth <1m, width -2-3m, limited roody debris and regetation within, fish habitat present, no lish observed,			NIA		
	suamp	(N/A SWDM3-3 community	1085-8	7	-no evidence of 1 no fish observed	eron resting, no ti , used for hunting	ish habitat	N/A		
	non-rotational hay 1		NIA OAGM2 community	1093 - vegetation <30 cm height, no evid small mommals no, after perch woods adjacent & conthe side, clu dandelion, alfalta for rectaring, o		lince of s but discent					
	meddaw	(NIA MEGM 3-5 community	1097		of small name adjacent treed noun by landou limited nector p	so on height no ev mals, roptor percle nor adjacent to for producing Plants	idence es casionally rest,	NIA		
	TY Species Song Sparrow Calibage while	EV #	Notes		TY whete	Species	EV #		Notes		
-	Antonicola	S			racc	200	TK				
	tree sindling	S			bliter ano	turkey Sauiscell	TK OB				
_	AMONIA				11 14.9	2-14-31 - 13	I'' M				
	aunal Type Codes (TY) =Bird I=Mammal =Herpetofauna =Lepidoptera =Fish - Territor	Codes (EV) Birds e Habitat Male	V- Visiting Nest NU- Used A- Anxienty Behavior FY- Fledge N- Nest Building (not wren or woodpect NB- Nest Building (not wren or woodpect)	nest d Young ker) cker)	FS- Poo CF- Adu NE- Nes NY- Nes	the carbin brecal Sac the carbing food t with eggs t with young	Other Wildlife OB- Observed DP- Distinctive Parts TK- Tracks VO- Vocalization	FE- Feedir CA- Carca FY- Eggs c SC- Scat	ng Evidence ss/Bones pr young		

lse this form in FC	DD, FOM			Aquatic, Terrestr	ial and Wetland Biologists	Woodland Numbe	er:		Sar
roject Name:	Komacywe	Project #:	1-1366			38		Page 1 of	f2
tart Time <u>12</u>	44	End Time	15.40		Date: <u>11/05/16</u>	Observer(s):	AWD. I RP		
olygon or Area ID	(006470000	10084	17005SWeathe	r Conditions: 'Ti /	1 of Wind HE CLILLODDO				
	# live or dead	1			1 few times > 85101 OBH				
lat Blumbar	cavity trees ≥	DI	at Contac LITM(Zana, IFTI		Commonte			
Not Number		4 C PIC	N390DEC	un sean		Comments			
		+ 5m	000000	100-00-00	and the second second second second second second second second second second second second second second second				
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ot 5	0	+600	0252101	410h1100					_
lot 6	<u> Q </u>	+-100	<u>()5%2(h)</u>	- TON HARD					
lot /	0		122992	-166-1707/					-
lot 8									
lot 9							-		
lot 10									
lot 11									-
lot 12									-
lot 13								_	_
lot 14									_
lot 15									
lot 16									_
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lot 33									
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ot 35	4.						1 4 N		

Preparation for EOS Bat Monitoring: Identification of High Quality Potential Roost Trees
 Identify the best potential roost trees in the applicable woodland/polygon: <10ha in size = up to 10</th>

 Tree #
 Species
 # of Cavities
 DBH (c
 >10ha in size = 1 additional for each ha up to 30 UTM Photo Number(s) DBH (cm) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Formula: Total # Cavity Trees / (# Plots x 0.05ha) This Section Project Manager Use Only lf >10/ha:

> or = 10/ha? Yes / No

BMA-____









Modified ELC Community Description

Page __ of __

Polygon: PIN \$340028	WOD-009
UTM:	A
Date: May 10/16	Time: 1430 - 1530
AMDIER	
Surveyor(s):	

Community Classification

Vegetation Type:	White Elm Lowland MMA Deciduous Forest	(FODM7-1)
Inclusion:	Pecidinous Plantation (TAGM	3)
Complex:	Coniferous Plantation (TAGMI)	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
()	Site	Cliff		Bog	Plantation
Cover	Open Water	Plant Form			
Open	Shallow Water	Plankton	Forb	Coniferous	7
Shrub	X Surficial Dep.	Submerged	Lichen	Mared	
X Treed	Bedrock	Floating-Lvd	Bryophyte		
		Graminoid	X Deciduous		

Stand Description

	Laver	нт	Cover	Species
•	Super canopy			
1	Canopy	2	4	whelm & green ash > basswood
2	Sub-canopy	3	4	green ash sub elm shauthorn sp.
3	Understorey	4	4	gray log wood = bl. rasperry = multitlora rose
4	Groundcover	57	4	Sanicula sp. > garlic mustard > cow parsnip

 HT Codes:
 1:>25m
 2:25-10m
 3:10-2m
 4:2-1m
 5:1-0.5m
 6:0.5-0.2m
 7:<0.2m</th>

 Cover Codes:
 0:none
 1:0-10%
 2:10-25
 3:25-60%
 4:>60%

Community Ann	Pioneer	K	Vouna	X	Mid ago		Matura	T	Old Crowth
Abundance Codes		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs		0	< 10	0	10-24	R	25 - 50	N	> 50
Snags		0	< 10	R	10 - 24	R	25 - 50	N	> 50
Size Class Analysi	s	H	< 10	A	10 - 24	0	25 - 50	N	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

ALC: NOTE: N



Layers: 1=

PLANT SPECIES LIST

1=canopy 2=sub-canopy 3=underslorey 4=ground layer

Species	-	La	yer	in the	Sample		Species		La	yer		Sample
Opecies	1	2	3	4	Jample		Opecies	1	2	3	4	Sample
whelm	A	A	0] -	reet canony				A	
green ash	A	A	0			2	Cow pars of P				A	-
mail Horarosc			A	0			Amistica nettle				0	
child cherry	1		A	0		-	garlic multard				A	
tart. LUNENSALLU		0	0				Sp. iewelweed			0.1	0	
bassnood	0	0					calico aster				0	
Ll. rasp being			A	0			trout like (white)				0	5
nanyberry		R	R				Cartx blanda				R	
red oak		Q	-				wild geranium				R	
polson iny (ryd)				H			Ranunkulus arourt.				R	
poison ivy (rad)				0			Galium aparine				0	
gray duawood		R	A	D			fillium canarchse				0	
Friendarsmalle	R	R				+	Sanjeula sp.				A	3
the chim sweet		R	R				wood agrimony				R	1
who mulberry		0	R				curly dock				R	2 12
tamarack!		R					motherwor				R	
autumn ofive			R				Common plantain				0	
redcesdar		R					giant required.				0	
Silver maple	R	D					0 0					
hauthanco		0	R			1						
Trumpum (p.	-	D	0	-	-			-	-	-		-
Magsimac	-	V	K					_				_
Norway sour	T	5 -										
1 1	1					1						

- photos	1038-10216	
- trainage	ditch flowing through feature a sin corner	
- distarba	ed due to edge effects, humans	
- decid. p	ontation to red oak and silver maple	

Page ____of__

Modified ELC Community Description

Page __ of __

1990		numy Description	
site: Romney V	JF (# 1736 (()	
Polygon: PIN 8340	029	W60-004	
UTM:			
Date: May 10/ 6)	Time: 1400-1430	0
Surveyor(s): Weather: [[⁰ C, wind	4/E,100% (ic, light rain	
Community Classifica	tion	· ·	
Vegetation Type:	mixed M	ontation (TAGMZ)
Inclusion:			
Complex:			

Polygon Description

System	Substrate	Topo Feature		Community	
Aquatic History	Organic Mineral Soll Parent Min Acidic Bedrock Basic Bedrock	Lacustrine Riverine X Bottomland Terrace Valley Slope	Talus Cravice/Cave Alvar Rockland Beach/Bar Sand Dune	Lake Pond River Stream Marsh Swamp	Barren Meadow Prairie Thicket Savannah Woodland
Cover	Site Open Water	Roll Upland Criff Plant Form	Bluff	Bog	Forest X Plantalion
Open Shrub X Treed	Shallow Water Surficial Dep Bedrock	Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte X Deciduous	X Coniferous Mixed	

Stand Description

2

	Laver	нт	Cover	Species
•	· Super-canopy	-		
1	Canopy-		1	
2	Sub-canopy	3	4	Silver maple > E. cotton ood > wh. ash = wh. spruce
3	Understorey	4	3	rough leaf dagwood > wh. ash > rld-osier dogwood
4	Groundcover	5-7	4	wild strauberry = fall goldeand = garlic mustard

 HT Codes:
 1: >25m
 2:25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 05m
 6: 0.5 - 0.2m
 7: <0.2m</td>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >80%

Community Age	Pioneer	X	Young		Mid-age	T	Mature	1	Old Growth
Abundance Codes		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Deadfall/Logs	_	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags		R	< 10	R	10 - 24	Ņ	25 - 50	N	> 50
Size Class Analysi	5	A	< 10	A	10-24	K	25 - 50	N	> 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST



Layers: 1=canopy 2=sub-canopy 3=underslorey 4=ground layer

		La	ver				Traditional Inc.		1.a	ver		Ê.
Species	4	2	2	4	Sample		Species	4	2	2		Sample
- [merolo	l,	A	0	4			ala dell'in		-	-	A	
ad codere		R	R	-			COMPUTIN		-		0	1
40 cordin	-	0	R				Pro An OUSIC	-			A	
rin Celoar	-	2	0	-			Too prater is	-	-	-	A	
und leaf day on			h		-		Carty blanda				R	-
any real second	1	-	R				AVENS SPRICE			-	0	
e alier dayou		-	0	0			Erlafton SD.				0	
Cottonwood		0	0	Ť	distance in		redelover				0	
In Pine		R	R			-	Nildstrawberry				A	
hagehickory		R	Ì		-	1	garlic mustard				A	
val fiflore roop			0				allout the gray	1			R	
appling protor		R					day fily				0	
thash !!		0	D			1	1					
whespryce		0				1						
Manifoba maple		R				1						
1						1						
						1						T
						1	12= 1					
				1							1	
	-		-	-			10.5			_	-	
	1		1	1		1				1	1	-

Wildlife and Other Notes

- photos 1034-1037 - naturalizing plantation - mostly deciduous spp. Usome in rows, some planted scattered, evenly aged

Page ____of__

Modified ELC Community Description

Page		of	
	_		_

Site		
Polygon:		
итм:		
Date:	Time:	
Surveyor(s):		
Weather:		

oommanne	ondounne	ation		_	 	The second second second	-	
Vegetation 7	Type:	1						
Inclusion		1	1					
Complex	.		1					

Polygon Description

14

System	Substrate	Topo Feature		Community	
Terrestrial Wetland	Organic Mineral Soil	Lacustine Riverine	Talus Crovice/Cave	Lake Pond	Barren Meadow
Aquatic	Parent Min Acidic Bedrock	Bottomiand	Alvar Rockland	River Stream	Prairie Thicket
History Natural Cultural	Basic Bedrock Carb Bedrock	Valley Slope Tableland Roll. Upland	Beach/Bar Sand Dune Bluft	Marsh Swamp Fen	Savannah Woodłand Forest
	Site	Cint		Bog	Plantation
Cover	Open Water	Plant Form	1		
Open Shrub Treed	Shallow Water Surficial Dep Bedrock	Plankton Submerged Floating-Lvd	Forb Lichen Bryophyte	Coniferous	

Stand Description •

Layer	HT	Cover	Species			
Super-canopy)	\
1 Canopy						1
2 Sub-canopy						1
3 Understorey				1.1		
4 Groundcover HT Codes:	1: >	25m 2:25-	10m 3: 10 - 2m	4:2-1m 5:1-05	m 6 0,5 - 0.2m 7 -	:0.2m
Size Class Analysi	s.	one 1:0-10	< 10	10 - 24	- 25 - 50	> 50
Snags			< 10	10 - 24	25 - 50	> 50
Deadfall/Logs			<in)< td=""><td>10 - 24</td><td>25 - 50</td><td>> 50</td></in)<>	10 - 24	25 - 50	> 50
Abundance Codes			N: None	R: Rare	O: Occasional	A: Abundant

Modified ELC Community Description

Page __ of __

S H 220 115 6.5 2 S S A B Texture C Depth C Texture C Depth C Texture C Depth C Texture C Depth C Texture Sicil Depth C Texture Sicil Depth C Texture Sicil Depth C Catoonates C Organices C Disc#1 Sise#1 Disc#2 Sise#1 Disc#3 Sise#2 Sise#3 Sise#1 Disc#3 Sise#1 Disc#4 Sise#1 Disc#3 Sise#1 Disc#3 Sise#1 Disc#4 Sise#1 Disc#2 Anatural feature along w	S	1	2	3				
Image: State state	on:	5	4		Polygon: PN	834 802	8	
b.5 Z S S A B Texture C-64 Depth C-64 Texture Sicil C L Depth C-64 Texture Sicil C L Storiness C Mottles C Gley Sicil C L Bedrock C Vater table C Carbonates C Organics C Disc #1 C Besid Area Snags Snags Snags Strue Color of the feature along wafer course, FODM 7-1 No	rt:	220	115		111	071000	0	
S S A B Texture C-64 Depth C-64 Texture C-64 Stoniness C-64 Gley C-64 Bedrock C-64 Catonales C-64 Corponics C-64 Debth C-64 Debth C-64 Debth C-64 Debth C-66 Debth C-66 <td></td> <td>6.5</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td>		6.5	2					
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Texture Depth Texture Depth Texture Depth Texture Depth Texture Stormess Mottles Gley Bedrock Water table Carbonates Organics e Disc #1 e Disc #1 e Disc #2 e Disc #2 e Disc #3 Regime ES: ample 1 & decid. plantation near road/huase, TAGM3 WoD-OF ample 2 & natural feature along water warre, FeBM 7-1 Wo		A	В	12	Species	Tally	1 Tally 2	Tally 3
Texture Depth Texture Depth Texture Depth Texture Depth Texture Depth Texture Depth Texture SicL CL Sommess Rockiness Mottles Ciey Bedrock Water table Carbonates Organics Poisc #1 Poisc #2 Poisc #3 Poisc #3 Poisc #3 Poisc #3 Poisc #3 Poisc #4 Poisc #2 Poisc #4 Poisc #2 Poisc #3 Poisc #3 Poisc #2 Poisc #4 Poisc #2 Poisc #4 Poisc #2 Poisc #4 Poisc #2 Poisc #4 Poisc #2 Poisc #4 Poisc #4 Poi				21	in the second se		1	
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Depth Depth Texture Depth Texture Depth Texture Depth Texture Stonness Xockiness Mottles QP 37 Gley Bedrock Water table Carbonates Organics Disc #2 Disc #3 Boisc #3 Regime Stall Stall Stall Disc #2 Disc #3 Regime Basel Area Bnags Stall Stall Disc #2 Disc #3 Regime Basel Area Bnags Stall Stall Stall Disc #2 Disc #3 Regime Basel Area Bnags Stall Stall Disc #3 Disc #4	nta: Texture	-		-				
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Stonness Rockiness Motiles Gley Bedrock Water table Carbonates Organics a Disc #1 a Disc #2 b Disc #3 Regime Snags Stonness Carbonates Carbonates Carbonates Snags Sna	Texture	SILL	CL					
Rockiness Mottles Gley Bedrock Water table Carbonates Organics a Disc #1 a Disc #2 b Disc #3 Regime Snage Sisc Sisc A decid. plantation near road/house, TAGM3 WOD-ON Snage Sna	Stoniness	1	1	2		V		
Mottles Gley Bedrock Water table Carbonates Organics a Disc #1 a Disc #2 b Disc #3 Regime Sinage Sisc S: ample 1 D decid. plantation near road/house, TAGM3 WOD-D Comple 2 D natural feature along water course, FGDM 7-1 WO	Rockiness	1	1			N		
Mottles Gley Bedrock Water table Carbonates Organics a Disc #1 a Disc #2 b Disc #3 Regime Sinage Si			1					
Gley Bedrock Water table Carbonates Disc #1 Disc #2 Disc #3 tegime Snags S: Imple 1 & decid. plantation near road/house, TAGM3 WOD-DO Snags S: Imple 2 & natural feature along water course, FODM 7-1 WO	Mottles	29	37					
Bedrock Water table Carbonates inganics Disc #1 Disc #2 Disc #3 egime Basal Area Basal Area	Glov		1					
Water table Carbonates Disc #1 Disc #1 Disc #2 Disc #3 tegrme Snags S: Imple 1 & decid. plantation near road/house, TAGM3 WOD-DO Smaple 2 & natural feature along water course, FODM 7-1 WO	Bodrack	-	1				1	
Vater varie Carbonates Organics P Disc #1 P Disc #2 P Disc #3 Regime Regime Snags SS: ample 1 2 decid. plantation near road/house, TAGM3 WOD-ON ample 2 2 natural feature along water course, FGDM 7-1 WO	Bedrock	1						
Carbonates Jarganics Disc #1 Disc #2 Disc #3 Legime Basal Area Snags S: Imple 1 & decid. plantation near road/house, TAGM3 NOD-ON Imple 2 & natural feature along water course, FODM 7-1 NO	vvater table	-	17	_				-
Disc #1 Disc #1 Disc #2 Disc #3 Legime Basel Area Snags S: Imple 1 @ decid. plantation near road/house, TAGM3 WOD-OR Single 2 @ natural feature along water course, FODM 7-1 WO	Carbonates	-	tour-	-			\rightarrow	
Disc#1 Disc#2 Disc#2 Disc#3 Regime Basel Area Basel Area Basel Area Snags S: Ample 1 2 decid. plantation near road/house, TAGM3 WOD-DA ample 2 2 natural feature along water course, FODM 7-1 WO	Organics						\rightarrow	
Disc #2 Disc #3 Regime Basal Area Basal	Disc #1							1
Disc #3 Regime 105 Total Basal Area Snags	Disc #2		-					1
Regime 5 Basel Area Brags S: Imple 1 2 decid. plantation near road/house, TAGM3 WOD-D ample 2 2 natural feature along water course, FODM 7-1 WO	Disc #3				Total			11
Snaps Simple 1 2 decid. plantation near road/house, TAGM3 WOD-D ample 2 2 natural feature along water course, FODM 7-1 WO	Regime	10	5	1	Basal Area			
s: imple 1 2 decid. plantation near road/house, TAGM3 WOD-ON ample 2 2 natural feature along water course, FODM 7-1 WO					Snags			
ample 1 2 decid. plantation near road/house, TAGM3 WOD-OF ample 2 2 natural feature along water course, FODM 7-1 WOD	S:							
ample 2 2 natural feature along water course, FODM 7-1 WW	ate 1 (1 100	i) al	1.115	10	TA	CM3	- N- M
ample 2 'a natural feature along water course, FODM 7-1 WWD	mple	a dec	10- 110	MATIO	"neur road/1	NUMSE, M	OVIN MA	JE# - 09.
The minimum with the second the second secon	amolo 2	ann	tural	feat.	ed -	r P	- 1 h m	1 MALON
	oumpor	0	1 au m	ICUTU	re yong water	rioure, t	-GDIM 1-	1 330

Wildlife Habitat Field Data Collectio	on						
Project Name: Romeau WC	*	Project #: 13	60	Area and/or	Polygon ID: 934 00.	25	
Date: 10/05/2016	Start 1	fime: 13.57	End Time:	与小院	Observers	HWDLEP	Page 1 of 2
Veather Conditions: The White White Are	0.0	10040 Prova	Machrete	JTH MA			
idicate whether or not the following habitat featur	res are p	present within the poly	on. If Yes to any, fi	I in Page 2. Inciden	tal Wildlife Observations	on Page 2.	
Habitat Features	Pras	ent	Same alin a	mart start to the	Informati	on to Record on Page 2	
Matar Natar	Yos	No Applicable to A	.∏.				
Spring Elooded Eield		X Draw extent of	Il water if not indicat	ed through ELC.		Longevity of site (if known, or estin	nate),
/ernal Pool		C Dimensions (ler	oth, width, and dept	h).		Sources of disturbance, current us	se, origin (natural or anthropogenic).
Pond		Vegetation spec	ies, woody debris/ba	asking logs within wa	iter.	Evidence of wildlife use including	waterfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water		× Presence of fish					
Swamp		X All Swamps:	Always search for He	eron Nest Bowls, Re	cord if active (April-June	only) - Evidence includes egg shell	is, guano, dead young. Map colony/nests if found.
felds	Yes	No Applicable to	M:	Oine of sile		Abundance of pectar-prod	lucing plants (e.g. coldeprods and asters)
Ion-rotational Hay or Weakly Grazed Pasture	×	Height of veget		Size of site	and course of disturbance	Adjacency to forest and fo	rest size
fleadow		Evidence of sm	ali mammais	Frequency a	and source of disturbance	inches (scattered trees shars fen	ceposts)
hicket, Woodland, Hydro Corridor				Location and	abundance of taptor pe	iches (acalleled lices, shago, lon	
ubstrate and Topography	Yes	No					
and or Fine/Loose Gravel		K Evidence of use	(turtles in or near th	e area, turtle tracks,	raided nests). Proximity	to Shallow Marsh (MAS) or Open	Water
anks, Steep Slopes, Sand Piles		X Count swallow	nest holes and indica	te location. Estima	te number of breeding pa	irs. Sources of disturbance. Draw	extent if not indicated through ELC.
liffs		K Height of cliff.	Rock type. Presenc	e of ledges or crevic	es and their size. Draw e	extent of cliffs if not indicated through	in ELC.
arst		× Depth of crevic	S				
Cave		X Depth of cave,	pedrock type	and the second			-the East and Jalian (attace)
latural Rock Piles / Talus Slopes		X Age. Rock/soil	type. Draw extent of	of talus slopes if not i	ndicated by ELC. Adjace	ency to large water body with produ	ictive fish population (otters).
exposed Unvegetated Lake/River/Wetland Edge		X Source of distu	bances. Presence	of shorebird food sou	irces (snails, worms, clar	ns, insects). Percent vegetation c	over, Distance to a Great Lake.
Seeps or Springs		K Ecosite. Numb	er or area of extent.	Presence of indicate	or plants, Iron staining. V	valer temperature. Degree and ler	FLC
slands or Peninsulas in Open Water		Natural or artific	ial. Record any gui	is or terns observed.	Draw extent of Island of	peninsula il not indicated tinodgri	
Anthropogenic Features	Yes	No Applicable to	MI:				
Abandoned Mine Shaft		Age	Depth into th	ne ground	Amount of sun exposu	re (or direction the slope faces)	
Old Rock or Debris Pile, Old Stone Fence		K Rock size	Vegetation p	present	Substrate composition	(or bedrock type)	
Abandoned Road or Rail Bed		Evidence of Us	9		Proximity to water and	estimated subterranean influence	or potential for winter water fluctuation,
Abandoned Well		🗴 Abandoned W	ells Only: Presence	and type of capping	terre a series and		
Old Foundation	11	Abandoned R	ad or Rail Bed Onl	y: Extent in the land	Iscape. Connectivity to c	ther natural features. Overhead ve	egetation cover.
Rurrows of Dana	Vac	No Applicable to	Jammal Burrows o	r Dens.			
Small Redent or Stake	100	Diameter of en		Soil Type		Availability of aquatic veg	etation or fish
Medium		Ecosite of locat	ion	Proximity to	water and type of water	Evidence of use, or tracks	s or digging marks
arge		X					
og Jams, Old Beaver Lodges		X Adjacency to la	rge water body with	productive fish popu	lation. Evidence of otter	(observed, tracks, scat, predated f	ish, turtles, eggs, frogs).
Crayfish Chimney (7E only)		★ Ecosite of loca	ion. Soil type. So	surce of site moisture	(meadow marsh, creek/	river edge, swamp etc).	
		Nol					
Evidence Extensive Browse and/or Lingulate Scat	Tes	NO Vegetation spe	cies browsed Ecos	ite. Other evidence o	f unquiate use. Presenc	e of seeps/springs. Barriers to mo	vement to and from the area.
Last Bowl or Stick Nest (herons or rantors)		* Quantity, Eco	site of location. Evi	dence of use. Spe	cies if known or bird grou	p. Size. Height in tree. Tree s	pecies.
Vest Down of other most (inclusion of reptarte)							
Outstanding Trees	Yes	NO Trop popular	Suidenee of pareh w	ana or parting DE	H height Exposure at	pove canopy Distance from surro	punding forest (m) or within
Large DBH, Outstanding Tali Shag	-	X Tree species.	DRH Number of or	wities Size and two	e of cavities Evidence	of use by bats (abundant quano) o	r other mammals or wood ducks.
Large DBH Gavity Tree (Live or Dead)	1 1	A Thee species.	JBH. Number of Ca	Willes. Size and typ	e or cavinos. Evidence		
Rare Communities or Species	Yes	No					
Old-Growth Forest		★ Average age o	trees. Range of D	BH or prism sweep.	Sources of disturbance (includes presence of exotics).	
Tallgrass Prairie or Savannah		≯ Soil type. Perc	ent cover of trees, si	hrubs, forbs, and gra	isses. Sources of distur	bance (includes presence of exotic	S).
Bog		× Soil type and d	epths.				a design of females
Red Spruce or White Oak Forest		X Soil type and d	rainage regime. DB	H range or prism sw	sep. Approximate Cano	py Cover. Source of disturbance of	or evidence of forestry.
Coastal Marshes (Great Lakes/Shallow Atlantic)		X Substrate type	(bedrock or soil type). Water level. Evid	ence of water fluctuation	Presence of Beaver Pond. Amo	uni or exposed shoreline.
Dunes / Beaches / Bars / Ridges		X Soil or substra	e type. Sand class.	Sources of disturbar	ice (includes presence o	record real wood tools	sinuus, iurus, anu giassos.
Sand Barren	-	> Sand class. S	purces of disturbanc	e (includes presence	or exotics). Percent are	a or exposed rock, vegetation, and	
Alvar		X Bedrock type.	oil type and depth.	Percent area of exp	osed rock and vegetatio	n. Sources or disturbance (include:	s presence or exolics).
kare Species (Not Species At Risk)		A INumber of indi	viduals and locations	s. Ecosite or vegeta	иоп туре.		
rare vegetation Community	1. 1.	X Sources of dist	urbance (includes pl	esence of exolics).			

. . .

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Characteristics of Identified Wildlife Habitat

Indicate the location of the habitat feature on the Field Map.

Project Name: Rommey WC

Date: 105/2016

Project #: 1736C

Area and/or Polygon ID: 3340028



RATURAL RESOURCE SOLUTIONS INC.

Page 2 of 2

	Identified Habitat Feature	# Obs	erved:	UTM(s)	Photo	Nomt	sis	Habitat De	otails (rel	ur to F	Page 1)	Associated Wildlife Obser	ved
	BARLES CORRESPONDED	+ +		The second unless	Wind	ç		- and the state of the state	, pad de	7	Property of the second statement	and Evidence	Carl
D	non-rotational hay/ weakly grazed pasture	(NIA-refer to ELC map	Norl			-veg. ~30 cm present-scatte posts, nearby 1 forest, limited plants	heigh redti sut no necta	t.r tees ta	aptor perches and fence djacent to obvicing	N/A	
Q	2 Old foundation			0382802 4665308	1044,	104	5	- rip rap size foundation, man limited vg. pre sun exposure, li rearby nater-f crossing of farm	rocks 1 Exten sent, S scal si isature lane	ind b ind b ind b ind b s are csl	old bridge elou graind, acting, good ssilt-clay, . D watercourse	N/A	
-	TY Species	FV	#	Notos		TV		Oracias		1	~		
-	Common Aprickie	9					Querry .	Hotories	EV	#	Dominia	notes	
F	Kosin U					-	an vy	STORE DE LA		1	1.2		_
E	Some Stalling					-							
-	Red coder	TK											
F	romarticle												
FBNH LED	aunal Type Codes (TY) Evidence C =Bird Breeding E I=Mammal H- Suitable =Herpetofauna S- Singing I =Lepidoptera P- Pair =Fish T- Territory =Dragonfly or Damselfly D- Courtship	Codes (E Birds Habitat Male Display	EV)	V- Visiting Nest NU- Used ne A- Anxienty Behavior FY- Fledged N- Nest Building (not wren or woodpecke NB- Nest Building (not wren or woodpeck DD- Distraction Display	est Young ır) :er)		FS- Food/Fe CF- Adult ca NE- Nest wi NY- Nest wi AE-Adult en	ecal Sac arrying food th eggs th young tering/leaving nest	Other OB- O DP- D TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza ouse/E	fe FE-Feeding ve Parts CA-Carcass FY-Eggs or tion SC-Scat Den SI-Other Sig	Evidence /Bones young Ins (Specify)	

Use	this	form	în	FOD,	FOM

Project #: 13-16C Project Name:

NATURAL RESOURCE SOLUTIONS INC. Aquatic, Terrestriat and Welland Biologists

Project Manager Use Only: Woodland Number :

AUDLEP

Page 1 of 2

Start Time 13:57

End Time 15 42

Date: 10/05/2016

Observer(s):

the cost loose A. Lee 0

Piet Number Piet Center UTM (Zone: [FT]) Comments Piot 1 Comments Comments Piot 2 Comments Comments Piot 2 Comments Comments Piot 3 Comments Comments Piot 4 Comments Comments Piot 5 Comments Comments Piot 4 Comments Comments Piot 5 Comments Comments Piot 4 Comments Comments Piot 5 Comments Comments Piot 6 Comments Comments Piot 7 Comments Comments Piot 8 Comments Comments Piot 9 Comments Comments Piot 10 Comments Comments Piot 11 Comments Comments Piot 12 Comments Comments Piot 13 Comments Comments Piot 14 Comments Comments Piot 15 Comments Comments <	
Pict 1Image: Constraint of the section of	bist
Piot 2Image: Mark Constraint of C	
Pid3Image: style	
Pid4Image: Main and Control of	
Pid5Image: style	_
Pid6Image: Mark Strength Strengt	
Piot 7Image: Marking State 1Piot 8Image: Marking State 1Piot 9Image: Marking State 1Piot 9Image: Marking State 1Piot 10Image: Marking State 1Piot 11Image: Marking State 1Piot 12Image: Marking State 1Piot 13Image: Marking State 1Piot 14Image: Marking State 1Piot 15Image: Marking State 1Piot 16Image: Marking State 1Piot 17Image: Marking State 1Piot 18Image: Marking State 1Piot 19Image: Marking State 1Piot 20Image: Marking State 1Piot 21Image: Marking State 1Piot 22Image: Marking State 1Piot 23Image: Marking State 1Piot 24Image: Marking State 1Piot 25Image: Marking State 1Piot 26Image: Marking State 1Piot 27Image: Marking State 1Piot 28Im	
Pid8Image: Margin M	
Pid 9Image: Section of the section of the	
Pid10Image: Addition of the second of the secon	_
Piot 11Image: state sta	
Pid12Image: style	
Piot 13Image: state sta	
Plot 14Image: Sector Secto	
Plot 15Image: state sta	
Plot 16Image: sector secto	_
Plot 17Image: Marking State S	ia
Plot 18Image: Sector Secto	
Plot 19Image: Sector Secto	_
Plot 20 Image: Marcine Stream St	
Plot 21 Image: Constraint of the system of the	
Plot 22 Image: Constraint of the system of the	
Plot 23 Plot 23 Plot 24 Image: Comparison of the second of the	
Plot 24 Image: Constraint of the second	-
Plot 25 Plot 26 Plot 2	
Plot 26	
Plot 27	
Plot 28	
Plot 29	
Plot 30	
Plot 31	
Plot 32	
Plot 33	
Plot 34	
Plot 35	

Number of Plots: Sites ≤10ha: 10 plots (minimum); each extra ha: 1 plot (up to max 35 plots)

Plots = 0.05ha or 12.6m radius

Select plots randomly

Preparation for EOS Bat Monitoring: Identification of High Quality Potential Roost Trees >10ha in size = 1 additional for each ha up to 30 Identify the best potential roost trees in the applicable woodland/polygon: <10ha in size = up to 10 Photo Number(s) UTM # of Cavities DBH (cm) Species Tree # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Formula: Total # Cavity Trees / (# Plots x 0.05ha) This Section Project Manager Use Only

If >10/ha: > or = 10/ha? Yes / No BMA-

Final Woodland Tally



Modified ELC Community Description

Page __ of __

Site: Ronaly WF	
Polygon: PIN 8340044,8	340046
UTM:	
Date: May 9/16	Time: 1320 - 1740
Surveyor(s): AMD CEP	
Weather: 3°C, wind 2/S	E. 7590 CC

Community Classification

Vegetation Type:	Swamp Maple Mineral Deciduous Swamp	SWDM3
Inclusion:		
Complex:		

Polygon Description

System	Substrate	Topo Feature	Community
Terrestrial Wetland Aquatic History	Acidic Bedrock	Lacustrine Talus Riverine Crevice/Can Softernland Alvar Terrace Rockland Valley Stope Beach/Bar Tableland Sand Dune	re Lake Barren Pond Meadow River Prairie Stream Thicket Marsh Savannah Swamp Woodland
Cultural	Site Open Water	Roll. Upland Bluff Cliff Plant Form	Fen Forest Bog Plantation
Open Shrub X	Shallow Water Surficial Dep. Bedrock	Plankton Forb Submerged Lichen Floating-Lvd Bryophyte Graminoid Y	Coniterous Mixed

Stand Description

_	Layer	HT	Cover	Species	- Control
	Super-canopy	1			r.quin
1	Canopy	12	4	Freeman's maple > wh. Elm > green	ash
2	Sub-canopy	3	4	freeman's maple > whelm > shay, h	ickory
3	Understorey	4	3	spicebush = gray dogwood > green ash	r
4	Groundcover	57	4	Virgspring blacky swild geranium >f	foul maina gra
HT (Cov	Codes: er Codes:	1 > 0:no	25m 2:25 one 1:0-	-10m 3:10°-2m 4:2°-1m 5:1-0.5m 6:0.5-0.2m 7:<0.2m 0% 2:10-25 3:25-60% 4:>60%	E
Size	e Class Analysi	s		A < 10 A 10-24 A 25-50 > 50	

Size Class Analysis	5	11	< 10	71	10 - 24	71	25 - 50	0	> 50
Snags		0	< 10	0	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs		6	< 10	0	10 - 24	0	25 - 50	R	> 50
Abundance Codes		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Community Age	Pioneer		Young	X	Mid-age	X	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ____of____

PLANT SPECIES CIST



Spaciae		La	yer		Sample		Species		Lay	rer	Ī	Sample	
Species	1	2	3	4	Sample		Species	1	2	3	.4	Sample	
Lagbarkhickorg	0	0					Spring beauty (virge,)			Ħ		
elmans maple	A	A					ack pulpit				0		
L. elm	A	A				-	mild geranium			- i	A		
booullo	0	0					tam false solute	2			A		
ilonivy (ryd)				A			avent spring				A	and 10	105
Dive Lush			A	0			majarple				R		
Ler evnostati				R			virg vaterleaf				A		
ibes antivitanus	n			0			moneyunt				A	1	1
neen ash	0	0	0				spring orlss,				D	check.	/
Awart rospberry				0	a		ion Flue violet				0		
Lolle cherm			0	0			Can blue juint				R		
edoak	K	R		l i			calice aster				0		
osa rubignosa			0	0	N		Solidage rugosa				D		
Lay dogwood			A	0			Ranuhaulularhorti	V	15		R		
Lile blech		0					Alliumranadense				Ó		
ther hickory	R	R					woodnettle				0		
oodbine (,				0			can may lower				0	1	12
oisuning (rad)				0			cralium argrellum	1		Ų	R	x J	- 1
irg-creeper				R		-	Glyceria striato				A	1	
ined lourestiff				0			Sensitive tern				A		
p. jewelweed	Ĩ			0			Conta tramiles				6	x	-10
0							siola enbescons				Ø	1	
area gracillimi				0	XV		Polygonatum publis	6	20		R		
uroak	R	R					dutchmans breeches	2			R		
Idlife and Other No	tes	_				_		_					

amphil Stel - excellent habitat, little disturbance - trees selectively harvested - shellbark occurring rarely throughout ★

- shumand oak accuring rarely throughout (species ID to be confirmed) ×

Pritacla

R

Modified ELC Community Description

Page __ of __

ite: \		
Polygon		
итм:		
Date:	Time:	
Surveyor(s):		
Weather:		

Community Classification

Vegetation Type:	
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Rivenne	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural	—	Roll Upland	BIN	Fen	Forest
	Site	Cliff		Bog	Plantation
Cover	Open Water	Plant Form	1		1
Open	Shallow Water	Plankton	Forb	Coniferous	1
Shrub	Surficial Dep	Submerged	Lichen	Mixed	
Treed	Bedrock	Floating-Lvd	Bryophyte	<u></u>	
		Graminoid	Deciduous	\	

Stand	Descri	ption
-------	--------	-------

Layer	HT Cover	Species		1	
• Super-cano	by				
1 Canopy				1	\
2 Sub-canopy					1
3 Understorey		_			1
4 Groundcove	r				1
HT Codes: Cover Codes:	1:>25m 2:25 0:none 1:0-	5 - 10m 3: 10 - 2m 10% 2: 10 - 25 3	4: 2 - 1m 5: 1 - 0 5n : 25 - 60% 4: >60%	n 6:05-02m 7∷≪	:0 2m
Size Class Analy	sis	< 10	10 - 24	25 - 50	> 50
Snags		< 10	10 - 24	25 - 50	> 50

Community Age	Pioneer		Young		Mid-age		Mature		Old Growth	
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant	
Deadfall/Logs			< 10		10 - 24		25 - 50		> 50	1
Snags			< 10	_	10 - 24	_	25 - 50		> 50	1
			10	-	10	_	20.00	-		

Modified ELC Community Description

Page __ of ___

Position:					
	5	Polygon: et a	MANUL 03	un II (
Aspect:	NA	111/1 8	370044,83	400 4 ()
%	0				
Туре:	6	Tree Tally			
Class:	A	Species	Tally 1	Tally 2	Tally 3
	the second second second second second second second second second second second second second second second s		and the second se		
Strata: Texture	IS:CL				
Death	(0-1)				1
Depth	6.0			-	
Strata: Texture	112-44				-
Deptn					
Surata: Texture		$-1 \rightarrow$			
Depth Strata: Toxture					
Sarata. Texture					
Depth	51	-			
Effective Texture	PIC -	-11			
Sumace Stoniness					
Surface Rockiness					
Depth to:	10				-
Mottles	- K			_	
Gley					
Bedrock				1	
Water table	1-1-1-			1	
Carbonates			_		
Depth of Organics	XUM				
Pore Size Disc #1		-11			
Pore Size Disc #2			_	_	
Pore Size Disc #3		"fotal:			1
Moisture Regime	2	Basal Area			
		Gnags			

Modified ELC Community Description PLANT SPECIES LIST

Page ____of___

UTM:							_		_	_	_
Date: May 9/16						Time:			_		
Surveyor(s): AMD, (EP	н					_		_		
Weather											
Layers:	1-04	nopy	2-84	b-can	opy 3-under	storey 4=ground layer					
Abundance Codes:	R=ra		Ver	siona	A=abundan	D=dominant	T	La	/er		San
Species	1	2	3	4	Sample	Species	1	2	3	4	- Creating
Canada elder			R			averssp-	-				
red raspherm				0		enchant-nightshod	2			0	
LL rasporting				0		false solemonsea				R	
Shellback hilkow	R	R				Sanicula Sp.				0	
hample		R	R			Carex Sp. Clacustin	5)			R	
cottom wid	R		1			Galium aparine	ľ			R	
Shungard work	R	R			check	running straukerny				R	
Decentra part	Ť		1			Sp water hemiloc	1			R	
	1		1			Los Straublerry	T			0	
	+					Runelle dastaid				R	
	+	1	\vdash			Sugar D agliment				R	
	-	1	+	+		vater la suit	+			R	
	+	+	+	\vdash		D. Al a chuća		\vdash		R	
	+	+		⊢	1	P Lister	MICA	1		R	-
	+	+	-	-		Nanuniului recurv		-	┢	R	-
	+	+-	-	+		Wild son aranit		+	-	R	
	-	-	+	┢		Cardanine diphille	-	-	-	0	-
	-	-	-	┢		garlic mustard	+	┝	-	TV	\vdash
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* see when on coversheet

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S	NATURAL	RESOURCE	SOLUTIONS	INC
0	Aquatic, Terrestri	ial and Wetland Bio	logists	

(Office use only) Community ID: Wer -008

SA

Wetland Vegetation Com	munities	
Project Name: Romney WF	Project #: 173	6C Parcel #: 834 0044, 8340046
Observer(s): AMD, CEP		ELC Code: SWOM3-3
Date: May 9/16	Time (24h): 132.0	
Wetland #: WET-08 8	Weather: Precipitation: N DNL	Temp (° C): {3
Veg Community #: 😪	Wind Speed & Direction: 2/SE	Cloud %: 75
Wetland Type: Swamp	Site Type: ? Dominant Form:	h
Permanent Open Water: NOW	% Check one: () central area	⊖ spread out in ponds
Photos: 1008-1015		
Forms (>25% absolute cover)	Dominant Species (give % re	elative cover)
h)(%:80) freeman's map	le (60%) > wf. elm (20%)) = green ash (10%) > shagbark hickory (10%)
c (%:)		· · · · ·
※ dc (%:)		
치 dh (%:)		
ds (%:)		
ts (%:)		
ls (%:)		
go (%:35) Virg spring bear	ity (40%) > wild geranium (30	10)> mortywort (20%) > ipring autos (70%)
ne) (%25) towl manno qu	ass (55%) > Carex SPD.	(4570) (several Carlx, reter to ELC forms)
be (%:)	4×4	1
re (%:)		
ff (%:)		
01 f (%:)		
su (%:)		
m (%:)		
u (%:)		
Soil type: Si C Mineral	Organic Depth of organics: ²	cm Organic Type: F (M) H Depth to bedrock: M/A cm
Soil type: C-clay, L-loam, S-sand, SI-s	It (or any combination)	
Organic= ≥40cm humic or mesic over i	nineral; ≥60cm fibric over mineral; ≥10cm organi	c over bedrock
Rare Species (Local, Regiona	, Wildlife Notes:	
Provincial):	5 B 4	
-shellbackhickond con	timed refer to incidental u	ildlife observations
ching I ITA II		
-) MAMARUDAR (ILD TO K	с.	
continued)		
Locally Rose:	Locally Pare:	×
Galium genzollun	Commercianing /	3
(RT)	Gurden (
Oldham 1993	~	
Caner bromsides 1	23).	
SAR observations must also inclu	ude a specific UTM location.	
Forms: h=deciduous trees (>6m); c=cc	niferous trees (>6m); dh, dc, ds =dead trees/shr	ubs; ts =tall shrubs (1-6m); Is =low shrubs (<1m); gc =ground cover; ne =narrow g plants: su =submerged plants: m =mosses: u =unvecetated water <2m deep or
the outer edge of a wetland or complete	ly surrounded by wetland	g plante, su countreges plante, in incocos, a antogotated water -211 doop of
Wetland Type: S=swamp; M=marsh; W	/=open water marsh; B=bog; F=fen	
Site Type: L=lacustrine (lake at least 8	na); P=palustrine; R=riverine; IS=isolated	

N/O: Not observed
Features to look for in the field:
○ active beaver lodges/dams N/0
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
refer to sulf assessment form
 wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
refer b incidental wildlife observations
O plant species (wild rice, cranberries)
~ 10
○ location of and directions of water flow at all inflows and outflows (mark whether permanent → or intermittent
reter to ELC map
O human related disturbances (fill, docks, houses, etc)
None
 evidence of recreational activities (nature appreciation, fishing, hunting)
Nonl
○ locations of seeps or springs, lagg N (0)
○ iron precipitates, marl deposits
N/O
O winter cover for wildlife
Norl
 ungulate summer habitat, moose aquatic feeding habitat
yes None
○ suitability for waterfowl breeding, staging, moulting
None
Surrounding topography (flat, rolling, hilly, steep)
flat
O surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; O utility corridor; Ø dec. forest;
O recent cutover or clearcut (<5yr); o conif. forest; O mixed forest; Q crops; Q row crop; O abandoned pit/quarry; O pasture;
lake or deep river: O creek floodplain: O rock outcrop
○ fish habitat present: Yes (No) (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
⊖ vernal pools
NIO
○ invasive species (plant, aquatic)
darlic mustard
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to provide fisheries habitat except during high water conditions)
provide institutes nabilat except during high water conditions)
Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water
Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

1

Attach full species list and wetland map.

Wildlife Habitat Field Data Collection

	San Natural Resource Solutions Inc.
Project Name: Rominly WF	Project #: (736C Area and/or Polygon ID: PIN 008340044,008340046 Terrestrial and Wetland Biologists
Date: May 9/16	Start Time: 320 End Time: 140 Observers: AMD, CEP Page 1 of 2
Weather Conditions: (3°C, via) 2/SE	, 7570 CC
Indicate whether or not the following habitat feature	s are present within the polygon. If Yes to any, fill in Page 2. Incidental Wildlife Observations on Page 2.
Habitat Features	Present Information to Record on Page 2
Water Spring Flooded Field Vernal Pool Pond Shallow Marsh (MAS) or Open Water Swamp	Yes No Applicable to All: Image: Constraint of all water if not indicated through ELC. Longevity of site (if known, or estimate). Image: Constraint of all water if not indicated through ELC. Sources of disturbance, current use, origin (natural or anthropogenic). Image: Constraint of the constraint
Fields Non-rotational Hay or Weakly Grazed Pasture Meadow Thicket, Woodland, Hydro Corridor	Yes No Applicable to All: X Height of vegetation Size of site Abundance of nectar-producing plants (e.g. goldenrods and asters) X Evidence of small mammals Frequency and source of disturbance Adjacency to forest and forest size X Location and abundance of raptor perches (scattered trees, snags, fenceposts) Size of site
Substrate and Topography Sand or Fine/Loose Gravel Banks, Steep Slopes, Sand Piles Cliffs Karst Cave Natural Rock Piles / Talus Slopes Exposed Unvegetated Lake/River/Wetland Edge Seeps or Springs Islands or Peninsulas in Open Water	Yes No X Evidence of use (turtles in or near the area, turtle tracks, raided nests). Proximity to Shallow Marsh (MAS) or Open Water X Count swallow nest holes and indicate location. Estimate number of breeding pairs. Sources of disturbance. Draw extent if not indicated through ELC. X Height of cliff. Rock type. Presence of ledges or crevices and their size. Draw extent of cliffs if not indicated through ELC. X Depth of crevices X Depth of cave, bedrock type X Age. Rock/soil type. Draw extent of talus slopes if not indicated by ELC. Adjacency to large water body with productive fish population (otters). X Source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation cover. Distance to a Great Lake. X Ecosite. Number or area of extent. Presence of indicator plants. Iron staining. Water temperature. Degree and length of slope. Soil types. X Natural or artificial. Record any gulls or terms observed. Draw extent of island or peninsula if not indicated through ELC.
Anthropogenic Features Abandoned Mine Shaft Old Rock or Debris Pile, Old Stone Fence Abandoned Road or Rail Bed Abandoned Well Old Foundation	Yes No Applicable to All: X Age Depth into the ground Amount of sun exposure (or direction the slope faces) X Rock size Vegetation present Substrate composition (or bedrock type) X Evidence of Use Proximity to water and estimated subterranean influence or potential for winter water fluctuation. X Abandoned Wells Only: Presence and type of capping X Abandoned Road or Rail Bed Only: Extent in the landscape. Connectivity to other natural features. Overhead vegetation cover.
Burrows or Dens Small - Rodent or Snake Medium Large Log Jams, Old Beaver Lodges Crayfish Chimney (7E only)	Yes No Applicable to Mammal Burrows or Dens: Image: Diameter of entrance Soil Type Availability of aquatic vegetation or fish Image: Diameter of entrance Soil Type Availability of aquatic vegetation or fish Image: Diameter of entrance Soil Type Availability of aquatic vegetation or fish Image: Diameter of entrance Soil Type Availability of aquatic vegetation or fish Image: Diameter of location Proximity to water and type of water Evidence of use, or tracks or digging marks Image: Diameter of location Soil type Source of site moisture (meadow marsh, creek/river edge, swamp etc).
Evidence Extensive Browse and/or Ungulate Scat Nest Bowl or Stick Nest (herons or raptors)	No X Vegetation species browsed. Ecosite. Other evidence of ungulate use. Presence of seeps/springs. Barriers to movement to and from the area. X Quantity. Ecosite of location. Evidence of use. Species if known or bird group. Size. Height in tree. Tree species.
Outstanding Trees Large DBH, Outstanding Tall Snag Large DBH Cavity Tree (Live or Dead)	Yes No X Tree species. Evidence of perch usage or nesting. DBH, height. Exposure above canopy. Distance from surrounding forest (m) or within. X Tree species. DBH. Number of cavities. Size and type of cavities. Evidence of use by bats (abundant guano) or other mammals or wood ducks.
Rare Communities or Species Old-Growth Forest Tallgrass Prairie or Savannah Bog Red Spruce or White Oak Forest Coastal Marshes (Great Lakes/Shallow Atlantic) Dunes / Beaches / Bars / Ridges Sand Barren	Yes No X Average age of trees. Range of DBH or prism sweep. Sources of disturbance (includes presence of exotics). X Soil type. Percent cover of trees, shrubs, forbs, and grasses. Sources of disturbance (includes presence of exotics). X Soil type and depths. X Soil type and depths. X Soil type and drainage regime. DBH range or prism sweep. Approximate Canopy Cover. Source of disturbance or evidence of forestry. X Soil or substrate type (bedrock or soil type). Water level. Evidence of water fluctuation. Presence of Beaver Pond. Amount of exposed shoreline. X Soil or substrate type. Sand class. Sources of disturbance (includes presence of exotics). Percent cover of trees, shrubs, forbs, and grasses. X Soil or substrate type. Sand class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and sand. Sources of erosion or fire. X Sand class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and sand. Sources of erosion or fire. Y Bard class. How and letthe Derest error of grassed exotic includes presence of fourted for the presence of evotics.

 Sand Barren
 X
 Sand class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and sand. Sources of erosion or fire.

 Alvar
 X
 Bedrock type. Soil type and depth. Percent area of exposed rock and vegetation. Sources of disturbance (includes presence of exotics).

 Rare Species (Not Species At Risk)
 X
 Number of individuals and locations. Ecosite or Vegetation Type.

 Rare Vegetation Community
 X
 Sources of disturbance (includes presence of exotics).

Characteristics of Identified Wildlife Habitat

Date: Project #:

Area and/or Polygon ID: PIN 8340044, 8340046



RATURAL RESOURCE SOLUTIONS INC.

Page 2 of 2

Indicate the location of the habitat feature on the Field Man

Project Name:

	indicate the location of the habitat leate	ine on the rield w	ap.							
	Identified Habitat Feature	# Observed	UTM(s)	Photo N	umbers	Habitat De	tails (refe	r to Pa	ge 1)	Associated Wildlife Observed and Evidence
0	crayfish chimney	Several	N/A -throughout SwDM3-3 feature	None		-SWDM3-3, sill Source from su	y cla vamp	y so	ils, moisture	N/A
2	Suump	(N/A-entire feature	1008-10	15	- no evidence of fish or fish he standing water but likely not d support amphib. b	tero abita abin abin abin abin abin abin	t of lant nous	ly throughout	N/A
3	rarespecies (non-sAR)	2 Spp.	N/A - both spp. occur rarely throughout polygon	1014 (5	Luma d valk)	- Su DM3-3 pol	7900			NIA
1	TY Species	EV #	Notes		TV	Species	EV	#	n	Notes
(\mathbf{y})	B RWBB	OB mult	die		8 N.CO	redinal	VO			
	R house unen	TK multi	(P		wood	anck	OB	2	pair	
	M gray squarel	OB							1 ¹	
	B BOCH	VO								
	B red bellied woodpecter	VO								
	H Amitoad	OB I					-	-	£.	
×	B wood thrush	VO I					-	-		
	Faunal Type Codes (TY) Evidence B=Bird Breedin M=Mammal H- Suital H=Herpetofauna S- Singir L=Lepidoptera P- Pair F=Fish T- Territt D=Dragonfly or Damselfly D- Count	e Codes (EV) g Birds ble Habitat ng Male bry ship Display	V- Visiting Nest NU- Used A- Anxienty Behavior FY- Fledge N- Nest Building (not wren or woodpec NB- Nest Building (not wren or woodpe DD- Distraction Display	nest d Young ker) cker)	FS- Food/F CF- Adult c NE- Nest w NY- Nest w AE-Adult er	ecal Sac arrying food ith eggs ith young ntering/leaving nest	Other OB- C DP- D TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza ouse/E	e FE-Feedin re Parts CA-Carcas FY-Eggs o tion SC-Scat SI-Other S	g Evidence ss/Bones r young igns (Specify)

Odd utb information Project Name (2) Project Name	Candidate Bat	Maternity Roost	Data Form	RESOURCE SOLUTIONS INC. Project Manager Use Only:
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Dise this form in F	LUMPLEY WF	Project #: 1726 B Aqualic, Terrestrial	and Welland Biologists Page 1 of 2
Start The $\frac{1}{3}$ between the first the first transformation of the first transform	177			Ma 9/16 AMD (FP
Palygon or Ares D ($\frac{2}{5}$ 4) for a ded arity trees Weather Conditions: ($\frac{3}{5}$, wind 2/56, 75%, 22 Plot Number 25cm doh Plot Center UTM (Zone, 11T) Comments Plot Number 0 3.5% 4($\frac{5}{5}$) 10m	Start Time 134	K240044 /	End Time 1170	Date: 1/10/1/10 Observer(s):
Product control Product ruting conclusion Product ruting conclusion Comments Product ruting conclusion \bigcirc 35 % 4(60) 4 (6 72.55 ± 10 m \sim Product ruting conclusion \bigcirc 35 % 4(60) 4 (6 72.55 ± 12 m \sim Product ruting conclusion \bigcirc 35 % 4(71) 4 (6 72.21 ± 12 m \sim Product ruting conclusion \bigcirc 35 % 4(60 + 166.72.21 ± 12 m \downarrow ruting rut	Polygon or Area II	D(8340046)	Weather Conditions: 3°C	- wind ZISE 75% CC
Produment Comments Plot Center UTM (2000;117) Plot 1 O 538460 4672255 $10m$ Plot 2 O 538460 4672255 $10m$ Plot 3 O 538460 467223 $12m$ Plot 4 I 038460 4667212 $12m$ Plot 5 O 338460 4667212 $12m$ Plot 6 O 338460 4667212 $12m$ Plot 7 O 338460 4667212 $12m$ Plot 8 O 0384761 4667163 $1m$ Plot 9 I 038460 4667168 $1m$ $1mex$ $mint 1mex$ Plot 9 I 038451 4667021 $1m$ $mint 2mint 1mex$ $mint 1mex$ Plot 10 O 038451 4667021 $1m$ $mint 2mint 1mex$ $mint 1mex$ Plot 11 O 038451 4667021 $1m$ $mint 1mex$ $mint 1mex$		# live or dead		
Plant O Observe of M Plactemer UM (zone: 1-1) Comments Plant O $0.58 \ (1.7) \ (1.672 \ 2.5 \ 1.0 \ 1.5 \ 1.$		cavity trees ≥	175	94.)
Phot1 O 0584601 166723 10m Phot2 O 0384611 4667211 12m Phot3 O 0384671 1467201 12m Phot3 O 0384671 1467201 12m Phot3 O 0384671 1467515 12m Phot5 O 0384671 1467097 12m 12m Phot5 O 0384671 1467097 12m 12m Phot5 O 0384671 1467097 12m 12m Phot6 O 0384671 1467097 12m 12m Phot7 O 0384674 1467108 12m 12m Phot8 O 0384571 4667108 12m 12m Phot10 O 0384571 4667108 12m 12m Phot11 O 0384571 4667108 12m 12m Phot12 O 0384571 4667042 17m 12m Phot13 D D38466 46670571 17m 12m 12m	Plot Number	25cm dbh		Comments
No.2 C) C S (S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 2 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 m) Pinta C) C S (1) 1 + 16 1 - 1 1 - 1 m) Pinta C) C S (1) + 1 + 12 + 1 - 1 + 12 + 1 - 1 + 12 + 1 - 1 + 12 + 1 + 12 + 1 + 12 + 1 + 12 + 12	Plot 1		03876 1667233 -100	
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Plots 0 0 038 4 G 11 4 6 G 109 1 2 m Plot 6 0 038 4 G 4 6 G 7 13 6 $\pm 5m$ Plot 7 0 038 4 G 6 4 6 G 7 13 6 $\pm 5m$ Plot 8 0 038 4 5 5 4 6 G 7 1 6 3 $\pm 7m$ Plot 9 1 0 0 03 8 4 5 3 5 4 6 G 7 1 6 4 5 m Plot 10 0 03 8 4 5 3 5 4 6 G 7 1 6 4 5 m Plot 11 0 038 4 5 5 4 6 G 7 1 6 4 5 m Plot 12 0 038 4 5 1 4 6 G 7 0 7 $\pm 6m$ Plot 13 1 03 8 4 6 0 7 4 6 6 7 0 7 1 $\pm 6m$ Plot 14 0 038 4 5 1 4 6 G 7 0 7 $\pm 6m$ Plot 15 0 03 8 4 5 1 4 6 G 7 0 7 $\pm 6m$ Plot 16 0 038 4 5 1 4 6 G 7 0 7 $\pm 6m$ Plot 18 0 038 4 5 1 4 6 G 7 0 7 $\pm 7m$ Plot 18 0 038 4 6 19 4 6 6 7 0 8 $\pm 7m$ Plot 18 0 038 4 6 6 7 0 8 $\pm 7m$ Plot 18 0 038 4 6 6 4 6 6 G 7 7 $\pm 7m$ Plot 20 0 0 3 8 4 5 1 4 6 6 G 7 9 $\pm 7m$ Plot 21 0 0 038 4 5 1 4 6 6 G 7 9 $\pm 7m$ Plot 22 0 0 3 8 4 6 6 4 6 6 G 7 8 $\pm 7m$ Plot 23 0 0 3 8 4 6 6 4 6 6 G 7 8 $\pm 7m$ Plot 24 1 0 038 4 5 1 4 6 6 G 7 9 $\pm 7m$ Plot 25 0 0 3 8 4 6 6 4 6 6 G 7 8 $\pm 7m$ Plot 27 0 0 3 8 4 4 2 4 4 6 6 G 6 4 $\pm 7m$ Plot 28 0 0 3 8 4 4 2 4 4 6 6 G 7 8 $\pm 7m$ Plot 22 0 0 3 8 4 4 2 4 4 6 6 G 7 8 $\pm 7m$ Plot 22 0 0 3 8 4 4 2 4 4 6 6 G 6 4 $\pm 7m$ Plot 23 0 0 3 8 4 4 2 4 4 6 6 G 6 4 $\pm 7m$ Plot 24 1 0 3 8 4 4 2 6 6 G 4 $\pm 7m$ Plot 25 0 0 3 8 4 4 2 4 4 6 6 G 6 4 $\pm 7m$ Plot 27 0 0 3 8 4 4 7 4 4 6 6 G 6 4 $\pm 7m$ Plot 28 0 0 3 8 4 4 2 6 6 G 4 8 $\pm 5m$ Plot 29 0 0 3 8 4 4 5 4 4 6 6 G 18 $\pm 5m$ Plot 29 0 0 3 8 4 4 5 4 4 6 6 G 18 $\pm 5m$ Plot 29 0 0 0 3 8 4 3 5 4 4 5 6 6 4 18 $\pm 5m$ Plot 29 0 0 0 3 8 4 3 5 4 4 5 6 6 4 18 $\pm 5m$ Plot 29 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Plot 4		0387686 7067212 -0m	THE WE Switchle Cautiles that high quality
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Protes C VSS 16 56 Tob 100 5 The F switzle (not high quality) Plot 10 O 03 8 4633 4667 201 \pm 46m Plot 11 O 03 8 4535 4667 201 \pm 5m Plot 12 O 03 8 4549 4667 108 \pm 5m Plot 12 O 03 8 4604 466 7077 \pm 6m dead ask \bar{w} switzle (avity (not kigh quality) Plot 13 I O3 8 4607 466 7072 \pm 7m Plot 15 O 03 8 4618 466 7021 \pm 7m Plot 16 O 03 8 4618 466 7008 \pm 7m Plot 18 O 03 8 466 466 6072 \pm 4 5m Plot 18 O 03 8 466 466 683 \pm 7m Plot 19 O 03 8 4628 466 6083 \pm 7m Plot 20 O 03 8 4628 466 6084 \pm 7m Plot 21 I 03 8 4627 466 7056 \pm 8m free $\bar{\omega}$ switzle (avity (lead ask, not high quality) Plot 22 O 03 8 4424 466 7054 \pm 7m Free $\bar{\omega}$ switzle (avity (lead ask, not high quality) Plot 23 I 03 8 4424 466 7056 \pm 8m free $\bar{\omega}$ switzle (avity (lead ask, not high quality) Plot 23 I 03 8 4424 466 7054 \pm 8m	Plot 7		6204/ FA 4677162 11-	
prots 1 $0.5.87603$ 166 (12.0) 1 me $5.61, 4.01$ 1 me $5.61, 4.01$ 1 me $5.61, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.62, 4.01, 4.01$ $1.61, 4.01$	Plot 8		020402 4/07214 14	1 co to cashelle coile had be benefit
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Plot 9		03 54625 4661210 21M	The " shi table cavity that high quality/
Plot 11 O O 38 (51) Hole 108 25m Plot 12 O O 38 (51) U (67 108 25m Plot 13 I D 38 (1604 U (67 107 15m Plot 14 O 0 38 (151 U (67 021 17m Plot 15 O 0 38 (171 U (66 7021 \pm (m) Plot 16 O 0 38 (171 U (66 7021 \pm (m) Plot 18 O 0 38 (163 U (66 7021 \pm (m) Plot 18 O 0 38 (163 \pm (17m Plot 18 O 0 38 (163 \pm (166 (172 \pm 8m Plot 20 O 0 38 (163 \pm 17m Plot 21 I 0 0 38 (163 \pm 7m Plot 22 O 0 38 (1424 \pm 66 (7054 \pm 7m Plot 23 O 0 38 (1424 \pm (166 (7064 \pm 7m Plot 24 I 0 38 (1424 \pm 66 (7064 \pm 7m Plot 25 O 0 38 (1428 \pm 8m $+$ (16 (13 \pm 5m) Plot 26 O 0 38 (1428 \pm 66 (13 \pm 5m)	Plot 10	0	105 8 1333 1667201 +6M	· · · · · · · · · · · · · · · · · · ·
Plot 12 O O Starts to 460 7106 2000 Plot 13 I D3 & 4604 466 7077 ± 600 dead ash \overline{w} suitable cavity (not high quality) Plot 14 O 03 & 4604 466 7077 ± 600 dead ash \overline{w} suitable cavity (not high quality) Plot 15 O 03 & 4604 466 7072 ± 7000 dead ash \overline{w} suitable cavity (not high quality) Plot 15 O 03 & 4604 466 7001 ± 60000 dead ash \overline{w} suitable cavity (not high quality) Plot 16 O 03 & 4604 466 7001 ± 600000 dead ash \overline{w} suitable cavity (not high quality) Plot 17 O 03 & 4604 466 7005 ± 700000000 dead ash \overline{w} suitable cavity (lead ash, not high quality) Plot 18 O 03 & 4607 065 $\pm 700000000000000000000000000000000000$	Plot 11	0	030 [31] 400 108 - 5m	
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Protifie O 0384618 4667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 667021 ± 76702 ± 77022 ± 76667028 ± 77022 ± 77028 ± 77022 ± 77028841426 ± 66670862 ± 87022 ± 7702841426 ± 66670862 ± 870222 ± 7702841427 ± 66670862 ± 870222 ± 7702841427 ± 66670862 ± 870222 ± 77028414272 ± 66670862 ± 870222 ± 166670842728 ± 1667027272727 $\pm 1667027272727277277277777777777777777777$	Plot 13		0381001 1007017 _6m	dead ask in suitable laving (nos high guarity)
Protis O District Test for the Tes	Plot 14		030 1051 106 101 M	
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Prot 17 O D 584 101 166 1008 17^{m} Plot 18 O O 384666 $4666972 \pm 8m$ Plot 19 O O 384628 $4666973 \pm 7m$ Plot 20 O O 384591 $4667054 \pm 7m$ Plot 20 O O 3844591 $4667054 \pm 7m$ Plot 21 I O 384424 $4667064 \pm 7m$ Plot 22 O O 384424 $4667064 \pm 7m$ Plot 23 O O 384424 $4667064 \pm 7m$ Plot 24 I O 384428 $4666948 \pm 8m$ $1ree = suitable (avity (lical ash, not high quality) Plot 23 O O 384424 4666948 \pm 8m 1ree = suitable (avity (lical ash, not high quality) Plot 24 I O 384428 4666948 \pm 8m 1ree = suitable (avity (lical ash, not high gual ble ingusted by mammer Plot 25 O O 384491 4666948 \pm 8m 1ree = suitable (avity (lical ash, not high gual ble ingusted by mammer Plot 26 O O 3844508 4666918 \pm 5m 1666918 \pm 5m Plot 28 Plot 29 Plot 32 Plot 32 Plot 32 Plot 32 Plot 32 $	Plot 16		0387671 700 00 20	· · · · · · · · · · · · · · · · · · ·
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Plot 20 C C Stripsing 400 (or) $f = f m$ Plot 21 I O 384486 4667066 ± 8 m tree = suitable cavity I lead ash, not high quality Plot 22 O O 384429 4667064 ± 7 m tree = suitable cavity I lead ash, not high quality Plot 23 O 0 384429 4667064 ± 6 m Plot 23 O 0 384428 4666948 ± 8 m tree = suitable cavity I memory for an maple but being used by memory Plot 25 O 0 384441 4666913 ± 5 m I I memory for an maple but being used by memory Plot 25 O 0 3844508 4666918 ± 5 m I I memory Plot 26 O 0 3844508 4666918 ± 5 m I I I memory Plot 27 I I I memory I I memory I <thi< th=""> I <thi< th=""> <thi< th=""></thi<></thi<></thi<>	Plot 19	0	0284551 4667054 +7	
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Plot 22 O 0 384421 4007001 - 1M Plot 23 O 0 384400 4667004 ± 6m Plot 24 I 0 384428 4666948 ± 8m tree F suifuble cavity (Incenan maple, but being used by mammer Plot 25 O 0 384441 466913 ± 5m tree F suifuble cavity (Incenan maple, but being used by mammer Plot 25 O 0 3844508 4666918 ± 5m tree F suifuble cavity (Incenan maple, but being used by mammer Plot 26 O 0 3844508 4666918 ± 5m F Plot 27 F F F F Plot 28 F <	Plot 21		10501180 1001060 - 6n	Tree & Suitable Cavity (read as in hot high guarry)
Pior 23 C Pior 100 100 <th< td=""><td>PIOT 22</td><td></td><td>0394406 4667001 - IM</td><td></td></th<>	PIOT 22		0394406 4667001 - IM	
Piot 25 D O 38 4441 466 6913 ±5m Piot 26 D O 38 4508 466 6918 ±5m Piot 27 Piot 28 Piot 29 Piot 30 Piot 30 Piot 31	PIOT 23		0384479 461 caug to	to a finite could theme also to the
Piot 25 O O 3 & H 1 / 1 / 0 6 (1) 2 Sm Piot 26 O O 3 & H 5 0 & H 66 6 9 1 & E Sm Piot 27 Image: Constraint of the second se	Plot 24		0284441 466/912 +C	True + Juita bu lavity inchan mapy, but sting used by mammal
Piot 25 Company (company (company)) Piot 27	PIUL 25	0	DODALEOS HELLOIS TOM	1 V V
Piot 27 Common	Plot 27		10281200 100 P110 T2W	
Piot 29 Image: Color of the co	Plot 29			
Piot 30 Image: Constraint of the second of the	Plot 20			
Piol 30 Piol 30 Piot 31	Plot 20			
Plot 32	Plot 31	-		
	Plot 37			
Plot 22	Plot 22			
	Plot 34			
	Plat 25	-		
Plot 35	Plot 35			

Number of Plots: Sites ≤10ha: 10 plots (minimum); each extra ha: 1 plot (up to max 35 plots)

Plots = 0.05ha or 12.6m radius

Select plots randomly

.)

5

Preparation for EOS Bat Monitoring: Identification of High Quality Potential Roost Trees Identify the best potential roost trees in the applicable woodland/polygon: <10ha in size = up to 10 >10ha in size = 1 additional for each ha up to 30 Tree # # of Cavities DBH (cm) UTM Photo Number(s) Species 1 2 3 4 5 6 7 8 9 10 We. 11 12 13 14 15 Formula: Total # Cavity Trees / (# Plots x 0.05ha) This Section Project Manager Use Only If >10/ha:

Final Woodland Tally

> or = 10/ha? Yes / No

BMA-×





Modified ELC Community Description



site: 1736C Rowney	
Polygon: H9	
UTM:	
Date: Sept. 21,2016	Time: 1355
Surveyor(s): PWD, NGM	
Weather:	

Community Classification

Ve	getation Type:	SWDM3-2	SilverMeale	Minul	Dec.	Sump Typo
	Inclusion:		1			1. 11
	Complex:					

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial Wetland Aquatic	Organic Mineral Soil Parent Min Acidic Bedrock	Lacustrine Riverine Bottomland Terrace	Talus Crevice/Cave Alvar Reckland	Lake Pond River Stream	Barren Meadow Prairie Thicket
History Natural Cultural	Basic Bedrock Carb, Bedrock	Valley Slope Tabletand Roll. Upland Cliff	Beach/Bar Sand Dune Bluff	Marsh Swamp Fen Bog	Savannah Woodland Forest Plantation
Open Shrub Treed	Open Water Shallow Water Surficial Dep Bedrock	Plant Form Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte X Deciduous	Coniferous Mixed	

Stand Description

	Layer	нт	Cover	Species
	Super-canopy	-	-	-
1	Canopy	2	4	Silver Maple DE, Cottonwood = Black Ultrut
2	Sub-canopy	3	2	Silver Night >>>Black Walnut,
3	Understorey	4	3	Silver Maple
4	Groundcover	-	-	- 1

 HT Codes:
 1: >25m
 2: 25 - 10m
 3: 10 - 2m
 4: 2 - 1m
 5: 1 - 0.5m
 6: 0.5 - 0.2m
 7: <0.2m</th>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Size Class Analysi	S	0	< 10		10 - 24		25 - 50	1	> 50
Snags		R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs		2.	< 10	7.	10 - 24	2	25 - 50	2	> 50
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Community Ann	Pionast	-	Vouna	X	Midaaa	-	Matura		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of Z

PLANT SPECIES LIST

Site:		
Polygon:		
UTM:		
Date:	Time:	
Surveyor(s):		
Weather:		

1=canopy 2=sub-canopy 3=understorey 4=ground layer Layers: Abundance Codes: R=rare O=occasional A=abundant D=dominant Layer Layer Species Sample Species Sample 1 2 3 4 1 2 3 4 DOO Silver Maple Black Walnut R R E. Cotton word 0

Wildlife and Other Notes

Photo: 7356, 7357 Swamp likely adventive in ditches in each side of railline.

RATURAL RESOURCE Aquatic, Terrestrial and Wetland Bio	SOLUTIONS INC.	(Office use only) Commu WET-008	nity ID:	
Wetland Vegetation Commun	nities			_
Project Name: Romany WEC	Project #: 17	360	Parcel #:	_
Observer(s): PWD, NGM		E	LC Code: SWDM3-2	_
Date: Sept 21.2016 Tin	ne (24h): 1355	- 1		_
Wetland #: WET-OCK We	ather: Precipitation: None	Temp (° C): 26		
Veg Community #: 51 Wi	nd Speed & Direction:	Cloud %: 50		_
Wetland Type: Sit	e Type: 👘 Dominant Fo	rm: h		
Permanent Open Water: 0%	Check one: O central are	ea () spread out in ponds		_
Photos: 7356,7357	And a local data and the billion of	The second second second second second		
Forms (>25% absolute cover)	Dominant Species (give ?	% relative cover)	「正法」を行うという。「「「「「「」」」、「」」、「」」、「」」、「」」、「」」、「」、「」、「」、「	18
h (%:70) S. Wer Maple (952)	t. Cattonwood (5%)			_
c (%:)				
8 dc (%:)				_
^i dh (%: _)				_
ds (%:)				_
ts (%:)				_
ls (%:)				
gc (%:)				_
ne (%:)				_
be (%:)				_
				_
ff (%:)				
				-
su (%:)				_
m (%:)				
		2 Organia Tupor F		
Soil type: C-clay, L-loam, S-sand, SI-silt (or	any combination)	5 cm Organic Type. F	M H Depth to bedrock. C C	m
Organic= ≥40cm humic or mesic over minera	l; ≥60cm fibric over mineral; ≥10cm or	ganic over bedrock		
Bare Species (Local Regional	Wildlife Notes:			
Provincial):				
None obs.	None dos.			
	oposific LITM location			
Forms: h=deciduous trees (>6m): c=conifero	us trees (>6m): dh. dc. ds=dead trees	s/shrubs: ts=tall shrubs (1-6m): Is=lo	w shrubs (<1m); ac=around cover: ne=narrow	v
emergents; be=broad emergents; re=robust e	mergents; ff=free-floating plants; f=flo	ating plants; su=submerged plants;	m=mosses; u=unvegetated water <2m deep	o on
the outer edge of a wetland or completely surr	ounded by wetland			140
Site Type: L=lacustrine (lake at least 8ha): P	palustrine: R=riverine: IS=isolated			
	· ···· · · · · · · · · · · · · · · · ·			-

Features to look for in the field:
○ active beaver lodges/dams
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
None dos (roadsile assistant)
wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
None obs.
O plant species (wild rice, cranberries)
None
○ location of and directions of water flow at all inflows and outflows (mark whether permanent> or intermittent>
See tield map, minimal ditch inflow from NE likely.
human related disturbances (fill, docks, houses, etc)
Historically a rail line.
 evidence of recreational activities (nature appreciation, fishing, hunting)
Roil line may be used for ATUS, etc (old roil palless remains).
Iocations of seeps or springs, lagg
Norre dos.
 iron precipitates, marl deposits
Nonre obs
O winter cover for wildlife
No
 ungulate summer habitat, moose aquatic feeding habitat
No
 suitability for waterfowl breeding, staging, moulting
No
surrounding topography (flat,)rolling, hilly, steep)
O surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; Ø utility corridor; Ø dec. forest.
O recent cutover or clearcut (<byr); abandoned="" conit,="" crop;="" crops;="" forest;="" mixed="" o="" pasture;<="" pit="" quarry;="" row="" td=""></byr);>
lake or deep river: O creek floodplain: O rock outcrop
fish habitat present: Yes (No) (circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
○ vernal pools
None dos.
🔿 invasive species (plant, aquatic) 🗸
None
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries nabitat except during high water conditions)

Lagg = the depressed zone or moat that develops at the periphery of some bogs and fens which is generally wetter than the surrounding area and often contains water

Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = \geq 25% live trees or tall shrubs; \geq 70% dead trees; \geq 50% low shrubs

Attach full species list and wetland map.

Project Name:		Project #	100210	Area and/or Polygon	ID: No C 1		Aquatic Terrestrial and Wetland Biologists
Project Name. Rommer WEC.		i toject m.	1756C	race and or reggen	H1 teatu	re	-
Date: See 21, 2016	Start Time	: 1355	End Time:	1410	Observers: PA	NO, NGK	Page 1 of 2
Weather Conditions:							
Indicate whether or not the following habitat feature	es are pres	ent within the c	olygon. If Yes to any, fill in	Page 2. Incidental Wildlife	e Observations on Pa	age 2.	
Indicate whether of nor the following names router			18		Information to	Descend an Desce D	The second second second second second second
Habitat Features	Present			AND THE REAL PROPERTY OF	Information to	Record on Page 2	
Water	Yes No	Applicable	to All:	brough ELC	Long	ouity of site (if known, or estimate	
Spring Flooded Field	V V	Draw extent	(length width and donth)	fitougii ELG.	Long	evity of site (if known, of estimate	origin (natural or anthropogenic)
Vernal Pool		Venetation	(length, width, and depth).	na loas within water	Evide	ance of wildlife use including wa	aterfowl turtles amphibians
Pond Shallow March (MAS) or Open Meter		Presence of	fieb	ng logs within water.		shee of whatte use moleding we	
Shallow Marsh (MAS) of Open Water	1	All Swamns	· Always search for Heron	Nest Bowls, Record if ac	ive (April-June only)	- Evidence includes egg shells,	guano, dead young. Map colony/nests if found.
Swamp		In on any	. rindje coaren lei ne en				
Fields	Yes No	Applicable	to All:				
Non-rotational Hay or Weakly Grazed Pasture		Height of ve	getation	Size of site		Abundance of nectar-produce	cing plants (e,g. goldenrods and asters)
Meadow		Evidence of	small mammals	Frequency and source	e of disturbance	Adjacency to forest and fore	est size
Thicket, Woodland, Hydro Corridor				Location and abundar	nce of raptor perches	(scattered trees, snags, fence	posts)
Substrate and Topography	Yes No						
Sand or Fine/Loose Gravel		Evidence of	use (turtles in or near the a	rea, turtie tracks, raided ne	esis). Proximity to Sh	anow warsh (MAS) or Upen W	dier
Banks, Steep Slopes, Sand Piles		Count swall	ow nest holes and indicate l	ledgen of estimate numbe	r or breeding pairs. Si	of cliffs if not indicated through	ELC.
Cliffs		Height of cli	n, Rock type. Presence of	leages or crevices and the	en size. Diaw extent	or carrs in normalicated through	hkVr:
Karst		Depth of cre	evices				
Cave		Depin of ca	ve, bedrock type	lus slopes if not indicated	WELC Adjacency to	a large water body with product	ive fish population (otters)
Natural Rock Plies / Talus Slopes		Age. Rock	sturbances Presence of st	porebird food sources (sna	ils worms clams ins	sects) Percent vegetation cov	ver. Distance to a Great Lake.
Exposed Onvegetated Lake/River/vetiand Edge	HH	Ecosite Nu	imber or area of extent. Pre-	sence of indicator plants	Iron staining. Water I	temperature. Degree and leng	th of slope. Soil types.
Islands or Peninsulas in Onen Water		Natural or a	rtificial Record any gulls of	terns observed. Draw ex	tent of island or penir	nsula if not indicated through El	LC.
Islands of Fernisulas in open Water		Internet of a			and the second second second		
Anthropogenic Features	Yes No	Applicable	to All:				
Abandoned Mine Shaft		Age	Depth into the g	round Amoun	t of sun exposure (or	direction the slope faces)	
Old Rock or Debris Pile, Old Stone Fence		Rock size	Vegetation pres	ent Substra	ate composition (or be	edrock type)	
Abandoned Road or Rail Bed		Evidence of	Use	Proxim	ity to water and estim	ated subterranean influence or	potential for winter water fluctuation.
Abandoned Well		Abandoned	Wells Only: Presence and	type of capping			
Old Foundation		Abandoned	Road or Rail Bed Only: I	Extent in the landscape. C	connectivity to other n	atural features. Overhead vegi	etation cover.
Burrows as Dana	Yes N	Annlinable	to Mammal Russowe or Do	BC!			
Burrows or Dens	Tes No	Applicable	to Mammal Burrows or De	Soil Type		Availability of aquatic vegeta	ation or fish
Modium	HE	Ecosite of k		Provimity to water and	type of water	Evidence of use or tracks of	aligning marks
		Ecosite of R	JCation	T TOATTING TO WARD AN			
Log Jams Old Beaver Lodges	0	Adjacency	o large water body with proc	ductive fish population. Ev	idence of otter (obse	rved, tracks, scat, predated fish	n, turtles, eggs, frogs).
Cravfish Chimney (7E only)	V	Ecosite of k	cation. Soil type. Source	e of site moisture (meadow	w marsh, creek/river e	edge, swamp etc).	
Construction of the second data		-11					
Evidence	Yes No	0	and the second statement of the second second second second second second second second second second second s				
Extensive Browse and/or Ungulate Scat		Vegetation	species browsed. Ecosite.	Other evidence of ungulate	e use. Presence of s	eeps/springs. Barriers to move	ment to and from the area.
Nest Bowl or Stick Nest (herons or raptors)		Quantity. E	cosite of location. Eviden	ce of use. Species if kno	wh or bird group.	size. Height in tree. Tree spe	icies.
Outstanding Trees	Yes N	0					
Large DBH, Outstanding Tall Snag		Tree specie	s. Evidence of perch usage	or nesting. DBH, height.	Exposure above c	anopy. Distance from surrou	nding forest (m) or within.
Large DBH Cavity Tree (Live or Dead)	V	Tree specie	s. DBH. Number of cavitie	es. Size and type of caviti	es. Evidence of use	by bats (abundant guano) or c	ther mammals or wood ducks.
Contraction of the second second second second second second second second second second second second second s					Contract Street Stre		
Rare Communities or Species	Yes N	0					
Old-Growth Forest	-	Average ag	e of trees Range of DBH	or prism sweep. Sources	of disturbance (includ	es presence of exotics)	
Tallgrass Prairie or Savannah		Soil type, F	ercent cover of trees, shrub	es, torbs, and grasses. So	ources of disturbance	(includes presence of exotics)	•
Bog		Soil type an	a aeptns.		rovimate Cononu Co	vor Source of disturbance as	avidence of forestar
Reg Spruce of White Oak Forest		/ Substrate 4	u urainage regime. DBH ra	Vater level Evidence of w	ater fluctuation Proc	ence of Beaver Pond Amount	t of exposed shoreline
Dunes / Reaches (Bres / Pidges		/ Soil or subs	trate type Sand clase Sou	rces of disturbance (includ	les presence of evoti	cs) Percent cover of trees en	rubs forbs and grasses
Sand Barren	HH	Sand class	Sources of disturbance (in	cludes presence of evotice	 Percent area of ex 	xposed rock, venetation and s	and. Sources of erosion or fire
Alvar		Bedrock tvr	e. Soil type and depth Pe	rcent area of exnosed rock	and vegetation. Sol	Irces of disturbance (includes r	presence of exotics).
Rare Species (Not Species At Risk)	HH	Number of	ndividuals and locations. E	cosite or Vegetation Type	regetation out		
Rare Vegetation Community	TTP	Sources of	disturbance (includes prese	nce of exotics).			

Solutions Inc.

Characteristics of Identified Wildlife Habitat

Rommey WEC

Project #:

1736 C

Date:	Sept 21. 2016		
60	Area and/or Polygon ID:	49	

RATURAL RESOURCE SOLUTIONS INC.

Page 2 of 2

Indicate the location of the habitat feature on the Field Map

Project Name:

Identified Habitat Feature	# Observe	d: UTM(s)	Photo	Numbi	015	Habitat D	etails (refe	r to Pa	ige 1)	Associated Wildlife Observed
Identified Habitat Foature Swamp 13 Adventive swamp in ditches of old rail line	# Observe	d: UTM(s) See map.	73 SG, -	Numbi	57	Habitat D No heren n determine Sno Fer bout roce	estalls (rofs ests. g pre ting)	Cou Cou trent	e (suitable roadside.	And Evidence
TY Species	EV a	Notes		TY		Species	EV	#		Notes
Nond :										
Faunal Type Codes (TY) Evidence B=Bird Breedin M=Mammal H- Suita H=Herpetofauna S- Sing L=Lepidoptera P- Pair F=Fish T- Territ D=Dragonfly or Damselfly D- Cour	e Codes (EV) g Birds ble Habitat ng Male bry ship Display	V- Visiting Nest NU- Used A- Anxienty Behavior FY- Fledg N- Nest Building (not wren or woodpeo NB- Nest Building (not wren or woodpe DD- Distraction Display	nest ed Young :ker) ecker)		FS- Food/F CF- Adult c NE- Nest w NY- Nest w AE-Adult er	ecal Sac arrying food ith eggs ith young ntering/leaving nest	Other OB- C DP- D TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza	fe FE-Feedin ve Parts CA-Carcas FY-Eggs o tion SC-Scat Den SI-Other S	g Evídence s/Bones r young igns (Specify)



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Modified ELC Community Description

Page __ of __

site: Komply WF (21736C)	
Polygon: PIN 8470072	WOD-012
UTM:	
Date: May 11/6	Time: 10 - 1200
Surveyor(s): AMD, CEP	
Weather: 12°C, wind 47E, 10090	66

Community Classification

Vegetation Type:	Wh Elm Mineral Decidnous Swamp (SWDMY-2)	
X Inclusion: ①	Frish-Moist Sugar Malle-Hardwood Decid Forest	FODM6-5)
× Gomplex: (2)	Fresh- Moist Woodland (WODMS)	- thorn

Polygon Description

incl

System	Substrate	Topo Feature		Community				
Terrestrial Welland Aquatic History Natural Cultural	Organic Mineral Soil Parent Min Acidic Bedrock Basic Bedrock	Lacustrine Riverine Bottomland Terrace Valley Slope Tableland Rølt, Upland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune Bluff	Lake Pond River Stream Marsh X Swamp Fen	Barren Meadow Prairie Thicket Savannah Woodland Forest			
l d	Site	Cliff	4	Bog	Plantation			
Cover	Open Water	Plant Form	Plant Form					
Open Shrub X	Shallow Water	Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Mixed				

Stand Description

	Layer	нт	Cover	Species
•	Super-canopy			*
1	Сапору	2	3	while lim > green ash > Manitoba maple
2	Sub-canopy	3	З	Manitoba maple > shaq. hickory > green ash
3	Understorey	4-	200	multiflora rose > vouch - leaved dog rood
4	Groundcover	57	4	timothy = ruled canary grass > sp. jewelneed

HT Codes: 1:>25m 2:25-10m 3:10-2m 4:2-1m 5:1-0.5m 6:0.5-0.2m 7:<0.2m Cover Codes: 0:none 1:0-10% 2:10-25 3:25-60% 4:>60%

Community Age	Pioneer	Young	X Mid-age	Mature	Old Growth
Abundance Codes:		N: None	R: Rare	O: Occasional	A: Abundant
Deadfall/Logs		R < 10	F 10-24	R 25 - 50	N > 50
Snags		R < 10	0 10 - 24	0 25 - 50	N > 50
Size Class Analysis	6	0 < 10	A 10 - 24	A 25 - 50	0 > 50

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ____of___

PLANT SPECIES LIST

Site: Polygon: UTM: Date: Time: Surveyor(s): Weather:

Snecies	Layer				Sample	Species	Layer				Sample
Openies	1	2	3	4	Campie	aptoies	1	2	3	4	Jampi
noney loarst		K				garlic mustand			•	0	
green ash	0	0	0			James racket.				0	
trinosthy						fallopldenrod				0	
bl.walnut	R	0	0			- Gitter nightstade				A	
wh.mulbern		R	R			Cou, Darship			í.	0	
Manimaple	D	A				- reld anavy				A	
stag-Sumar		0	0			teasel				0	
Nh.elm	A	0	0			dandelion				D	
ingar maple	R	R				vellow inchet				R	
shag hickory	R	Ö				- so ienelweed				A	
multiplora rose 1		0	A			Epring boardy (Vira)				0	
rough loat Jogwood		0	0			wood agrimony				R	
redoak	R	R				bull thistel				R	
autumn ofive			R			Sprich avens				0	
al. cherry	R	0				com for dock				0	
Amboolh	R	R				- timothy			-	A	
Comorar		R				1					
ir onivised		R			1						
tod Lance alle			0	6							
I WIT HOMENSUL KIE	-	Ω	P	-			-		-		
hackberry	_	K					_				
1											110
•											
	-	-		-			-	-	_	-	

Wildlife and Other Notes

- -photos 1062 1078 -watercause flowing through flature -used recreationally -walking trail + picnic area hunting -woodduck resting box 2 create edge

- Feature consists of riparian / flood plain swamp, in narrow tringes of upland top of valley slopes - swamp is open, minimal free cover sec. woodsa SCC WCr
NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Polygon: PIN 8470072	(0)
UTM:	
Date: May 11/16	Time: 1200- 1225
Surveyor(s): AMD, CEP	
Weather: 11°C, wind 4/E 1	00% (C, no orlip.

Community Classification

Vec	getation Type:	Fresh- moist Graninaid Mendow	(MEGMY)
	Inclusion:		
	Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial Wetland Aquatic	Organic Mineral Soil Parent Min Acidic Bedrock	Lacustrine Riverine Bottomland Terrace	Tatus Crevice/Cave Alvar Rockland	Lake Pond River Stream	Barren Meadow Prairie Thicket
History Natural Cultural	Basic Bedrock Carb. Bedrock	Valley Slope Tableland Roll Upland	Beach/Bar Send Dune Bluff	Marsh Swamp Fen Bog	Savannah Woodland Forest Plantation
Cover Copen Shrub Treed	Cpen Water Shallow Water Surficial Dep Bedrock	Plant Form Plankton Submerged Floating-Lvd K Graminold	Forb Lichen Bryophyte Deciduous	Coniferous Moxed	

Stand Description

- 10	Layer	нт	Cover	Species
	Super-canony	-		N
1	Canopy	2	1	basswood > bitternut Lickory
2	Sub-canopy.	3	1	red cedar
3	Understorey	4	l	stag Sumac
4	Groundcover	5-	4	reed canary gross > timothy > tall goldenrod

HT Codes: 1:>25m 2:25-10m 3:10-2m 4:2-1m 5:1-0.5m 6:0.5-0.2m 7:<0.2m Cover Codes: 0:none 1:0-10% 2:10-25 3:25-60% 4:>60%

Size Class Analysis	5	R	< 10	R	10 - 24	R	25 - 50	N	> 50
Snags		N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs		N	< 10	N	10 - 24	N	25 - 50	N	> 50
Abundance Codes:		N:	None	R:	Rare	0:	Occasional	A:	Abundant
Community Age	Pioneer	X	Young		Mid-age	11	Mature	1	Old Growth

Site:

Modified ELC Community Description PLANT SPECIES LIST

NATURAL RESOURCE SOLUTIONS INC

Polygon: UTM: Time: Date: Surveyor(s): Weather:

Layers:

1=canopy 2=sub-canopy 3=understorey 4=ground layer

Creation		La	yer		Comolo		Facility		La	ver		Comple
Species	1	2	3	4	Sample		Species	1	2	3	4	Sample
ld Clidar		R	R			-	rel d Caro N				A	
nay hickory	R					-	timothy				A	
an Sumac	1		R				andelian				0	
whime berry			R				Comforms11				K	
asswool	R						Comburdak				0	
bitter hickory	R						garil wistard				0	
							mollerwort				R	
						-	tall aslachivad				A	
							cathip is				R	
						-	Can thistle,				A	
							Vellow ricket			1	0	
				_								
								1				
								1.1				
					_			-	-			
	_			_				-		-		
								-			-	_
								1 1				
	-				-			-	-	-	-	

Wildlife and Other Notes

-photos 1079-1083 - feature consists of gross meadow along valley slope, in few scattered tries

Page ____of____

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

· ·	Page	of	_
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site: Romney wec		
Polygon: PIN 8470072		
UTM:		
Date:	Time:	
Surveyor(s):		
Weather:		

Community Classification

Vegetation Type:	
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial Wetland Aquatic History	Organic Minprat Soil Parent 45n Acidic Bedrock Basic Bedrock Carb Bedrock	Lacustine Riverine Bottomland Terrace Valley Slope Tableland	Talus Crevice/Cave Alvar Rockland Beach/Bar Sand Dune	Lake Pond River Stream Marsh Swamp	Barren Meadow Prairie Thicket Savannah Woodland
Cultural	Site Open Water	Cliff	Bluff	Fen Bog	Forest Plantation
Open Shrub Treed	Shallow Water Surficial Dep Bedrock	Plankton Submerged Floating-Lvd. Grammoid	Forb Lichen Bryophyte	Coniferous Nixed	

Stand Description

Layer	HT	Cover	Species	1	1	
Super-canop	y				1	
1 Canopy					/	
2 Sub-canopy					/	
3 Understorey						
4 Groundcover HT Codes: Cover Codes:	1: > 0:nc	25m 2:25 - one 1:0 - 10	10m 3: 10 - 2m)% 2: 10 - 25 3	4: 2 - 1m 5: 1 - 0.5r : 25 - 60% 4: >60%	m 6:05-02m 7:<	:0 2m
Size Class Analy	515		< 10	10 - 24	25 - 50	> 50
Snags			< 10	10 - 24	25 - 50	> 50
Deadfall/Logs			< 10	10 - 24	25 - 50	> 50
Abundance Codes:			N: None	R: Rare	O: Occasional	A: Abundant
Community Age	T	Pioneer	Young	Mid-age	Mature	Old Growth

Modified ELC Community Description

Page __ of ___

	17	-					
osition:	b ac	2010	Polygon:	IN 8	4700	72	
spect	12	0435			,	-	
	2	-					
ype:	2	5	Tree Tally				_
lass	C	B	Species		Tally 1	Tally 2	Tally 3
						· · · · · · · · · · · · · · · · · · ·	
Strata: Texture	(L	GL					-
Depth	0-12	0-47					
Strata: Texture	572						
Depth	13-45					-	
Strata: Texture				1			
Depth							
Strata: Texture							
Depth					1		
ffective Texture	SIC	CL		1			
urface Stoniness					1		
urface Rockiness							
epth to:							
Mottles	13	3					
Gley	-	/			1		1
Bedrock	-	1					D
Water table	_	/					
Carbonates	-	/					1
epth of Organics	-	1			1.		
ore Size Disc #1							
Pore Size Disc #2							
ore Size Disc #3			Total:				
	6	5	Basal Area				
loisture Regime							-

Resource Aquatic, Terrestrial and Wetlan	CE SOLUTIONS INC.	Office use only) Community ID:
Wetland Vegetation Comm	nunities	
Project Name: Romney WEC	Project #: (736)	Parcel #: 008470072
Observer(s): AMD, CEP		ELC Code:
Date: May 11/6	Time (24h): 110 - 1200	
Wetland #:	Weather: Precipitation: None	Temp (° C): 12-
Veg Community #:	Wind Speed & Direction: 비/도	Cloud %: 100
Wetland Type: Swamp	Site Type: 🤾 Dominant Form: 🌡	N
Permanent Open Water: 5	% Check one: (X) central area ()	spread out in ponds associated a watercourse
Photos: 1062-1078		
Forms (>25% absolute cover) h (%+(0) ↓ h. ℓ (((0 70) c (%:) dc (%:) dd (%:)	Dominant Species (give % rela > gr ash (3070) > Manitoba	tive cover) maple (257,) > shag. hickory (57,0)
ds (%:) ts (%:) ls (%:) oc (%:)		
na (%: (a) time the (60 la) ?	read canada anores (40.72)	
he (%:)		
ff(0)		
$\overline{\lambda}$		
m (<u>%:</u>)		
u (%:)		
Soil type: S. C Mineral L	Organic Depth of organics: C c	m Organic Type: F M H N/A Depth to bedrock: \mathbb{N}/A cm
Organic= ≥40cm humic or mesic over mi	neral; ≥60cm fibric over mineral; ≥10cm organic o	ver bedrock
Rare Species (Local, Regional,	Wildlife Notes:	
Provincial):	-refer to incidental obse	unvation list
Cocally read	Cal	
Genm verning 19	193	
SAR observations must also includ	le a specific UTM location.	
Forms: h=deciduous trees (>6m); c=coni	iferous trees (>6m); dh, dc, ds= dead trees/shrubs	; ts =tall shrubs (1-6m); Is =low shrubs (<1m); gc =ground cover; ne =narrow
emergents; be =broad emergents; re =rob the outer edge of a wetland or completely	ust emergents; ff=free-floating plants; f=floating pl surrounded by wetland	ants; su =submerged plants; m =mosses; u =unvegetated water <2m deep
Wetland Type: S=swamp; M=marsh; W=	open water marsh; B=bog; F=fen	
Site Type: L=lacustrine (lake at least 8ha); P=palustrine; R=riverine; IS=isolated	

N/O: not observed

Features to look for in the field:
⊖ active beaver lodges/dams N / 6
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
N(D
wildlife observations (furbearers, waterfowl, baitfish, bullfrogs, snapping turtles)
refer to incidental abcorrection list
○ plant species (wild rice, cranberries)
○ location of and directions of water flow at all inflows and outflows (mark whether permanent> or intermittent>
refer to field map
O human related disturbances (fill, docks, houses, etc)
walking trail buch hagging, tyle cutting
evidence of recreational activities (nature appreciation, fishing, hunting)
ves-evidence of hunting absenced
O locations of seeps or springs, lago
N/O
O iron precipitates, marl deposits
$\lambda 1/0$
⊖ winter cover for wildlife
nonl
O ungulate summer habitat, moose aquatic feeding habitat
VIC DO
suitability for waterfowl breeding, staging, moulting
very limited habitat availability win vaturcourse
Surrounding topography (flat, rolling, hilly, steep)
flat (although swamp is in valley)
⊖ surrounding habitat diversity (≥0.5ha large, within 1.5km): O recent burn (<5yr); O abandoned ag. field; Ø utility corridor; Ø dec. forest;
O recent cutover or clearcut (<5yr); O conif. forest; O mixed forest; O crops; O abandoned pit/quarry; O pasture;
O ravine; O terrain appreciatbly undulating, hilly or with ravines; & fence rows; O fence row with deep cover or shelterbelt; & open
lake or deep river; 🖄 creek floodplain; O rock outcrop
(seasonal soramp)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
watercourse only, appears to be a permanent drainage teature, no fish observed, tish habital prevent
NIO
○ invasive species (plant, aquatic)
NIO
Definitions:
FIOW = now in a denned channel High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries habitat except during high water conditions)
I agg = the depressed zone or most that develops at the periphery of some hore and fens which is dependently watter than the surrounding
rease and often contains water

Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland

Marl = white, loose, crumbling deposit consisting of a mixture of clay, calcite, dolomite or invertebrate shells under water or under a layer of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.

Candidate Bat N Use this form in FO	faternity Roos t D, FOM	Data Form	NATURAL F	RESOURCE SOLUTIONS INC.	Project Manage Woodland Numb	r Use Only: ber :	
Project Name:	Romarync	Project #: 17.26C	Aquatic, tertestilar	and wettand biologists			Page 1 of 2
Start Time	2	End Time12.2.7		Date: 11/03/16	Observer(s):	AND, CEP	
Polygon or Area ID	(843002R)	Weather	Conditions: 11/2	WHE CLUDP Principal	one.		
	# live or dead			+not enargy area for 10'81\$	Heretore noted	cill trees with c	auntes, see Eos sect
Plot Number	cavity trees ≥ 25cm dbh	Plot Center UTM (Z	one:)		Comments		
Plot 1							
Plot 2							
Plot 3							
Plot 4							
Plot 5							
Plot 6							
Plot 7							
Plot 8							
Plot 9							
Plot 10							
Plot 11							
Plot 12							
Plot 13							
Plot 14							
Plot 15							
Plot 16							
Plot 17							
Plot 18							
Plot 19							
Plot 20	1.1						
Plot 21							
Plot 22							
Plot 23							
Plot 24							
Plot 25							
Plot 26							
Plot 27		and the state of the second					
Plot 28							
Plot 29							
Plot 30							
Plot 31			•				
Plot 32							
Plot 33							
Plot 34							
Plot 35							

Number of Plots: Sites ≤10ha: 10 plots (minimum); each extra ha: 1 plot (up to max 35 plots)

Plots = 0.05ha or 12.6m radius

Select plots randomly

ree #	Species	# of Cavities	DBH (cm)	UTM 115	Photo Number(s)
1	Am racin		120	14m 0382021 4663136	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Wildlife Habitat Field Data Collection	n				Solutions Inc.
Project Name: Konney Nic			Project #: 1736C Area and/or F	Aquatic Terrestrial and Wetland Biologists	
Date: 11/05/16	Start '	Time:	11:10 End Time: 10.07	Observers: AND LEP	Page 1 of 2
Weather Conditions: 1. 11°C U.od 42 CC-1	000	2-01	D. N. LONG		
Indicate whether or not the following habitat feature	es are j	oreser	t within the polygon. If Yes to any, fill in Page 2. Incident:	al Wildlife Observations on Page 2.	
Habitat Features	Pres	ent		Information to Record on Page 2	
Water	Yes	No	Applicable to All:		
Spring Flooded Field		×	Draw extent of all water if not indicated through ELC.	Longevity of site (if known, or est	timate)
Vernal Pool		X	Dimensions (length, width, and depth)	Sources of disturbance, current	use, origin (natural or anthropogenic),
Pond	~	X	Vegetation species, woody debris/basking logs within wate	.er. Evidence of wildlife use including	a waterfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water	X	-	All Swamps: Always search for Heron Nest Bowls Rec	rord if active (April- June only) - Evidence includes end shr	ells quano dead vouno. Man colony/nests if found
Swamp		1	An Swamps. Always search for fictor rear bows. Free		sio, gaano, acca yeang. map asion/meato in tound.
Fields	Yes	No	Applicable to All:		
Non-rotational Hay or Weakly Grazed Pasture		X	Height of vegetation Size of site	Abundance of nectar-pro	oducing plants (e.g. goldenrods and asters)
Meadow	X		Evidence of small mammals Frequency ar	nd source of disturbance Adjacency to forest and f	forest size
Thicket, Woodland, Hydro Corridor	X		Location and	abundance of raptor perches (scattered trees, snags, fer	nceposts)
S. L.	Vee	No			
Substrate and Topography	Yes	NO	Evidence of use (turtles in or near the area, turtle tracks, t	raided nests) Proximity to Shallow Marsh (MAS) or Open	n Water
Banks Steen Slones Sand Piles		¥	Count swallow nest holes and indicate location. Estimate	e number of breeding pairs. Sources of disturbance. Drav	w extent if not indicated through ELC.
Cliffs		X	Height of cliff. Rock type. Presence of ledges or crevice	s and their size. Draw extent of cliffs if not indicated throu	ugh ELC.
Karst		X	Depth of crevices		
Cave		X	Depth of cave, bedrock type		
Natural Rock Piles / Talus Slopes		X	Age. Rock/soil type. Draw extent of talus slopes if not in	dicated by ELC. Adjacency to large water body with prod	fuctive fish population (otters).
Exposed Unvegetated Lake/River/Wetland Edge	-	×	Source of disturbances. Presence of shorebird food sour	ces (snails, worms, clams, insects). Percent vegetation	cover, Distance to a Great Lake.
Seeps or Springs	-	X	Ecosite. Number of area of extent. Presence of indicator	Draw extent of island or peninsula if not indicated through	n FLC
Islands of Peninsulas in Open Water	1	1	Natarai of annicial. Record any guis of series observed.	bran extern of bland of permission international internation	
Anthropogenic Features Abandoned Mine Shaft Old Rock or Debris Pile, Old Stone Fence	Yes	No X	Applicable to All: Age Depth into the ground Rock size Vegetation present	Amount of sun exposure (or direction the slope faces) Substrate composition (or bedrock type)	
Abandoned Road or Rail Bed Abandoned Well		X	Evidence of Use Abandoned Wells Only: Presence and type of capping	Proximity to water and estimated subterranean influence	e or potential for winter water fluctuation
Old Foundation		x	Abandoned Road or Rail Bed Only: Extent in the lands	cape. Connectivity to other natural features. Overnead v	egetation cover.
Burrows or Dens	Yes	No	Applicable to Mammal Burrows or Dens:		
Small - Rodent or Snake		X	Diameter of entrance Soil Type	Availability of aquatic veg	getation or fish
Medium		X	Ecosite of location Proximity to v	Nater and type of water Evidence of use, or track	ks or digging marks
Large		X		the Polaria faith to be and to do and the set	Cab & disc same formal
Log Jams, Old Beaver Lodges		X	Adjacency to large water body with productive fish popula	mon. Evidence of otter (observed, tracks, scat, predated	tish, turues, eggs, trogs).
(Clayinan Chinniey (/ C Only)	1 1	1. ~	Ecosite of location. Soil type. Source of and molature (incadow marsh, creekinger edge, swamp etc).	
Evidence	Yes	No			
Extensive Browse and/or Ungulate Scat		X	Vegetation species browsed. Ecosite. Other evidence of	ungulate use. Presence of seeps/springs. Barriers to me	ovement to and from the area.
Nest Bowl or Stick Nest (herons or raptors)	1		Quantity. Ecosite of location. Evidence of use. Speci-	es if known or bird group. Size. Height in tree. Tree	species.
Outstanding Trees	Vee	Na			
Large DBH, Outstanding Tall Shag	Tes	X	Tree species. Evidence of perch usage or nesting DBI-	t height Exposure above canooy Distance from surr	rounding forest (m) or within.
Large DBH Cavity Tree (Live or Dead)		X	Tree species. DBH. Number of cavities. Size and type	of cavities. Evidence of use by bats (abundant guano) of	or other mammals or wood ducks.
		1		- Andrew Contractor and C	
Rare Communities or Species	Yes	No			
Old-Growth Forest		X	Average age of trees. Range of DBH or prism sweep. S	jources of disturbance (includes presence of exotics)	
Laligrass Prairie or Savannan		X	Soil type. Percent cover of trees, shrubs, forbs, and grass	ses. Sources of disturbance (includes presence of exotin	CS).
Red Spruce or White Oak Forest	-	K	Soil type and drainage regime. DBH range or prism sweet	en Approximate Capopy Cover Source of disturbance	or evidence of forestry
Coastal Marshes (Great Lakes/Shallow Atlantic)		× v	Substrate type (bedrock or soil type). Water level Evide	ince of water fluctuation. Presence of Reaver Pond. Amr	punt of exposed shoreline.
Dunes / Beaches / Bars / Ridges		Ŷ	Soil or substrate type Sand class Sources of disturbanc	ce (includes presence of exotics). Percent cover of trees	shrubs, forbs, and grasses
Sand Barren		X	Sand class, Sources of disturbance (includes presence c	of exotics). Percent area of exposed rock, vegetation, and	d sand, Sources of erosion or fire,
Alvar		X	Bedrock type. Soil type and depth. Percent area of expo	sed rock and vegetation. Sources of disturbance (include	es presence of exotics)
Rare Species (Not Species At Risk)	\checkmark	-	Number of individuals and locations. Ecosite or Vegetation	on Type	
Rare vegetation Community		X	Sources of disturbance (includes presence of exotics)		

of Z

Characteristics of Identified Wildlife Habitat

Date: 11/05/16

Project Name: Ronmer WC

Project #: 1736C

Area and/or Polygon ID: 347078



Page 2 of 2

	Indicate the location of the habitat feature	on the Field	Map.							
	Identified Habitat Feature	# Observ	ved: UTM(s) IFT	Photo	Numbers	Habitat De	tails (ref	er to Pa	ge 1)	Associated Wildlife Observed
	Stuknest debris Dile (wood) delx 5 5°C (content norm) rure Spencers (nutration)	л Е к	= 5m 03820624662111 ± 5m 03820624663192 ± 4m 03822214663152	2		down't appear to be pile of alexa branche bill of alexanist bi hore 'aust	outive s, full oucs?	in ayo sun amiliu	ung Ambacen ood dabhqfuillsun	
0	stick nest	ſ	03820624663111 1074,1075 -Jin FODM6-5 - no evidence of current u - Am. beech tree, nest ~ tree ~ 20 cm dbh					t vise ~ 151	γυγ,	no raptors ubserved
Z	debris rile (woody montenial)	1	0382062 466319Z	1077		- not suitable as extend below grow - sturting to grow - adjacent to vates - clay/loan soils	none observed			
3	debris pile (concrete and rood)	l	0382221 4663122	108	- concrete + wood pill - concrete + wood pill - does not appear to extend below frost line - just a pill - graving over - weedy veg. - ~ 100-BOn to closest water source - concrete up to Im across			none observed		
4	rare spp. (non-sAR) 1		refer to map for location	Nonl		-1 honey locust	obsen	led in	WODMS	NIA
	TY Species	EV	# Notes		TY	Species	EV	#		Notes
	Red-wased Drudsed				10) 10 0	ter renderinger				
	Killdeen				Êu	(citan)		1	Plushed from of	16%
	Corressiloper Spirm 2				-94	ter and the second second second second second second second second second second second second second second s				
	Redeedar				Dire him	ind indist	-			
	Am Guldhich	A R	1 Elvion Olderland			\checkmark	_			
	High Codes (TY) Evidence C Faunal Type Codes (TY) Beading B B=Bird Breeding B M=Mammal H- Suitable H=Herpetofauna S- Singing M L=Lepidoptera P- Pair F=Fish T- Territory D=Dragonfly or Damselfly D- Courtshin		V- Visiting Nest NU- Us A- Anxienty Behavior FY- Fle N- Nest Building (not wren or wood) NB- Nest Building (not wren or woo DD- Distraction Display	ed nest dged Young pecker) dpecker)	FS- Fo CF- Ad NE- Ne NY- Ne AE-Adu	d/Fecal Sac ult carrying food st with eggs st with young It entering/leaving nest	Other OB- C DP- E TK- T VO- V HO- H	r Wildlife Observed Distinctive Tracks /ocalizat House/D	e FE- Feedin e Parts CA- Carcas FY- Eggs o ion SC- Scat en SI- Other S	g Evidence ss/Bones r young igns (Specify)

2	of	Z

Wildlife Habitat Field Data Collection

Wildlife Habitat Field Data Collection	n			Satural Resource Solutions Inc.
Project Name:			Project #: Area and/or Polygon ID:	Aquatic, Terrestrial and Wetland Biologists
Date:	Start 1	'ime:	End Time: Observers:	Page 1 of 2
Weather Conditions:				
Indicate whether or not the following habitat leatur	es are p	reser	t within the polygon. If Yes to any, fill in Page 2. Incidental Wildlife Observations on Page 2.	
Habitat Features	Pres	ent	Information to Record on Page 2	
Water	Yes	No	Applicable to All:	1
Spring Flooded Field		1	Draw extent of all water if not indicated through ELC. Longevity of site (if known, of estim	1ate)
Vernal Pool	-	-	Dimensions (length, width, and deput). Sources of distributing the second state of th	e, origin (natural or anthropogenic),
Pond Challew March (MAS) or Open Mater		-	Vegetation species, woody debis/basking logs within water. Evidence of within each and the basking logs within water.	atenowi, turties, amprilolans
Shallow Marsh (MAS) or Open Water	-	-	All Swams: Always search for Heron Nest Bowls. Record if active (April-June only) - Evidence includes eag shells	s, quano, dead young. Map colony/nests if found.
Swallp	1-1-	4		
Fields	Yes	No	Applicable to All:	
Non-rotational Hay or Weakly Grazed Pasture		1	Height of vegetation Size of site Abundance of nectar-produ	ucing plants (e.g. goldenrods and asters)
Meadow			Evidence of small mammals Frequency and source of disturbance Adjacency to forest and for	rest size
Thicket, Woodland, Hydro Corridor			Location and abundance of raptor perches (scattered trees, snags, fence	eposts)
Substrate and Topography	Yes	NO	Evidence of use (luides in or pear the area, tudia tracks, roided pasts). Provinity to Shallow Marsh (MAS) or Open V	Vater
Sand or Fine/Loose Gravel	-	-	Count swallow nest holes and indicate location. Estimate number of breeding pairs. Sources of disturbance. Draw	extent if not indicated through ELC.
Banks, Steep Slopes, Sand Mies		-	Height of cliff. Rock type. Presence of ledges of crevices and their size. Draw extent of cliffs if not indicated through	h ELC.
Karet		-	Depth of crevices	
Cave		-	Depth of cave, bedrock type	
Natural Rock Piles / Talus Slopes			Age. Rock/soil type. Draw extent of talus slopes if not indicated by ELC. Adjacency to large water body with produc	ctive fish population (otters).
Exposed Unvegetated Lake/River/Wetland Edge			Source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation or	over. Distance to a Great Lake.
Seeps or Springs			Ecosite. Number or area of extent. Presence of indicator plants. Iron staining. Water temperature. Degree and leng	gth of slope. Soil types.
Islands or Peninsulas in Open Water		17	Natural or artificial. Record any gulls or terns observed. Draw extent of island or peninsula if not indicated through E	ELC.
		-		
Anthropogenic Features	Yes	No	Applicable to All:	
Abandoned Mine Shatt		-	Age Depth mo the ground Amount of sun exposure (of direction the slope faces)	
Abandened Read or Reil Red		-	Rock size vegetation present Substrate Composition (of Dedimating right)	or notential for winter water fluctuation
Abandoned Well		-	Evidence of Ose	
Old Foundation		-	Abandoned Road or Rail Bed Only: Extent in the landscape. Connectivity to other natural features. Overhead vec	petation cover.
		1.		* STATUELL THE # Solo
Burrows or Dens	Yes	No	Applicable to Mammal Burrows or Dens:	()
Small - Rodent or Snake			Diameter of entrance Soil Type Availability of aquatic vege	tation or fish
Medium			Ecosite of location Proximity to water and type of water Evidence of use, or tracks	or digging marks
Large		-	A three the second	the distance frame)
Log Jams, Old Beaver Lodges	-	-	Adjacency to large water body with productive rish population. Evidence of otter (observed, tracks, scat, predated its	sn, tudies, eggs, frogs).
Calify (/E only)	1 1	1	Ecosite of location. Solitype: Source of site moisture (meadow marsh, creekinver edge, swamp etc).	
Evidence	Yes	No		
Extensive Browse and/or Ungulate Scat			Vegetation species browsed. Ecosite. Other evidence of ungulate use. Presence of seeps/springs. Barriers to mov	ement to and from the area.
Nest Bowl or Stick Nest (herons or raptors)			Quantity. Ecosite of location. Evidence of use. Species if known or bird group. Size, Height in tree. Tree sp	pecies.
Outstanding Trees	Yes	No	Tree species Evidence of earth upgas - parting DRH bainty Evency above sanony Distance from surray	unding forest (m) or within
Large DBH, Outstanding Tall Shag			The species DBH Number of cavities Size and two of cavities Evidence of use to bat (abundant quand) or	other mammals or wood ducks
(Large DDH Gavity Hee (Live of Dead)	L. Li	-l	The species. Durit, Hender of cavities, clice and type of cavities. Endence of also by bals (abandant gasho) of	
Rare Communities or Species	Yes	No		
Old-Growth Forest			Average age of trees. Range of DBH or prism sweep. Sources of disturbance (includes presence of exotics).	
Tallgrass Prairie or Savannah			Soil type. Percent cover of trees, shrubs, forbs, and grasses. Sources of disturbance (includes presence of exotics	i).
Bog			Soil type and depths.	
Red Spruce or White Oak Forest			Soil type and drainage regime. DBH range or prism sweep. Approximate Canopy Cover. Source of disturbance or	evidence of forestry.
Coastal Marshes (Great Lakes/Shallow Atlantic)			Substrate type (bedrock or soil type). Water level. Evidence of water fluctuation. Presence of Beaver Pond. Amou	nt of exposed shoreline.
Dunes / Beaches / Bars / Ridges		-	Soil or substrate type. Sand class. Sources of disturbance (includes presence of exotics). Percent cover of trees, st	hrubs, forbs, and grasses.
Sand Barren		-	Sand class, Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and a	sand. Sources of erosion or fire.
Alvar Data Species (Not Species At Disk)		-	bedrock type, soil type and depth. Percent area of exposed rock and vegetation, sources of disturbance (includes)	presence of exolics).
Rare Venetation Community	H	-	Sources of disturbance (includes presence of evotics)	
Indie Tegetaion oonindinty	1 1	1	President of distribution (highlight highlight of evolution)	

Project Name:

Date:

Project #:

Area and/or Polygon ID:



	Indica	te the location of the habitat feature	e on the F	Field Ma	p.		/	-					
		Identified Habitat Feature	# Obs	served:	UTM(s)	Photo M	Numb	ers	Habitat Det	ails (refe	r to Pa	ige 1)	Associated Wildlife Observed and Evidence
5	0(*	en water	ł		N/A - water course feature	1072			- ~2-3 m vi -limited vegeta debuis -fish halitat observed	Ith, tion pres	derf and enf	th unkn. -oody fish rot	NIA
D	S.	vamp 1 N/A - SwOM4-2 1069 - nu evidence of heron nesting Community Community - Timited standing water in defressional areas - dress nu applar suitable for amphib. breeding - no Fish habitat vin swamp- watercourse only i no fish obs - disturbance due to recreation use it property isedimentation to crops close to watercourse readow + woodland 1 of N/A - MEGMY + 1078 (woDMG) - height of veg. 780 cm (grasse)					nesting in Joes not phile. swamp- fish observed reation al mtation due (grasses) os conformerch	N/A					
					NODEL COMMUNITE	1082 (~	IEG	M4)	- good rectar sou - Forest Labitat	ries -	gold	enrodst asters	
	ΤY	Species	EV	#	Notes		ΤY		Species	EV	*#		Notes
										-			
				-			_						
	Fauna B=Bird M=Ma H=Her L=Lep F=Fisl D=Dra	al Type Codes (TY) b Breeding mmal H- Suitable rpetofauna S- Singing idoptera P- Pair n T- Territor gonfly or Damselfly D- Courts	Codes (Birds e Habitat Male y	EV)	V- Visiting Nest NU- Used I A- Anxienty Behavior FY- Fledge N- Nest Building (not wren or woodpec) NB- Nest Building (not wren or woodpe DD- Distraction Display	nest d Young ser) cker)		FS- Food CF- Adult NE- Nest NY- Nest AE-Adult	/Fecal Sac carrying food with eggs with young entering/leaving nest	Other OB- C DP- D TK- Tr VO- V HO- H	Wildlin bserve istinctiv acks ocaliza	fe FE- Feedin re Parts CA- Carca: FY- Eggs c tion SC- Scat	ig Evidence ss/Bones or young







May 30 2016 PWD



NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page $\int of 2$

Polygon: 008480105	INDO-C	μң
UTM:		
Date: May 30, 2016	Time: 1219	
Surveyor(s): PWD		
Weather 25°C word 2/510 10	2 cc m. analica	

Community Classification

Ve	getation Type:	SWDM3-3 Swame Merle Min. Dec. Swamp	Type.
	Inclusion:		Л
	Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial Wetland Aquatic	Organic Mineral Soil Parent Min. Acidic Bedrock	Lacustrine Riverine Bottomland Terrace	Talus Crevice/Cave Alvar Rockland	Lake Pond River Stream	Barren Meadow Prairie Thicket
History Natural Cultural	Basic Bedrock Carb. Bedrock	Valley Slope Tabletand Rolf. Upland	Beach/Bar Sand Dune Biuff	Marsh Swamp Fen Bog	Savannah Woodland Forest Plantation
Cover Open Shrub X Treed	Open Water Shallow Water Surficial Dep. Bedrock	Plant Form Plankton Submerged Floating-Lvd Graminoid	Forb Lichen Bryophyte Deciduous	Coniferous	

Stand Description

	Layer	нт	Cover	Species
	Super-canopy	-	1	
1	Салору	2	4	Freeman Mayle NAm Basswood = Am Elm > Bur Oak
2	Sub-canopy	3	2	Freeman Medie > Am. Boseword = Am Flm = Bur Oak.
3	Understorey	4	2	Hultistora Rose Streeman Maske: Rowle Ind Degwood
4	Groundcover	57	3	Core area not visible

 HT Codes:
 1:>25m
 2:25 - 10m
 3:10 - 2m
 4:2 - 1m
 5:1 - 0.5m
 6:0.5 - 0.2m
 7: <0.2m</th>

 Cover Codes:
 0:none
 1: 0 - 10%
 2: 10 - 25
 3: 25 - 60%
 4: >60%

Size Class Analysis	0	< 10	0	10 - 24	0	25 - 50	N	> 50
Snags		< 10	0	10 - 24	0	25 - 50	N	> 50
Deadfall/Logs	0	< 10	0	10 - 24	N	25 - 50	N	> 50
Abundance Codes:	N:	None	R:	Rare	0:	Occasional	A:	Abundant

	0	1 Marine	Vieren	-	
Community Age	Pioneer	Young	A Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 2

PLANT SPECIES LIST

Site:		
Polygon:		
UTM:		
Date:	Time:	
Surveyor(s):		
Weather:		

Layers:	1=c

canopy 2=sub-canopy 3=understorey 4=ground layer

		1						1.4			
Species	-	La	yer	1	Sample	Species	-	La	yer		Sample
T7 . A.F.	177	2	3	4		Engl a	1	2	3	4	
Burock	n	$ \circ $	_			Wild Geranium	-			0	
Am Elm	0	D				Phranciles			_	R	
Freeman Maple	D	A	D			Visalization Waterland				0	
Stahorn Sunac .	13.	Ø	R			Lance leaved Ader				0	
Am Basswood	0	0									
E. Collowood		R	R								
Stree Ash	R	R									9
Shahad Hodran	-	8									
Will Por	1	1	0				1				
R.M.	1	1		0					-		11
R I I IF.		1	0				1		-	-	
Vount-leaved Daywood	1	-	P	-			-		-		-
	+	-	-				-		-	-	
	+	-	-	-			-		-	-	1
	+	-								-	
	-										
		-					-				
					·						
									_		
	+	-		-			-	-	-	-	
	1									1	
	-	_					-		-		

Wildlife and Other Notes

Greek Crested Rycatcher : SM	White-triled Deer		
Rod-ward Blackbard RA			
Codar Werning su			
Sony Sparsmus V SM			
Commen. Yellowflerent SM	Data	120004	
Mounting Dove - SH	1 1000	12-01-1	
J			

Wildlife Habitat Field Data Collection	n		As observed from E boundary	San Natural Resource Solutions Inc.
Project Name: Romany WEC		1	Project #: Area and/or Polygon ID: 0084 80105	Aquatic, Terrestrial and Welland Biologists
Date: Na. 30,2016	Start	Time:	219 End Time: 1236 Observers: PWD	Page 1 of 2
Weather Conditions: 25°C, wind 2/51,	10%00	c, no	blech	
Indicate whether or not the following habitat feature	es are p	present	within the polygon. If Yes to any, fill in Page 2. Incidental Wildlife Observations on Page 2.	
Habitat Features	Pres	sent	Information to Record on Page 2	
Water	Yes	No	Applicable to All	
Spring Flooded Field			Draw extent of all water if not indicated through ELC. Longevity of site (if known, or estimated through ELC).	ate)
Vernal Pool			Dimensions (length, width, and depth). Sources of disturbance, current use	, origin (natural or anthropogenic)
Pond		V.	/egetation species, woody debris/basking logs within water. Evidence of wildlife use including water	aterfowl, turtles, amphibians
Shallow Marsh (MAS) or Open Water	1	× I	rresence of rish Ni Swamer, Alwaye search for Haven Next Review Record if active (April, Ivne apli), Evidence includes and shalls	auana dead young. Man colony/pasts if found
Towamp	I V	1 1	an owamps. Anways search for record reaction reaction and the (Aphrodule Unity) - Evidence includes egg sheks,	guano, dead young. Map coonymeats in round.
Fields	Yes	No	Applicable to All:	
Non-rotational Hay or Weakly Grazed Pasture			Peight of vegetation Size of site Abundance of nectar-product	cing plants (e.g. goldenrods and asters)
Meadow			Evidence of small mammals Frequency and source of disturbance Adjacency to forest and fore	est size
Thicket, Woodland, Hydro Corridor		(V)	Location and abundance of raptor perches (scattered trees, snags, fence	posts)
Sand or Eine/Loose Gravel	Tes	NO.	Evidence of use (turtles in or near the area, turtle tracks, raided nests). Provimity to Shallow Marsh (MAS) or Onen W	ater
Banks Steen Slones Sand Piles	H	1710	Court swallow nest holes and indicate location. Estimate number of breeding pairs, Sources of disturbance. Draw e	xtent if not indicated through ELC.
Cliffs		1	leight of cliff. Rock type. Presence of ledges or crevices and their size. Draw extent of cliffs if not indicated through	ELC.
Karst		21	Depth of crevices	
Cave		VI	Jepth of cave, bedrock type	
Natural Rock Piles / Talus Slopes		V	ge. Rock/soil type. Draw extent of talus slopes if not indicated by ELC. Adjacency to large water body with product	tive fish population (otters).
Exposed Unvegetated Lake/River/Wetland Edge		1	source of disturbances. Presence of shorebird food sources (snails, worms, clams, insects). Percent vegetation Cov	th of close. Sell tupos
Seeps or Springs	\vdash	1	200ste. Number of area of extent. Presence of indicator plants, iron staming, water temperature. Degree and temp absorbed to a state of the state	in of slope. Soli types.
Islands of Peninsulas III Open Water	1	<u> </u>	atura or annicial. Record any guils or tents observed, Draw extent or plant or pennisula in normalicated moduline	
Anthropogenic Features Abandoned Mine Shaft	Yes	No	Applicable to All: Age Depth into the ground Amount of sun exposure (or direction the slope faces)	
Old Rock or Debris Pile, Old Stone Fence		1	Rock size Vegetation present Substrate composition (or bedrock type)	
Abandoned Road or Rail Bed	$ \vdash $	1V	Evidence of Use Proximity to water and estimated subterranean influence or	potential for winter water fluctuation.
Abandoned Well	\mapsto	1.A	(bandoned Wells Unit: Presence and type of capping Abandoned Bead on Beil Beil Onliv: Extent is the leadecape. Connectivity to other natural features. Overhead year	etation cover
old i buildalloit	1 1	1 1	toandoned Noad of Nan Ded Only. Exicit in the landscape, Connectivity to other national readines, oronnoad rogs	
Burrows or Dens	Yes	No	Applicable to Mammal Burrows or Dens:	
Small - Rodent or Snake		V	Diameter of entrance Soil Type Availability of aquatic vegeta	ation or fish
Medium		1	Ecosite of location Proximity to water and type of water Evidence of use, or tracks o	or digging marks
Large		14	Adjacenet to large water body with productive fish consulation. Evidence of otter (observed, tracks, shat predated fish	turtles eans frons)
Craufish Chimney (75 only)	\mapsto	17	Auglebrick for large water body with productive instruction for the formation of the content of the swamp for the state instruction of the content of the swamp for the sw	r, tunica, egga, nogaj.
(or a yild if of initially (if a only)		1.0 1.		
Evidence	Yes	No		
Extensive Browse and/or Ungulate Scat		1	regetation species browsed. Ecosite. Other evidence of ungulate use. Presence of seeps/springs. Barriers to move	ement to and from the area.
Nest Bowl or Stick Nest (herons or raptors)		V	Juantity. Ecosite of location. Evidence of use. Species if known or bird group. Size. Height in tree. I ree spe	cies.
Outstanding Trees	Yes	No		
Large DBH, Outstanding Tall Snag		1	free species. Evidence of perch usage or nesting. DBH, height. Exposure above canopy. Distance from surrour	nding forest (m) or within.
Large DBH Cavity Tree (Live or Dead)		1	ree species. DBH. Number of cavities. Size and type of cavities. Evidence of use by bats (abundant guano) or o	ther mammals or wood ducks.
			> 5-10 dead trees but couldres have approvents. (All dead trees Ash 20.40 DSH, Interq.).	
Rare Communities or Species	Yes	NO	Average age of trace. Pages of DRH or ofers surger. Sources of disturbance (includes presence of evolics)	
Tallorass Prairie or Savannah	H	1	Solitype Percent cover of trees shrubs forbs and grasses. Sources of disturbance (includes presence of exotics)	
Bog	H	1	Soil type and depths.	
Red Spruce or White Oak Forest	H	1	Soil type and drainage regime. DBH range or prism sweep. Approximate Canopy Cover. Source of disturbance or r	evidence of forestry.
Coastal Marshes (Great Lakes/Shallow Atlantic)		V,	Substrate type (bedrock or soil type). Water level. Evidence of water fluctuation. Presence of Beaver Pond. Amount	t of exposed shoreline.
Dunes / Beaches / Bars / Ridges		1	oil or substrate type. Sand class. Sources of disturbance (includes presence of exotics). Percent cover of trees, shr	rubs, forbs, and grasses.
Sand Barren		V	and class. Sources of disturbance (includes presence of exotics). Percent area of exposed rock, vegetation, and sa	and, Sources of erosion or fire.
Alvar	10	V	secrock type. Soil type and depth. Percent area of exposed rock and vegetation. Sources of disturbance (includes p	resence of exolics).
Rare Vegetation Community	1	17	Sources of disturbance (includes presence of explicit)	
	1	1.1		

Characteristics of Identified Wildlife Habitat

Project Name: Rommey WEC

Project#: 1736c

Date: H-7 30, 2016 Area and/or Polygon ID: 0084 80\05



Page 2 of 2

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Indicate the location of the habitat feature on the Field Map.

and and	Identified Habitat Fea	ture	# Obs	erved:	UTM(s)	Photo M	Numbe	ers	Habitat Deta	ils (refe	er to Pa	ige 1)	Associated Wildlife Observed and Evidence
N	ic habitates (Si identified,	(Hu											
TY	Species	r sheet	EV	#	Notes		TY		Species	EV	#		Notes
										1			
							-				-		
Fauna	al Type Codes (TV)	Evidence	Codes /	EVA		1				1			
Faunal Type Codes (TY) Evidence Codes (EV) B=Bird Breeding Birds M=Mammal H- Suitable Habitat V- Visiting Nest NU- Used nest H=Herpetofauna S- Singing Male A- Anxienty Behavior FY- Fledged Young L=Lepidoptera P- Pair N- Nest Building (not wren or woodpecker) F=Fish T- Territory NB- Nest Building (not wren or woodpecker)		nest d Young er) cker)		FS- Food/F CF- Adult c NE- Nest w NY- Nest w	ecal Sac arrying food ith eggs ith young	Other OB- C DP- D TK- Tr VO- V	Wildlin bserve vistinctiv racks ocaliza	fe FE- Feedin ve Parts CA- Carcas FY- Eggs o tion SC- Scat	ng Evidence ss/Bones or young				

2	NATURAL	RESOURCE	SOLUTIONS	INC.
5	Aquatic, Terrestr	ial and Wetland Bio	logists	

(Office use only) Community ID: WET-009

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Wetland Vegetation Communiti	es	
Project Name: Rommer WEC	Project #: 173	60 Parcel #: West of 008480105
Observer(s): Pub		ELC Code: 50043-3
Date: May 30, 2016 Time	(24h): 1219	
Wetland #: WET- OOG Weath	er: Precipitation: None	Temp (° C): 25
Veg Community #: SI Wind	Speed & Direction: 2/Sw	Cloud %: O
Wetland Type: C Site T	vpe: T Dominant Forn	1: h
Permanent Open Water: 0 %	Check one: O central area	O spread out in ponds
Photos: 120004		
	Dominant Spacios (give %	relative cover)
h (%: 60) Freeman Hands (80)	Awaren Bassing	(102) Augure Flora (62) Bur Ack (42)
c(%:)	ej, rovarco (Cassoco	
8 dc (%:)		
to (0/ :)		
IS (%.)		
re (%:)		
su (%:)		
m (<u>%:</u>)		
u (%:)		2
Soil type: Mineral Orga	combination	cm Organic Type: F M H Depth to bedrock: 2 cm
Organic= >40cm humic or mesic over mineral: >6	Combination)	nic over bedrock
	Wildlife Notes	
Provincial):	whame Notes.	
None observed	See ELC COVE	r sheet
		2
SAR observations must also include a sp	ecific UTM location.	
Forms: h=deciduous trees (>6m); c=coniferous t	ees (>6m); dh, dc, ds=dead trees/s	nrubs; ts=tall shrubs (1-6m); Is=low shrubs (<1m); gc=ground cover; ne=narrow
emergents; be= broad emergents; re= robust eme the outer edge of a wetland or completely surroun	gents; ff=free-floating plants; f=floati ded by wetland	ng plants; su=submerged plants; m=mosses; u=unvegetated water <2m deep on
Wetland Type: S=swamp; M=marsh; W=open wa	ater marsh; B=bog; F=fen	
Site Type: L=lacustrine (lake at least 8ha); P=pa	ustrine; R=riverine; IS=isolated	

Features to look for in the field:
⊖ active beaver lodges/dams
O locations of rare species (UTM needed; note habitat, abundance, behaviour, etc)
Non a dos (acurad , line)
○ wildlife observations (furbearers, waterfow) baitfish, bullfrogs, snapping turtles)
Non a
☐ location of and directions of water flow at all inflows and outflows (mark whother permanent
o location of and directions of water now at an innows and outnows (mark whether permanent ———————————————————————————————————
(human related disturbances (fill darks brunch (on site or a erial).
No
 evidence of recreational activities (nature appreciation, fishing, hunting)
None abs.
O locations of seeps or springs, lagg
None obs.
○ iron precipitates, marl deposits
None obs.
O winter cover for wildlife
No
O ungulate summer habitat, moose aquatic feeding habitat
No
suitability for waterfowl breeding, staging, moulting
Not sudoble
Surrounding topography (flat) rolling, hilly, steep)
Surrounding habitat diversity (>0.5ba large, within 1.5km); O recent burn (<5vr); O abandoned ag, field; O utility corridor; Ø dec, forest
O recent cutover or clearcut (<5vr): O conif. forest: O mixed forest: O crops: @ row crop: O abandoned nit/guarry: @ @ pasture:
O ravine; O terrain appreciatbly undulating, hilly or with ravines; O fence rows; O fence row with deep cover or shefterbelt; O open
lake or deep river; & creek floodplain; O rock outcrop
⊖ fish habitat present: Yes (No)(circle)
If yes, describe: low or high marsh, seasonal or permanent swamp, fish or habitat observed
○ vernal pools
None dos.
Ø invasive species (plant, aquatic)
Small amount of Phisquites along East edge, European Buckshorn edges.
Definitions:
Flow = flow in a defined channel
High marsh = the area from the water line to the inland boundary of marsh wetland type (i.e. wet meadow - insufficient standing water to
provide fisheries habitat except during high water conditions)
Lagg = the depressed zone or moat that develops at the periphery of some boos and fens which is generally wetter than the surrounding
area and often contains water
Low marsh = the marsh area from the existing water line out to the outer boundary of the wetland
Mart = white loose crumbling denosit consisting of a mixture of clay, calcite, dolomite or involtobrate shells under water or under a lower
of peat or vegetation

Open water marsh (W) = dominated by su, f, ff, u, or wild rice or soft or hard-stemmed bulrush

Swamp = ≥25% live trees or tall shrubs; ≥70% dead trees; ≥50% low shrubs

Attach full species list and wetland map.



March 10/16 Rommer WEC #1736A K. Burrell 0950-1420 13°C, prist, SW-1 100% CC Waterfoul Stopover 7 Staging -driving transect Notes Obs. - most fields are well drained, I little standing water - Fields are roughly 60% Soy, 25% corn, 115% winter wheat 3 Bald Eagle nest ; 2 adults obs. on nest; I ad appears to be including - nest is highly visible; directly 1293 4th Con, Line 2 600m. south of (3) Rusty Blackbird (see map) Lobs. in soy Field i mixed blackbirds. At least 3 ind.

(+) - small marsh feature; calling Chorus Frogs; good location for annuran Survey 5) - 5mall man-made poul ; suitable for anuran survey (b)-extensive fallow field (~500x 500m) Lo ask Ken re: site -> well known to birders for grassland breeding birds JL DARLING LLC USA • RiteintheF XXXX *- entire site is situated in excellent area during spring migration for shorebirds. CWS runs a survey in spring through study orea





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KGB





Notes: **Romney WEC - Waterfowl** MINISTRY OF NATURAL RESOURCES AND FORESTRY Map #2 £. Ontario Make a Topographic Map Stopover and Staging Area Legend Building as Symbol Skalding to Scale 13 Arport Helport I Hospital Melpor 福司 10 Scepture Base Ferry Route Trail Phoid 1 00 -[7]-- Ratway | Train Station - Astway with Godge -> ---- Ratiote with Littine Road (Major --- Minor) Winter Pood Pical with United 5 C Road with Turner - Primary Kings or 400 Series Histowy Secondary Highway Tertiary Highway (N) District, County Regional or Municipal Road B: Tell Highway One Way Road Road with Permanent Bincked Passagn Road with Address Rances Hydro Lete: Communication Line or Unknown Transmission Line Natural Gas Poetine. Water Poetine or Unknown Poetine Sout Height Indux Ganlow Comou Wooded Area Wethingt Waterbody Visionary Elev Vatercourse Fals Radi Rapids (Fails Rapds Algons. 60 Lock Gate 12 Dam 1 Hydro Vall Dam i Hydra Wali Provincial 1 State Ecundary Reenaponal Boundary Upper Tier \ District Municipal Boundary Lover Tier I Single Tier Municipal Boundary Laure Indian Relative Provincial Park .0, National Park Conservation Reserve Mitpry Lands 14 Projection: Web Mercator 1.4 km Imagery Copyright Notices: Ontario Ministry of Natural Resources and Forestry; NASA Landsat The Ontario Ministry of Natural Resources and Forestry shall not be liable in any way for Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological the use of, or reliance upon, this map or any information on this map. This map should not be used for: navigation, a plan of survey, routes, nor locations. Survey. © Copyright for Ontario Parcel data is held by Queen's Printer for Ontario and its licensors and may

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Rommer WEC #1736A March 17/16 K68 Waterfow) survey 1340 0920-9°C, 0% CC. SW-4. -overall condition quite any Ofresh beaver signs on trees Dsvitable Barn Swallow nest site (bridge) 3 Amphibian monitoring stations 4> (suitable) 4) Pond. beside woodlot L's old farm pit? -> suitable for annurans (5) Bald Eagle nest Usee last weeks notes -> no adults present lite in the Rain

No.352





North 17/16



K6B



Romney WEC - Waterfowl Stopover and Staging Area





Morch 17/16 KG8

3



March 17/16 (4)



MINISTRY OF NATURAL RESOURCES AND FORESTRY Make a Topographic Map Romney WEC - Waterfowl Stopover and Staging Area Notes: map 114



Mora 17/16



Notes:

Map 6



MINISTRY OF NATURAL RESOURCES AND FORESTRY Make a Topographic Map Romney WEC - Waterfowl Stopover and Staging Area

K6B



Legend







POntario



K6B 3/25/16 Rommey WEC #1736A 0908-1317 -1°C, W-3, 100% CC, Waterfoul surveys! No precipi (#1) Am. Kestral 31 I suitable habitat, perched on wine #2) Red-tailed Hawk isodult purched #3) Ring-necked Duck (30, 29) brog no Climber # Am. Kestrel J' L> adult perched along road #5) Bald Eagle nest (exact location) [> I golutt sitting very low down on nest -> nest appears to be in an Ash tree L> not confirmed (tree species) #DAm, Kestrel 31 & (pair) ite in the Rain La poss, nest site

No.352
(#) Mallard 2 pair in Arainage ditch (#3) Wilson's Snipe (1) & 1> foraging in ditch (#9) A. Kestrel perched An. Kestrel perched (2) pair βıð O Wood Duck P JL DARLING LLC Tacoma, WA, USA • RiteintheRain.com 3 A. Kestel 100m, NW



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