

Appendix E

Bird Survey Report, Jim Wilson, 2014

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Subject - Bird Survey – Water and Wastewater Treatment Facilities - Oromocto, N.B.

This is a report on a survey of the bird life within the proposed areas of a water treatment facility (PID 60006186) at the confluence of the Oromocto and Saint John Rivers and a proposed waste water treatment facility located on adjacent DND property in Oromocto, as requested. This survey is part of a NB Environmental Impact Assessment.

Overview

I visited the development site with Rhonda Dana of Dillon Consulting Limited on two occasions - the morning of June 11 and the evening of June 16, 2014. Together we conducted a series of six point counts on each visit to assess and inventory the bird species in the area, especially the presence of any Species at Risk.

During the visits we also looked for stick nests that could be evidence of nesting raptors, corvids, herons or other large birds and we watched for the presence of any birds of prey that would be protected under provincial regulation.

We also examined the general habitat within the property to see if there might be any areas that could be considered unique habitat for bird Species at Risk at other seasons.

We did not detect any stick nests and saw only a single flying bird listed as a Species at Risk. We did not find any unique habitats within the development area that might be expected to harbour Species at Risk at other seasons of the year.

Survey Methods

The six point count locations within the proposed development areas were predetermined by Dillon Consulting (see coordinate details in Appendix 1). The locations were plotted to ensure relatively easy access, spread coverage over both development sites, be at least 250 meters apart and be located in a variety of habitat types. Minimizing noise pollution was also a factor, to ensure reasonable conditions for listening for bird song.

We travelled between point count locations by vehicle.

Both the morning and evening point counts involved five-minute periods of quietly listening to the songs and calls of all birds in the area of each point count location as well as observing for the movements of birds within the area or flying overhead.

A further check involved playing a digital recording of an Eastern Screech Owl being mobbed by a flock of very vocal Black-capped Chickadees for a further period of four to five minutes. The maternal instincts of songbirds are very strong during the breeding season, and this recording has the potential to draw in most birds within earshot, providing an observer with an idea of what birds are around that might not have been vocalizing during the previous five minute period. Any new species or additional individuals of a previously-recorded species were then added to the point count inventory.

Bird Species Noted

Thirty-nine bird species were identified during the survey and are detailed in the attached **APPENDIX 1 – Summary of Point Count Surveys**. A total of 179 individual birds were noted during these counts.

APPENDIX 2 – Summary of Species by Relative Abundance presents the list of birds by relative abundance, beginning with the most common.

Weather

Weather conditions on June 11th and 16th were clear and sunny with no wind on the morning of the 11th and virtually none on the 16th. The temperature varied from +9 to +12 Celsius during the first survey and between +24 and +20 C during the second. Sound pollution was relatively low at all point count locations except stop #6 where traffic noise was significant the evening of June 16th.

General Habitat

The habitat within the two development locations was largely treed, ranging from mixed deciduous trees and shrubbery to mixed second growth deciduous and coniferous cover as well as some open but uncultivated field. As a result, the bird life within the survey area is quite varied, as shown in the appendixes.

Conclusions

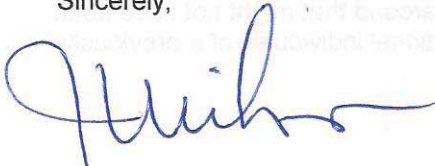
1. We did not detect any stick nests or any birds of prey during the survey.
2. The only bird Species at Risk detected during the survey was a single adult Barn Swallow (*Hirundo rustica* – SARA status Threatened) that flew past high overhead shortly after we finished the point count at location #4 on June 11th. The bird was detected by sound but appeared to be merely passing over the area as it foraged for aerial insect food. We checked a nearby storage building for the presence of Barn Swallows or their nests but did not find any. And on our return visit the evening of June 16th there was no sign of the bird in the area. We concluded that the risk of Barn Swallows nesting within the development area is very low.
3. We did not identify any unique habitat within the development area that might harbour a Species at Risk now, or at other seasons of the year.

Recommendations

1. That if the proposed development proceeds, if possible, that clearing of vegetated areas be done outside of the normal migratory bird nesting season (early May to early September) to avoid possible violations of the Migratory Bird Act in connection with the disturbance of nesting migratory birds.
2. That workers involved with the clearing of vegetated areas watch for large stick nests in trees that could be the nests of protected birds of prey and have them checked for species identity and possible occupancy before any tree cutting is done in the immediate area of the nest. Stick nests are much more visible during months when foliage is gone and some raptor species begin nesting earlier than early May.
3. That if clearing of vegetated area must be done within the early May to early September nesting period that steps be taken to avoid possible problems with nesting birds under the Migratory Bird Act. This might involve obtaining a special permit to clear or conducting surveys for active nests before clearing begins.

If you have any questions or need additional information, please contact me by email or telephone at the addresses above.

Sincerely,



Jim Wilson

SUMMARY OF HYDROPHYTIC VEGETATION IDENTIFIED IN WETLANDS IN THE AREA OF THE PROPOSED WWTP.

Common Name	Scientific Common	ACCDC Ranking	COSEWIC/SARA Ranking
WETLAND 1a (WL1a)			
Red Maple	<i>Acer rubrum</i>	S5	---
Speckled Alder	<i>Alnus incana</i>	S5	---
Fringed Sedge	<i>Carex crinita</i>	S5	---
Necklace Sedge	<i>Carex projecta</i>	S5	---
Parasol White-Top	<i>Doellingeria umbellata</i>	S5	---
Woodland Horsetail	<i>Equisetum sylvaticum</i>	S5	---
Canada Manna-Grass	<i>Glyceria canadensis</i>	S5	---
American Mannagrass	<i>Glyceria grandis</i>	S5	---
Fowl Manna-Grass	<i>Glyceria striata</i>	S5	---
Sensitive Fern	<i>Onoclea sensibilis</i>	S5	---
White Spruce	<i>Picea glauca</i>	S5	---
Choke Cherry	<i>Prunus virginiana</i>	S5	---
Red Raspberry	<i>Rubus idaeus</i>	S5	---
Swamp Aster	<i>Symphotrichum puniceum</i>	S5	---
Northern White Cedar	<i>Thuja occidentalis</i>	S5	---
Northern Starflower	<i>Trientalis borealis</i>	S5	---
WETLAND 1b (WL1b)			
Balsam Fir	<i>Abies balsamea</i>	S5	---
Broad-Leaved Water-Plantain	<i>Alisma triviale</i>	S5	---
Speckled Alder	<i>Alnus incana</i>	S5	---
Wild Sarsaparilla	<i>Aralia nudicaulis</i>	S5	---
Blue-Joint Reedgrass	<i>Calamagrostis canadensis</i>	S5	---
Fringed Sedge	<i>Carex crinita</i>	S5	---
Parasol White-Top	<i>Doellingeria umbellata</i>	S5	---

Common Name	Scientific Common	ACCDC Ranking	COSEWIC/SARA Ranking
Marsh Bedstraw	<i>Galium palustre</i>	S5	---
Yellow Avens	<i>Geum aleppicum</i>	S5	---
Canada Manna-Grass	<i>Glyceria canadensis</i>	S5	---
Black Holly	<i>Ilex verticillata</i>	S5	---
Canada Rush	<i>Juncus canadensis</i>	S5	---
Soft Rush	<i>Juncus effusus</i>	S5	---
American Pinesap	<i>Monotropa hypopithys</i>	S5	---
Mountain Holly	<i>Nemopanthus mucronatus</i>	S5	---
Sensitive Fern	<i>Onoclea sensibilis</i>	S5	---
Cottongrass Bulrush	<i>Scirpus cyperinus</i>	S5	---
Climbing Nightshade	<i>Solanum dulcamara</i>	S5	---
Narrow-Leaved Meadow-Sweet	<i>Spiraea alba</i>	S5	---
Northern White Cedar	<i>Thuja occidentalis</i>	S5	---
Narrow-Leaved Cattail	<i>Typha angustifolia</i>	S5	---
American Elm	<i>Ulmus americana</i>	S4	---