

August 31, 2018

Mr. Ian Martin
Project Manager, Ontario Region
Canadian Environmental Assessment Agency
Room 907, 55 St. Clair Avenue East
Toronto, ON M4T 1M2

RE: Responses to Third Round of Information Requirements for the Magino Gold Project Environmental Impact Statement (IR-3)

Dear Mr. Martin,

Responses to Information Requirement #3 for the Magino Gold Project Environmental Impact Statement have been prepared and are included with this submission. Due to the small number of comments, the responses are organized within a table-style document and include a supporting figure and tabular information.

We trust the assessment team will find the responses satisfactory to continue to move the EA process forward and I look forward to further communications in this regard.

Sincerely,
<Original signed by>

Kyle Stanfield
Director, Environment & Community Relations
Prodigy Gold, a subsidiary of Argonaut Gold
807-621-6152

ANNEX 1: Third Round of Information Requirements for the Magino Gold Project Environmental Impact Statement (IR-3)

IR -3 Number (e.g. FFH(3)-01)	Prodigy ID #	IR -2 Reference # (if applicable)	Project Effects Link to CEAA 2012	Reference to EIS guidelines	Reference to EIS (including appendices)	Context and Rationale	Specific Question/ Proposed Follow-up Measure
IR-3 Reference #: HE(3)-19A	ID: CEAA-FD66	IR-2 Reference #: HE(2)-19	Project Effects Link to CEAA 2012: 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	Reference to EIS guidelines: Part 2, Section 6.2.6.	Reference to EIS: TSD 14	<p>Context and Rationale:</p> <p>Prodigy’s response to IR# HE(2)-19A provides revised definitions for magnitude of human health effects. Table 3.4-2 defines low magnitude as "Project-related environmental exposures are predicted (as identified via HHRA [...]) to exceed regulatory benchmarks (i.e., 1 <HQ (Hazard Quotient) ≤20 for mercury only, 1 <HQ ≤10 for all other chemicals...) The rationale provided for defining a different low magnitude threshold for mercury is that "a magnitude of risk for mercury with an HQ less than 20 is considered to pose a low risk to human health given that various conservative assumptions (i.e., "risk drivers") were incorporated into the assessment that have likely overestimated the potential risks due to consumption of fish". It is unclear why 20 is acceptable as "low risk" to human health for mercury, while 10 is acceptable for all other contaminants. It is also inappropriate to define the criteria differently based on the conservativeness of the modelling approach, as it is assumed that the model would be equally conservative for all contaminants. The Agency recommends that Prodigy use the same HQ thresholds for all contaminants, including mercury, and assess its more representative model against those definitions.</p> <p>Prodigy’s response to IR# HE(2)-19A indicates that "... the implementation of a monitoring program (TSD 20-12) that will verify whether the predicted concentrations from the EA could be realized and, if they are, that mitigation measures would be implemented to prevent a health effect from occurring." This sentence is unclear as to how Prodigy intends to implement its monitoring program for human health. It appears that mitigation measures would be implemented if environmental assessment predictions are proven to be valid, rather than to as a response to invalid predictions. The Agency needs a clear, conceptual-level follow-up program at the environmental assessment stage to understand how Prodigy will verify that these predictions are correct. As Prodigy’s response to IR# HE(2)-19A also describes fish consumption as a clear risk driver, the Agency expects that sampling of fish tissue will also be part of the follow-up plan for human health.</p>	<p>Specific Question/ Request for Information:</p> <p>A. Redefine the magnitude criteria for human health to define "low risk" with the same Hazard Quotient (HQ) levels for all contaminants, and provide a scientific rationale for the choice of the HQ threshold being "low risk". Evaluate the significance of the residual effects on human health based on a representative scenario;</p> <p>B. Provide details of a conceptual follow-up plan that will verify environmental assessment predictions of mercury concentrations in surface water and in fish tissue, to protect human health. Provide the following at a conceptual level:</p> <ul style="list-style-type: none"> - locations where monitoring will occur; - chemical or physical parameters that will be monitored, including mercury and cobalt; - the frequency, timing and duration of the monitoring; - how the monitoring results will be used to validate environmental assessment predictions; - contingency plans that would be put in place if the monitoring results are found to be valid in comparison to environmental assessment predictions; and, - how Indigenous groups, federal and provincial departments will be involved in the development and implementation of these follow-up programs, including the plan that would be put in place to communicate any increase in contaminants and associated risks to human health. <p>This plan may incorporate aspects of existing monitoring plans for surface water and fish tissue; the Agency needs clarity in each of the details requested above, as opposed to references to technical supporting documents. This information must be provided to determine how the follow-up program will verify environmental assessment predictions, with an understanding that some details may be finalized after the environmental assessment as part of permitting processes.</p>

Response A

With respect to the magnitude definitions for a Change in Human Health, the target HQ has been updated to 10 for all contaminants, including mercury. In lieu of regulatory guidance in regards to significance criteria with respect to the evaluation of human health, the selection of a target HQ of 10 in defining a "low risk" magnitude as it relates to a change in human health is based upon industry experience completing HHRAs in support of EAs, and accounts for the expected conservatism in the selection of toxicity benchmarks, the predictive modeling used to estimate exposure concentrations, and the assessment of conservative exposure scenarios in the HHRA (TSD 14, Appendix A). When considering the representative scenario for mercury as described in the May 2018 responses to IRs HE(2)-24, HE(2)-25 and IE(2)-14, and included as an Errata to the EIS, the predicted HQ is less than 10 and therefore is considered to pose a "low risk" and have no residual effect on the VEC of human health. As with all contaminants that were associated with some level of risk identified via a HHRA (i.e., cadmium, PM_{2.5}, PM₁₀, arsenic, cobalt, and mercury), monitoring of mercury in its affected environmental medium (i.e., surface water) has been indicated in the EIS.

Response B

For the protection of human health due to predicted increases in mercury concentrations in surface water and potential associated increases in mercury concentration in fish tissue, monitoring of mercury in surface water has been recommended in the EIS. Further details of the monitoring plan are provided below and will be formalized in an environmental monitoring plan during the permitting process.

- Monitoring of water quality, including arsenic, mercury and cobalt, at specified locations as indicated in the monitoring plan (Table 7-85 of EIS).
- Monitored water quality concentrations will be compared to baseline concentrations past the mixing zone; if concentrations remain below baseline concentrations, no further monitoring commitments are proposed.

- If monitored water quality concentrations are greater than baseline concentrations past the mixing zone, then fish tissue monitoring would be triggered in the locations where exceedances were identified and would be monitored for the same chemicals identified to exceed baseline concentrations.
- Monitored fish tissue concentrations would be compared to baseline fish tissue concentrations monitored in the nearby water bodies. If fish tissue concentrations are greater than established baseline concentrations, further assessment would be required to determine whether changes to current fish consumption advisories would be warranted or whether additional mitigation measures would be required to lower fish tissue concentrations.

At a conceptual level to address the reviewer's comments the plan should include the following:

- Locations where surface water monitoring will occur (Table 7-85 of EIS), including those locations that were predicted to have potential changes to surface water quality of the chemicals associated with potential health risks (i.e., arsenic, cobalt, and mercury) identified via the HHRA.
- The frequency and timing of surface water quality monitoring is outlined in Table 7-85 of the EIS.
- The surface water monitoring concentrations will be considered in comparison to the baseline concentrations from the surface water quality EIS chapter.
- Contingency plans (i.e., should surface water monitoring concentrations exceed baseline concentrations from the surface water quality EIS chapter) could include those described above, including monitoring fish tissue, implementing further mitigation measures in addition to those already incorporated into the project design, and adjustments to fish consumption advisories to ensure that human health is protected.
- Indigenous groups, federal and provincial departments will be involved in the development and implementation of these follow-up programs, including the plan that would be put in place to communicate any increase in contaminants and associated risks to human health.

IR -3 Number (e.g. FFH(3)-01)	Prodigy ID #	IR -2 Reference # (if applicable)	Project Effects Link to CEAA 2012	Reference to EIS guidelines	Reference to EIS (including appendices)	Context and Rationale	Specific Question/ Proposed Follow-up Measure
IR Number: HE(3)-19B	ID: CEAA-FD66	IR-2 Reference #: HE(2)-19	Project Effects Link to CEAA 2012: 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	Reference to EIS guidelines: Part 2, Section 6.2.6.	Reference to EIS: TSD 14.	Context and Rationale: Prodigy indicated in the response to IR# HE(2)-19B that “the health risks due to DPM [diesel particulate matter] are considered to be negligible”, as “the maximum annual average DPM concentration of all receptor locations of 1.5 µg/m ³ (fenceline) is lower than the published mean DPM exposure in the United States (2 µg/m ³), published levels from vehicular emissions (20 to 25 µg/m ³) and from diesel-powered equipment in underground mine operations (10 to 5,570 µg/m ³ ; Ghio et al. 2012)”. It is not appropriate to disregard the health effects of DPM based on a comparison to mean exposure level in urbanized areas of the United States, given that the referenced concentrations are not health-based screening criteria, that there are no thresholds for DPM below which no adverse health effects are expected. Further, the rationale provided by Prodigy does not account for the contributions of the Project to the concentrations of DPM.	Specific Question/ Request for Information: A. Update the HHRA to include a quantitative assessment of incremental lifetime cancer risk (ILCR) using the unit risk and inhalation slope factor available from the California Office of Health Hazard Assessment, CalEPA (2015). B. Based on the answer to A, identify any appropriate mitigation measures and provide an assessment of the significance of effects to Indigenous health. California Environmental Protection Agency. 2015. Findings of the Scientific Review Panel On The Report on Diesel Exhaust. https://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm

Response A

A quantitative assessment was completed with respect to the ILCR for DPM (Please see TSD 14, Appendix A, Section 7.1, Table 7.1-4 and associated text) using the California EPA inhalation unit risk value (as noted in TSD 14, Appendix A, Attachment 2, Table 3 – Annual Air Thresholds).

The provided text in regard to the predicted risks from annual exposure to DPM (i.e., exceeding the regulatory benchmark) was meant to provide context to the predicted risks and not meant to disregard the potential for health effects if actual air quality concentrations from the Project reflect modelled air quality concentrations (i.e., used in the HHRA).

Response B

Predicted carcinogenic risks were in exceedance of regulatory benchmarks for DPM (as noted in the response to Part A). With respect to the significance of a predicted risk (via a HHRA) equating to the potential for a Change to Human Health from the Project, overall it is considered “negligible” based on the defined significance criteria presented in TSD 14, Table 3.4-2.

Monitoring of DPM is discussed in TSD 14, Section 6.1, which specifically states, “It is noted that monitoring for diesel combustion by-products was indicated under the Meteorology and Air Quality TSD using Particulate Matter sampling. Therefore, further monitoring of other chemicals that are solely due to diesel combustion (e.g., NO₂, DPM, sodium hydroxide) is not required.” The Golder Tech Memo¹ entitled “Description of Air Quality Management Plan for the Proposed Magino Mine Project” states the following with respect to particulate matter emissions resulting from combustion:

For some of the monitored compounds there are no additional controls available to further reduce the emissions. For example, the use of Tier 4 vehicles, with the lowest emissions of PM available is considered the best available control technology and it has been mandatory in Canada since 2012 that new vehicles conform to Tier 4 standards. Therefore, the majority of the off-road vehicles used in the future at the Project site will likely meet Tier 4 limits. In addition to assuming the greatest vehicle use, the conservative emission estimates used in the air quality assessment assumed the vehicles were Tier 3 and therefore the actual tailpipe emissions will be lower than the conservative values used in the emission estimates which will result in lower measured concentrations.

As such, it is likely that the air quality assessment in the EIS overpredicted potential ground level concentrations of particulate matter resulting from mobile equipment. The proposed ambient air monitoring program outlined in the above noted technical memorandum outlines monitoring for Total Suspended Particulate (TSP), PM₁₀ and PM_{2.5}. This monitoring is expected to capture particulate matter from combustion; however, it should be noted that monitoring specifically for PM from combustion is not possible as particulate from combustion can not be distinguished from other particulate sources in the proposed monitoring. In response to similar questions in past EAs it has been proposed and accepted that PM_{2.5} is a suitable indicator substance to monitor for particulate from combustion.

¹Golder Associates Ltd, 2018. Description of Air Quality Management Plan for Proposed Magino Mine Project. Technical Memorandum to Kyle Stanfield, Argonaut Gold Inc. March 5, 2018

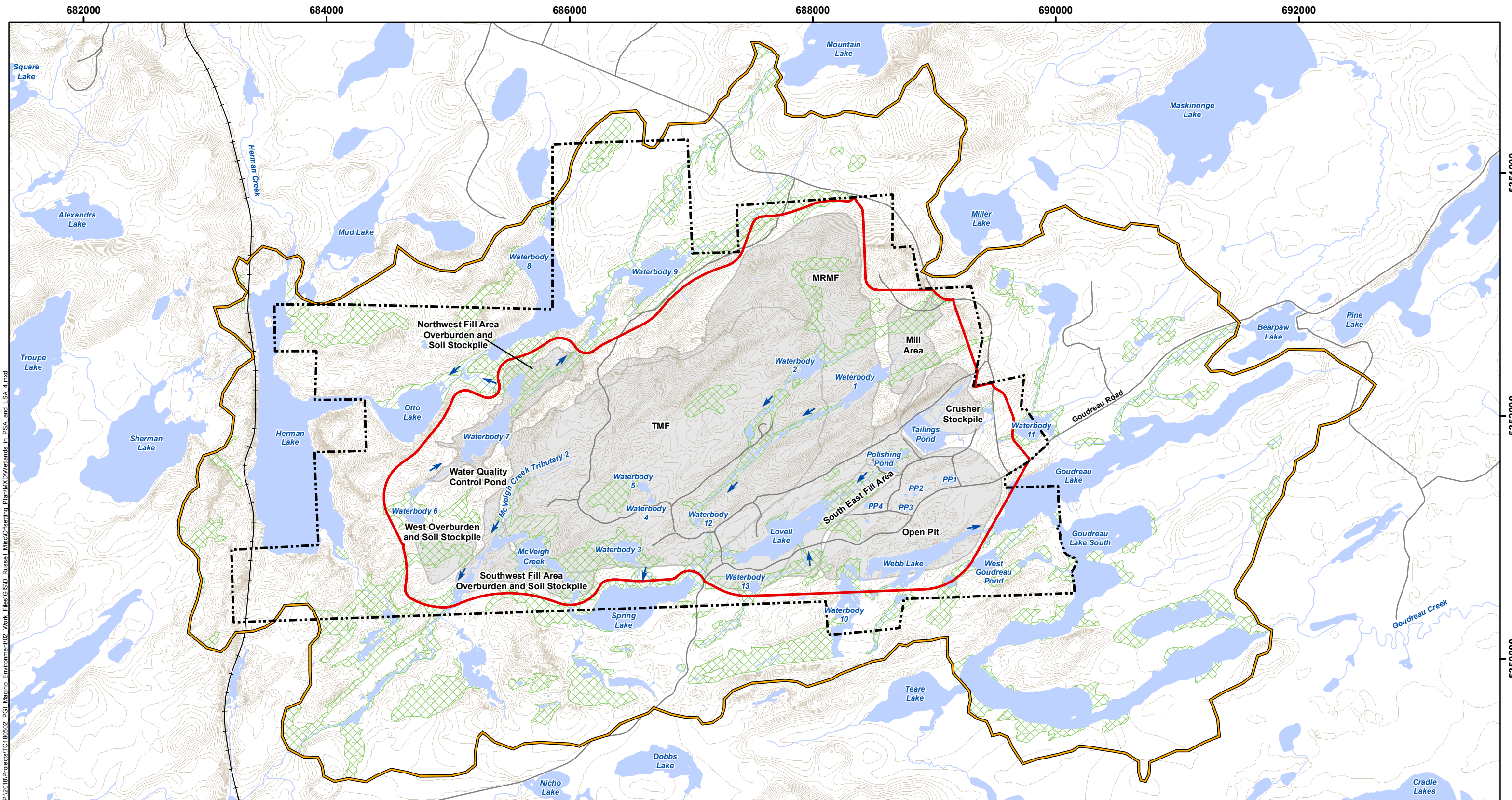
IR -3 Number (e.g. FFH(3)-01)	Prodigy ID #	IR -2 Reference # (if applicable)	Project Effects Link to CEAA 2012	Reference to EIS guidelines	Reference to EIS (including appendices)	Context and Rationale	Specific Question/ Proposed Follow-up Measure
IR Number: EA(3)-01a	ID: CEAA-FD86	IR-2 Reference #: EA(2)-01A	Project Effects Link to CEAA 2012: 5(2) Linked to Regulatory Permits/Authorizations (specify which legislation)	Reference to EIS guidelines: Part 1, Section 3.3.1.	Reference to EIS: Chapter 15, Section 15.1.6; Response to IR-1 Appendix 8.	<p>Context and Rationale:</p> <p>In order to complete its analysis of any effects due to changes to the environment, other than those referred to in section 5 (1)(a) and (b) of CEAA 2012, the Agency requires further information on the extent of wetlands that would be lost or altered due to the Project.</p> <p>Specifically, the proponent should provide the area of wetlands that would be lost or altered due to project components for which a federal authorization (in other words, a Fisheries Act Authorization or Schedule 2 amendment pursuant to the Metal and Diamond Mining Effluent Regulations under the Fisheries Act) would be required.</p>	<p>Specific Question/ Request for Information:</p> <p>A. Provide the specific area of wetlands that would be lost or altered due to the removal or alteration of waterbodies and streams in the project and local study areas, for which a federal authorization would be required;</p> <p>B. Provide a figure that illustrates the associated project components, waterbodies, streams, and associated wetlands in the project and local study areas</p>
<p>Response A</p> <p>The requested information is provided in Table 1.</p> <p>Response B</p> <p>The requested figure is provided as Figure 1.</p>							

IR -3 Number (e.g. FFH(3)-01)	Prodigy ID #	IR -2 Reference # (if applicable)	Project Effects Link to CEAA 2012	Reference to EIS guidelines	Reference to EIS (including appendices)	Context and Rationale	Specific Question/ Proposed Follow-up Measure
IR Number: CE(3)-07	ID: CEAA-96	IR-2 Reference #: CE(2)-07	Project Effects Link to CEAA 2012: 5(1)(a)(iii) Migratory Birds	Reference to EIS guidelines: Part 2, Section 6.1.7	Reference to EIS: Chapter 7 -7.4.5, 7.4.7; Appendix E; TSD 17	<p>Context and Rationale: Changes in the environment due to new mine facilities and transportation corridors will cause potential effects for migratory bird communities related to habitat loss, increased disturbance (noise, light, dust), and increased edge effects. The proponent has presented the total breeding bird occurrences by watershed only (Appendix E) as well as what species at risk were found during surveys (TSD 17). However, the presentation of breeding bird survey results should provide estimates of the total number of birds that will be affected by the project and by any cumulative effects, including due to the adjacent forestry management area.</p>	<p>Specific Question/ Request for Information:</p> <p>A. Provide estimates of the total number of individuals of each migratory bird species, including species at risk, that would be affected by the Project and by the cumulative effects associated with the Project;</p> <p>B. Where necessary, apply significance criteria to residual effects, and describe any additional mitigation measures that may be required to ensure no significant adverse residual cumulative effects;</p> <p>C. Describe any follow-up and monitoring programs required to verify environmental assessment predictions and the efficacy of mitigation measures.</p>
<p>Response A:</p> <p>Estimates of the total number of breeding pairs (breeding males) of each migratory bird species, including species at risk, that are expected to be affected (displaced) by the Project are provided in Table 2. Data were calculated from bird survey point count data assuming that all birds (breeding males) that were located within a 100 m radius of the point count station were detected and enumerated without duplication. Bird point count surveys were organized by watershed, but for the purpose of this exercise, a weighted average of all point count data was calculated for each ecosite type, yielding an average density (males / ha) for each species for each ecosite type. GIS analysis was then used to determine the area of each ecosite type that would be lost (displaced) by Project development. The total area that would be directly lost has been calculated at 1,270 ha. The total number of breeding pairs of all species that would be displaced is estimated at 5,001, consisting of 73 species. This includes four species at risk (Common Nighthawk, Whip-poor-will, Chimney Swift and Olive-sided Flycatcher). It is stressed that the habitats will be displaced, but as habitat clearing will not occur during the nesting season, migratory birds that traditionally use the Project site area for nesting will have an opportunity to seek alternative nesting sites elsewhere.</p> <p>In terms of birds that would be potentially displaced by disturbance effects, beyond the area of direct habitat displacement, such as by noise, dust and light, monitoring studies conducted by Wood at several mine sites have shown that there is little overall difference in point count results for areas that are so disturbed, and more remote control sites. There is consequently little basis for estimating numbers of individual birds that could potentially be displaced by disturbances such as noise, dust and light.</p> <p>With regard to cumulative effects with known current / planned forestry operations, the response to IR2: CEAA-96 / CE(2)-07: CUMULATIVE ENVIRONMENTAL EFFECTS – LOSS OF FOREST COVERAGE indicated that an additional 949 ha of forest harvesting, related to area forestry operations, was anticipated. For the purpose of determining cumulative effects with Magino operations, it was assumed that this harvesting would consist of upland forest types, with a distribution similar to that shown in Table 1. Consequently, to account for cumulative effects, the upland forest hectare values shown in Table 1 were increased by a factor of 2.03 (1,868 ha / 919 ha) for Table 3. The total cumulative number of displaced birds (as breeding males) is calculated at 8,821, also consisting of 73 species. It is important to stress that the displacement of birds by forestry operations will be less intense compared with that of mine operations, as post-forestry cut habitats will still support a variety of bird species.</p> <p>Response B:</p> <p>Estimating the numbers of individuals of migratory birds that are expected to be displaced by Project development, and as a result of cumulative effects, does not change significance determinations in the EIS.</p> <p>Response C:</p> <p>A follow-up monitoring program relative to migratory and breeding birds is not proposed (Section 7.4.5.9 of the EIS), as it is assumed that areas cleared for mine development are unlikely to support migratory and breeding birds.</p>							

Table 1. Habitat Loss Associated With Effects Under CEAA, 2012, Section 5.2.

Habitat type		Area within PSA (ha)	Area within LSA (ha)	Area within RSA (ha)	Direct Loss of Habitat due to Project Activities (ha)	Direct loss of Habitat due to 5.2 Effects (ha)	Area rehabilitated after decommissioning and abandonment (ha)	5.2 Effect Area rehabilitated after decommissioning and abandonment (ha)	Permanent loss of habitat due to Project activities post-closure			Permanent loss of habitat due to 5.2 activities post-closure		
									Percent of PSA (%)	Percent of LSA (%)	Percent of RSA (%)	Percent of PSA (%)	Percent of LSA (%)	Percent of RSA (%)
Upland	Forested	1259	2505	7800	919	603	350	150	45	23	7	36	18	6
	Rock Barren	1	1.3	9	0.5	0.0	1	1.0	-100	-38	-6	-200	-77	-11
<i>Upland subtotal</i>		<i>1260</i>	<i>2506.3</i>	<i>7809</i>	<i>920</i>	<i>603</i>	<i>351</i>	<i>151</i>	<i>45</i>	<i>23</i>	<i>7</i>	<i>36</i>	<i>18</i>	<i>6</i>
Wetland	Mineral	33	36	70	16	10	0	0	48	44	23	31	29	15
	Peatland	287	507	1470	199	122	40	40	55	31	11	29	16	6
<i>Wetland subtotal</i>		<i>320</i>	<i>543</i>	<i>1540</i>	<i>215</i>	<i>132</i>	<i>40</i>	<i>40</i>	<i>55</i>	<i>40</i>	<i>14</i>	<i>29</i>	<i>17</i>	<i>6</i>
Disturbed		80	170	417	80	65	394	13	-393	-185	-75	65	31	13
Open Water		167	436	1369	56	56	350	63	-176	121	-22	-4	-2	-1
Total		1826	3655	11135	1270	857	1135	267	7	4	1	32	16	5

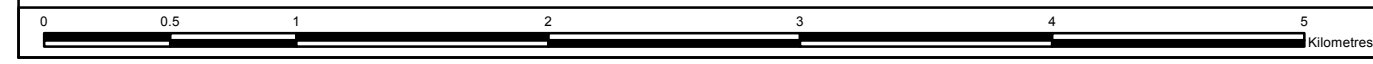
Yellow indicates area lost due to work associated with dewatering/infilling of waterbodies and watercourses (either through a Fisheries Act Authorization or a Schedule 2 amendment). This includes wetlands lost/altere d due to channel realignments and changes in flows and levels associated with loss of upstream waterbodies. Includes upland areas lost to project components that require the above authorizations to enable construction.



P:\2018\Projects\TC180502_PGI_Magino_Environment\02_Work_Files\GIS\ID_Russell_Misc\Offsetting_Plan\Map\DWetlands_in_PSA_and_LSA_4.mxd

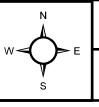
LEGEND

- Property Boundary
- Project Study Area (PSA)
- Local Study Area (LSA)
- Proposed Mine Facilities
- Mineral Wetland
- Organic Wetland
- Watercourse
- Contours (2.5 m interval)
- Railway
- Road



NOTES:
 - Project outline boundary, property boundary, site footprints and contours provided by Minnow.
 - Wetland data as provided by SLR.

Datum: NAD83
 Projection: UTM Zone 16N



MAGINO GOLD PROJECT

Waterbodies, Streams and Wetlands in the Project and Local Study Areas

PROJECT N°: TC180502

FIGURE: 1

SCALE: 1:30,000

DATE: August 2018

Table 2: Numbers of Breeding Pairs Expected to be Displaced by Mine Site Development

Habitat Type		Upland Forest					Mineral Wetlands	Peat Wetlands					Disturbed	Open Water		Total
Ecosite Type		B049	B055	B065	B070	B119	B134	B128	B136	B138	B144	B147	Disturbed	LA	OW	
Aerial Extent (ha)		61.6	673.6	8.3	173.7	1.8	16.0	126.4	13.1	18.7	16.9	23.9	80.5	39.9	16.1	1270.5
Species																
Common Loon	<i>Gavia immer</i>	0.0	44.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	2.7	0.0	2.8	5.4	0.0	60.7
Canada Goose	<i>Branta canadensis</i>	0.0	176.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	177.4
American Black Duck	<i>Anas rubripes</i>	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	0.0	41.4
Mallard	<i>Anas platyrhynchos</i>	0.0	5.5	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Common Goldeneye	<i>Bucephala clangula</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	7.6
Bald Eagle	<i>Haliaeetus leucocephalus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Ruffed Grouse	<i>Bonasa umbellus</i>	0.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	49.7
Sandhill Crane	<i>Grus canadensis</i>	0.0	27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5
Killdeer	<i>Charadrius vociferus</i>	19.6	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1
Wilson's Snipe	<i>Gallinago delicata</i>	0.0	5.5	5.3	4.6	0.0	0.0	11.5	0.0	0.0	0.0	0.0	4.3	0.0	5.1	36.3
American Woodcock	<i>Scolopax minor</i>	0.0	16.5	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	22.5
Herring Gull	<i>Larus argentatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Common Nighthawk	<i>Chordeiles minor</i>	0.0	16.5	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	2.8	1.8	0.0	55.7
Whip Poor Will	<i>Antrostomus vociferus</i>	0.0	22.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8
Chimney Swift	<i>Chaetura pelagica</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	0.0	27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	28.9
Downy Woodpecker	<i>Picoides pubescens</i>	0.0	11.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	18.2
Hairy Woodpecker	<i>Picoides villosus</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
American Three-toed Woodpecker	<i>Picoides dorsalis</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	8.3
Northern Flicker	<i>Colaptes auratus</i>	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	17.9
Pileated Woodpecker	<i>Dryocopus pileatus</i>	0.0	16.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	5.1	27.1
Woodpecker species	NA	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Olive-sided Flycatcher	<i>Contopus cooperi</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Eastern Wood Pewee	<i>Contopus virens</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
Alder Flycatcher	<i>Empidonax alnorum</i>	39.2	22.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.8	0.0	5.1	74.5
Least Flycatcher	<i>Empidonax minimus</i>	0.0	55.0	2.6	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	4.3	0.0	0.0	73.4
Blue-headed Vireo	<i>Vireo solitarius</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
Warbling Vireo	<i>Vireo gilvus</i>	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	22.2
Philadelphia Vireo	<i>Vireo philadelphicus</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	7.3
Red-eyed Vireo	<i>Vireo olivaceus</i>	19.6	154.0	5.3	9.2	0.6	0.0	28.7	0.0	0.0	8.1	0.0	25.6	3.6	5.1	259.9
Blue Jay	<i>Cyanocitta cristata</i>	0.0	38.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	42.6
American Crow	<i>Corvus brachyrhynchos</i>	0.0	11.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	21.6
Common Raven	<i>Corvus corax</i>	0.0	33.0	2.6	4.6	0.0	0.0	5.7	0.0	0.0	2.7	7.6	2.8	0.0	0.0	59.1
Black-capped Chickadee	<i>Poecile atricapillus</i>	0.0	60.5	0.0	9.2	0.0	0.0	5.7	0.0	0.0	2.7	0.0	12.8	0.0	0.0	91.0
Boreal Chickadee	<i>Poecile hudsonicus</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	8.3
Red-breasted Nuthatch	<i>Sitta canadensis</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
White Breasted Nuthatch	<i>Sitta carolinensis</i>	19.6	77.0	2.6	13.8	0.0	0.0	11.5	0.0	0.0	2.7	0.0	4.3	0.0	0.0	131.5
Brown Creeper	<i>Certhia americana</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Winter Wren	<i>Troglodytes hiemalis</i>	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Golden-crowned Kinglet	<i>Regulus satrapa</i>	0.0	33.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0	2.7	0.0	19.9	0.0	0.0	72.9
Ruby-crowned Kinglet	<i>Regulus calendula</i>	0.0	33.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	7.1	0.0	0.0	51.6
Veery	<i>Catharus fuscescens</i>	0.0	159.5	7.9	13.8	0.6	0.0	11.5	0.0	0.0	8.1	0.0	19.9	1.8	0.0	223.2
Swainson's Thrush	<i>Catharus ustulatus</i>	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.8	0.0	14.2
Hermit Thrush	<i>Catharus guttatus</i>	39.2	126.5	5.3	9.2	0.0	0.0	11.5	0.0	0.0	8.1	0.0	14.2	1.8	0.0	215.9
American Robin	<i>Turdus migratorius</i>	19.6	71.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	18.5	0.0	0.0	112.3
Gray Catbird	<i>Dumetella carolinensis</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
Cedar Waxwing	<i>Bombycilla cedrorum</i>	117.7	143.0	2.6	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0	289.6
Tennessee Warbler	<i>Oreothlypis peregrina</i>	0.0	11.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	2.7	0.0	4.3	0.0	5.1	27.7

Habitat Type		Upland Forest					Mineral Wetlands	Peat Wetlands					Disturbed	Open Water		Total
Ecosite Type		B049	B055	B065	B070	B119	B134	B128	B136	B138	B144	B147	Disturbed	LA	OW	
Aerial Extent (ha)		61.6	673.6	8.3	173.7	1.8	16.0	126.4	13.1	18.7	16.9	23.9	80.5	39.9	16.1	1270.5
Species																
Nashville Warbler	<i>Oreothlypis ruficapilla</i>	0.0	16.5	0.0	4.6	0.0	0.0	23.0	0.0	0.0	0.0	0.0	11.4	1.8	0.0	57.3
Northern Parula	<i>Setophaga americana</i>	0.0	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	5.7	0.0	0.0	74.4
Yellow Warbler	<i>Setophaga petechia</i>	0.0	22.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	29.5
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	58.8	236.5	7.9	32.3	0.6	0.0	5.7	0.0	0.0	8.1	0.0	37.0	3.6	0.0	390.6
Magnolia Warbler	<i>Setophaga magnolia</i>	0.0	5.5	0.0	9.2	0.0	0.0	0.0	0.0	3.0	0.0	0.0	4.3	0.0	0.0	22.0
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>	0.0	93.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	98.2
Yellow-rumped Warbler	<i>Setophaga coronata</i>	0.0	71.5	0.0	9.2	0.0	0.0	17.2	0.0	0.0	8.1	0.0	18.5	0.0	0.0	124.6
Black-throated Green Warbler	<i>Setophaga virens</i>	0.0	115.5	0.0	9.2	0.0	0.0	17.2	0.0	0.0	5.4	0.0	12.8	1.8	5.1	167.1
Bay-breasted Warbler	<i>Setophaga castanea</i>	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
Black-and-White Warbler	<i>Mniotilta varia</i>	19.6	93.5	0.0	9.2	0.6	0.0	5.7	0.0	0.0	0.0	0.0	10.0	3.6	0.0	142.3
American Redstart	<i>Setophaga ruticilla</i>	39.2	104.5	2.6	4.6	0.0	0.0	23.0	0.0	0.0	10.8	0.0	19.9	0.0	0.0	204.7
Ovenbird	<i>Seiurus aurocapilla</i>	19.6	209.0	10.5	13.8	0.0	0.0	34.5	0.0	0.0	8.1	0.0	29.9	5.4	0.0	330.9
Kentucky Warbler	<i>Geothlypis formosa</i>	0.0	11.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	18.2
Common Yellowthroat	<i>Geothlypis trichas</i>	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
Scarlet Tanager	<i>Piranga olivacea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Chipping Sparrow	<i>Spizella passerina</i>	39.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	42.1
Song Sparrow	<i>Melospiza melodia</i>	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	13.9
Swamp Sparrow	<i>Melospiza georgiana</i>	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6
White-throated Sparrow	<i>Zonotrichia albicollis</i>	19.6	154.0	2.6	27.7	0.0	0.0	46.0	0.0	0.0	8.1	0.0	44.2	1.8	5.1	309.1
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Dark-eyed Junco	<i>Junco hyemalis</i>	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	16.7
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	0.0	5.5	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	19.6	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.1
Common Grackle	<i>Quiscalus quiscula</i>	0.0	16.5	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	279.1	0.0	303.7
American Goldfinch	<i>Spinus tristis</i>	0.0	0.0	0.0	73.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	75.2
Total																5,001

Table 3: Numbers of Breeding Pairs Expected to be Displaced by Mine Site Development Plus Planned Forestry Operations

Habitat Type		Upland Forest					Mineral Wetlands	Peat Wetlands					Disturbed	Open Water		Total
Ecosite Type		B049	B055	B065	B070	B119	B134	B128	B136	B138	B144	B147	Disturbed	LA	OW	
Aerial Extent (ha)		125.2	1369.2	16.8	353.1	3.7	16.0	126.4	13.1	18.7	16.9	23.9	80.5	39.9	16.1	2219.5
Species																
Common Loon	<i>Gavia immer</i>	0.0	89.4	0.0	0.0	0.0	0.0	5.7	0.0	0.0	2.7	0.0	2.8	5.4	0.0	106.2
Canada Goose	<i>Branta canadensis</i>	0.0	357.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	359.2
American Black Duck	<i>Anas rubripes</i>	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	0.0	52.8
Mallard	<i>Anas platyrhynchos</i>	0.0	11.2	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9
Common Goldeneye	<i>Bucephala clangula</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	7.6
Bald Eagle	<i>Haliaeetus leucocephalus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Ruffed Grouse	<i>Bonasa umbellus</i>	0.0	89.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	95.1
Sandhill Crane	<i>Grus canadensis</i>	0.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.9
Killdeer	<i>Charadrius vociferus</i>	39.9	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0
Wilson's Snipe	<i>Gallinago delicata</i>	0.0	11.2	10.7	9.4	0.0	0.0	11.5	0.0	0.0	0.0	0.0	4.3	0.0	5.1	52.2
American Woodcock	<i>Scolopax minor</i>	0.0	33.5	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	44.3
Herring Gull	<i>Larus argentatus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Common Nighthawk	<i>Chordeiles minor</i>	0.0	33.5	0.0	0.0	0.0	0.0	34.5	0.0	0.0	0.0	0.0	2.8	1.8	0.0	72.7
Whip Poor Will	<i>Antrostomus vociferus</i>	0.0	44.7	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.5
Chimney Swift	<i>Chaetura pelagica</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	0.0	55.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	57.3
Downy Woodpecker	<i>Picoides pubescens</i>	0.0	22.4	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	29.5
Hairy Woodpecker	<i>Picoides villosus</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
American Three-toed Woodpecker	<i>Picoides dorsalis</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	14.0
Northern Flicker	<i>Colaptes auratus</i>	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	35.0
Pileated Woodpecker	<i>Dryocopus pileatus</i>	0.0	33.5	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	5.1	46.9
Woodpecker species	NA	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Olive-sided Flycatcher	<i>Contopus cooperi</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Eastern Wood Pewee	<i>Contopus virens</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Alder Flycatcher	<i>Empidonax alnorum</i>	79.7	44.7	5.4	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.8	0.0	5.1	140.5
Least Flycatcher	<i>Empidonax minimus</i>	0.0	111.8	5.4	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	4.3	0.0	0.0	132.9
Blue-headed Vireo	<i>Vireo solitarius</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Warbling Vireo	<i>Vireo gilvus</i>	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	39.2
Philadelphia Vireo	<i>Vireo philadelphicus</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	13.0
Red-eyed Vireo	<i>Vireo olivaceus</i>	39.9	313.1	10.7	18.7	1.2	0.0	28.7	0.0	0.0	8.1	0.0	25.6	3.6	5.1	454.8
Blue Jay	<i>Cyanocitta cristata</i>	0.0	78.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	82.4
American Crow	<i>Corvus brachyrhynchos</i>	0.0	22.4	0.0	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	42.5
Common Raven	<i>Corvus corax</i>	0.0	67.1	5.4	9.4	0.0	0.0	5.7	0.0	0.0	2.7	7.6	2.8	0.0	0.0	100.7
Black-capped Chickadee	<i>Poecile atricapillus</i>	0.0	123.0	0.0	18.7	0.0	0.0	5.7	0.0	0.0	2.7	0.0	12.8	0.0	0.0	163.0
Boreal Chickadee	<i>Poecile hudsonicus</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	14.0
Red-breasted Nuthatch	<i>Sitta canadensis</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
White Breasted Nuthatch	<i>Sitta carolinensis</i>	39.9	156.5	5.4	28.1	0.0	0.0	11.5	0.0	0.0	2.7	0.0	4.3	0.0	0.0	248.3
Brown Creeper	<i>Certhia americana</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Winter Wren	<i>Troglodytes hiemalis</i>	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Golden-crowned Kinglet	<i>Regulus satrapa</i>	0.0	67.1	0.0	0.0	0.0	0.0	17.2	0.0	0.0	2.7	0.0	19.9	0.0	0.0	107.0
Ruby-crowned Kinglet	<i>Regulus calendula</i>	0.0	67.1	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0	7.1	0.0	0.0	85.7
Veery	<i>Catharus fuscescens</i>	0.0	324.3	16.1	28.1	1.2	0.0	11.5	0.0	0.0	8.1	0.0	19.9	1.8	0.0	410.9
Swainson's Thrush	<i>Catharus ustulatus</i>	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.8	0.0	25.6
Hermit Thrush	<i>Catharus guttatus</i>	79.7	257.2	10.7	18.7	0.0	0.0	11.5	0.0	0.0	8.1	0.0	14.2	1.8	0.0	402.0
American Robin	<i>Turdus migratorius</i>	39.9	145.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	18.5	0.0	0.0	206.4
Gray Catbird	<i>Dumetella carolinensis</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Cedar Waxwing	<i>Bombycilla cedrorum</i>	239.2	290.7	5.4	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0	571.0
Tennessee Warbler	<i>Oreothlypis peregrina</i>	0.0	22.4	0.0	9.4	0.0	0.0	0.0	0.0	0.0	2.7	0.0	4.3	0.0	5.1	43.8

Habitat Type		Upland Forest					Mineral Wetlands	Peat Wetlands					Disturbed	Open Water		Total
Ecosite Type		B049	B055	B065	B070	B119	B134	B128	B136	B138	B144	B147	Disturbed	LA	OW	
Aerial Extent (ha)		125.2	1369.2	16.8	353.1	3.7	16.0	126.4	13.1	18.7	16.9	23.9	80.5	39.9	16.1	2219.5
Species																
Nashville Warbler	<i>Oreothlypis ruficapilla</i>	0.0	33.5	0.0	9.4	0.0	0.0	23.0	0.0	0.0	0.0	0.0	11.4	1.8	0.0	79.1
Northern Parula	<i>Setophaga americana</i>	0.0	134.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	5.7	0.0	0.0	142.6
Yellow Warbler	<i>Setophaga petechia</i>	0.0	44.7	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	56.9
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	119.6	480.8	16.1	65.6	1.2	0.0	5.7	0.0	0.0	8.1	0.0	37.0	3.6	0.0	737.7
Magnolia Warbler	<i>Setophaga magnolia</i>	0.0	11.2	0.0	18.7	0.0	0.0	0.0	0.0	3.0	0.0	0.0	4.3	0.0	0.0	37.2
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>	0.0	190.1	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.7	0.0	1.4	0.0	0.0	195.4
Yellow-rumped Warbler	<i>Setophaga coronata</i>	0.0	145.4	0.0	18.7	0.0	0.0	17.2	0.0	0.0	8.1	0.0	18.5	0.0	0.0	207.9
Black-throated Green Warbler	<i>Setophaga virens</i>	0.0	234.8	0.0	18.7	0.0	0.0	17.2	0.0	0.0	5.4	0.0	12.8	1.8	5.1	295.9
Bay-breasted Warbler	<i>Setophaga castanea</i>	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Black-and-White Warbler	<i>Mniotilta varia</i>	39.9	190.1	0.0	18.7	1.2	0.0	5.7	0.0	0.0	0.0	0.0	10.0	3.6	0.0	269.2
American Redstart	<i>Setophaga ruticilla</i>	79.7	212.4	5.4	9.4	0.0	0.0	23.0	0.0	0.0	10.8	0.0	19.9	0.0	0.0	360.6
Ovenbird	<i>Seiurus aurocapilla</i>	39.9	424.9	21.4	28.1	0.0	0.0	34.5	0.0	0.0	8.1	0.0	29.9	5.4	0.0	592.2
Kentucky Warbler	<i>Geothlypis formosa</i>	0.0	22.4	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	29.5
Common Yellowthroat	<i>Geothlypis trichas</i>	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
Scarlet Tanager	<i>Piranga olivacea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Chipping Sparrow	<i>Spizella passerina</i>	79.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	82.6
Song Sparrow	<i>Melospiza melodia</i>	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	25.2
Swamp Sparrow	<i>Melospiza georgiana</i>	39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.9
White-throated Sparrow	<i>Zonotrichia albicollis</i>	39.9	313.1	5.4	56.2	0.0	0.0	46.0	0.0	0.0	8.1	0.0	44.2	1.8	5.1	519.7
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4
Dark-eyed Junco	<i>Junco hyemalis</i>	0.0	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	28.1
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	0.0	11.2	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	39.9	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.4
Common Grackle	<i>Quiscalus quiscula</i>	0.0	33.5	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	279.1	0.0	320.7
American Goldfinch	<i>Spinus tristis</i>	0.0	0.0	0.0	149.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	151.3
Total																8,821