

December 23, 2022

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Dear Mr. Courville,

Re: Greenstone Mine, 2022 Federal Biodiversity Monitoring Report

Greenstone Gold Mines GP Inc. (GGM) proposes to construct, operate, and ultimately decommission/close a new open pit gold mine, process plant, and associated ancillary facilities, collectively known as the Greenstone Mine (the Mine). The Mine's Environmental Impact Statement was approved by the federal Minister of the Environment as outlined in the Decision Statement issued December 10, 2018, under Section 54 of the Canadian Environmental Assessment Act, 2012. The 2022 Federal Biodiversity Monitoring Report has been developed and submitted to satisfy Federal EIS Conditions 4.1, 4.3, 7.1, 7.1.1, and 7.1.2.

Should you have any questions or comments, please contact the undersigned.

Sincerely,

<original signed by>

Eric Lamontagne
General Manager

cc: Michelle Fraser, Stantec Consulting Ltd.
Mike Johns, Stantec Consulting Ltd.
Lesley Lorrimer, Stantec Consulting Ltd.
Laura Vares, Greenstone Gold Mines
Peter Pajunen, Greenstone Gold Mines

Greenstone Mine

2022 Federal Biodiversity Monitoring Report

(To satisfy Federal EIS Conditions 4.1, 4.3, 7.1, 7.1.1, and 7.1.2)

HP-MG003-EV-136-0032_0

December 23, 2022

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List of Abbreviations

BMMP	Biodiversity Monitoring and Management Plan
CEAA	Canadian Environmental Assessment Agency
ECCE	Environment and Climate Change Canada
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ETP	Effluent Treatment Plant
FWCA	Fish and Wildlife Conservation Act
GGM	Greenstone Gold Mines GP Inc.
MBCA	Migratory Birds Convention Act
MECP	Ministry of the Environment, Conservation and Parks
MNR	Ontario Ministry of Natural Resources
MNRF	Ministry of Natural Resources and Forestry
MTO	Ministry of Transportation of Ontario
OMNRF	Ontario Ministry of Natural Resources and Forestry
PDA	project development area
the Project	Greenstone Gold Mine
SARO	Species at Risk in Ontario
SWAT	Southwest Arm Tributary
TETP	temporary effluent treatment plant
TMF	tailings management facility

1 Introduction

Greenstone Gold Mines GP Inc. (GGM) is in the process of constructing the Greenstone Mine (the Project), which was formerly referred to as the Hardrock Project. The Mine site is located just south of Geraldton, Ontario, within the municipality of Greenstone, at the intersection of Highway 11 and Highway 584. The Project's Environmental Impact Statement (EIS) (Stantec 2018) was approved by the Canadian Environmental Assessment Agency (CEAA), as outlined in the Decision Statement issued under Section 54 of the *Canadian Environmental Assessment Act, 2012*. The federal Decision Statement contained various Conditions of Approval. A Biodiversity Management and Monitoring (BMMP) (GGM 2020) was prepared to address Conditions of Approval related to monitoring potential effects of the Project on biodiversity. The BMMP contained a series of appendices that each deal with specific federal or provincial monitoring requirements.

Construction started March 1, 2021, with tree clearing activities, which allowed for the construction of a temporary camp to house mine workers, the set-up of construction trailers, and the construction of a temporary effluent treatment plant (TETP). Construction of the following features and mine components commenced during the 2022 monitoring period:

- A. New highway realignment road base
- B. Tailings Management Facility (TMF) dams
- C. Goldfield Creek Diversion Dam
- D. Goldfield Creek realignment
- E. Two grade control structures on the Southwest Arm Tributary (SWAT)
- F. Several culverts
- G. Full scale effluent treatment plant (ETP)
- H. Effluent discharge pipeline
- I. Office buildings
- J. The mill
- K. Other site infrastructure.

1.1 Purpose

The purpose of this 2022 Biodiversity Monitoring Report is to describe monitoring activities for the period of October 1, 2021, through September 30, 2022, that were undertaken to satisfy federal EIS Conditions 4.1, 4.3, 7.1, 7.1.1, and 7.1.2.

The overall objectives related to each condition are provided in Table 1.1, which also references the applicable section of this 2022 Biodiversity Monitoring Report. This report focuses on those Federal conditions that are relevant to the 2022 development activities. Other conditions only apply to activities that will commence in subsequent years, and they will be reported on those development activities and associated conditions are initiated.

Table 1.1: Objectives for Federal Conditions of Approval Related to Biodiversity Monitoring and Management

Federal Condition	Report Section	Objective (from federal Decision Statement, 9/4/2019)
4.1	2.1	The Proponent shall carry out the Designated Project in a manner that protects migratory birds and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment and Climate Change Canada's <i>Avoidance Guidelines</i> and the risk of incidental take. The Proponent's actions when carrying out the Designated Project shall be in compliance with the <i>Migratory Birds Convention Act, 1994</i> , the <i>Migratory Birds Regulations</i> and the <i>Species at Risk Act</i> .
4.3	2.2	Compensate the loss of barn swallow (<i>Hirundo rustica</i>) nesting sites as a result of the Project, taking into account Ontario's <i>Recovery Strategy for Barn Swallow (Hirundo rustica)</i> . Install, prior to construction, and maintain, for three years, artificial barn swallow nesting structures.
7.1	BMMP and 2.3	Develop, prior to construction a bald eagle (<i>Haliaeetus leucocephalus</i>) protection plan that takes into account Ontario's Management Plan for the Bald Eagle (<i>Haliaeetus leucocephalus</i>) in Ontario and Ontario's Bald Eagle Habitat Management Guidelines. Implement the protection plan during construction and operation. As part of the implementation of the protection plan:
7.1.1	2.3	Conduct, once prior to construction and annually until vegetation clearing is completed within the project development area, surveys of active bald eagle (<i>Haliaeetus leucocephalus</i>) nests within the project development area and within 800 meters of the project development area and provide the results of the surveys to Indigenous groups, relevant authorities and the Agency no later than 60 days after the end of each survey.
7.1.2	2.3	Develop, and implement measures to protect active nest(s) found pursuant to the surveys referred to in condition 7.1.1. At a minimum, these measures shall include restrictions on access and on Designated Project activities, including site preparation and vegetation clearing, that the Proponent may undertake from March 1 to August 31 within 400 metres of any active nest. The Proponent shall submit these measures to the Agency prior to implementing them, including the period(s) of time during which these measures will apply.

2 Monitoring Activities

Sections 2.1 through 2.3 provide a description of monitoring activities undertaken in the 2022 monitoring year to satisfy Conditions 4.1, 4.3, 7.1, 7.1.1, and 7.1.2.

2.1 Migratory Bird Nest Management Plan

The following section describes measures carried out to satisfy federal Condition 4.1 of the Decision Statement. The Migratory Birds Convention Act (MBCA), 1994 protects migratory birds, their nests, and eggs. It prohibits the harming, killing, disturbance or destruction of migratory birds, nests, and eggs. Birds not addressed under the MBCA are grouse, quail, pheasants, ptarmigan, hawks, owls, eagles, falcons, cormorants, pelicans, crows, jays, kingfishers, and some species of blackbirds. Most species not protected by the MBCA are protected by the provincial Fish and Wildlife Conservation Act (FWCA). Some species are also protected by provincial and/or federal species at risk legislation.

Birds and their nests and eggs may be inadvertently destroyed through the undertaking of certain activities (e.g., during vegetation clearing). This is referred to as “incidental take”. The Migratory Bird Nest Management Plan was created to reduce the risk of harm to migratory birds due to incidental take related to the construction, operation, and closure of the Greenstone Mine (GGM 2021). The Plan is intended to apply to native bird species that nest in Ontario.

2.1.1 Methods

To support pre-construction vegetation clearing during the breeding bird nesting period for Zone C5 (April 20 to August 31), nest surveys were completed by a qualified biologist to identify active bird nests and establish appropriate buffers. In 2022, nest sweeps were completed in three areas within the Project Development Area (PDA). Sweeps were conducted according to methods outlined in the BMMP (GGM 2020) and Stantec’s Low Intensity Nest Search protocol (Stantec 2019) under the supervision of a qualified biologist.

Systematic sweeps of forested areas were conducted by walking parallel transects at 5 m spacing through areas to be cleared. Where nests were identified, the nest, or tree supporting the nest was flagged and a 30 m boundary was delineated to maintain a vegetation and disturbance buffer around the nest.

Locations of identified and flagged nests were provided to GGM and clearing operators. Vegetation was maintained in the 30 m buffer around the nests until the end of nesting season in Zone C5 (August 31). Results of each nest sweep effort were considered valid for up to 7 days after which time the area would be re-swept if clearing had yet to occur.

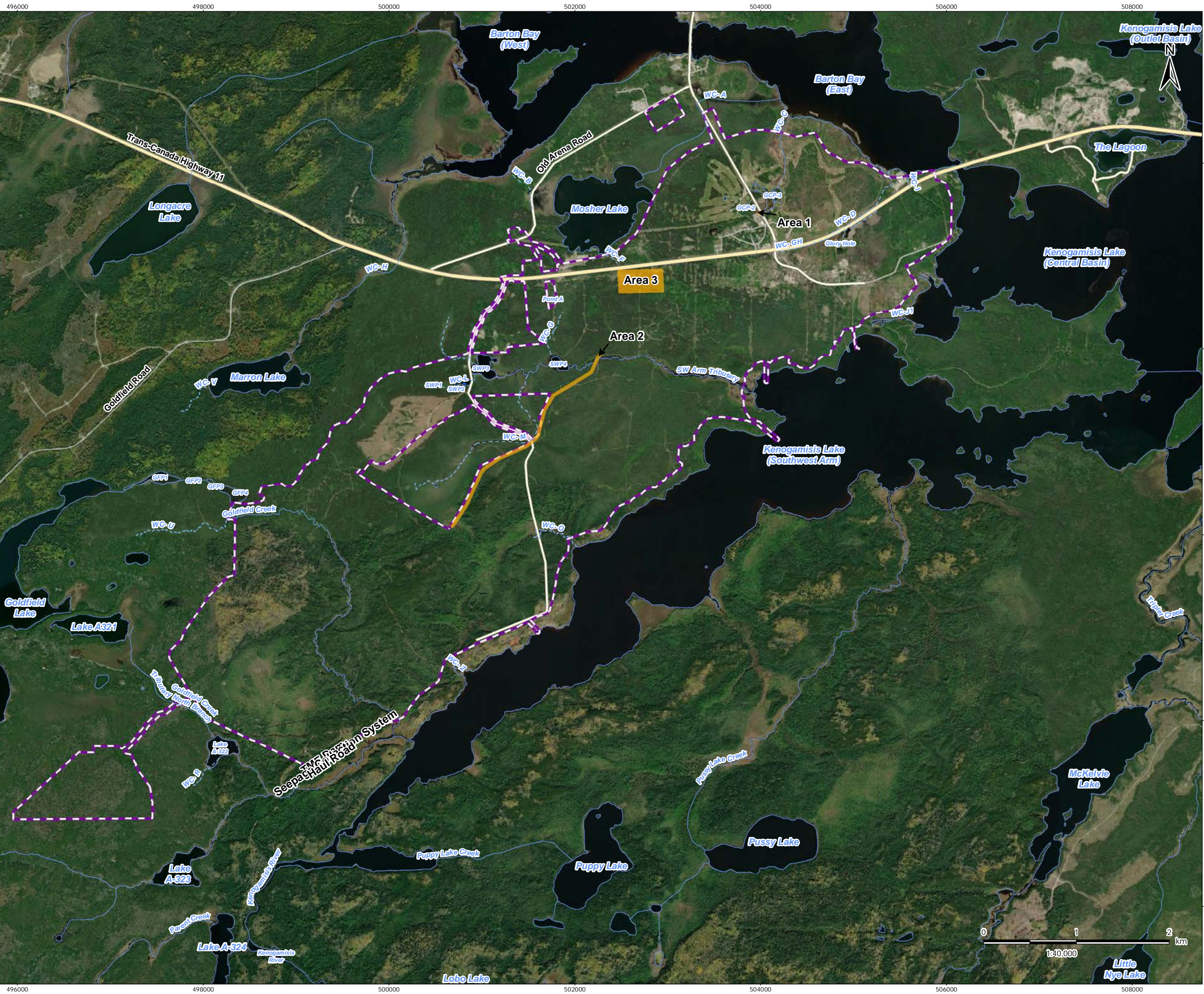
Surveys for bird nests were completed in 13.75 ha of forested and naturally vegetated areas along Michael Power Boulevard (Area 1) at waste rock stockpile 3 (Area 3) on May 18, 2022, and along a 6 m buffer along a power corridor on August 8, 2022 (Area 2) (Figure 1).

2.1.2 Results and Mitigation

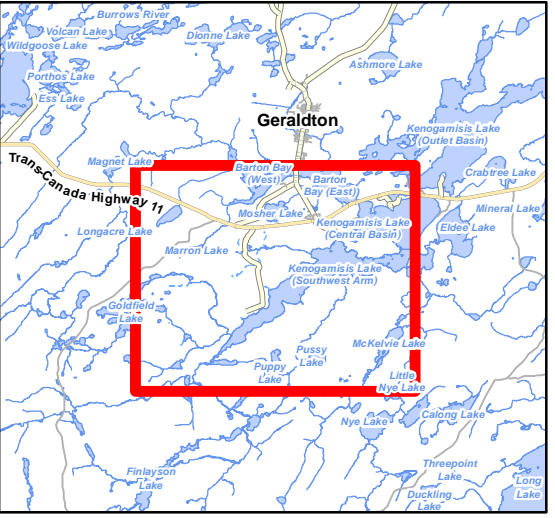
Two active nests were located during the nest sweeps (Figure 1). An American kestrel (*Falco sparverius*) nest was found within 30 m of the power corridor and an unknown bird species along Michael Power Boulevard (Figure 1). Each tree containing a nest was flagged with a 30 m buffer and locations communicated to GGM and clearing operators via UTM coordinates and mapping. The flagged areas were cleared after the nesting period (September 1st).

Table 2.1: Summary of Nest Sweeps completed in 2022

Survey Location	Date	Area (ha)	Nests Identified
Area 1	5/18/2022	10.66	1
Area 2	8/8/2022	0.01	1
Area 3	8/8/2022	3.08	2
Total		13.75	2



- Legend**
- Project Development Area
 - Nest Location
 - 2022 Bird Sweep Areas
 - Flight Path
 - Highway
 - Major Road
 - Local Road
 - Watercourse- Permanent
 - Watercourse- Intermittent
 - Waterbody



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
 3. Orthographic Imagery Source: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Imagery Date- Unknown
- December 2022
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Greenstone Gold Mines GP Inc (GGM)
Hardrock Project

Figure No.
1

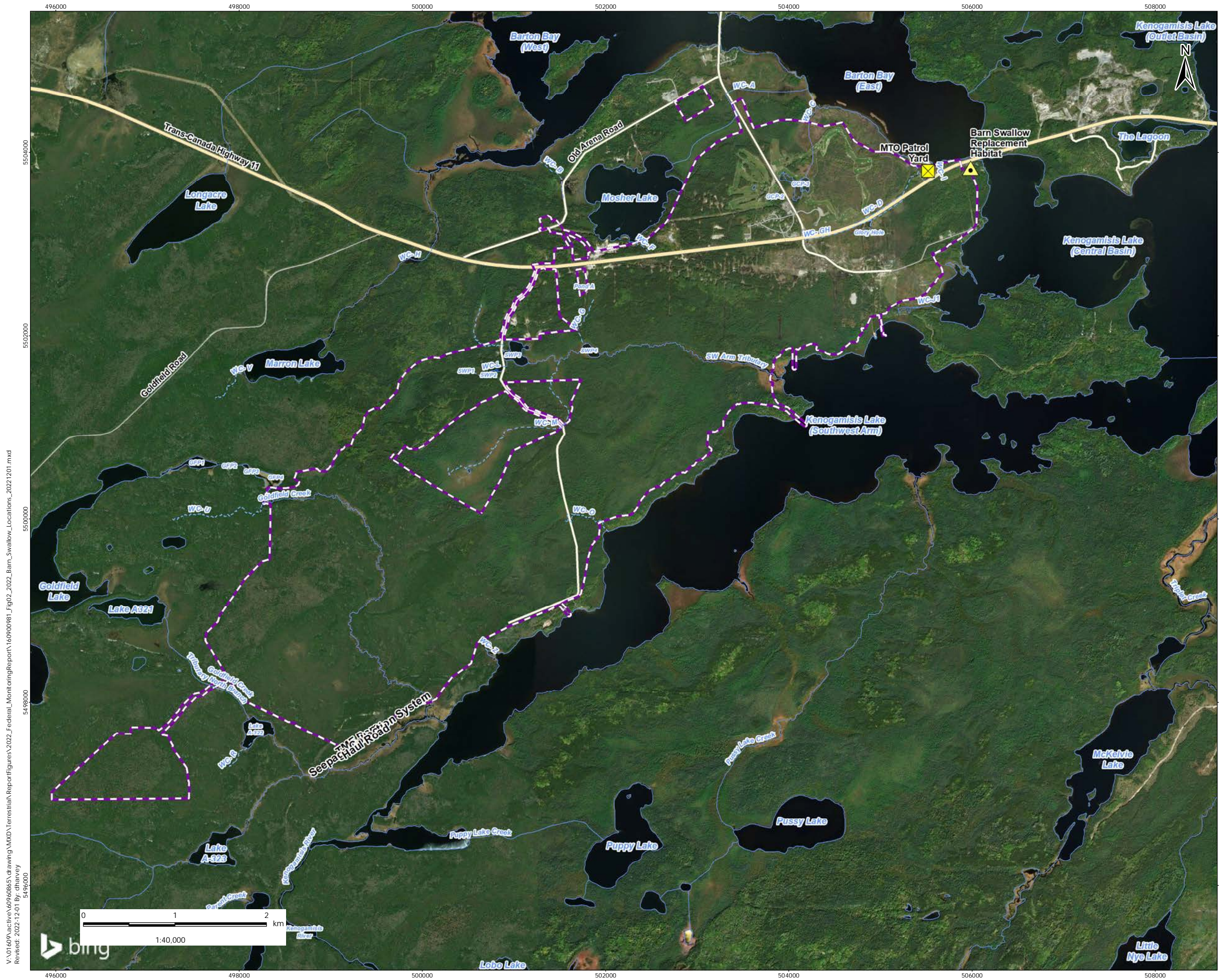
Title
Migratory Bird Nest Sweep
Areas in the PDA

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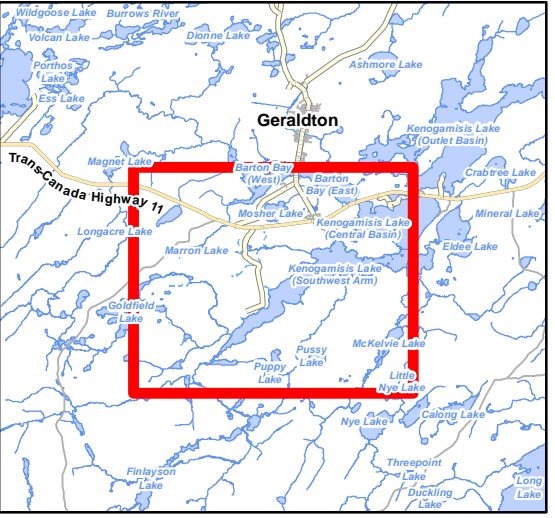
2.2 Barn Swallow Mitigation and Restoration Record

The following section describes measures carried out to satisfy federal Condition 4.3 of the Decision Statement. Barn swallows (*Hirundo rustica*), a threatened species (ESA 2007, SARO 2011) is present in two buildings requiring removal by GGM in the Ministry of Transportation of Ontario (MTO) Patrol Yard (Figure 2). Removal is expected to occur in 2023 following procedures outlined in the BMMP (GGM 2020).

In preparation for removal of barn swallow habitat, and in accordance with federal EIS Condition 4.3 habitat compensation was provided in 2021 through installation of a nesting structure with artificial nesting cups following nesting habitat guidelines provided by the Ontario Ministry of Natural Resources (MNRF 2016). The structure is located approximately 500 m east of the MTO Patrol Yard, immediately outside the PDA, near suitable foraging habitat over Kenogamisis Lake (GGM 2021). As detailed in the BMMP, a Notice of Activity will be filed with the Ministry of Environment, Conservation and Parks (MECP) in 2022. The filing of the Notice is in process.



- Legend
- Project Development Area (Optimized Site Plan, May 2019)
 - MTO Patrol Yard (Barn Swallow Habitat)
 - Barn Swallow Replacement Habitat
 - Highway
 - Major Road
 - Local Road
 - Watercourse- Permanent
 - Watercourse- Intermittent
 - Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
 3. Orthographic Imagery Source: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS Imagery Date- Unknown

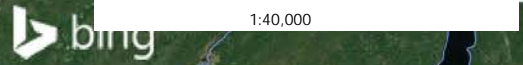
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Client/Project
Greenstone Gold Mines GP Inc (GGM)
Hardrock Project

Figure No.
2

Title
Barn Swallow
Locations in the PDA

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 Revised: 2022-12-01 By: dhanvey



2.2.1 Barn Swallow Monitoring 2022

2.2.1.1 Monitoring of Existing Barn Swallow Populations

Barn Swallow populations at the MTO buildings were monitored on July 14 by GGM staff and on August 7, 2022, by a Stantec biologist. Barn Swallows and active Barn Swallow nests were present in two buildings: the MTO salt building and the MTO wood dome building (Appendix A – Photos 1 and 3).

Barn swallows were observed in the MTO wood dome building during both surveys (Table 2.2). Barn swallows were observed in the wood dome flying in and out of the building regularly. One active nest was observed on July 14 and two on August 7, 2022. Many inactive nests were observed.

Barn Swallows were observed in the MTO salt building during both surveys (Table 2.2 and Table 2.3). Individuals were observed perched on a wire inside the building and on the metal structure (Appendix A – Photo 2). One active nest was observed on July 14, 2022, and no active nests on August 7, 2022.

Table 2.2: Summary of Barn Swallow Monitoring of MTO Wood Dome in 2022

Survey Date	Number of Barn Swallows	Number of Active Barn Swallow Nests	Number of Inactive Barn Swallow Nests	Total Number of Barn Swallow Nests
July 14, 2022	2	1	18	19
August 7, 2022	5	2	12	14

Table 2.3: Summary of Barn Swallow Monitoring of MTO Salt Building

Survey Date	Number of Barn Swallows	Number of Active Barn Swallow Nests	Number of Inactive Barn Swallow Nests	Total Number of Barn Swallow Nests
July 14, 2022	5	1	1	2
August 7, 2022	13	0	2	2

2.2.1.2 Monitoring of Habitat Compensation

The Barn Swallow habitat compensation structure was monitored four times during the 2022 nesting season (Table 2.4). The habitat compensation structure was in good condition during the 2022 nesting season, including the overall structure, nest cups, and predator controls. There was no evidence of use of the structure by Barn Swallows or other bird or bat species in 2022.

Table 2.4 Barn Swallow Habitat Compensation Structure Monitoring

Survey Date	Is the Barn Swallow structure in good condition? (Y/N)	Are nest cups in good condition? (Y/N)	Evidence of Barn Swallow nesting? (Y/N)	Are predator controls in good condition? (Y/N)	Other Birds/Bats Using Structure? (Y/N)
June 1, 2022	Y	Y	N	Y	N
June 16, 2022	Y	Y	N	Y	N
June 30, 2022	Y	Y	N	Y	N
August 30, 2022	Y	Y	N	Y	N

2.2.1.3 Mitigation

The MTO structures are expected to be removed during the winter of 2023. To avoid the risk of killing, harming, or harassing barn swallow populations it is recommended that removal occur outside the Barn Swallow nesting period of May 1 to August 31 of any year.

2.3 Bald Eagle Protection Plan

The following section describes measures carried out to satisfy federal Condition 7.1, 7.1.1, and 7.1.2 of the Decision Statement. Bald Eagle (*Haliaeetus leucocephalus*) has been confirmed nesting within 800 m of the PDA. Bald Eagles are a species of special concern in Ontario but are not at risk federally. Bald Eagle nests are also protected by the *Fish and Wildlife Conservation Act*.

In 2022 a pre-construction Bald Eagle survey was completed to help determine if clearing, site preparation and early construction activities had potential to impact eagle nests or eagle nest buffer zones. One active Bald Eagle nest within 800 m of construction activities was also monitored to document potential impacts of project construction on Bald Eagle nesting behaviour and nest success.

This annual report addresses the following reporting requirements:

1. Annual surveying of active eagle nests
2. Reporting implemented mitigation measures

2.3.1 Methods

2.3.1.1 Nest Survey

A Bald Eagle nest survey was completed on April 21, 2022, by a Stantec biologist and GGM drone operator using a Mavic Air 2¹ drone, a small quad-rotor drone. The drone survey targeted areas where Bald eagle nests were known to be present and most likely active during surveys conducted in 2019 and 2021 along the Kenogamisis Lake shoreline from Barton Bay to the south west arm (Figure 3) (Northern Bioscience 2019, Stantec 2021).

The survey took place during leaf-off with snow cover exceeding 50-cm. Heavy snow in winter 2022 inhibited identification of nests using the drone.

2.3.2 Nest Monitoring

Bald Eagle Nest E-535 is between 200 m and 400 m of various Project components and is 352 m from the tailings management facility TMF (Figure 3). For nests within 200 - 400 m of project components, vegetation clearing, or site preparation is not permitted from March 1 to August 31 and from March 1 to June 30 for nests 400-800 m from project components.

There was no active construction in the TMF that occurred within 800 m of nest E-535 during the nesting period. However, there was construction vehicle traffic travelling within 800 m of the nest during the nesting period. To monitor potential impacts from vehicle traffic, nest E-535 was regularly monitored by GGM staff from April 4, 2022, when nesting activity was first observed, to June 30, 2022 (Appendix B). During each visit, activity at the nest and presence of eagles near the nest was recorded.

2.3.3 Results

2.3.3.1 Bald Eagle Nest Survey

One active Bald Eagle nest (E-535) was located during the 2022 drone survey (Figure 3 and Table 2.5). Two nests that were identified in the 2021 survey (WP-008 and 487) were not located in 2022. Two adult Bald Eagles were observed on and near nest E-535 at the time of the survey (Table 2.5, Photos A.2.1, A.2.2, A.2.3).

¹<https://www.dji.com/ca/mavic-air-2>

Table 2.5: Summary of Aerial Drone Survey of Bald Eagles, Spring 2022

Nest ID	First Year Identified	Status - 2021	Status - 2022	Easting	Northing	Within 800 m of PDA?	Notes
WP-008	2019	Present	Unknown	505612.5	5504865	No	In large trembling aspen near shoreline. Not located in 2022.
E-535	2019	Present	Present - Active	500320.5	5497932	Yes	In large trembling aspen near shoreline. Nest occupied by pair of eagles by March 2022.
487	2019	Present	Unknown	499648.7	5497012	Yes	In large trembling aspen near shoreline. Not located in 2022.

2.3.3.2 Eagle Nest Monitoring

Eagles were confirmed to be present on or near nest E-535 from April 4, 2022, to June 27, 2022 (Appendix A, Photos 4 and 5). Bald Eagle activity near the nest declined after June with only one observation of eagles in the vicinity of nest E-535 in July (July 13) and no observations in August (Appendix B). No juvenile Bald Eagles or active feeding was observed. As a result, nesting behaviour or success was not confirmed in 2022 at this location.

2.3.4 Mitigation

Of the four eagle nests that were identified in 2019, three were present in 2021 (487, E-535, WP-008). Only nest E-535 showed evidence of potential nesting in 2022.

Nest 487 (not present in 2022) is 650 m from the TMF and nest E-535 (active in 2022) is 217 -352 m from various project components, including the TMF (Table 2.5). Nest WP-008 (not active in 2022) is greater than 800 m from project component (Table 2.5). Given their locations, Nest 487 and E-535 (potentially active in 2022) continue to be subject to precautionary mitigation measures.

Construction mitigation recommendations for eagle nests 487 and E-535 are summarized in Table 2.6. The Bald Eagle Habitat Management Guidelines (MNR 1987) identify three buffer zones that should be applied to Bald Eagle nests. Varying levels of activity restrictions apply to each buffer zone:

- Primary zone: the first 100 m around the nest and carries the highest level of restriction.
- Secondary zone: extends from 100 to 200 m around the nest and activities significantly altering the landscape are prohibited within this zone.

- Tertiary zone: extends from 200 to 800 m around the nest; this is the least restrictive zone and allows some activities except during the most critical life cycle period for nesting eagles.

Mitigation measures during construction are as follows:

- No vegetation removal or Project activities will occur within 200 m (i.e., the primary and secondary zones, as defined by MNR 1987) of an active nest.
- The limits of the vegetation removal and construction area within 800 m of an active nest will be staked in the field. Activities will occur inside the marked limit of work.
- A 120 m vegetated buffer zone will be retained along the shoreline of the lake; and vegetation that is present between each nest and the lakeshore will be retained.
- Large and mature trees will be retained between each nest and the closest Project components to maintain a visibility barrier to Project activities to the extent possible
- Vegetation clearing activities and site preparation activities between 400 m and 800 m of active nests will not occur from March 1 to June 30 (the incubation and nestling period for bald eagle [MNR 1987; MNR 2010]).
- If vegetation clearing or site preparation activities are required within 200- 400 m of the nest, they should occur outside of the incubation, nestling, and fledging period (March 1 to August 31 [MNR 2010]).

These mitigation measures are specific to construction activities that are currently being undertaken. Operations mitigation for raptor nests will be implemented when Operations activity commences.

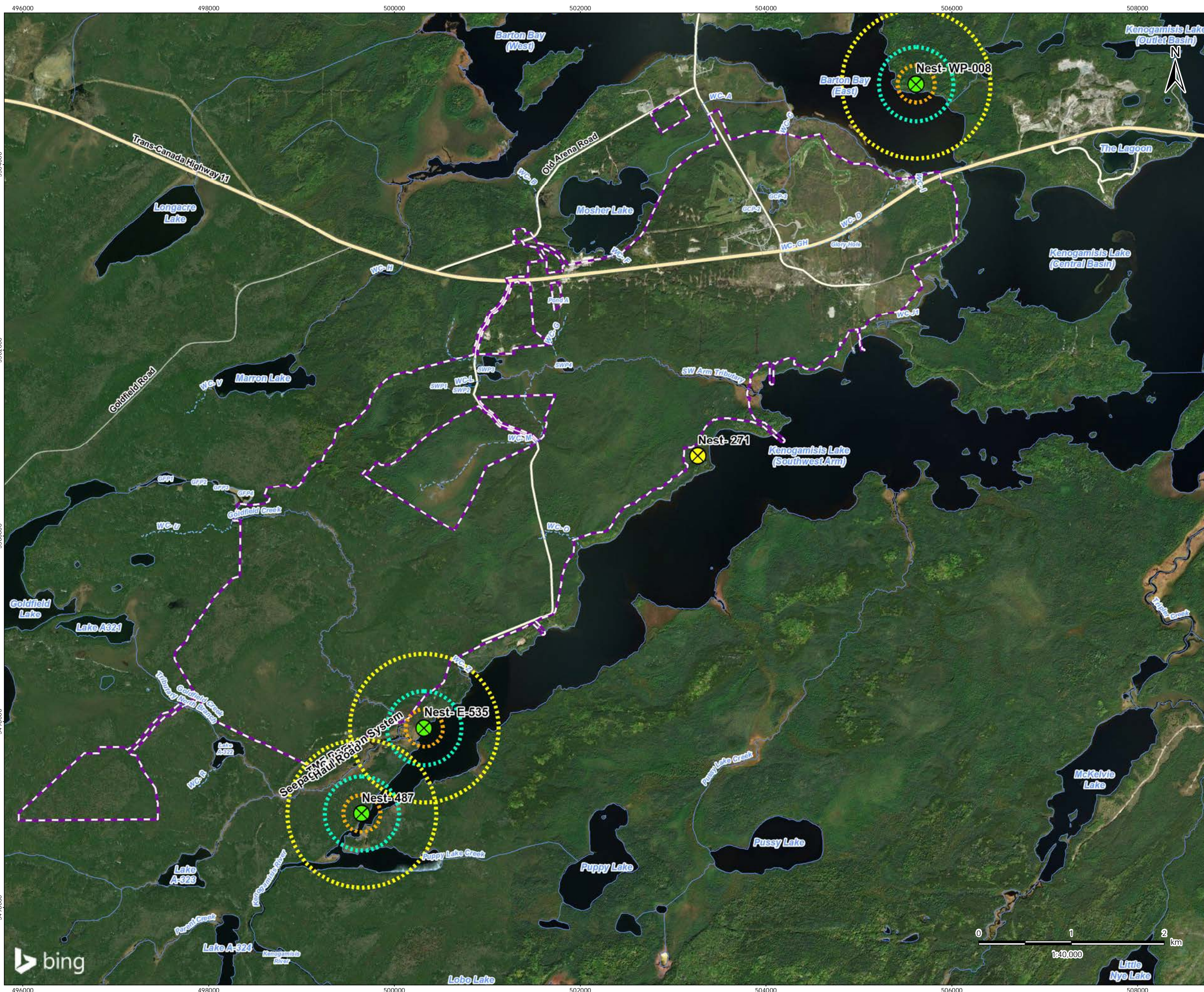
Table 2.6: Summary of Recommended Construction Mitigation Measures for Eagle Nest within 800 m of the PDA

Critical Buffer Distance from Nest	Mitigation Measure	Current Applicable Nest IDs
All distances	Large and mature trees will be retained between each nest and the closest Project components to maintain a visibility barrier to Project activities to the extent possible.	487; E-535
< 120 m	Vegetated buffer zone will be retained along the shoreline of the lake; and all vegetation that is present between each nest and the lakeshore will be retained.	487; E-535
< 200 m	No vegetation removal or Project activities will occur within 200 m (i.e., the primary and secondary zones, as defined by MNR, 1987) of an active nest.	Does not currently apply to known nests
200 m - 400 m	Vegetation clearing or site preparation activities should occur outside incubation, nestling, and fledging periods (March 1 to August 31 [MNR 2010]).	E-535
400 m - 800 m	Vegetation clearing activities and site preparation activities will not occur from March 1 to June 30 (the incubation and nestling period for bald eagle [MNR 1987; MNR 2010]).	487; E-535
< 800 m	The limits of the vegetation removal and construction area within 800 m of an active nest will be staked in the field. Activities will occur inside the marked limit of work.	487; E-535
Source: Stantec 2020		

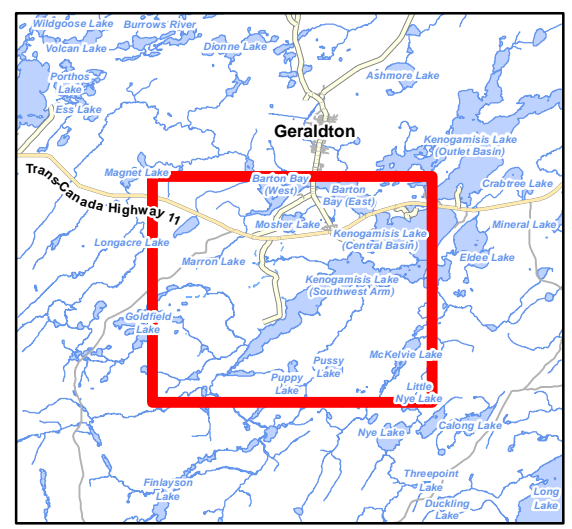
2.3.5 Recommendations

Based on result of the 2022 Bald Eagle monitoring, the following recommendations are made to reduce the likelihood of impacts of GGM Project activity on Bald Eagle nests in the PDA:

1. It is recommended that all known Bald Eagle nests in the PDA be visited annually to visually confirm the presence of eagle nests and their activity status in the PDA. Assessing status of nests may require use of a larger drone to better assess eagle activity.
2. Nest E-535 should be monitored regularly for nesting activity from the ground beginning in April each year.
3. Construction mitigation measures be adhered to, and anticipated non-compliance be communicated to regulators (ECCC and MNRF).



- Legend
- Project Development Area (Optimized Site Plan, May 2019)
 - Bald Eagle Nest, Absent
 - Bald Eagle Nest, Present
 - Bald Eagle Nest 200 m Buffer
 - Bald Eagle Nest 400 m Buffer
 - Bald Eagle Nest 800 m Buffer
 - Highway
 - Major Road
 - Local Road
 - Watercourse- Permanent
 - Watercourse- Intermittent
 - Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
 3. Orthographic Imagery Source: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS Imagery Date- Unknown

December 2022
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Client/Project
Greenstone Gold Mines GP Inc (GGM)
Hardrock Project

Figure No.
3

Title
Bald Eagle Nest Locations in the LAA

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Revised: 2022-12-01 By: dhanvey



3 Summary

This report addresses the management plans and conditions of the Federal Decision Statement that are required to be implemented because of the commencement of Project construction activities. Additional activities and associated conditions will be implemented as the Project proceeds towards operation and infrastructure is advanced and will be reported on at that time.

Three specific Conditions of Approval related to monitoring potential effects of the Project on biodiversity were assessed including:

- Condition 4.1, avoidance of incidental take of migratory birds through nest sweeps of areas to be cleared during the breeding season.
- Condition 4.3, Barn Swallow habitat compensation.
- Condition 7.1, (including subsections 7.1.1, and 7.1.2), monitoring of Bald Eagle nests within 800 m of the PDA and implementation of a mitigation plan to avoid disturbance of Bald Eagle nests from Project activities during the breeding season.

Management plans for these conditions have been developed as part of the BMMP. This report confirms compliance of the implementation of the three conditions and the performance and/or effectiveness of these conditions to maintain the function of the valued ecosystem components. Upon completion of additional surveys and monitoring in subsequent years, the effectiveness of the protective and mitigation techniques will be further assessed. At the time of this report, the Federal conditions related to valued ecosystem components have been implemented and demonstrated to be effective in meeting their intended objective.

4 References

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Appendix A

Photologs

A.1 Migratory Bird Nest Management Plan

Photo 1 American kestrel nest identified in Area 2



Photo 2 Flagging on nest tree



A.2 Barn Swallow Monitoring

Photo 3 MTO Salt Building



Photo 4 Barn Swallows and nests in MTO Salt Building



Photo 5 MTO Dome View from Outside



Photo 6 Active Barn Swallow nest in MTO Dome

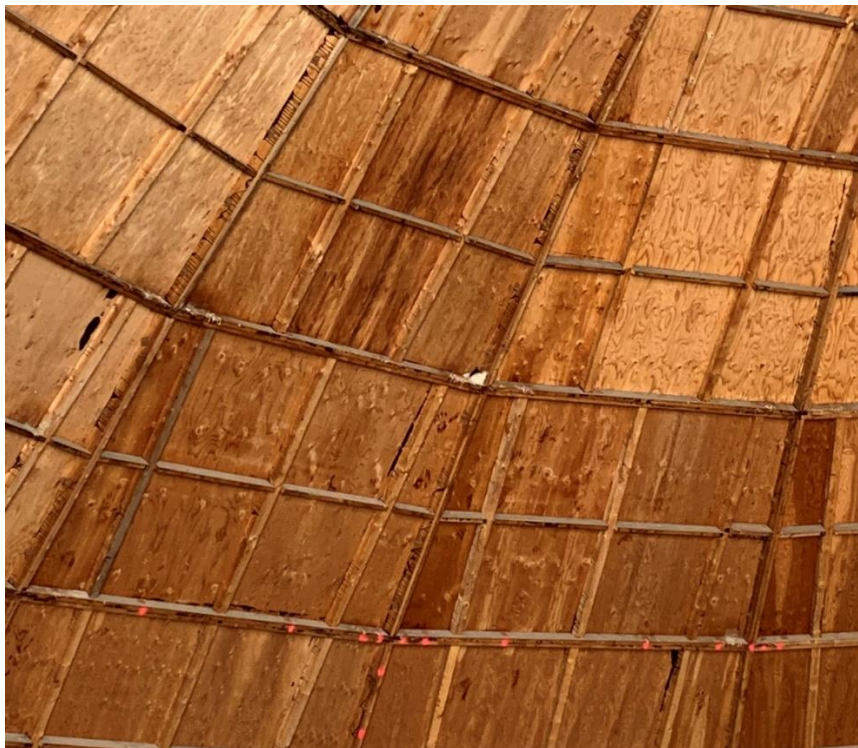


Photo 7 Closeup of Active Barn Swallow Nest in MTO Dome Building



A.3 Bald Eagle Monitoring

Photo 8 Bald Eagle nest E-585 in large aspen on shoreline of Kenogamis Lake (Date: April 17, 2022)



Photo 9 Bald Eagle nest E-585 in large aspen tree near shoreline of Kenogamis Lake (Date: April 21, 2022)



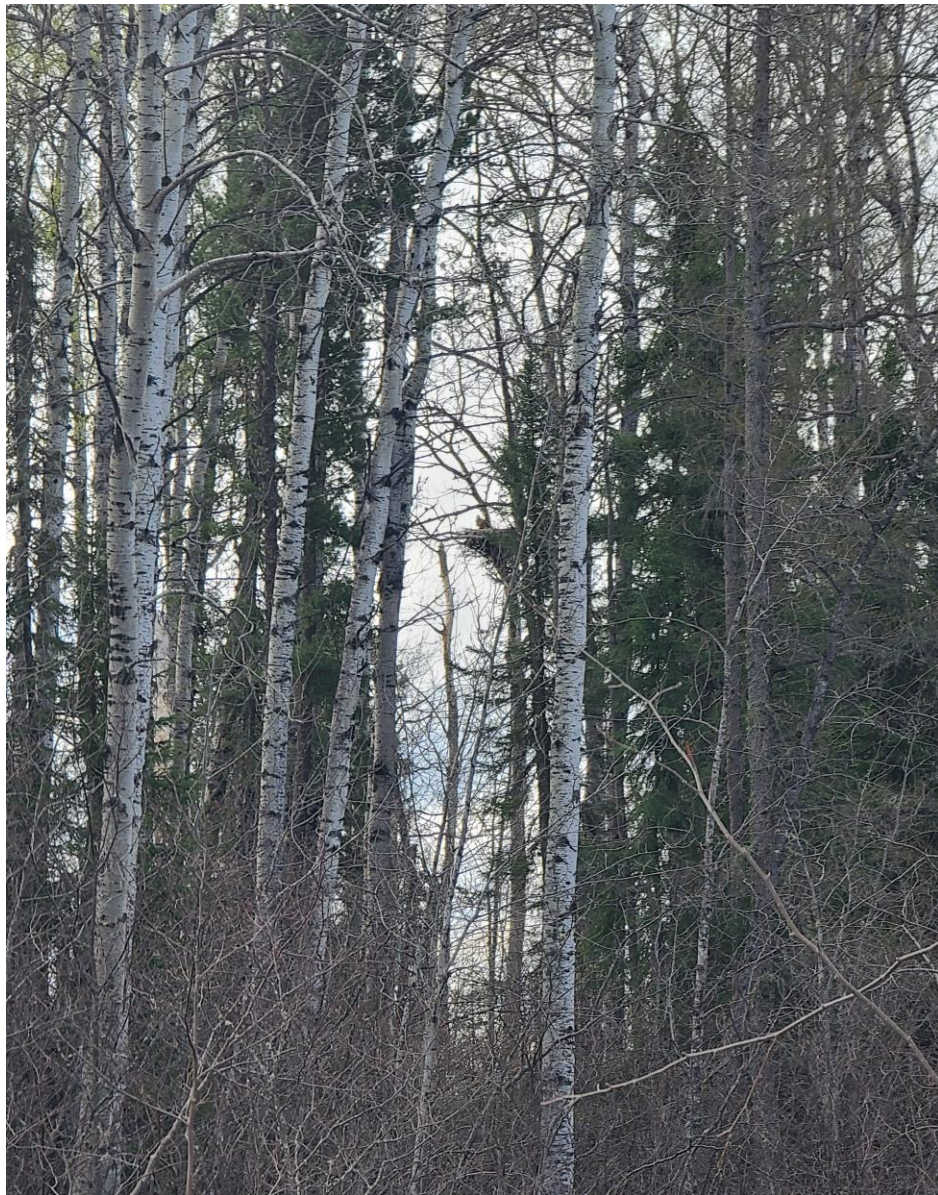
**Photo 10 Bald Eagle nest E-585 in aspen with in-construction tailing management facility in background
(Date: April 21, 2022)**



Photo 11 Adult Bald eagle on nest E-585 (Date: May 17, 2022)



Photo 12 Nest E-585 with adult Bald Eagle on nest (Date: May 17, 2022)



Appendix B

Bald Eagle Nest Monitoring

Table B.1 Bald Eagle Nest E-535 Monitoring April 4 to May 17, 2022

Date	Observation
4-Apr-22	1 Eagle Found
5-Apr-22	1 Eagle Found
5-Apr-22	2 Eagles found
6-Apr-22	No Eagles found
7-Apr-22	2 Eagles found
7-Apr-22	2 Eagles found
8-Apr-22	No Eagles found
8-Apr-22	1 Eagle Found
9-Apr-22	1 Eagle Flying overhead
9-Apr-22	No Eagles found
11-Apr-22	2 Eagles found
12-Apr-22	No Eagles found
12-Apr-22	1 Eagle Found
13-Apr-22	No Eagles found
14-Apr-22	1 Eagle Found
15-Apr-22	No Eagles found
15-Apr-22	2 spotted at fournier garbage bin
16-Apr-22	No Eagles found
17-Apr-22	2 Eagles found
18-Apr-22	2 Eagles found
19-Apr-22	No Eagles found
20-Apr-22	No Eagles found
20-Apr-22	No Eagles found
21-Apr-22	No Eagles found
22-Apr-22	No Eagles found
23-Apr-22	No Eagles found
24-Apr-22	No Eagles found
25-Apr-22	No access
26-Apr-22	1 Eagle Found
27-Apr-22	No Eagles found
28-Apr-22	No Eagles found
29-Apr-22	No Eagles found
30-Apr-22	1 eagle found
1-May-22	No Eagles found
3-May-22	1 Eagle Found
4-May-22	No Eagles found
5-May-22	No Eagles found

Date	Observation
6-May-22	1 eagle found
7-May-22	No Eagles found
8-May-22	1 Eagle Found
9-May-22	1 Eagle Found
10-May-22	2 Eagles found
11-May-22	1 Eagle Found
12-May-22	No Eagles found
13-May-22	No Eagles found
14-May-22	1 Eagle Found
15-May-22	No Eagles found
16-May-22	1 Eagle Found
17-May-22	1 eagle found

Table B.2 Bald Eagle Nest E-535 Monitoring May 20 to August 14, 2022

Date	Nest present (Y/N)	Eagles found? (Y/N)	Nest active? (Y/N)	Observations
20-May-22	yes	yes	yes	
21-May-22	yes	no	no	
1-Jun-22	yes	no	no	
2-Jun-22	yes	no	no	
2-Jun-22	yes	yes	no	1 eagle found in tree beside the nest
3-Jun-22	yes	no	no	
4-Jun-22	yes	no	no	
4-Jun-22	yes	no	no	
7-Jun-22	yes	no	no	
8-Jun-22	yes	no	no	
9-Jun-22	yes	no	no	
10-Jun-22	yes	no	no	
11-Jun-22	yes	yes	yes	
12-Jun-22	yes	no	no	
13-Jun-22	yes	no	no	
15-Jun-22	yes	yes	no	1 eagle in tree
16-Jun-22	yes	no	no	
16-Jun-22	yes	yes	no	
17-Jun-22	yes	no	no	
18-Jun-22	yes	no	no	
19-Jun-22	yes	no	no	
20-Jun-22	yes	no	no	

Date	Nest present (Y/N)	Eagles found? (Y/N)	Nest active? (Y/N)	Observations
21-Jun-22	yes	no	no	
22-Jun-22	yes	no	no	
24-Jun-22	yes	yes	no	1 eagle found in tree near the nest
26-Jun-22	yes	no	no	breezy and sunny 17 degrees Celsius
27-Jun-22	yes	yes	no	1 eagle perched on a branch in the tree beside the nest
27-Jun-22	yes	no	no	Sunny and windy 11 degrees Celsius
5-Jul-22	yes	no	no	
6-Jul-22	yes	no	no	
7-Jul-22	yes	no	no	
8-Jul-22	yes	no	no	
9-Jul-22	yes	no	no	
10-Jul-22	yes	no	no	
11-Jul-22	yes	no	no	
12-Jul-22	yes	no	no	
13-Jul-22	yes	yes	no	2 eagles flying in vicinity of nest
14-Jul-22	yes	no	no	
15-Jul-22	yes	no	no	
16-Jul-22	yes	no	no	
17-Jul-22	yes	no	no	
9-Aug-22	yes	no	no	
10-Aug	yes	no	no	
11-Aug-22	yes	no	no	
12-Aug-22	yes	no	no	
13-Aug-22	yes	no	no	
14-Aug-22	yes	no	no	