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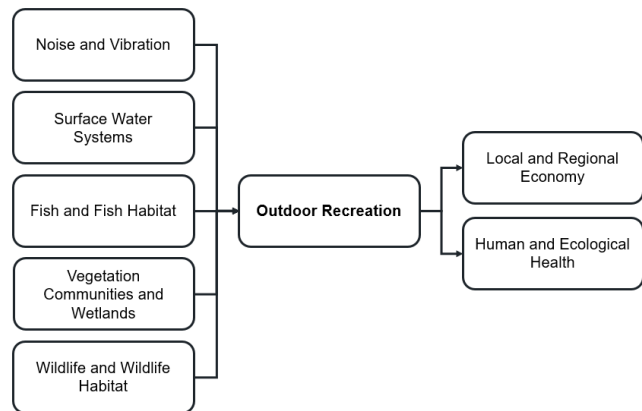
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6.18 Outdoor Recreation

Outdoor recreation was selected as a valued component (VC) because it is possible for recreational fishing, hunting, navigational routes, outdoor recreation and wildlife viewing, and the use of seasonal cabins to occur in the Springpole Gold Project (Project) area. In the absence of mitigation, Project activities during the construction, operations and closure phases could affect the ability to participate in or the experience of conducting those activities. The Project region also includes areas of Indigenous traditional land and resource use; that topic is discussed in Section 6.21.

In the absence of mitigation, the assessment of potential changes in outdoor recreation are directly linked to other VCs and is informed by the following sections:

- **Noise and vibration (Section 6.3):** the assessment of potential effects on noise and vibration includes changes in sensory disturbances during construction and operation of the Project that could affect the experience of “being on-the-land” during outdoor recreational activities.
- **Surface water systems (Section 6.6 to 6.9):** the assessment of potential effects on surface water systems includes changes in water quantity during construction and operation of the Project which may affect navigation.
- **Fish and fish habitat (Section 6.10):** the assessments the potential effects on fish and fish habitat includes changes in local fish populations and fish habitat during the construction and operations of the Project which may affect the fisheries resources available for recreational fishing.
- **Vegetation communities and wetlands (Sections 6.11):** the assessment of potential effects on vegetation communities and wetlands includes changes in vegetation communities (including wetland ecologies) during the construction and operation of the Project that may affect viewscales for recreational users and indirectly affect wildlife resources for recreational hunting activities.
- **Wildlife and wildlife habitat (Section 6.12):** the assessment of potential effects on wildlife and wildlife habitat includes direct and indirect changes in wildlife habitat during the construction and operation of the Project that may affect wildlife resources available for recreational hunting.



In addition, the assessment of potential changes in outdoor recreation are also directly linked to other VCs, and informs the analysis of the following sections:

- **Local and regional economy (Section 6.19):** the assessment of the potential effects on local and regional economy is informed by changes in recreational fishing, hunting and use of recreational areas during the construction and operation of the Project as this may affect the local and regional economy.
- **Human and ecological health (Section 6.24):** the assessment of the potential effects on human and ecological health is informed by the changes in recreational hunting, fishing and use of recreational areas during construction and operation of the Project as this may affect the risk to human health.

The assessment of the potential changes on outdoor recreation from the Project are compared against relevant provincial and federal criteria (Section 6.18.1.4) and existing conditions (Section 6.18.2). The socioeconomic technical support documentation is included in Appendix Q, which includes the Baseline Socioeconomic Report (Appendix Q-1).

6.18.1 Assessment Approach

The approach to the assessment of potential changes in outdoor recreation includes a description of the relevant regulatory and policy setting, a description of the input obtained through consultation specific to this VC, the identification of criteria and indicators along with the associated rationale, and a description of the spatial and temporal boundaries used for this VC, along with a description of the attributes used to determine the significance of any residual, adverse effects. The assessment of potential effects is supported by a description of the existing conditions for the VC (Section 6.18.2), the identification and description of applicable pathways of potential effects on the VC (Section 6.18.3) and a description of applicable mitigation measures for the VC (Section 6.18.4). An outline of the analytical method conducted for the assessment and the key assumptions and/or conservative approach is found in Section 6.18.5. With the application of mitigation measures to the potential effects on the VC, the residual effects are then characterized in Section 6.18.6 and the significance of the residual effects is determined in Section 6.18.7.

6.18.1.1 Regulatory Setting

The effects assessment for outdoor recreation has been prepared in accordance with the requirements of the federal Environmental Impact Statement (EIS) Guidelines (Appendix B-1) and the provincial approved Amended Terms of Reference (ToR; Appendix B-3). Concordance tables, indicating where EIS Guidelines and ToR requirements have been addressed, are provided in Appendix B-2 and B-5, respectively. Government policies, objectives, standards or guidelines most relevant to the VC are summarized below.

Fisheries Act

In Ontario, the legislative authority to develop fisheries management plans primarily lies with the Ministry of Natural Resources (MNR). The MNR is responsible for creating and implementing fisheries management plans to ensure the conservation and sustainable use of fish resources in the province. While the federal government has overarching legislative authority for fisheries management across Canada, including inland fisheries, provinces like Ontario have the right to manage and regulate fisheries within their jurisdiction. This includes setting fishing limits, seasons, and other regulations.

Public Lands Act

The *Public Lands Act* controls the management, sale and disposition of public or Crown, lands and forests. Under the Act, land use planning areas may be designated, and regulations can be established to control activities within a planning area. The Act provides for the right to use roads on public land except for private forest roads. Work permits may be issued under the *Public Lands Act*, when undertaking certain activities on Crown land and shorelands.

Far North Act

The *Far North Act, 2011* is a land use planning process which determines the most appropriate use of land and water in the Far North of Ontario. The land use plan will identify which lands will be dedicated for protection and which lands are open for potential economic development for forestry, tourism, mining or renewable energy. As part of the process, Indigenous communities and a planning team from the Ministry of Natural Resources develop a Terms of Reference that set out the objectives and process to develop the

land use plan. The Cat Lake – Slate Falls Community Land Use Plan (CLFN, SFN and MNR 2011) developed a land use plan under the Far North Act, which establishes the goals and objectives for planning to address cultural, social, environment and economic interests within the planning area.

Fish and Wildlife Conservation Act

In Ontario, the legislative authority to develop bear management areas is provided by the *Fish and Wildlife Conservation Act* (FWCA). This act gives the Ministry of Natural Resources (MNR) the legal framework to manage and regulate bear populations, including the establishment of bear management areas. Bear management areas are specific regions where bear hunting is regulated, often characterized by potential bear habitats and licensed tourist outfitters.

Further, the legislative authority to develop Wildlife Management Units (WMUs) is provided by the *FWCA*. This act empowers the Ministry of Natural Resources (MNR) to manage wildlife resources, including the establishment and regulation of WMUs. The WMUs are specific geographic areas designated for the management of wildlife populations and habitats. They help in setting hunting regulations, seasons, and quotas to ensure sustainable wildlife management.

Local land and resource management plans and policies associated with these administrative areas also contribute to the framework for assessing the compatibility between land and resource use types. The Project and its potential effects overlap several local management units, including:

- Fisheries Management Zone (FMZ) 4
- Bear Management Areas (BMAs); and
- Wildlife Management Units (WMUs) 3, 16A and 4.

In addition to the resource management plans described above, the Project lies within the Sioux Lookout General Use Area (G2515), which is 1,415,209 hectares under Ontario's Living Legacy Land Use Strategy. Land uses applicable to the area include mining, forestry, cottaging, tourism. In general, the Crown land is actively used for recreation, fishing, hunting and fur harvesting as well as by major industries such as mining, forestry and resource-based tourism. The area contains a resource-based tourism industry main base lodges to more remote outfitter camps. The Cat Lake – Slate Falls Community Based Land Use Plan was developed jointly by Cat Lake First Nation, Slate Falls First Nation, and the Province of Ontario. The plan sets goals and objectives for planning which address cultural, social, environmental and economic interests.

6.18.1.2 Influence of Consultation with Indigenous Communities, Government and the Public

Consultation has been ongoing for several years prior to and throughout the environmental assessment process, and will continue with Indigenous communities, government agencies and the public through the life of the Project. Section 2.0 provides more detail on the consultation process. The Record of Consultation (Appendix D) includes detailed comments received, and responses provided, during the development of the final Environmental Impact Statement / Environmental Assessment (EIS/EA).

Feedback received through consultation has been addressed through direct responses (in writing and follow up meetings) and incorporated into the final EIS/EA, as appropriate. Key comments that influenced the assessment for the outdoor recreation VC between the draft and final EIS/EA are provided below.

Navigation

The Impact Assessment Agency of Canada requested a table listing navigable waterbodies and an assessment of any potential impacts to the exercise of rights by Indigenous people due the Project's effects on the waterbody. A table of potentially navigable water bodies has been included in Section 6.18

(Table 6.18-4), and the assessment of potential impacts on rights of Indigenous people is included in Section 6.26.

The Northwestern Ontario Métis Community noted that portaging is both a historical and contemporary mode of travel to determine whether the potential navigation routes are used by Northwestern Ontario Métis Community. First Mining Gold Corp. (FMG) funded a supplemental traditional knowledge and land use study for the Northwestern Ontario Métis Community to better understand the use of important areas including the use of navigation routes. and no navigation routes in the Project Development Area (PDA) were identified.

The Ministry of Natural Resources (MNR) requested further information on the navigability of waterbodies in the Project development area and measures to mitigate adverse effects on the portage route between Springpole and Birch Lake. A summary of potentially navigable water bodies is included in Table 6.18-4. Additional information on measures to mitigate changes in the portage route between Springpole and Birch Lake has been included in Section 6.18.6.4.

The MNR noted that the assessment on outdoor recreation did not appear to consider the changes in navigation at the outlet of Springpole Lake, which includes a series of Class I and II rapids, that may be impacted by changing water levels during the controlled refilling of the open pit at closure. Section 6.8 provides an assessment of the potential effects on water quantity (including flows) due to the Project. The maximum potential reduction in water level for an average year during the period when the open pit basin is being refilled would be within natural variation at approximately 13 centimetres (cm) (Appendix M1). This change is well within the observed range of existing water levels (0.9 to 2.0 metres [m]) during the summer period (June to October), and is not anticipated to have an effect on navigation.

Bear Management Areas

The MNR and the Ministry of Citizenship and Multiculturalism requested further information on the number of BMAs within the applicable study areas and requested clarification on the measures used to mitigate the potential loss of access for the holders of the BMAs. The numbers of identified BMAs have been updated in Section 6.18.2.1. The mitigation measures outlined for potential effects on wildlife and wildlife habitat in the final EIS/EA, and prohibition of hunting within the controlled access portion of the Project area will reduce potential effects on BMAs.

Consideration for Fisheries Management Plans

The MNR requested further consideration of the FMP for FMZ 4 for the management of potential effects on recreational fishery opportunities. The potential loss of fish productivity for Birch Lake and Springpole lake due to the Project is assessed in Section 6.10 (Fish and Fish Habitat) and Appendix F (Fish Habitat Offsetting and Compensation Plan) and takes into consideration the FMP for FMZ 4. The potential loss of access to recreational fisheries is discussed in Section 6.18.6.1. With Project mitigation measures, there are no anticipated effects on fish productivity or access to recreational fisheries.

Assessment of Potential Changes on Outdoor Recreation

The MNR commented that the term measurable parameter suggests the use of quantitative assessments whereas some identified parameters were qualitative. The term has been changed to indicators, as illustrated in Section 6.18.1.4. Further, the MNR noted several Indigenous hunting and fishing camps on the shores of Springpole Lake, south of the exploration camp, in which there may be changes to access due to the Project. Available information regarding Indigenous land and resource use and potential impacts on those uses is addressed in Section 6.21.

6.18.1.3 Spatial and Temporal Boundaries

The PDA is defined as the footprint of the Project including the mine site area, mine site access road and the transmission line corridor, as well as a buffer in order to allow for flexibility for design optimizations during Project permitting. The buffer includes approximately 250 m around the mine site area. The buffer for the transmission line is included within the 40 m wide corridor and within the 30 m wide corridor for the mine access road. Where the mine access road and transmission line are aligned together, the buffer is included within a 60 m wide corridor.

The spatial boundaries used for the assessment of outdoor recreation are shown in Figure 6.18-1 and defined as follows:

- **Local Study Area (LSA):** The LSA for outdoor recreation is based on the combined LSAs for the surface water systems and wildlife. The LSA for surface water systems is appropriate for activities such as recreational fishing and navigation as this occurs throughout the Birch Lake watershed waterbodies. The wildlife LSA is suitable for activities such as hunting and wildlife viewing. The combination is suitable for recreational activities as these activities rely on both the Birch Lake watershed and the associated land base. As a result, the LSA includes a buffer around the PDA, including the mine access road and transmission line.
- **Regional Study Area (RSA):** The outdoor recreation RSA is also based on the RSAs for surface water systems and portions of the wildlife RSA for similar reasons. The portions of the wildlife RSA include the quaternary watersheds that are overprinted by the PDA, and an area for the eastern portion of the RSA within 10 kilometres (km) of the PDA. The 10 km represents a typical home range for most wildlife species that may be harvested for recreational hunting such as Moose and Black Bear.

The temporal boundaries for the assessment of outdoor recreation are defined as:

- **Construction Phase:** Years -3 to -1, representing the construction period for the Project.
- **Operations Phase:** Years 1 to 10, with the first year potentially representing a partial year as the Project transitions from construction into operations. Mining of the ore from the open pit will end in Year 10, at which time the pit will begin refilling with water; and
- **Decommissioning and Closure Phase:**
 - o Active Closure: Years 11 to 15, when final decommissioning and the majority of active reclamation activities are carried out; and
 - o Post-closure: Years 16+, corresponding to the post-closure monitoring period and when the filled open pit basin will be reconnected to Springpole Lake.

Effects on this VC are assessed for each Project phase (i.e., construction, operations and closure).

6.18.1.4 Criteria and Indicators

Outdoor recreation has the potential to be impacted by the Project both directly (e.g., loss of recreation areas) and indirectly (e.g., changes in access). In undertaking the assessment of effects on outdoor recreation, the following criteria were used:

- Changes in recreational fishing;
- Changes in recreational hunting;
- Changes in recreation areas; and
- Changes in navigation.

The specific criteria, measurable indicators and the rationale for the selection of criteria are described in Table 6.18-5. To support the effects assessment, indicators are assessed using professional judgement and experience.

6.18.1.5 Description of Residual Effect Attributes

The residual effects for outdoor recreation are characterized in terms of the following attributes:

- Magnitude;
- Geographic extent;
- Duration;
- Frequency; and
- Reversibility.

These attributes along with the rankings are further described in Table 6.18-6.

In addition, the residual effects for outdoor recreation are characterized according to the socio-economic context within which the VC is found. This is a qualitative measure of the sensitivity and/or resilience of the VC to potential change. The following ranking is applicable:

- **Level I:** The VC may or may not be sensitive but is capable of supporting the predicted change with typical mitigation measures.
- **Level II:** The VC is sensitive and requires special measures to support the predicted change.
- **Level III:** The VC is sensitive and unable to support the predicted change even with special measures.

As noted in Section 6.1, a residual effect is defined as significant if both of the following criteria are satisfied:

- A Level II or III rating is attained for all of the attributes involving magnitude, extent, duration and reversibility; and
- A Level II or III rating is attained for socio-economic context.

Conversely, if a Level I rating is achieved for any of the attributes involving magnitude, extent, duration, frequency or reversibility or, if a Level I rating is achieved for socio-economic context (where applicable), then the residual effect is considered to be not significant.

In the event there is a significant adverse effect, the likelihood of occurrence is further described.

6.18.2 Existing Conditions

A description of the baseline conditions is presented below to characterize the existing conditions for outdoor recreation and is based on several years of study that has resulted in a comprehensive dataset for this stage of project planning. The existing conditions are used to support the assessment of potential effects from the Project on outdoor recreation, and will support long-term monitoring for the Project. Further baseline information on outdoor recreation can be found in the Baseline Socioeconomic Report (Appendix Q-1).

6.18.2.1 Recreational Fishing

Recreational fishing is conducted throughout the LSA and RSA. The MNR has established FMZs throughout Ontario. All of the PDA and LSA are located within FMZ 4 (Figure 6.18-2). The majority of the RSA is located within FMZ 4, excluding the eastern portion of the transmission line east of Slate Falls, which is located within FMZ 2. FMZ 4 has a total area of 60,440.8 square kilometres (km²) and FMZ 2 has an area of 221,087.9 km².

FMZ 4 is subject to a FMP developed by the MNR with input from the FMZ 4 Advisory Council (MNRF 2021d). Due to the various aquatic habitat types, there are many sportfish species managed in FMZ 4, including Brook Trout, Crappie, Lake Sturgeon, Lake Trout, Lake Whitefish, Largemouth Bass, Smallmouth Bass, Muskellunge, Northern Pike, Rainbow Trout, Splake, Sunfish, Walleye, Sauger and Yellow Perch (MNRF 2021f). There is currently no FMP or advisory council for FMZ 2.

The FMZ 4 zone-wide Recreation Fishing Season and Limits, as described by the MNR, are subject to certain waterbody exceptions. Several waterbodies within FMZ 2 and FMZ 4 have specific regulations that differ from the zone-wide regulations. Springpole Lake is provincially designated for Lake Trout management and is managed for naturally reproducing Lake Trout populations (NDMNRF 2019). However, MNR noted that dispositions under the *Mining Act* such as those required for the Project, are exempt from the Lake Trout policy.

The periods of the year in which fishing is permitted vary by species in FMZ 2 and FMZ 4. However, the open season for Lake Trout is between January 1 and September 30, whereas the open season for Walleye is January 1 to April 14 and then the third Saturday of May until December 31. Further information regarding zone-wide recreational fishing seasons is presented in the Socioeconomic Baseline Study in Appendix Q-1.

6.18.2.2 Hunting

The PDA and the LSA are located in WMU 4 and WMU 16A, as shown in Figure 6.18-3. WMU 4 includes the transmission line corridor and the southern portion of the mine access road. WMU 16A includes the mine site area of the PDA and the northern parts of the mine access road and transmission line. The northwest corner of the RSA is located in WMU 3 and the southeast corner of the RSA overlaps with a small portion of WMU 16B.

WMU 16A is within the Cervid Ecological Zone A of the Cervid Ecological Framework, whereas WMU 3 and 4 are within Cervid Ecological Zone B (MNRF 2009). The goals of the Cervid Ecological Framework Zones A and B are to ensure a sustainable Cervid populations, including Caribou (Boreal population), White-tailed Deer, Moose and Elk and to emphasize minimizing impacts to the Caribou population, while maintaining low densities of Moose and White-tailed Deer populations. Further, habitat for Caribou should be emphasized in land and resource planning processes. The application of the Cervid Ecological Framework takes into consideration various aspects including social, cultural and economic benefits, population management, habitat management, climate change, disease and human-cervid conflicts management (MNRF 2009).

The MNR issues Outdoor Cards, hunting licences, validation tags and game seals (valid until the end of the hunting season within the WMU issued). The number of validation tags, which allow the tag holder to harvest a specific species and sex in hunting season, issued for the WMU in a year is determined by the MNR and considers the number of animals of each species that can be harvested in a sustainable manner in the WMU (MNRF 2021c).

Additional detail is provided in Appendix Q-1.

Moose

The estimated number of active hunters and the number of moose harvested is presented in Table 6.18-1. Between 2013 and 2022, the number of active hunters in WMU 4 ranged from 716 to 1,000 and the total number of Moose harvested ranged from 74 to 165 annually. In WMU 16A, there were an estimated 286 to 423 active hunters who harvested 22 to 47 Moose annually between 2013 and 2022.

White-Tailed Deer

Over the period 2013 to 2022, there were fewer active White-tailed Deer hunters and fewer harvested in the region, compared to Moose harvesting. Details of the number of hunters and harvested White-tailed Deer are presented in Table 6.18-2. Between 2013 and 2022, the number of active hunters in WMU 4 ranged from 66 to 230 and the total number of deer harvested ranged from 0 to 14 annually. In WMU 16A, there were an estimated 0 to 21 active deer hunters who harvested 0 to 1 deer annually, between 2013 and 2022.

Black Bear

Ontario has a framework for managing the current Black Bear population, which is estimated to be between 85,000 and 105,000 bears (MNRF 2021b). BMAs are Crown land areas licensed to a tourist outfitter for providing Black Bear hunting opportunities to non-residents, which forms an important component of the management of Black Bears. The regulations consider wildlife management and its economic role and impact (MNRF 2021b). As shown in Figure 6.18-4 there are 24 BMAs that overlap with the PDA, LSA and RSA including alternative routings for the transmission line corridor. For assessment of the potential effects of the Project, including the preferred transmission line corridor, there are six BMAs that overlap the PDA and LSA.

In WMU 4, the number of active bear hunters ranged between 101 and 234 and the number of Black Bears harvested ranged between 7 and 83 annually, during the period of 2013 to 2022. In WMU 16A, during the same period, the number of bear hunters ranged between 30 to 81 and the number of Black Bears harvested ranged from 4 to 15 annually.

Table 6.18-3 presents details on past Black Bear hunting activities.

Small Game

Small game hunting is permitted for Ruffed and Spruce Grouse, Sharp-tailed Grouse, Ptarmigan, Double-crested Cormorant, Snowshoe Hare, Arctic and Red Fox, Opossum, Raccoon, Skunk and Weasel in WMU 3, 4, 16A and 16B (MNRF 2021c).

Falconry is also permitted in WMU 3, 4, 16A and 16B for hunting small game. Falconry involves the use of trained raptors (birds of prey, such as Red-tailed Hawk) to hunt small game.

6.18.2.3 Recreational Areas

Parks, conservation reserves and other protected areas play an important role in maintaining and conserving ecological integrity, cultural resources and sustainable outdoor recreation values. There are two conservation reserves within the RSA (Figure 6.18-5): the Gull-Christina Conservation Reserve, which is located 22.4 km southeast from the Project site, and the Brokenmouth River Conservation Reserve, which is located 41.8 km south from the Project site. The RSA encompasses Fawcett Lake, which has been identified as an Area of Natural and Scientific Interest (ANSI) candidate. Fawcett Lake is located 27 km east from the Project site. The eastern border of the RSA overlaps with the western boundary of the Pembina Lake Peatland Use ANSI, located approximately 85 km from the Project site.

Of the six seasonal cabins in the LSA, the five that occurred in the PDA have been or will be purchased by FMG prior to construction (Figure 6.18-6). These cabins are remote with no road access. There are no cabins along the mine access road or transmission line corridor. Access to the PDA and LSA is limited to forestry roads and the road to Slate Falls Nation. There are no campgrounds within the LSA and there is one designated camping sites within the RSA, located less than 45 km south of the Project.

6.18.2.4 Navigation

As per the *Canadian Navigable Waters Act* (RSC 1985, c. N-22), navigable water:

means a body of water, including a canal or any other body of water created or altered as a result of the construction of any work, that is used or where there is a reasonable likelihood that it will be used by vessels, in full or in part, for any part of the year as a means of transport or travel for commercial or recreational purposes, or as a means of transport or travel for Indigenous peoples of Canada exercising rights recognized and affirmed by section 35 of the Constitution Act, 1982, and

- a) there is public access, by land or by water;*
- b) there is no such public access but there are two or more riparian owners; or*
- c) Her Majesty in right of Canada or a province is the only riparian owner.*

None of the waterbodies in the mine site area PDA are listed as navigable waters within Schedule 1 of the *Canadian Navigable Waters Act*.

Based on historical research for cultural heritage in the LSA and the above definition, it was determined that navigation routes for watercraft exist including Springpole Lake, Birch Lake, and unnamed lakes L-1 and L-2, as shown in Figure 6.18-7, as well as larger watercourses such as the Birch River. A summary of potentially navigable water bodies is included in Table 6.18-4. Six portage routes between lakes are located in the LSA, with one located in the PDA that traverses the mine site (Springpole – Birch Lake travel route). These portages may be used for recreation and Traditional Land Use purposes and are known to be historically used by a trapline holder. Further details on the navigation routes and portages are provided in Appendix S-7.

6.18.2.5 Traditional Knowledge

As part of the Project, all eight Indigenous communities were contacted to participate in the EA process, and to provide Traditional Knowledge and Traditional Land Use (TK/TLU) information. To date, six Indigenous communities, Cat Lake First Nation, Lac Seul First Nation, Mishkeegogamang Ojibway Nation, Slate Falls Nation, Wabauskang First Nation and the Northwestern Ontario Métis Community, have provided Traditional Knowledge and Traditional Land Use information. Specific TK/TLU information relevant to outdoor recreation was not identified, however Indigenous recreational activities is described in Seciton 6.21 and 6.26.

6.18.3 Identification of Pathways to Potential Effects

As a first step in the assessment process, it is important to identify Project activities that may result in pathways to potential effects on outdoor recreation. These potential effects may be direct, indirect and/or positive effects, where applicable. Table 6.18-7 includes the potential interactions of the Project with outdoor recreation, prior to the application of the mitigation measures. The professional judgement of technical experts experienced with mining projects in Ontario and Canada as well as input from Indigenous communities, government agencies and the public informed the identification of those interactions that are likely to result in a pathway to a potential effect due to a measurable change on outdoor recreation. These pathways to potential effects are further described below for each phase of the Project, along with the rationale for those interactions excluded from further assessment. Section 6.18.4 and Table 6.18-8 provide a description of the mitigation measures applied to these pathways to potential effects during all phases of

the Project. The residual effects, after the application of the mitigation measures, are then described and further evaluated in Section 6.18.6, using the criteria and indicators identified in Section 6.18.1.4.

Construction Phase

The construction phase of the Project is expected to occur over a three-year period and will include preparation of the site and the construction of mine infrastructure. The following interactions with the Project result in pathways to potential effects on outdoor recreation as described below. After mitigation is applied to each pathway, as described in Table 6.18-8, the residual effects are assessed using the criteria identified for each pathway:

- Site preparation activities for the mine site, including clearing, grubbing and bulk earthworks, will interact with outdoor recreation.
 - These activities will result in pathways to potential effects on outdoor recreation due to:
 - The change in vegetation communities could lead to a change in the abundance of wildlife habitat in the LSA for species that are hunted recreationally;
 - The change in vegetation could lead to a change in viewscales that could affect the experience associated with the use of recreational areas;
 - The operation of Project equipment could create sensory disturbances to wildlife in the LSA, thereby affecting recreational hunting;
 - The operation of Project equipment could also create sensory disturbances for the experience associated with the use of recreational areas; and
 - A change in the existing portage routes crossing the PDA.
 - The assessment of potential effects on outdoor recreation includes changes in recreational hunting, changes in recreation areas and changes in navigation from these pathways.
- The construction of the mine access road and airstrip, including the development and operation of aggregate resources and the construction of the transmission line for the Project interacts with outdoor recreation.
 - These activities result in pathways to potential effects due to:
 - The change in vegetation communities could lead to a change in the abundance of wildlife habitat in the LSA for species that are hunted recreationally or viewed during the use of recreational areas;
 - The operation of Project equipment could create sensory disturbances to wildlife in the LSA, thereby affecting recreational hunting; and
 - The operation of Project equipment could also create sensory disturbances for the experience associated with the use of recreational areas.
 - The assessment of potential effects on outdoor recreation includes changes in recreational hunting and changes in the use of recreational areas from these pathways.
- The construction of the dikes and the controlled dewatering of the open pit basin interacts with outdoor recreation.
 - These activities result in pathways to potential effects due to:
 - The change in fish habitat and access to fishing areas within the mine site area that could affect recreational fishing;
 - The change in portage routes between Springpole and Birch Lakes within the north basin of Springpole Lake during operation, thereby affecting navigation;
 - The operation of the dewatering pumps may potentially result in the entrainment and impingement of fish, thereby affecting recreational fishing;



- The operation of Project equipment could create sensory disturbances to wildlife in the LSA, thereby affecting recreational hunting; and
- The operation of Project equipment could also create sensory disturbances for the experience associated with the use of recreational areas.
- o The assessment of potential effects on outdoor recreation includes changes in recreational fishing, changes in recreational hunting, changes in the use of recreational areas and change in navigation from these pathways.
- The construction of the starter embankment for the co-disposal facility (CDF), surficial soil stockpile and ore stockpile interacts with outdoor recreation.
 - o These activities result in pathways to potential effects due to the following:
 - The change in vegetation communities could lead to a change in the abundance of wildlife habitat in the LSA for species that are hunted recreationally.
 - The change in vegetation could lead to a change in viewsapes that could affect the experience associated with the use of recreational areas.
 - The operation of Project equipment could create sensory disturbances to wildlife in the LSA, thereby affecting recreational hunting.
 - The operation of Project equipment could also create sensory disturbances for the experience associated with the use of recreational areas.
 - o The assessment of potential effects on outdoor recreation includes changes in recreational hunting, and changes in the use of recreational areas from these pathways.
- The commissioning of the process plant interacts with outdoor recreation. This activity results in pathways to potential effects due to an increase in sensory disturbance that may affect wildlife in the LSA, thereby affecting recreational hunting, and may affect the experience associated with using recreational areas. The assessment of potential effects on outdoor recreation includes changes in recreational hunting and changes in the use of recreational areas from these pathways.
- Project employment and expenditures interacts with outdoor recreation. This activity results in a pathway to a potential effect due to a change in the workforce on site which may change demands on wildlife and fish resources due to recreational fishing and hunting. The assessment of potential effects on outdoor recreation includes changes in recreational fishing and changes in recreational hunting from this pathway.

All other interactions between the Project and the outdoor recreation VC during construction are not considered plausible and unlikely to have potential for effects.

Operations Phase

The operations phase is anticipated over a 10-year period. The following interactions with the Project result in pathways to potential effects on outdoor recreation as described below. After mitigation is applied to each pathway, as described in Table 6.18-8, the residual effects are assessed using the criteria identified for each pathway:

- The operation of the process plant interacts with outdoor recreation, and this activity results in a pathway to potential effects due to a change in sensory disturbance that may affect the experience associated with recreational fishing, the abundance of wildlife in the LSA used for recreational hunting, and the experience associated with the use of recreational areas. The assessment of potential effects on outdoor recreation includes changes in recreational hunting, changes in recreational fishing and changes in the use of recreational areas from this pathway.



- The operation of the open pit mine interacts with outdoor recreation.
 - o This activity results in pathways of potential effects on outdoor recreation due to:
 - A change in sensory disturbance from equipment operation that may affect the abundance of wildlife in the LSA used for recreational hunting, and the experience associated with recreational fishing, hunting and the use of recreational areas; and
 - A change in vibration levels from blasting activities that may affect the availability of fisheries resources in the LSA for recreational fishing.
 - o The assessment of potential effects on outdoor recreation includes changes in recreational fishing, changes in recreational hunting and changes in the use of recreational areas from these pathways.
- The operation of overburden stockpiles, CDF and ore stockpiles interacts with outdoor recreation.
 - o This activity results in pathways to potential effects due to:
 - A change in sensory disturbances from equipment operation and a change in viewscales that may affect the experience associated with recreational fishing, hunting and the use of recreational areas;
 - A change in viewscales from these components that may affect the experience associated with recreational fishing, hunting and the use of recreational areas; and
 - A change in sensory disturbances from equipment operation that may affect the abundance of wildlife in the LSA used for recreational hunting.
 - o The assessment of potential effects on outdoor recreation includes changes in recreational fishing, changes in recreational hunting and change in the use of recreation areas from these pathways.
- The operation of the water management and treatment facilities interacts with outdoor recreation. This activity results in pathways to potential effects on outdoor recreation due to a change in hydrology and the operation of the effluent treatment plant that may affect the availability of fisheries resources used for recreational fishing. The assessment of potential effects on outdoor recreation includes changes in recreational fishing from these pathways.
- The operation of mine site infrastructure, specifically the dikes, interacts with outdoor recreation and results in a pathway to potential effects due to a change in access to adjacent areas of Springpole Lake from the implementation of measures, such as floating booms to provide a safe distance for boaters and fishers from mine operations. The assessment of potential effects on outdoor recreation includes changes in recreational fishing and change in navigation from this pathway.
- Progressive reclamation activities within the PDA interact with outdoor recreation. Progressive reclamation results in pathways to potential effects on outdoor recreation due to revegetation activities that could change the habitat for wildlife species used for recreational hunting and could change the viewscales that may affect the experience associated with recreational fishing, hunting and the use of recreational areas. The assessment of potential effects on outdoor recreation includes changes in recreational fishing, changes in recreational hunting and change in the use of recreation areas from these pathways.
- Project employment and expenditures interacts with outdoor recreation and results in a pathway to potential effect due to the change in workforce on site which may increase demands on wildlife and fish resources due to recreational fishing and hunting. The assessment of potential effects on outdoor recreation includes changes in recreational fishing and changes in recreational hunting from this pathway.

All other interactions during operations between the Project and the outdoor recreation VC are not considered feasible and unlikely to have potential for effects.

Decommissioning and Closure Phase

Activities occurring during the active closure phase, which is expected to occur over a five-year period, are similar to those that occur during the construction phase, and use similar mining equipment but generally on a smaller scale. The following interactions with the Project result in pathways to potential effects on outdoor recreation as described below. After mitigation is applied to each pathway, as described in Table 6.18-8, the residual effects are assessed using the criteria identified for each pathway:

- Final reclamation activities include re-grading and revegetation of impacted areas, placement of cover in select areas, and the implementation of remaining habitat offsetting measures.
 - o These activities interact with outdoor recreation, and result in pathways to potential effects on outdoor recreation due to:
 - A change in sensory disturbances from the operation of equipment which may affect the experience associated with recreational fishing, hunting and the use of recreational areas;
 - The implementation of the remaining fish habitat offsetting measures which will increase the area of fish habitat and change the availability of fisheries resources used for recreational fishing;
 - Revegetation activities that may change the area of wildlife habitat and change the availability of wildlife species used for recreational hunting; and
 - Revegetation activities may also change the viewscape which may affect the experience associated with recreational fishing, hunting and the use of recreational areas.
 - o The assessment of potential effects on outdoor recreation includes changes in recreational fishing, changes in recreational hunting and changes in the use of recreational areas from these pathways.
- The filling of the open pit basin will include the transfer of supplemental water from the north basin of Springpole Lake in a controlled manner over a period of between three and five years, followed by reconnection to Springpole Lake once water quality is suitable.
 - o These activities interact with outdoor recreation and result in pathways to potential effects on the VC due to:
 - A change in the amount and access to fish habitat in the open pit basin which may affect recreational fishing; and
 - A change in water levels and change in access that may affect navigation.
 - o The assessment of potential effects on outdoor recreation includes changes in recreational fishing and changes in navigation from these pathways.

During decommissioning and closure, the removal of assets, demolition of remaining materials, and the disposal of demolition-related wastes is not expected to have an interaction with outdoor recreation and unlikely to have potential for effects.

6.18.4 Mitigation Measures

Measures to be implemented to avoid or minimize the effects of the Project on outdoor recreation or to enhance beneficial effects on outdoor recreation include the following:

- Implement the mitigation measures for potential effects on air quality (Section 6.2.4), including:



- During construction, operations and active closure, a dust management plan will be implemented to identify potential sources of fugitive dusts, outline mitigation measures that will be employed to control dust generation and detail the inspection and record keeping required to demonstrate that fugitive dusts are being effectively managed.
- Dust emissions from roads and mineral stockpiles will be controlled through the application of water spray and supplemented by dust suppressants, if required;
- Site roads will be maintained in good condition, with regular inspections and timely maintenance completed to minimize the silt loading on the roads; and,
- Vehicle speeds will be limited.
- Implement the mitigation measures for potential effects on noise (Section 6.3.4), including:
 - Building dimensions, layout and orientation will be designed to shield noise sources, where possible.
 - Acoustical enclosures will be used in the process plant to limit overall noise emissions from key noise sources, such as the ball mills.
 - Generator intakes and exhausts in the process plant will use silencers.
 - Motorized equipment will be selected or designed with mufflers / silencers to limit noise emissions during all phases of the Project.
 - Reversing alarms should be dimmable with white noise and/or strobe lights, but in accordance with the applicable health and safety regulations, during all phases of the Project.
 - The use of engine brakes will be prohibited.
 - Vehicles and equipment will be operated in such a way that impulsive noise is minimized, where possible, during all phases of the Project.
 - Regular inspections will take place to confirm that equipment and machinery used on site is operated in good working condition through regular maintenance.
 - For helicopter use during transmission line construction, minimum flight altitudes will be maintained unless the helicopters are engaged in construction tasks, landing or departure.
- Implement the mitigation measures for potential effects on surface water (Section 6.6.4), including.
 - During construction, operation and active closure, an erosion and sediment control (ESC) plan will be implemented to manage runoff water in disturbed areas.
 - During construction, operation and active closure, an integrated water management system will be designed to collect and control contact water.
 - Water collection ditches will be constructed and operated around the perimeter of infrastructure, including the CDF and stockpiles to collect overland flow and seepage and direct it to the integrated water management system.
 - Non-contact water will be diverted away from Project components using ditches, diversion berms and other suitable measures.
 - Collected contact water that is not recycled in ore processing will be treated at the ETP and discharged to the southeast arm of Springpole Lake in accordance with permitting requirements.
- Implement the mitigation measures for potential effects on fish and fish habitat (Section 6.10.4), including:
 - Relocate fish from the work area prior to undertaking in-water works for the construction of Project infrastructure.



- Undertake in-water construction activities outside of the fish spawning and egg incubation periods to reduce the potential for effect to fish.
- Implement the measures outlined in the Fish Habitat Offsetting and Compensation Plan (Appendix F).
- Prohibit fishing within the gated controlled access portion of the PDA by Project personnel while working or residing on-site, during construction, operation and closure phases.
- Prior to construction, develop a detailed blasting management plan for areas adjacent to fish habitat that meets DFO criteria or alternate values derived in consultation with DFO.
- Install screens or use other measures at water intakes to prevent entrainment or impingement of fish as per the *DFO Code of Practice* (DFO 2020).
- Implement the mitigation measures for potential effects on wildlife and wildlife habitat (Section 6.11.4), including:
 - Prohibit hunting within the gated controlled access portion of the PDA by Project personnel while working or residing on-site, during construction, operation and closure phases.
 - During construction, minimize the area cleared with heavy machinery for the mine access road, as practical, recognizing the need for clear sightlines for safety.
 - Minimize the removal of woody vegetation along the transmission line by limiting removal to hazard trees and only clearing for safe access and infrastructure needs.
 - During construction, operation and closure phases, enforce reduced speed limits along Project-controlled roads within high-quality wildlife habitats, particularly along segments with known or recurrent wildlife crossings;
 - During construction, operation and closure phases, Project-related vehicles travelling on the mine access road must come to a stop if wildlife is encountered and provide them with the right-of-way to cross the road; and
 - During construction, operation and closure phases, log (and report as needed) observed wildlife, sign / tracks and wildlife-vehicle collisions and alter mitigation measures as appropriate.
 - During construction, operation and closure phases, wildlife awareness training will be provided to Project employees.
 - During, domestic solid waste products and similar materials will be properly secured, stored, and disposed of at an offsite licensed facility, particularly anything that is an attractant for scavenging wildlife.
 - During operations, minimize vegetation management along the transmission line corridor to that necessary for safe operation.
 - During the closure of the Project, consider the incorporation of wildlife habitat features into the overall closure plan.
- Minimize the Project footprint (areal extent).
- During the construction, operations and closure phases, implement mitigation for lighting and changes to viewscales to minimize sensory disturbance, including:
 - To prevent a direct line-of-sight from light, maintain light sources below natural barriers such as tree lines or artificial barriers such as berms;
 - Minimize light spill and glare by through the use of shielding on stationary light sources and direct lighting downwards where practical; and
 - Preserve a tree line as a buffer to minimize the amount of the mine site that can be seen from recreational areas.

- Conduct progressive reclamation during operations and final reclamation during closure to promote the reestablishment of wildlife and aquatic habitat.
- Maintain alternate access to navigation routes that traverse the PDA during construction and operations phases, through the re-establishment of historic portage routes.
- Re-establish portage routes during the closure phase in a suitable location based on feedback from land and resource users.
- Place transmission line poles above the high-water mark when adjacent to waterbodies;
- Communicate Project activities affecting waterbodies/watercourse used for navigation throughout the construction, operation, and decommissioning/closure phases to potentially affected local resource users.
- Post signage around the PDA to alert local resource users of the presence of Project facilities and activities.

The application of mitigation measures for the pathways to potential effects is illustrated in Table 6.18-8. Mitigation measures described in this section are expected to be effective for their intended purposes, given their effective implementation at similar projects.

Ongoing communication with local resource users will be implemented to verify the accuracy of the predicted effects, assess the effectiveness of the implemented mitigation measures and may be further optimized throughout the life of the mine.

6.18.5 Analytical Method

The assessment of the potential effects on outdoor recreation was undertaken using evaluations of potential Project effects that considered the relative areas of recreational uses and the potential extent of Project effects. This relied on published information, an understanding of the Project activities, information from the assessment of other VCs and professional judgement.

Specifically, the proportions of WMUs and FMZs that could be affected by the Project were assessed by comparing their total areas with the portions affected by the Project.

The extent of sensory disturbances caused by the Project were assessed using the results from the effects assessment for noise and light. The visual effects assessment was conducted by comparing the existing views from selected vantage points with future views that incorporated planned Project features generated through computer simulations (Appendix U). In addition, the distance to seasonal cabins not owned by FMG was calculated.

Navigable waters effects were qualitatively assessed by determining navigable waters overprinted along known navigation routes, and by the number of known portages overprinted due to Project development.

6.18.5.1 Assumptions and the Use of the Conservative Approach

The presence of FMZs, WMUs and cabins in the study areas indicates hunting, fishing and recreational activities occur within the PDA, LSA and RSA. This is supported by the documented number of Moose, White-tailed deer and Black Bear harvested in the WMUs that overlap with the PDA, LSA and RSA. The assessment took a conservative approach by assuming those activities occur in the study areas even if primary or secondary research did not identify those activities in general or within site-specific areas.

The analysis of changes in recreational fishing is informed by the assessment of potential changes in fish habitat, and uses the assumptions outlined in Section 6.10.5.1. Similarly, the analysis of changes in

recreational hunting is informed by the assessment of potential changes in wildlife, and uses the assumptions described in Section 6.12.5.1, including the assumptions for sensory disturbances.

It is assumed that navigation occurs in the LSA and RSA using large waterbodies and navigation routes while undertaking recreational activities. Within the PDA, the historic travel or portage routes shown in Figure 6.18-7 are considered navigable.

6.18.6 Characterization of Potential Residual Effects

Potential residual effects of the Project on the outdoor recreation, after the application of mitigation, are assessed as discussed below.

6.18.6.1 Change in Recreational Fishing

During the construction phase, in order to isolate the mining area, two dikes will be constructed, and the mining area will be dewatered in a controlled manner. The open pit basin and location of the two dikes has been optimized to minimize the area of temporary disturbance, resulting in the temporary removal of fish habitat over 156 ha, or only 6 percent (%) of the total 2,861 ha surface area of Springpole Lake. The remaining 2,705 ha, or 94% of Springpole Lake will remain available for recreational fishing as it is under baseline conditions. This includes the maintenance of five deep water Lake Trout summer habitat areas throughout the lake including four large deep water lake trout summer habitat areas in the north basin. Recreational fishing in Birch Lake will be unaffected by the Project and will remain available as it is under baseline conditions. In addition, there are numerous lakes in the LSA and RSA that provide opportunities for recreational fishing.

At closure, fish habitat will be restored through the implementation of fish habitat offsetting measures as described in Appendix F and reconnection of the open pit to Springpole Lake during closure. The measures include overbuilding the dikes to integrate spawning shoals along the active lake-facing side to replace Lake Trout and Lake Whitefish spawning opportunities lost during construction. During operations, coarse wood structures will be placed along Springpole Lake shorelines that currently lacking structural diversity to support fish. Prior to closure, a new embayment will be constructed to the east of the open pit basin and will be functional at closure. During closure, the open pit basin including the north end and the Phase 1 pit will be contoured and enhanced with fish habitat structures, additional cover, suitable substrates and optimal depths to improve habitat suitability for key fish species. Further, the flows will be restored to unnamed lake L-1 to support use by fish at closure.

In addition, through coordination with the Ontario Ministry of Energy and Mines, the South Bay Mine, which is located approximately 45 km southwest of the Project, will be rehabilitated and three lakes (Boomerang, Mud and Amanda Lake, with a total area of 87 hectares [ha]) will be restored to support local fish populations again. Also, a Lake Sturgeon study will be conducted to investigate the feasibility of reinstating or augmenting Lake Sturgeon populations in the Birch River and Cat River system.

Project-related noise and the change in viewscales within the LSA may cause some anglers to avoid areas adjacent to the mine site area during operations. Project-related noise will include, for example, noise from construction and excavation equipment, production equipment, large water management pumps, vehicle traffic, and blasting as described in Section 6.3. The CDF will be visible from surrounding viewpoints during construction, operations and closure, however a tree line will be retained as a buffer between the CDF and viewpoints as practical, to diminish the amount of the mine site that can be seen. The landscape rating is low and typical of the surrounding environment. The area has high scenic value but low viewer sensitivity due to the low number of viewers that are present for brief periods of time. The visibility of the CDF following

completion of closure activities will not change and will not degrade the visual aesthetics in the LSA as described in Appendix U. However, at closure, sensory disturbance will be reduced and eventually cease for recreational fishing.

The potential for increased pressure on fisheries within the PDA will be mitigated by prohibiting fishing by Project personnel (employees and contractors) within the controlled access portion of the PDA. With the acquisition of a number of local outfitters fishing pressure is expected to decrease compared to baseline, which will benefit traditional land users. The mine site is remote and employees will be transported to site by bus or aircraft in some cases, where they will be provided accommodations until the end of their work cycle. Employees will not have access to transportation to travel off site to fish in other areas.

With the implementation of mitigation measures for noise, viewsapes, surface water and fish habitat, along with the minimal Project footprint, reclamation measures during operations and closure phases, and the prohibition of fishing within the controlled access portion of the PDA, there will be no residual effects on recreational fishing.

6.18.6.2 Change in Recreational Hunting

During construction of the Project, there will be a localized reduction of wildlife habitat due to activities in the PDA, and there will be indirect alterations to wildlife habitat in the areas adjacent to the mine in the LSA during operations due to sensory disturbances, as described in Section 6.12. Project-related noise as described in Section 6.3 and mining activities may also cause some hunters to avoid areas close to the mine site of the PDA. However, there are numerous hunting areas within the LSA and RSA, and the Project only overprints 1,733 ha, or 3.3% of the 51,943 ha of available hunting area in the LSA and 0.33% of the 524,387 ha of available hunting area in the RSA. Potential increases in recreational hunting by Project personnel (employees and contractors) will be mitigated by prohibiting hunting while on site within the controlled access portion of the PDA. The mine site is remote and employees will be transported to site by bus, where they will be provided with accommodation until the end of their work cycle. Employees will not have access to transportation to travel off site to hunt in other areas. At closure, sensory disturbances will be reduced and eventually cease, thereby removing the sensory disturbances to wildlife that are recreationally hunted.

With the implementation of mitigation measures for noise, viewsapes and wildlife habitat, along with the minimal Project footprint, reclamation measures during operations and closure phases, and the prohibition of hunting within the controlled access portion of the PDA, there will be no residual effects on recreational hunting.

6.18.6.3 Change in Recreational Areas

The construction and operations of the Project could affect recreational areas for recreational land and resources users.

The closest Project component to the recreational areas is the proposed transmission line and is located 2.8 km from the Gull-Christina Conservation Reserve, 16 km from the Brokenmouth River Conservation Reserve, 14 km from the Fawcett Lake ANSI, 10.8 km from the Pembina Lake Peatland Use ANSI, 9.3 km from the closest cabin and 9.1 km from the designated camping site. Although these recreational areas are within the RSA, they are well away from the PDA, and therefore direct changes in aquatic and terrestrial habitat (as described in Section 6.10 and Section 6.11) will not affect these areas. In addition, it is not anticipated that direct changes in aquatic and terrestrial habitat from the Project will affect access to these remote recreational areas, as there is no existing road connecting to these areas.

Based on the modelling results for noise, dust and the visual assessment, there is low potential for sensory disturbances to land users in these recreational areas. The Gull – Christina Conservation Reserve is the closest recreational area to the transmission line, which is less than 3 km away. The construction phase of the transmission line will have the greatest sensory disturbance of all phases but will be limited in geographic area and duration. Based on the modelling results for noise and air emissions, these recreational areas will be outside the extent of predicted effects. The predicted sound levels at the western boundary of the reserve will be less than 40 A-weighted decibels (dBA), and the modelled air emissions are not predicted to exceed Ambient Air Quality Criteria at the closest point of reception (POR 42). The transmission line would not be within visual range of this reserve due to the distance and the maintenance of existing vegetation.

With the implementation of mitigation measures for sensory disturbances for noise, dust and viewscales during construction and operations phase, reclamation to improve fish and wildlife habitat, and the reduction and eventual cessation of sensory disturbances at closure, there will be no residual effect on recreational areas.

6.18.6.4 Change in Navigation

The construction and operation of the Project will isolate the mining area with the construction of the dikes that will remove approximately 156 ha or 6% of the navigable water surface area of Springpole Lake during construction and operations and require mitigation with the relocation of the existing portage route between Springpole Lake and Birch Lake also during construction and operation phases. An alternate portage route has been identified for the construction and operations phases of the Project through consultation with the local trapline holder that uses the current portage route. The new portage is planned to be on the west side of the north basin of Springpole Lake (Figure 6.18-7). During closure, the open pit basin will be refilled with water in a controlled manner within three to five years and a connection with the north basin of Springpole Lake will be re-established. This would allow the previous navigation and portage route to be re-opened using the same or similar area as prior to the construction of the Project.

All other waterbodies identified in Table 6.18-4, including L-1 and L-2, are generally isolated with no public access as the area surrounding the waterbodies is on leased lands held by FMG. The connecting channels to the waterbodies, including those identified in Table 6.18-4, are not navigable and primarily activated by precipitation events. Further, there is no known current commercial, recreational or Indigenous use of these waterbodies and connecting channels for navigation.

With the implementation of mitigation measures for surface water, along with the minimal Project footprint, the maintenance of alternate access to portages and the re-establishment of portage routes at closure, if applicable, there will be no residual effect on navigation.

6.18.7 Significance of Residual Effects

With the proposed design and mitigation measures, residual effects on outdoor recreation are not predicted and therefore a determination of significance is not required.

6.18.8 Confidence Prediction

While it is conservatively assumed that these activities are occurring throughout the study area, the prediction confidence is high based on input received during the review of the draft EIS/EA.

6.18.9 References

- Ministry of Natural Resources and Forestry (MNR). 2009. Cervid Ecological Framework. Retrieved April 5, 2021, from Ministry of Natural Resources and Forestry: <https://www.ontario.ca/page/cervid-ecological-framework>.
- Ministry of Natural Resources and Forestry (MNR). 2021a. Black Bear Hunting Activity and Harvests. Retrieved January 7, 2024 from Ministry of Natural Resources and Forestry: <https://data.ontario.ca/dataset/black-bear-hunting-activity-and-harvests>.
- Ministry of Natural Resources and Forestry (MNR). 2021b. Black Bear Management Framework. Retrieved April 5, 2021, from Ministry of Natural Resources and Forestry: <https://www.ontario.ca/page/black-bear-management-framework>.
- Ministry of Natural Resources and Forestry (MNR). 2021c. 2021 Hunting Regulations Summary. Retrieved April 5, 2021, from Ministry of Natural Resources and Forestry: <https://files.ontario.ca/books/mnrf-2021-hunting-regulations-summary-en-2021-04-01-v2.pdf>.
- Ministry of Natural Resources and Forestry (MNR). 2021d. Fisheries Management Zones. Retrieved April 5, 2021, from Ministry of Natural Resources and Forestry: <https://www.ontario.ca/page/fisheries-management-zones>.
- Ministry of Natural Resources and Forestry (MNR). 2021e. Moose Hunting Activity and Harvests. Retrieved January 7, 2024, from Ministry of Natural Resources and Forestry: <https://data.ontario.ca/dataset/moose-hunting-activity-and-harvests>.
- Ministry of Natural Resources and Forestry (MNR). 2021f. Ontario Fishing Regulations Summary. Retrieved April 5, 2021, from Ministry of Natural Resources and Forestry: <https://www.ontario.ca/document/ontario-fishing-regulations-summary>.
- Ministry of Natural Resources and Forestry (MNR). 2021g. White-Tailed Deer Hunting Activity and Harvests. Retrieved January 7, 2024, from Ministry of Natural Resources and Forestry: <https://data.ontario.ca/dataset/white-tailed-deer-hunting-activity-and-harvest>.
- Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNR). 2019. Inland Lakes Designated for Lake Trout Management. December 10, 2019. Retrieved from Ministry of Northern Development, Mines, Natural Resources and Forestry: <https://www.ontario.ca/page/inland-lakes-designated-lake-trout-management>.



Table 6.18-1: Moose Hunting Activity and Harvest in WMU 3, 4, 16A and 16B

Wildlife Management Unit	Year	Estimated Active Hunters	Estimated Bull harvest	Estimated Cow harvest	Estimated Calf harvest	Total
3	2013	1,300	66	65	59	190
	2014	1,169	60	43	38	141
	2015	1,084	50	32	6	88
	2016	1,082	60	42	10	112
	2017	1,072	42	44	19	105
	2018	1,114	39	28	12	79
	2019	1,095	72	50	7	129
	2020	1,123	62	39	2	103
	2021	881	67	43	16	126
	2022	789	47	46	13	106
4	2013	990	88	47	30	165
	2014	946	59	45	39	143
	2015	840	37	33	6	76
	2016	806	56	39	19	114
	2017	881	53	43	3	99
	2018	954	23	48	3	74
	2019	878	51	45	9	105
	2020	1,000	55	45	0	100
	2021	716	66	47	16	129
	2022	721	63	37	15	115
16A	2013	292	33	5	4	42
	2014	400	20	13	14	47
	2015	422	29	5	0	34
	2016	423	29	4	0	33
	2017	393	16	6	0	22
	2018	361	27	7	0	34
	2019	403	21	13	1	35
	2020	324	32	2	0	34
	2021	309	32	7	0	39
	2022	286	30	9	0	39
16B	2013	408	25	8	0	33
	2014	406	13	12	8	33
	2015	430	43	14	3	60
	2016	497	34	7	0	41
	2017	561	35	15	2	52
	2018	567	41	7	3	51
	2019	668	52	23	0	75
	2020	769	43	20	1	64
	2021	697	41	14	3	58
	2022	585	30	15	3	48

Source:
MNRF 2021e.



Table 6.18-2: White-tailed Deer Hunting Activity and Harvest in WMU 3, 4, 16A and 16B

Wildlife Management Unit	Year	No. Active Hunters	Estimated Antler Harvest	Estimated Antlerless Harvest	Estimated Total Harvest by Residents
3	2013	386	38	25	63
	2014	244	19	0	19
	2015	214	4	6	10
	2016	345	5	3	8
	2017	335	13	6	19
	2018	305	2	0	2
	2019	165	13	0	13
	2020	166	10	5	15
	2021	151	10	7	17
	2022	111	9	6	15
4	2013	145	3	6	9
	2014	209	2	0	2
	2015	188	3	2	5
	2016	230	0	3	3
	2017	68	0	2	2
	2018	121	0	0	0
	2019	71	8	0	8
	2020	72	13	1	14
	2021	66	7	2	9
	2022	69	2	2	4
16A	2013	18	0	0	0
	2014	0	0	0	0
	2015	20	0	0	0
	2016	18	0	0	0
	2017	3	0	0	0
	2018	18	0	0	0
	2019	16	1	0	1
	2020	21	1	0	1
	2021	16	0	0	0
	2022	11	0	0	0
16B	2013	22	4	0	4
	2014	0	0	0	0
	2015	7	0	0	0
	2016	11	0	0	0
	2017	37	0	0	0
	2018	37	0	0	0
	2019	12	1	0	1
	2020	21	1	0	1
	2021	16	0	0	0
	2022	11	1	0	1

Source:
MNR 2021g.



Table 6.18-3: Black Bear Hunting Activity and Harvest in WMU 3, 4, 16A and 16B

Wildlife Management Unit	Year	Black Bear Hunters	Black Bears Harvested
3	2013	179	70
	2014	175	82
	2015	184	64
	2016	234	76
	2017	208	83
	2018	190	62
	2019	198	76
	2020	132	22
	2021	137	44
	2022	191	49
4	2013	179	70
	2014	175	82
	2015	184	64
	2016	234	76
	2017	208	83
	2018	190	62
	2019	198	76
	2020	132	22
	2021	101	7
	2022	192	53
16A	2013	30	4
	2014	39	7
	2015	42	9
	2016	80	13
	2017	67	15
	2018	81	7
	2019	77	12
	2020	55	5
	2021	62	4
	2022	57	16
16B	2012	102	39
	2013	98	41
	2014	96	37
	2015	123	46
	2016	164	65
	2017	175	64
	2018	181	50
	2019	193	51
	2020	155	13
	2021	179	10
2022	162	17	

Source:
MRNF 2021a.



Table 6.18-4: Potentially Navigable Waterbodies Associated with the Springpole Gold Project

Lakes and Ponds	Streams
L-1	L-5-out
L-2	L-6-out
L-3	S-16
L-4	S-17
L-5	S-18
L-6	S-19
L-16	S-21
L-17	S-22
L-18	S-23
L-19	
L-20	
Springpole Lake	
Birch Lake	



Table 6.18-5: Outdoor Recreation Criteria, Indicators and Rationale

Criteria	Indicator	Rationale
Change in recreational fishing	<ul style="list-style-type: none"> • Area of fish habitat lost / altered • Change in the availability of the resource • Area affected by sensory disturbances • Change in viewscales • Access to areas of recreational fishing 	<ul style="list-style-type: none"> • Recreational fishing is possible in the area that could be affected as a result of Project activities.
Change in recreational hunting	<ul style="list-style-type: none"> • Area of wildlife habitat lost / altered • Change in the availability of the resource • Area affected by sensory disturbances • Change in viewscales 	<ul style="list-style-type: none"> • Recreational hunting is possible in the area that could be affected as a result of Project activities.
Change in recreation areas	<ul style="list-style-type: none"> • Area of land or water with altered access to recreational areas • Area affected by sensory disturbances • Change in viewscales 	<ul style="list-style-type: none"> • Recreation areas could exist in the area that could be affected as a result of Project activities.
Change in navigation	<ul style="list-style-type: none"> • Length of navigation routes removed • Number of portage routes removed • Area of navigable waters removed 	<ul style="list-style-type: none"> • Springpole and Birch Lake are large bodies of navigable water in proximity to the Project, and portage routes in the Project area could be affected as a result of Project activities.



Table 6.18-6: Significance Determination Attributes and Rankings for Outdoor Recreation

Attribute	Description	Category
Magnitude	A qualitative or quantitative measure to describe the size or degree of the residual effects relative to baseline conditions	<p>Level I: Residual effects may be noticeable and/or measurable but are manageable within the capacity available.</p> <p>Level II: Residual effects are noticeable and/or measurable and represent a moderate change relative to capacity available.</p> <p>Level III: Residual effects are noticeable and/or measurable and represent a major change relative to capacity available.</p>
Geographic extent	The spatial extent over which the residual effect will take place	<p>Level I: Effect is restricted to the LSA.</p> <p>Level II: Effect extends beyond the LSA.</p> <p>Level III: Effect extends beyond the RSA.</p>
Duration	The time period over which the residual effect will or is expected to occur	<p>Level I: Effect occurs over the short term: less than or equal to 3 years.</p> <p>Level II: Effect occurs over the medium term: more than 3 years but less than 20 years.</p> <p>Level III: Effect occurs over the long term: greater than 20 years.</p>
Frequency	The rate of occurrence of the residual effect	<p>Level I: Effect occurs once, infrequently or not at all.</p> <p>Level II: Effect occurs intermittently or with a certain degree of regularity.</p> <p>Level III: Effect occurs frequently or continuously.</p>
Reversibility	The extent to which the residual effect can be reversed	<p>Level I: Effect is fully reversible.</p> <p>Level II: Effect is partially reversible or potentially reversible with difficulty.</p> <p>Level III: Effect is not reversible.</p>



Table 6.18-7: Potential Interactions of Project Components with Outdoor Recreation

Project Component / Activity	Outdoor Recreation
Construction Phase	
Site preparation activities including clearing, grubbing and bulk earthworks	Yes
Construction of the mine site access road and airstrip, including the development and operation of aggregate resource areas	Yes
Development of temporary construction camp and staging areas	-
Construction of the fish habitat development area	-
Construction of the transmission line to the Project site	Yes
Construction of the onsite haul and access roads	-
Construction of the dikes in the north basin of Springpole Lake	Yes
Construction of buildings and onsite infrastructure	-
Construction of the central water storage pond	-
Controlled dewatering of the open pit basin	Yes
Construction of the starter embankments for the CDF	Yes
Stripping of lake bed sediment and overburden at the open pit	-
Development of the surficial soil stockpile	Yes
Initiation of pit development in rock	-
Initiation of stockpiling of ore	Yes
Establishment and operation of water and waste, management and treatment facilities	-
Commissioning of the process plant	Yes
Employment and Expenditures	Yes
Operations Phase	
Operation of the process plant	Yes
Operation of open pit mine	Yes
Management of overburden, mine rock, tailings and ore in designated facilities	Yes
Operation of water and waste, management and treatment facilities	Yes
Accommodations complex operations	-
Operation and maintenance of mine site infrastructure	Yes
Progressive reclamation activities	Yes
Employment and Expenditures	Yes
Decommissioning and Closure Phase	
Removal of assets that can be salvaged	-
Demolition and recycling and/or disposal of remaining materials	-
Removal and disposal of demolition-related wastes in approved facilities	-
Reclamation of impacted areas, such as by re-grading, placement of cover, and revegetation	Yes
Filling of the open pit basin with water	Yes
Monitoring and maintenance	-
Employment and Expenditures	-

Note:

- = The interaction is not expected, and no further assessment is warranted.



Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
Change in recreational fishing	•	•	•	Implement the mitigation measures for potential effects on noise (Section 6.3.4), including: <ul style="list-style-type: none"> • Building dimensions, layout and orientation will be designed to shield noise sources, where possible. • Acoustical enclosures will be used in the process plant to limit overall noise emissions from key noise sources, such as the ball mills. • Generator intakes and exhausts in the process plant will use silencers. • Motorized equipment will be selected or designed with mufflers / silencers to limit noise emissions during all phases of the Project • Reversing alarms should be dimmable with white noise and/or strobe lights, but in accordance with the applicable health and safety regulations, during all phases of the Project • The use of engine brakes will be prohibited. • Vehicles and equipment will be operated in such a way that impulsive noise is minimized, where possible, during all phases of the Project • Regular inspections will take place to confirm that equipment and machinery used on site is operated in good working condition through regular maintenance. • For helicopter use during transmission line construction, minimum flight altitudes will be maintained unless the helicopters are engaged in construction tasks, landing or departure.
	•	•	•	Implement the mitigation measures for the potential effects on surface water (Section 6.6.4, Section 6.7.4 and 6.8.4), including: <ul style="list-style-type: none"> • During construction, operation and active closure, an erosion and sediment control (ESC) plan will be implemented to manage runoff water in disturbed areas. • During construction, operation and active closure, an integrated water management system will be designed to collect and control contact water. • Water collection ditches will be constructed and operated around the perimeter of infrastructure, including the CDF and stockpiles to collect overland flow and seepage and direct it to the integrated water management system. • Non-contact water will be diverted away from Project components using ditches, diversion berms and other suitable measures.



Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
				<ul style="list-style-type: none"> Collected contact water that is not recycled in ore processing will be treated at the ETP and discharged to the southeast arm of Springpole Lake in accordance with permitting requirements.
	•	•	•	Implement the mitigation measures for potential effects on fish and fish habitat (Section 6.10.4), including: <ul style="list-style-type: none"> Relocate fish from the work area prior to undertaking in-water works for the construction of Project infrastructure. Undertake in-water construction activities outside of the fish spawning and egg incubation periods to reduce the potential for effect to fish. Implement the measures outlined in the Fish Habitat Offsetting and Compensation Plan (Appendix F). Prohibit fishing within the gated controlled access portion of the PDA by Project personnel while working or residing on-site, during construction, operation and closure phases. Prior to construction, develop a detailed blasting management plan for areas adjacent to fish habitat that meets DFO criteria or alternate values derived in consultation with DFO. Install screens or use other measures at water intakes to prevent entrainment or impingement of fish as per the DFO <i>Code of Practice</i> (DFO 2020).
	•	–	–	Minimize the Project footprint (areal extent).
	–	•	•	Conduct progressive reclamation during operations and final reclamation during closure to promote the reestablishment of wildlife and aquatic habitat.
Change in recreational hunting	•	•	•	Implement the mitigation measures for potential effects on noise (Section 6.3.4), including: <ul style="list-style-type: none"> Building dimensions, layout and orientation will be designed to shield noise sources, where possible. Acoustical enclosures will be used in the process plant to limit overall noise emissions from key noise sources, such as the ball mills. Generator intakes and exhausts in the process plant will use silencers. Motorized equipment will be selected or designed with mufflers / silencers to limit noise emissions during all phases of the Project Reversing alarms should be dimmable with white noise and/or strobe lights, but in accordance with the applicable health and safety regulations, during all phases of the Project



Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
				<ul style="list-style-type: none"> • The use of engine brakes will be prohibited. • Vehicles and equipment will be operated in such a way that impulsive noise is minimized, where possible, during all phases of the Project • Regular inspections will take place to confirm that equipment and machinery used on site is operated in good working condition through regular maintenance. • For helicopter use during transmission line construction, minimum flight altitudes will be maintained unless the helicopters are engaged in construction tasks, landing or departure.
	•	•	•	<p>Implement the mitigation measures for potential effects on wildlife and wildlife habitat (Section 6.11.4), including:</p> <ul style="list-style-type: none"> • Prohibit hunting within the gated controlled access portion of the PDA by Project personnel while working or residing on-site, during construction, operation and closure phases. • During construction, minimize the area cleared with heavy machinery for the mine access road, as practical, recognizing the need for clear sightlines for safety. • Minimize the removal of woody vegetation along the transmission line by limiting removal to hazard trees and only clearing for safe access and infrastructure needs. • During construction, operation and closure phases, enforce reduced speed limits along Project-controlled roads within high-quality wildlife habitats, particularly along segments with known or recurrent wildlife crossings; • During construction, operation and closure phases, Project-related vehicles travelling on the mine access road must come to a stop if wildlife is encountered and provide them with the right-of-way to cross the road; and • During construction, operation and closure phases, log (and report as needed) observed wildlife, sign / tracks and wildlife-vehicle collisions and alter mitigation measures as appropriate. • During construction, operation and closure phases, wildlife awareness training will be provided to Project employees. • During, domestic solid waste products and similar materials will be properly secured, stored, and disposed of at an offsite licensed facility, particularly anything that is an attractant for scavenging wildlife. • During operations, minimize vegetation management along the transmission line corridor to that necessary for safe operation.

Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
				<ul style="list-style-type: none"> During the closure of the Project, consider the incorporation of wildlife habitat features into the overall closure plan.
	•	•	•	Implement the mitigation measures for potential effects on wildlife and wildlife habitat (Section 6.12.4), including: <ul style="list-style-type: none"> Prohibit hunting within the gated controlled access portion of the PDA by Project personnel while working or residing on-site, during construction, operation and closure phases. During construction, minimize the area cleared with heavy machinery for the mine access road, as practical, recognizing the need for clear sightlines for safety. Minimize the removal of woody vegetation along the transmission line by limiting removal to hazard trees and only clearing for safe access and infrastructure needs. During construction, operation and closure phases, enforce reduced speed limits along Project-controlled roads within high-quality wildlife habitats, particularly along segments with known or recurrent wildlife crossings; During construction, operation and closure phases, Project-related vehicles travelling on the mine access road must come to a stop if wildlife is encountered and provide them with the right-of-way to cross the road; and During construction, operation and closure phases, log (and report as needed) observed wildlife, sign / tracks and wildlife-vehicle collisions and alter mitigation measures as appropriate. During construction, operation and closure phases, wildlife awareness training will be provided to Project employees. During, domestic solid waste products and similar materials will be properly secured, stored, and disposed of at an offsite licensed facility, particularly anything that is an attractant for scavenging wildlife. During operations, minimize vegetation management along the transmission line corridor to that necessary for safe operation. During the closure of the Project, consider the incorporation of wildlife habitat features into the overall closure plan.
	•	–	–	Minimize the Project footprint (areal extent).
	–	•	•	Conduct progressive reclamation during operations and final reclamation during closure to promote the reestablishment of wildlife and aquatic habitat.



Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
	•	•	•	Prohibit hunting within the controlled access portion of the PDA by Project personnel while working or residing on site.
Change in recreational areas	•	•	•	Implement the mitigation measures for potential effects on air quality (Section 6.2.4), including: <ul style="list-style-type: none"> • During construction, operations and active closure, a dust management plan will be implemented to identify potential sources of fugitive dusts, outline mitigation measures that will be employed to control dust generation and detail the inspection and record keeping required to demonstrate that fugitive dusts are being effectively managed. • Dust emissions from roads and mineral stockpiles will be controlled through the application of water spray and supplemented by dust suppressants, if required; • Site roads will be maintained in good condition, with regular inspections and timely maintenance completed to minimize the silt loading on the roads; and, • Vehicle speeds will be limited.
	•	•	•	Implement the mitigation measures for potential effects on noise (Section 6.3.4), including: <ul style="list-style-type: none"> • Building dimensions, layout and orientation will be designed to shield noise sources, where possible. • Acoustical enclosures will be used in the process plant to limit overall noise emissions from key noise sources, such as the ball mills. • Generator intakes and exhausts in the process plant will use silencers. • Motorized equipment will be selected or designed with mufflers / silencers to limit noise emissions during all phases of the Project • Reversing alarms should be dimmable with white noise and/or strobe lights, but in accordance with the applicable health and safety regulations, during all phases of the Project • The use of engine brakes will be prohibited. • Vehicles and equipment will be operated in such a way that impulsive noise is minimized, where possible, during all phases of the Project • Regular inspections will take place to confirm that equipment and machinery used on site is operated in good working condition through regular maintenance. • For helicopter use during transmission line construction, minimum flight altitudes will be maintained unless the helicopters are engaged in construction tasks, landing or departure.



Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

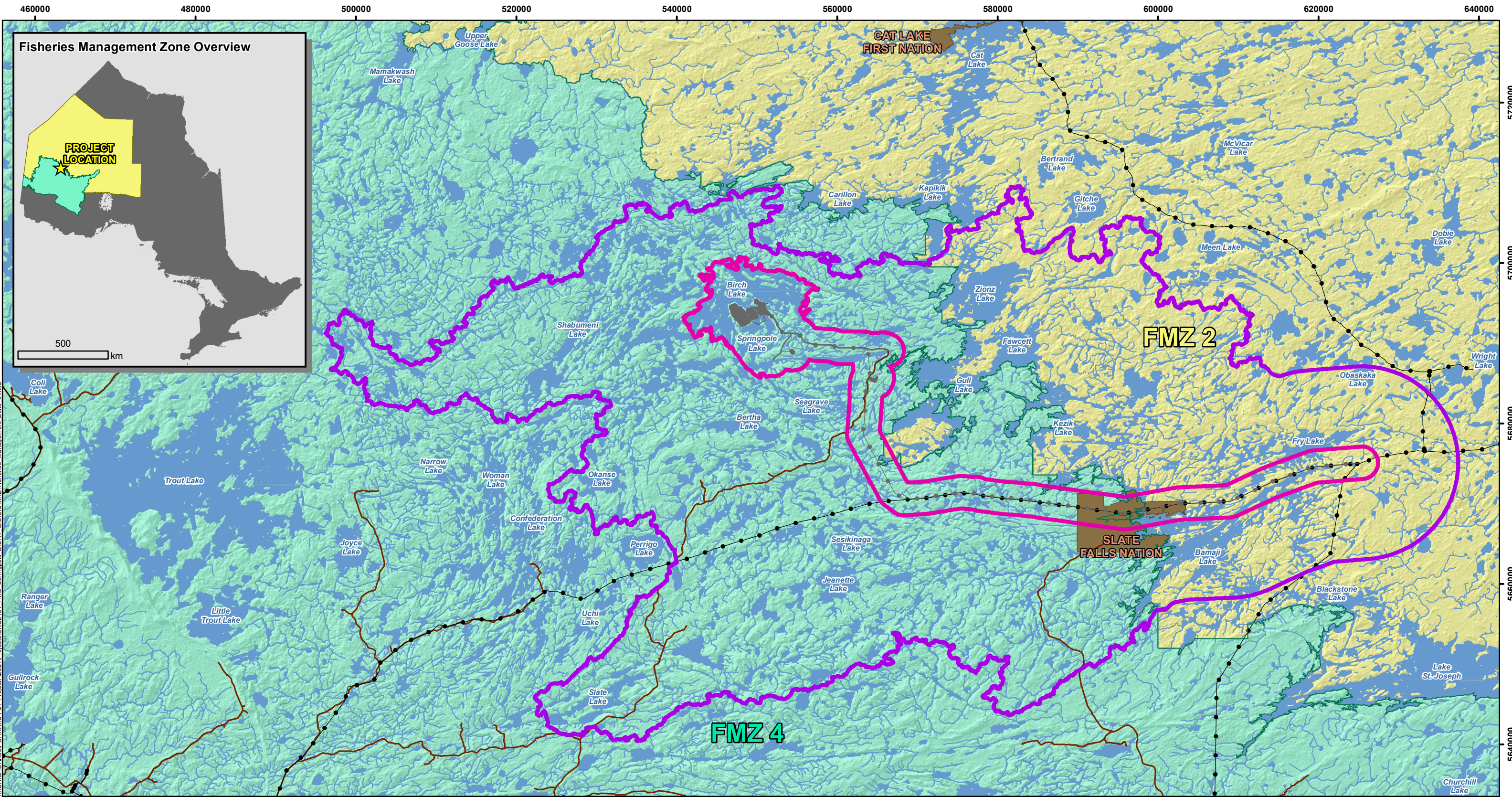
Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
	•	•	•	Implement the mitigation measures for the potential effects on surface water (Section 6.6.4, Section 6.7.4 and 6.8.4), including: <ul style="list-style-type: none"> • During construction, operation and active closure, an erosion and sediment control (ESC) plan will be implemented to manage runoff water in disturbed areas. • During construction, operation and active closure, an integrated water management system will be designed to collect and control contact water. • Water collection ditches will be constructed and operated around the perimeter of infrastructure, including the CDF and stockpiles to collect overland flow and seepage and direct it to the integrated water management system. • Non-contact water will be diverted away from Project components using ditches, diversion berms and other suitable measures. • Collected contact water that is not recycled in ore processing will be treated at the ETP and discharged to the southeast arm of Springpole Lake in accordance with permitting requirements.
	•	–	–	Minimize the Project footprint (areal extent).
	•	•	•	Implement mitigation for lighting and changes to viewscales to minimize sensory disturbance, including: <ul style="list-style-type: none"> • To prevent a direct line-of-sight from light, maintain light sources below natural barriers such as tree lines or artificial barriers such as berms; • Minimize light spill and glare by through the use of shielding on stationary light sources and direct lighting downwards where practical; • Preserve a tree line as a buffer to minimize the amount of the mine site that can be seen from recreational areas.

Table 6.18-8: Proposed Mitigation Measures for Potential Outdoor Recreation Effects

Pathways to Potential Effect / Criteria	Phase			Proposed Mitigation Measure
	Con.	Op.	Cl.	
Change in navigation	•	•	•	Implement the mitigation measures for the potential effects on surface water (Section 6.6.4, Section 6.7.4 and 6.8.4), including: <ul style="list-style-type: none"> • During construction, operation and active closure, an erosion and sediment control (ESC) plan will be implemented to manage runoff water in disturbed areas. • During construction, operation and active closure, an integrated water management system will be designed to collect and control contact water. • Water collection ditches will be constructed and operated around the perimeter of infrastructure, including the CDF and stockpiles to collect overland flow and seepage and direct it to the integrated water management system. • Non-contact water will be diverted away from Project components using ditches, diversion berms and other suitable measures. • Collected contact water that is not recycled in ore processing will be treated at the ETP and discharged to the southeast arm of Springpole Lake in accordance with permitting requirements.
	•	–	–	Minimize the Project footprint (areal extent).
	•	•	–	Maintain alternate access to navigation routes that traverse the PDA during construction and operations phases, through the re-establishment of historic portage routes.
	–	–	•	Re-establish portage routes during the closure phase in a suitable location based on feedback from land and resource users.
	•	–	–	Place transmission line poles above the high water mark when adjacent to waterbodies.
	•	•	•	Communicate Project activities affecting waterbodies/watercourse used for navigation throughout the construction, operation, and decommissioning/closure phases to potentially affected local resource users.
	•	•	•	Post signage around the PDA to alert local resource users of the presence of Project facilities and activities.

Note:

Con. = construction; Op. = operations; Cl. = closure; • = mitigation is applicable; – = mitigation is not applicable.



LEGEND

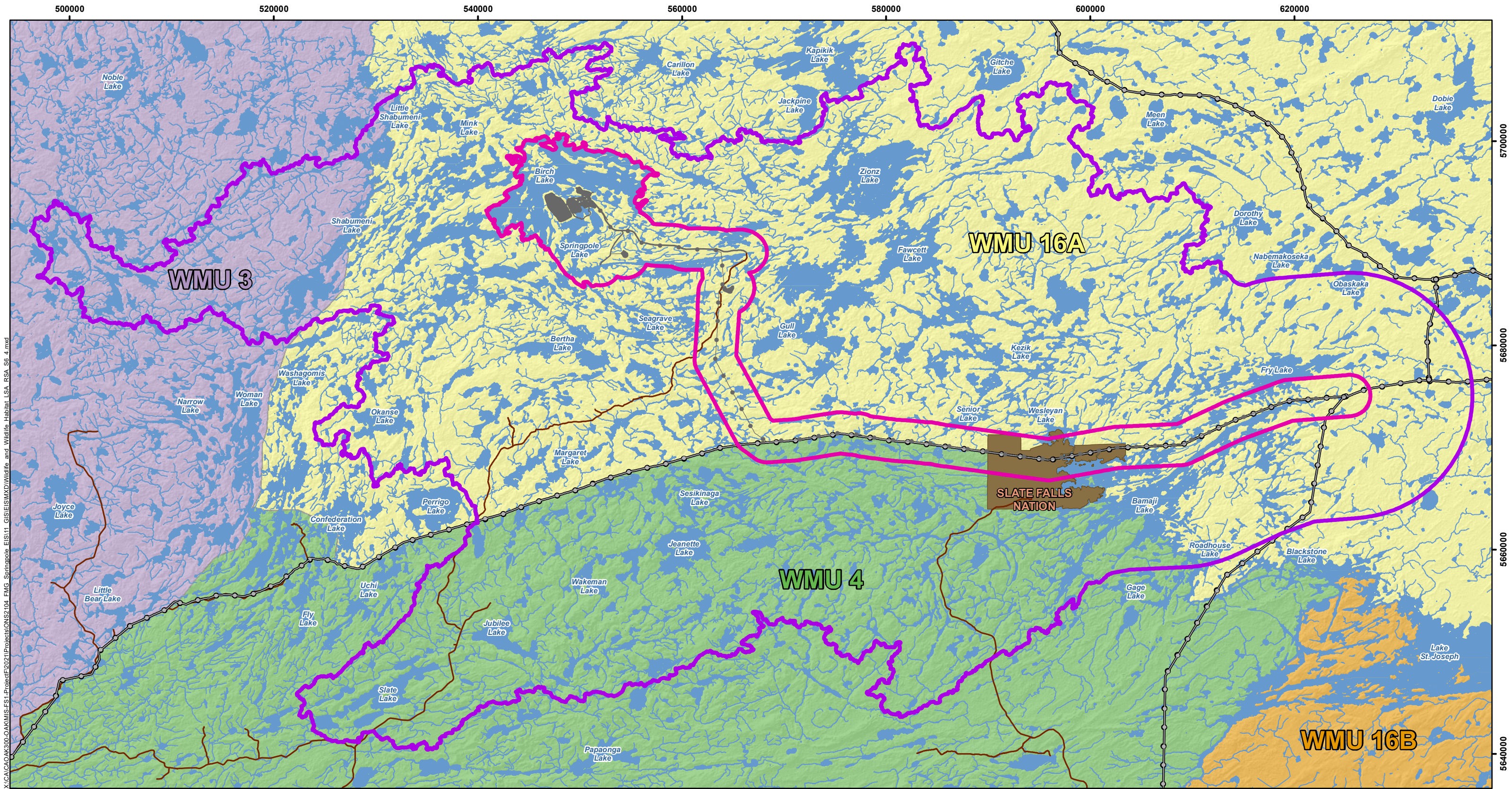
- Proposed Mine Feature
- Local Study Area for Outdoor Recreation
- Regional Study Area for Outdoor Recreation
- First Nation Reserve
- Existing Road
- Existing Transmission Line
- Watercourse
- Waterbody
- Fisheries Management Zone (Labelled with ID)**
- FMZ 2
- FMZ 4

NOTES:

- Topographic information extracted from LIO, MNR.
- Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1, 26 June 2023 and modified by WSP July 2023.
- 230 kV transmission line provided by First Mining Gold, April 2024.

Datum: NAD83
Projection: UTM Zone 15N

SPRINGPOLE GOLD PROJECT
Fisheries Management Zones
PROJECT N°: ONS2104 FIGURE: 6.18-2
SCALE: 1:450,000 DATE: October 2024

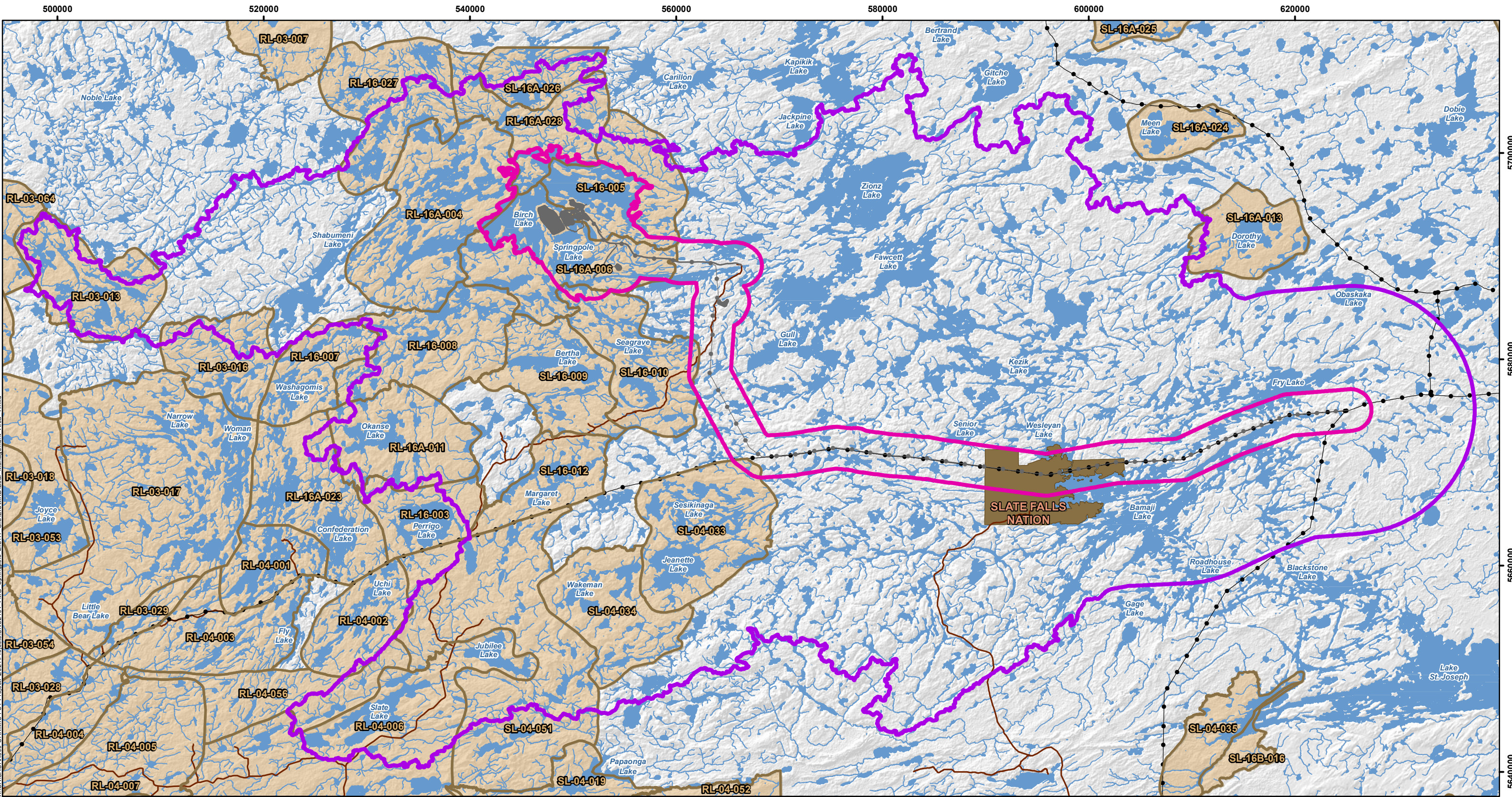


LEGEND

Proposed Mine Feature	Existing Transmission Line	Wildlife Management Unit (Labelled with ID)
Local Study Area for Outdoor Recreation	Watercourse	WMU 3
Regional Study Area for Outdoor Recreation	Waterbody	WMU 4
First Nation Reserve		WMU 16A
Existing Road		WMU 16B

NOTES:
 - Topographic information extracted from LIO, MNRF.
 - Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1. 26 June 2023 and modified by WSP July 2023.
 - 230 kV transmission line provided by First Mining Gold, April 2024.

SPRINGPOLE GOLD PROJECT	
Wildlife Management Units	
Datum: NAD83 Projection: UTM Zone 15N	
PROJECT N°: ONS2104	FIGURE: 6.18-3
SCALE: 1:350,000	DATE: October 2024



LEGEND

- Proposed Mine Feature
- Local Study Area for Outdoor Recreation
- Regional Study Area for Outdoor Recreation
- First Nation Reserve
- Existing Road
- Existing Transmission Line
- Watercourse
- Waterbody
- Bear Management Area (Labelled with ID)

NOTES:

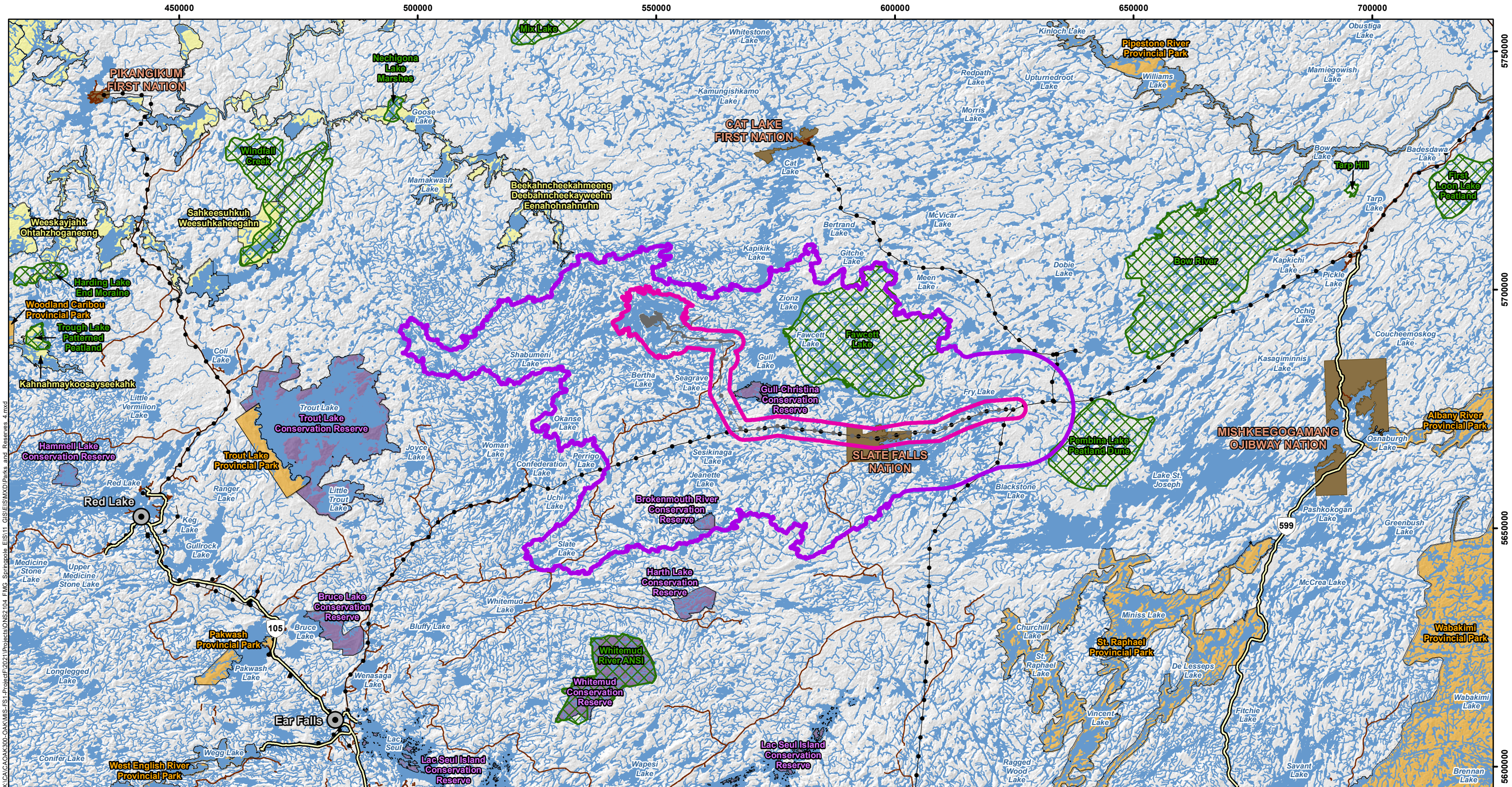
- Topographic information extracted from LIO, MNRF.
- Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1. 26 June 2023 and modified by WSP July 2023.
- 230 kV transmission line provided by First Mining Gold, April 2024.

Datum: NAD83
Projection: UTM Zone 15N

SPRINGPOLE GOLD PROJECT				
Bear Management Areas				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PROJECT N°: ONS2104</td> <td style="width: 50%;">FIGURE: 6.18-4</td> </tr> <tr> <td>SCALE: 1:350,000</td> <td>DATE: October 2024</td> </tr> </table>	PROJECT N°: ONS2104	FIGURE: 6.18-4	SCALE: 1:350,000	DATE: October 2024
PROJECT N°: ONS2104	FIGURE: 6.18-4			
SCALE: 1:350,000	DATE: October 2024			



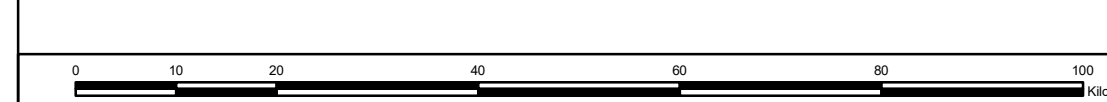
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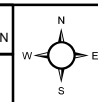
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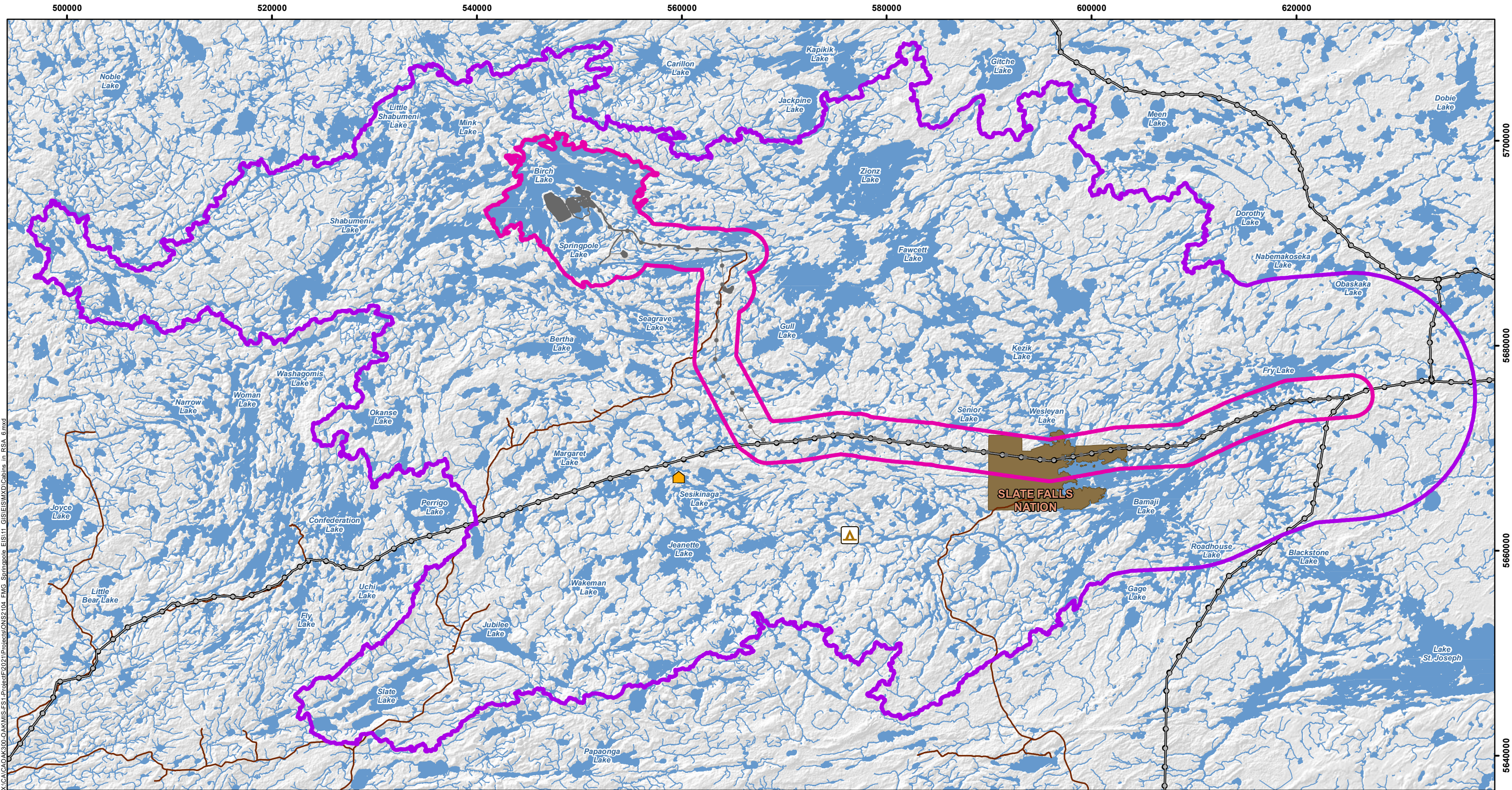
NOTES:
 - Topographic information extracted from LIO, MNRF.
 - Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1. 26 June 2023 and modified by WSP July 2023.
 - 230 kV transmission line provided by First Mining Gold, April 2024.

SPRINGPOLE GOLD PROJECT	
Parks and Conservation Reserves	
PROJECT N°: ONS2104	FIGURE: 6.18-5
SCALE: 1:750,000	DATE: October 2024



Datum: NAD83
 Projection: UTM Zone 15N





LEGEND

- Proposed Mine Feature
- Local Study Area for Outdoor Recreation
- Regional Study Area for Outdoor Recreation
- Cabin
- Designated Camping Site
- First Nation Reserve
- Existing Road
- Existing Transmission Line
- Watercourse
- Waterbody

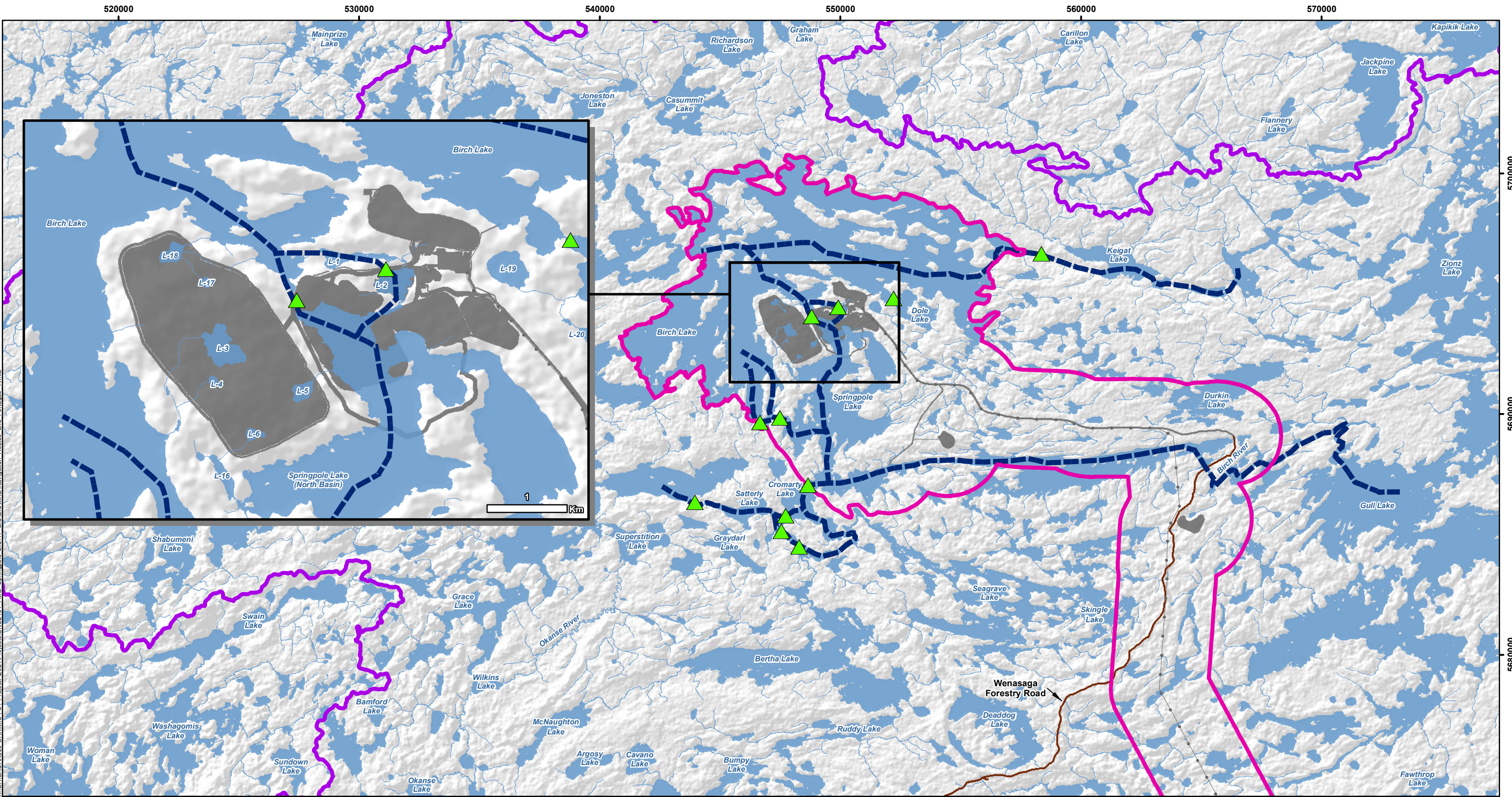
NOTES:

- Topographic information extracted from LIO, MNRF.
- Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1. 26 June 2023 and modified by WSP July 2023.
- 230 kV transmission line provided by First Mining Gold, April 2024.

Datum: NAD83
Projection: UTM Zone 15N

SPRINGPOLE GOLD PROJECT				
Recreational Sites and Cabins				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PROJECT N°: ONS2104</td> <td style="width: 50%;">FIGURE: 6.18-6</td> </tr> <tr> <td>SCALE: 1:350,000</td> <td>DATE: October 2024</td> </tr> </table>	PROJECT N°: ONS2104	FIGURE: 6.18-6	SCALE: 1:350,000	DATE: October 2024
PROJECT N°: ONS2104	FIGURE: 6.18-6			
SCALE: 1:350,000	DATE: October 2024			

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LEGEND

- Proposed Mine Feature
- Local Study Area for Outdoor Recreation
- Regional Study Area for Outdoor Recreation
- Existing Road
- Watercourse
- Waterbody
- Portage (Harding 1936)
- Navigation Route

NOTES:

- Topographic information extracted from LIO, MNRF, LiDAR survey.
- Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1, 26 June 2023 and modified by WSP July 2023.
- 230 kV transmission line provided by First Mining Gold, April 2024.

Datum: NAD83
Projection: UTM Zone 15N

SPRINGPOLE GOLD PROJECT	
Navigation Routes and Portages	
PROJECT N°: ONS2104	FIGURE: 6.18-7
SCALE: 1:150,000	DATE: August 2024



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