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B.18 – CULTURAL CONTINUITY

B.18.1 PREFACE

On January 27, 2015, the Executive Committee requested that CMC provide supplementary information to the Casino Project (YESAB Project No. 2014-0002) to enable the Executive Committee to commence Screening. The Executive Committee considered comments from various First Nations, Decision Bodies and regulators on the adequacy of the Project Proposal in the preparation of the Adequacy Review Report (ARR). CMC provided a Supplementary Information Report (SIR-A) on March 16, 2015. Subsequently, the Executive Committee issued a second Adequacy Review Report (ARR No.2) on May 15, 2015 following a second round of review.

Responses to the eight requests for supplementary information related to Section 18 and Section A.18 of the Project Proposal and SIR are provided below, as outlined in Table B.18.1-1. CMC is providing this Supplementary Information Report (SIR-B) to comply with the Executive Committee's Adequacy Review Report ARR No.2; CMC anticipates that the information in the two SIRs and in the Proposal, when considered together, is adequate to commence Screening.

Table B.18.1-1 Requests for Supplementary Information Related to Cultural Continuity

Request #	Request for Supplementary Information	Response
R2-198	A description of input from First Nations including traditional knowledge and how it will inform the plan	Section B.18.3.1
R2-199	A description on how mitigations regarding heritage resources will be implemented throughout the life of the Project	Section B.18.3.2
R2-200	A monitoring and evaluation mechanism.	Section B.18.3.3
R2-201	A comprehensive TLU study including traditional knowledge. The information provided shall cover traditional land use activities identified by First Nations.	Section B.18.4.1
R2-202	An assessment of effects of the Project on TLU.	Section B.18.4.2
R2-203	An assessment of effects of the Project on traditional economies.	Section B.18.4.3
R2-205	A description of plant species of traditional, cultural, or economic importance within the Project footprint. Include a description of any efforts to engage First Nations or other land users in identifying plants of concern and any ground studies that sought to identify and map plants of concern. This information shall be provided as part of a Traditional Land Use study as requested in Section 15.1	Section B.18.5.1
R2-206	Provide a description of concerns raised regarding effects to traditional harvest areas and indicate the location of the areas of concern. This information shall be provided as part of a Traditional Land Use study as requested in Section 15.1.	Section B.18.6.1

B.18.2 INTRODUCTION

Cultural Continuity was selected as a Valued Component (VC) by Casino Mining Corporation (CMC) because this component was deemed important from consultations with local First Nation and other regional residents. The Proposal assessed the potential effects of the Casino Project (the Project) on the ability of communities or individuals to sustain their cultural identity; this ability is dependent on having access to resources that support cultural retention and provide opportunities to participate in cultural activities.

The responses to supplementary information requests provided herein do not constitute a re-assessment of the effects on cultural continuity, but do provide a summary of Traditional Land Use used to generate the Project Proposal, and to assess effects. This information is substantial and extensive. The effects assessment on

traditional land use activities such as hunting, trapping and fishing was provided in Section 18 of the Project Proposal, which generally coincided with the assessment of effects on First Nation Settlement Lands that was provided in Section 19 of the Project Proposal. The conclusions reached in those sections remain relevant. CMC believes that the information contained in this assessment of potential Project effects on cultural continuity is sufficient for the Executive Committee of the YESAB to initiate and conduct a screening of the Project. If additional information that is specific to the mine site or proposed upgrades to various segments of the Freegold Road or Freehold Gold Road Extension are required, CMC is committed to engage in further work in a manner and at a time acceptable to First Nations.

B.18.3 HERITAGE MANAGEMENT PLAN

B.18.3.1 R2-198

R2-198. A description of input from First Nations including traditional knowledge and how it will inform the plan

A Heritage Resources Management Plan that incorporates Project-related traditional knowledge is provided in Appendix B.18A. During the collection of heritage resources baseline data in 2013, field staff included members of Selkirk First Nation, and of Little Salmon/Carmacks First Nation. Traditional knowledge (TK) information was informally provided by the First Nation members to the cultural resources staff of Ecofor Consulting Ltd. throughout the baseline data collection program. First Nations participants also received training in heritage assessment services. Ecofor Consulting Ltd. staff subsequently wrote the Heritage Resources Management Plan provided in Appendix B.18A.

Further, as described in the response to R392, prior to its finalization, the draft Interim Heritage Resources Management Plan was provided to the following governments for review on September 11, 2015:

- Selkirk First Nation;
- Little Salmon Carmacks First Nation;
- Tr'ondëk Hwëch'in; and
- Heritage Resources Unit of the Yukon Department of Tourism and Culture.

Comments received from Tr'ondëk Hwëch'in and the Heritage Resources Unit were incorporated into the Heritage Resources Management Plan that is set out in Appendix B.18A. No comments were received from Selkirk First Nation or Little Salmon Carmacks First Nation.

B.18.3.2 R2-199

R2-199. A description on how mitigations regarding heritage resources will be implemented throughout the life of the Project

The Casino Heritage Resources Summary Report (Appendix A.18A) lists each of the known historic resources and the known archaeological sites that will be, or may be impacted by the Project. Some historic resources and archaeological sites may be avoided entirely with changes in the final engineering design such as the selection and location of borrow pits. Each of the resources and sites that will be impacted, will be the subject of archaeological site specific or historic resource specific data recovery plans to be prepared and reviewed by the Heritage Resources Unit. For example, some of the historic resources that will be impacted may have already

been, or will be recommended for additional on-site recording, archival and/or informant interviews, to better document their past use history (see Appendix B.18A).

The Casino Heritage Resources Management Plan discusses site impacts in its Communication Protocol 1: Ground Disturbing Activities, and Communication Protocol 3: Planned Impact of Known Sites (Appendix B.18A). Data recovery plans for archaeological sites that will be impacted will focus on detailed hand excavation and archaeological analysis (dating or other testing where possible), and reporting to recover a representative sample of the site and its resources. This representative sample of excavation will range from only a small number of square meters for the smaller sites, up to nearly two hundred square meters of excavations for larger and more significant sites. These mitigation efforts will be conducted in advance of construction efforts and would be designed to retrieve the most information from those sites before they are impacted. The timing of the mitigation efforts will be coordinated with construction planning to be completed as construction moves forward. As construction work progresses some areas will be recommended for monitoring, and if chance finds or discoveries are made that warrant additional heritage assessment and mitigation efforts those sites and resources will be evaluated on a case by case basis. If required, supplemental data recovery or mitigation plans will be prepared, reviewed by the Heritage Resources Unit, and implemented prior to the continuation of construction. If sites are planned to be mitigated in close proximity to active construction then temporary fencing will be used to prevent impacts to the site.

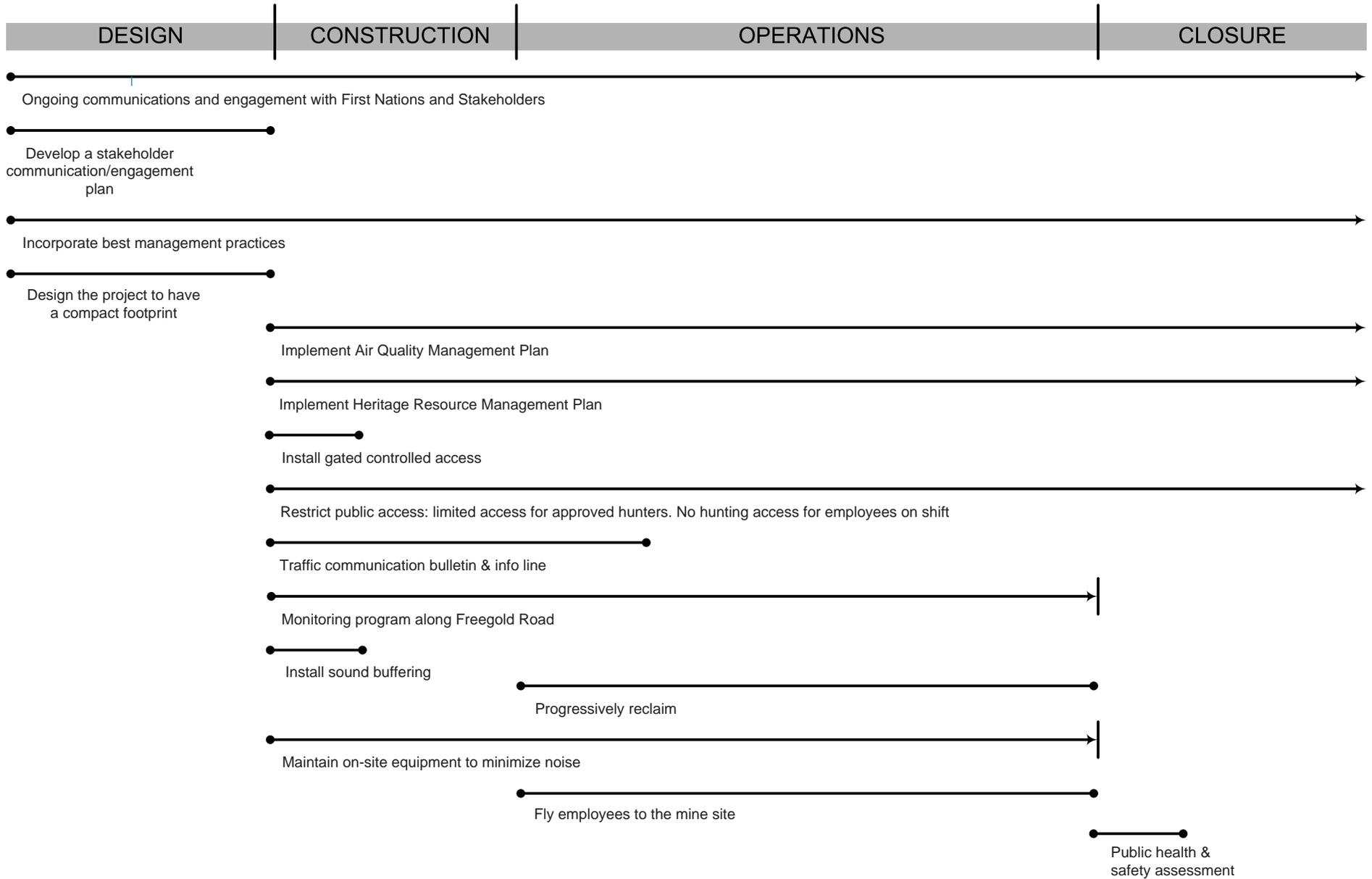
The Heritage Resources Management Plan defines “Heritage Sites” are those which contain historical and archaeological structures or artifacts, burial sites, sacred sites and archaeological and historic sites. Places of cultural value; subsistence and recreational harvesting; and traditional knowledge were incorporated as indicators for the Valued Component Cultural Continuity, detailed in Section 18 of the Project Proposal.

Mitigations included to minimize the effect on places of cultural value, subsistence and recreational harvesting and traditional knowledge were detailed in Section 18, and include the following, with the description on how mitigations regarding heritage resources will be implemented throughout the life of the Project provided in Figure B.18.3-1:

- Minimizing the effect on areas available for cultural activities or areas of potential archaeological or cultural significance by:
 - Designing the Project to have as compact a mine site footprint, to the extent practical;
 - Progressively reclaiming the Maximum Disturbance Area; and
 - Mitigating effects on archaeological sites through the Heritage Resource Management Plan.
- Implement a Road Use Plan to manage and limit access to the mine area and access road, to reduce the potential for hunting pressures on wildlife, wildlife-human conflicts, and protect existing wildlife-dependent land users through:
 - Restricting public access (access by permit, as directed and agreed by the Steering Committee);
 - Installing controlled, gated, manned access (located at the new bridge over Big Creek – or as otherwise agreed); and
 - Developing a stakeholder communication/engagement plan to ensure concerns are identified and addressed.
- Circulate a traffic communication bulletin/update and establish an information line to keep stakeholders informed of construction activities along the Access Road.
- Establish a monitoring program for local land users along the Freegold Road Upgrade.

- At closure, conduct a public health and safety assessment for the mine site to identify potential risks and develop appropriate, specific long-term mitigation and management measures (such as fencing and signage).
- Minimizing changes in local ambience, such as traffic, noise and emissions, and related wilderness experience by:
 - Minimizing traffic noise and emissions by incorporating accepted best management practices;
 - Employees flown to mine site to avoid multiple busses creating additional traffic on access road;
 - Ensuring on-site equipment is regularly maintained to control noise and emissions;
 - Proper sound buffering of the ore processing facility on site;
 - Implement an Air Quality Management Plan; and
 - Ongoing communications and engagement with First Nations will ensure that potential effects associated with traffic, emissions and noise along the Freegold Road corridor will be identified, documented and addressed.
- Allow limited road access to those approved for traditional use or other activities as may be allowed under the Road Use Plan and as regulated by the Territorial Government and First Nation Governments.

Figure B.18.3-1 Heritage Resource Mitigation Measure Implementation throughout Mine Life



B.18.3.3 R2-200

R2-200. A monitoring and evaluation mechanism.

Heritage sites include burial sites, sacred sites and archaeological and historic sites. Monitoring and evaluation for *heritage sites* that contain historical and archaeological structures or artifacts, includes checking known archaeological sites and historic resources to ensure site flagging is in place prior to construction. If flagging is not already in place, the historic site or resource will be flagged or fenced for avoidance. Some areas associated with known sites and resources will be recommended for avoidance and heritage monitoring. These monitoring efforts would ensure sites and resources that are not to be impacted, are properly flagged and signed so they are avoided. On-site monitoring during construction will be carried out to ensure sites to be avoided are indeed avoided. Other areas of heritage sites and resources that have been the subject of mitigation efforts may also be recommended for monitoring during construction to ensure chance finds are managed as per the chance finds procedure. The chance finds procedure has been presented in the Casino Heritage Resource Management Plan as Communications Protocol 2 (Appendix B.13B).

Heritage resources include harvestable resources; migration routes; waterways; salt licks; calving areas; traplines; medicines; raw materials; place names; camps, trails and caches and traditional knowledge. Monitoring and evaluation of Project effects and mitigation on *heritage resources*, will be conducted through the establishment of an ongoing joint process with affected First Nations and Yukon Government and through implementation of the Socioeconomic Management Plan (draft provided in Appendix A22F).

CMC will work with affected First Nations and Yukon Government to monitor the activities of the Project to avoid or minimize adverse socio-economic effects on community health and well-being, and to enhance benefits where applicable.

CMC, in collaboration with government departments and affected First Nations, will establish an effects monitoring program to monitor the socio-economic effects of the Project during construction, operations, and closure phases in order to accomplish the following objectives:

- Collect and document data related to socio-economic conditions of affected communities;
- Work with local agencies to monitor Project socio-economic effects;
- Confirm and verify the predicted socio-economic effects of the Project;
- Identify unforeseen socio-economic effects of the Project;
- Monitor employment and skills training programs by CMC and other institutions such as Yukon College and YMTA;
- Evaluate the effectiveness of mitigation measures in managing socio-economic effects; and
- Revise existing, and where appropriate, develop new mitigation measures to manage unforeseen socio-economic effects.

This monitoring program will lay out the commitment and framework for monitoring the effects described in the Project Proposal. CMC will generate annual reports to summarize the monitoring program results and will include data on the socio-economic predicted effects in order to track the changes from pre-Project conditions through operations.

Monitoring and mitigation of socio-economic effects will also inform development of adaptive management plans in consultation with local and regional institutions and government agencies to determine effectiveness of adaptive and mitigation measures.

B.18.4 TRADITIONAL KNOWLEDGE AND TRADITIONAL LAND USE

B.18.4.1 R2-201

R2-201. A comprehensive TLU study including traditional knowledge. The information provided shall cover traditional land use activities identified by First Nations.

CMC has provided the YESAB with considerable Traditional Land Use and Traditional Knowledge that describes the traditional land use activities identified by First Nations in proximity to the Project. The effects assessment on traditional land use activities such as hunting, trapping and fishing, was provided in Section 18 of the Project Proposal, which generally overlapped with the assessment of effects on First Nation Settlement Lands in Section 19 of the Project Proposal. The conclusions made in those sections remain relevant. A Socio-Economic Baseline Report (Appendix 13A) and Land Use and Tenure Baseline Report (Appendix 19A) were submitted as part of the Project Proposal. Both detail traditional knowledge and traditional land use in the Project Area and are derived from publicly available baseline data describing land use activities that occur near the Project. In addition, this information was supplemented with information received from affected First Nations during discussions that took place over a number of years.

Multiple discussions with the affected First Nations in advance of Project Proposal submission (SFN, 2012, pers. comm.) indicated insufficient interest or human capacity for conducting a Traditional Knowledge and Traditional Land Use (TKTLU) study for the Project. Rather, some of those discussions indicated that a TKTLU study may be considered after the Project Proposal submission to YESAB and an opportunity to assess potential effects (LSCFN, 2013, pers. comm.). Details of CMCs communication regarding conducting a TKTLU study with the affected First Nations are provided by First Nation in Section B.18.4.1.1, as are summaries of issues raised throughout that consultation. Of the offers made by CMC to FNs to fund FN conducted TKLU studies, none have yet been accepted. CMC has understood that First Nations hold considerable TKTLU information that they consider to be proprietary. CMC further understands that First Nations intended to use this information to inform their own review of the Project.

Traditional land use in the Project area has been relatively well known. Substantial information was generated during the negotiation of comprehensive land claim agreements in Yukon that were settled in the mid 1990's with SFN, LSCFN and TH. In the absence of a formal Project-specific TKTLU study, CMC used this information to inform the design of the Casino Project. More recently, WRFN has made available TKTLU information in support of their asserted claim over the northern boundary of their traditional territory. In addition, key aspects of Project design (e.g., road route, waste management and deposition, and water use) were further informed by information obtained through multiple consultations with affected First Nations. A summary of traditional land use in the Project area, and the resulting Project design decisions and/or changes made on the basis of this knowledge, is provided below. The information contained in this section B.18.3 is from publicly available documentation and not subject to confidentiality provisions.

CMC suggests that the information provided below forms a strong base of TKTLU information and is sufficient to enable the Executive Committee to initiate and complete the assessment process. Should further studies be conducted by the affected First Nations, CMC and YESAB will have the opportunity to include that information in

the assessment, or incorporate its findings as part of the licensing processes or part of established adaptive management processes during the course of Project operation.

B.18.4.1.1 Consultation with First Nations with respect to TKTLU Studies

Consultation with First Nations with identified land use in the Project area was conducted during the years of data collection and impact assessment leading up to submission of the Project Proposal (2008 – 2013). Information on that consultation is summarized in Section 2 and Section A.2 of the Proposal and SIR, respectively. During the course of those consultations, CMC canvassed the need for collection and use of traditional land use with First Nations and their respective Renewable Resource Councils, and discussions continued during the YESAB process in 2014 and 2015. Information specific to Selkirk First Nation (SFN), Little Salmon/Carmacks First Nation (LSCFN), Tr'ondëk Hwëch'in First Nation (THFN), White River First Nation (WRFN), Champagne and Aishihik First Nations and Kluane First Nation are summarized below. The TKTLU summarized in the Socio-Economic Baseline Report (Appendix 13A) and the Land Use and Tenure Baseline Report (Appendix 19A) reflect input and the views of the affected First Nations.

The importance of protecting locations of traditional harvest of wildlife is a consistent theme through many of the discussions. Discussions to develop a TLU Study that would identify these sites and be led by LSCFN and SFN are ongoing. CMC has also assisted WRFN in applying for funding to conduct a WRFN specific TLU study. Since submission of the Project Proposal, CMC has incorporated publically available secondary source information and had in-depth consultation with LSCFN and SFN regarding important sites along the proposed access road route. This information was considered in relation to the Project but the Project Proposal was not changed because this new information was covered by the approach taken in the Project Proposal: the Project Proposal had already considered and taken into account potential adverse effects on existing natural resources (including wildlife) that are potentially used for traditional purposes by First Nations, as well as proposed corresponding mitigations.

Selkirk First Nation

CMC has extended numerous invitations to SFN to conduct and/or support a TKTLU study. Those discussions took place both prior to completion of the Project Proposal and after its submission to YESAB. Consultation related to TKTLU with SFN in advance of the Project Proposal submission (from 2008 – 2013) is summarized in Table B.18.4-1 and is based on the consultation log provided in Appendix 2A. A second table sets out meetings subsequent to submission of the Project Proposal in January 2014, between SFN and CMC during which TKTLU was discussed. Table B.18.4-1 summarizes the commitments made by CMC to address SFNs concerns which included:

- Potential Project effects on the Yukon River and local communities, and consideration of traditional knowledge.
- Road route effects, including access points for the project, increased traffic and spur roads, increased dust and noise from trucks, effects of increased numbers of large trucks on tourism in the area and increased safety risks with trucks driving through local communities.
- Effects on ability to practice traditional activities and effects on traditional activities, including traditional harvesting.

Early discussions with Selkirk led to the identification of a significant body of analysis, including Traditional Knowledge that was created in response to the original proposal for road access to Casino in the 1980's. This material (i.e., Pease and Weinstein, 1988) was made available to CMC, and used extensively to inform the design, route selection and proposed mitigation for the Freegold Road Upgrade. A literature search (Appendix

A.2A) was also conducted which provided further information, including TK, that was considered in the Project design.

Prior to submission of the Project Proposal, CMC shared the draft Socio-economic Baseline Report with the Selkirk First Nation and received and responded to their feedback. SFN commented that they would like to see socio-economic and traditional study work be undertaken on an all-encompassing traditional land basis rather than in a piecemeal way for various individual land users (Table B.18.4-1).

Subsequent consultation conducted since the submission of the Project Proposal is provided in Table B.18.4-2. Topics discussed included outlining the requirements for a TLU and commissioning a TLU study (TLUS) in 2015. A community meeting was held on April 30, 2015 and socio-economic and traditional land use was discussed. Most recently, CMC has met with the Selkirk First Nation to seek clarity with respect to their views on this matter, and to reiterate CMC's invitation and support of conducting a TLU study. SFN expressed its desire to conduct its own TKTLU study. CMC will follow SFN's guidance on when and how they wish to complete this work. CMC will support a comprehensive TLU study being conducted once the necessary guidance documents are in place, and to consider and integrate this information into the Project, as well as into the establishment of the socio-economic monitoring program.

Table B.18.4-1 Pre-Submission Summary of Consultation with Selkirk First Nation Regarding TKTLU Studies

Event	Date	Discussions related to TKTLU Studies
Meeting	May 3, 2008	CMC gathered detailed information and completed effects assessments, to identify potential adverse effects of the Project. Effects assessments included employment and income, employability, economic development and business sector, community vitality, infrastructure and services, cultural continuity, land use and tenure, as well as wildlife, aquatics, vegetation, noise and air quality. CMC will implement a variety of plans to minimize potential adverse effects on traditional uses, Yukon River and communities. Plans include a Wildlife Mitigation and Monitoring Plan (Appendix 23A), Wildlife Management Plan (Section 22.3) Waste Management Plan (Section 22.3), Air Quality Management Plan (Section 22.3), Air Quality and Fugitive Dust Deposition Monitoring Program (Section 23.3), Aquatics Monitoring Plan (Section 23.3), and a Progressive Reclamation Effectiveness Monitoring Program (Section 23.3). CMC will implement a Fish Habitat Compensation Plan (Appendix 10C) and will monitor socio-economic effects and adapt management measures where required (Sections 13-19).
Open House	October 20, 2008	The Selkirk First Nation was invited to and participated in most meetings with Yukon regulators and other government agencies to review the development of the Project Proposal and to discuss topics of mutual interest, including access options, and specifically the Freegold Road, and the proposed extension and upgrades. Land Use and Cultural Continuity sections (18 and 19) assess effects. CMC intends to continue consultation with the Selkirk First Nation.
Meeting	June 10, 2009	TK: SFN would prefer to have TK integrated into the EA rather than be a separate report. Elders need to be involved. Field Assistant: SFN prefers to have a Lands and Resources staff member assist rather than a summer student to allow for better retention of learnings and improved opportunities for sharing TK.
Meeting	October 14, 2009	CMC gathered detailed information and completed effects assessments, to identify potential adverse effects of the Project. Effects assessments included employment and income, employability, economic development and business sector, community vitality, infrastructure and services, cultural continuity, land use and tenure, as well as wildlife, aquatics, vegetation, noise and air quality.

Event	Date	Discussions related to TKTLU Studies
		<p>CMC will implement a variety of plans to minimize potential adverse effects on traditional uses, Yukon River and communities. Plans include a Wildlife Mitigation and Monitoring Plan (Appendix 23A), Wildlife Management Plan (Section 22.3) Waste Management Plan (Section 22.3), Air Quality Management Plan (Section 22.3), Air Quality and Fugitive Dust Deposition Monitoring Program (Section 23.3), Aquatics Monitoring Plan (Section 23.3), and a Progressive Reclamation Effectiveness Monitoring Program (Section 23.3).</p> <p>CMC will implement a Fish Habitat Compensation Plan (Appendix 10C) and will monitor socio-economic effects and adapt management measures where required (Sections 13-19).</p>
Meeting	November 4, 2009	Presented the findings of the July and September 2009 heritage and archaeology field program. SFN asked that field crews be accompanied by Elders and youth. SFN also noted that one-on-one or small group discussions with Elders would be a welcome approach to gathering TK information.
Meeting	January 7, 2010	Presentations were made to outline the baseline programs and proposed approach: Freegold Road extension, TK program, heritage and archaeology program, socio-economic program, cumulative effects assessment. Recommendations were made and approaches to be taken for each of the programs were determined.
Meeting	March 16, 2010	<p>CMC suggested and discussed approaches to gathering traditional knowledge and socio-economic information with the Selkirk First Nation. Discussions have included joint socio-economic monitoring with the Minto mine; discussions continue.</p> <p>Shared the draft Socio-economic Baseline Report with the Selkirk First Nation and received and responded to their feedback. CMC intends to continue to consult the Selkirk First Nation during the review of the Project Proposal.</p>
Meeting	April 13, 2010	Reviewed the archeological work completed and sites documented in 2009, and presented the 2010 fieldwork program. Altamira intends to have students and Elders involved in the fieldwork. Discussed potential mitigation options for sites that would be affected by the project. A number of potential heritage sites were noted during the meeting, and will be followed up by Altamira. SFN was concerned that WCG can proceed with activities that may damage heritage sites without assessing the sites for impact first. Also concerned about WCG's commitment to any SFN recommendations for protection and mitigation.
Meeting	April 29, 2010	Traplines: SFN is concerned about effects of traplines near the Yukon River. Also noted that the Freegold Road Extension access route may affect nearby traplines; this should be properly documented and mitigated where appropriate.
Meeting	May 3, 2010	Access and Roads: SFN raised concerns about spur roads and the amount of traffic anticipated for these roads. Suggested an alternate access route through White River. Information Sharing: SFN is looking at establishing a body of knowledge that can be shared by all companies contacting the First Nation for similar information. Also discussed the Freegold Road Users Group.
Letter	October 24, 2011	CMC provided an update on the status of the environmental and socio-economic work. CMC is anticipating submitting the Project Proposal to YESAB in early 2011. Noted that WCG will be establishing technical working groups on the project and would like SFN to participate. Also noted that they would like to incorporate TK into the proposal in a manner acceptable to SFN.
Meeting	October 15, 2012	Concerns: (a) project consultation should wait until Capstone's consultation is complete; (b) Freegold Road Extension and its potential to open up access to other users; (c) potential negative effects on the Klaza herd and mitigation design; (d) potential effects on traditional practices.

Event	Date	Discussions related to TKTLU Studies
Meeting	February 20, 2013	<p>CMC completed land use and socio-economic effects assessments that considered potential effects from the Freegold Road and associated traffic. Potential effects from noise and dust were considered in a number of effects assessments. Mitigation to address potential adverse effects was developed. Potential traffic effects are discussed in Sections 17, 18 and 19.</p> <p>A by-pass will be constructed in the vicinity of the Village of Carmacks to mitigate adverse effects from potential increased traffic.</p> <p>Socio-economic monitoring and adaptive management are proposed. Effects of noise and dust will be monitored.</p>
Meeting	July 9, 2013	<p>As a strictly controlled Resource Road, traffic volumes will be known and specified. The road design will be specified to support the Project traffic. Additional traffic will be added through controlled management planning only.</p> <p>Potential traffic effects are discussed in Sections 17, 18 and 19.</p>

Table B.18.4-2 2014 – 2015 Summary of Consultation with Selkirk First Nation Regarding TKTLU Studies

Event	Date	Discussions related to TKTLU Studies
Meeting	June 25, 2014	Discussed results of socio-economic adequacy review filed with YESAB; SFN stated the importance of completing a TLUS and both will speak with SFN Chief and Council for further direction and to draft a Terms of Reference for CMC
Meeting	August 8, 2014	Ecofor and SFN to prepare a workplan to outline the scope of work needed for a TLUS.
Phone call	August 25, 2014	Meeting via phone with SFN regarding socio-economic information
Email	October 15, 2014	Email from CMC to SFN to propose time to discuss some unresolved items like the socio-economic work (TLUS)
Memo	February 24, 2015	Memo from Hemmera to discuss approach, timing and deliverables to produce a SFN supplementary report to address their review comments on the socio-economic components of the Project Proposal. Timing to review data gathering approaches for TLU set for March/April 2015 and for study implementation from May-August 2015.
Letter	February 27, 2015	Letter from CMC to SFN regarding requests from YESAB review that are relevant to the co-operative bilateral work between CMC and SFN. In particular, in previous discussions SFN and CMC had agreed that a TLU or TK study was not a priority for SFN at that time. CMC also noted that they wish to support/assist SFN with a TK/TLU study if they wish to do one and that the period during which the SIR is under review by YESAB (upcoming field season) would be ideal to complete a TLUS. CMC added that WRFN has indicated interest in a TLUS as well and perhaps the two First Nations could collaborate.
Meeting	April 30, 2015	Community meeting - socio-economics and TLUS discussed
Meeting	August 26, 2015	Tailings Management Facility Workshop: SFN technical consultant attended and raised concerns about the legacy impacts of the tailings management facility on the SFN traditional territory.
Meeting	October 1, 2015	Wildlife Working Group Meeting: SFN technical consultant attended and raised concerns about long-term effects of the road on wildlife and access.
Meeting	November 15, 2015	Meeting with SFN. TLUS discussed. SFN reiterated their desire that TLUS be done internally and be kept confidential within SFN.

Little Salmon/Carmacks First Nation

Consultation with Little Salmon/Carmacks First Nation (LSCFN) in advance of Project Proposal submission was conducted throughout 2008 – 2013, and consultation related to TKTLU with LSCFN is summarized in Table B.18.4-3, with the complete consultation record provided in Appendix 2A. Following submission of the Project Proposal to YESAB in January 2014, and based on discussions between CMC and LSCFN, CMC made a request to the Executive Committee of YESAB on May 23, 2014, to place the YESAB review of the Project Proposal on hold for all parties for a period of up to 180 days. The purpose of this request was to enable CMC to engage in additional consultation with LSCFN and other First Nations. A consultation workplan between CMC and LSCFN was developed that included a total of seven technical meetings (including a kick-off meeting) and six community meetings to be held throughout June to November, 2014. Key topics for discussion were the road access and

management, wildlife mitigation and monitoring plan, and socio-economic impact assessment. The purpose of the consultation in 2014 was to enable LSCFN to gather enough information to make an early assessment of the potential positive and negative effects of the Project, including impacts on traditional pursuits and the cultural and heritage resources of the LSCFN and the measures to avoid, minimize or manage those impacts. Consultation activities conducted throughout 2014 – 2015 that related to TKTLU consisted of a field trip with LSCFN members along the Freegold Road and Freegold Road Extension, and technical and community based meetings on topics specific to wildlife, cultural and socio-economic impacts, a summary of which is provided in Table B.18.4-4.

Information collected by CMC related to traditional land use included:

- Identification by LSCFN of important areas (such as recreation sites, and heritage sites) and access points to traditional trails and areas of existing use that would need to be maintained through the road re-alignment. [During the June 18, 2014 Access Road field trip].
- Identification by LSCFN members of the importance of caribou and moose to their traditional harvest. [During the July 23, 2014 wildlife community meeting].
- Identification by meeting participants of some of the assumptions made around the demographic profile of fly-in/fly-out workers that needed clarification and making a request for further data review. It was noted that none of the scenarios fully incorporated the traditional economy and the associated impacts to that vital part of LSCFN lifestyle. [During the October 22, 2014 socio-economic community meeting].
- Identification by LSCFN of the need for a TLU report, but for one that LSCFN was “in control” of preparing and would be made available to CMC with provisions for confidentiality. LSCFN and CMC discussed that a joint TLU between LSCFN and SFN be conducted, and the resulting data be shared on a “one-time” basis with CMC. [During the June 2014 Socio-Economic technical meeting].
- Identification of concerns regarding effects on traditional harvesting due to traffic and access control, at the same time as recognizing that road improvements and increased incomes may allow for greater ability to partake in traditional activities. [During the September and October 2014 community meetings].

By way of a letter to CMC dated October 17, 2014, LSCFN identified that there was still a concern about the lack of community level socio-economic data and a need to document LSCFN traditional land uses that could be affected by the Project. Specifically, the letter stated that the current state of information in regard to LSCFN traditional land use in the Casino Project Proposal is a

“significant weakness. The footprint of the mine site and the road to access the site alone will have a significant effect on the use of preferred harvest areas, heritage sites and the distribution of LSCFN land use over the life of the project and beyond. This use requires improved documentation for the effects of the project to be better understood.”

In response to this request, and in recognition that the TKTLU related impacts on LSCFN would arise primarily in relation to upgrades to the Freegold Road and Freegold Road Extension, CMC suggested to LSCFN, in writing and at meetings, that the early implementation of a Road Use Working Group, as proposed in the Project Proposal, may be the best mechanism to address the complex issue of access for First Nation members and others that have an existing right of access. CMC stated its preference for a mechanism that controls public access but does not limit the right of access by existing users or those exercising aboriginal rights. CMC suggested that these topics would be best explored through community-based discussions like those proposed for the Road Use Working Group.

While consultation with LSCFN continued in 2015 (discussions were mainly in the form of CMC support for a Greenhouse Garden proposal, a Wellness Research study, and meetings with the Executive Director), plans for a formal TKTLU study have not progressed.

Table B.18.4-3 Pre-Submission Summary of Consultation with Little Salmon/Carmacks First Nation Regarding TKTLU Studies

Event Type	Date	Discussions related to TKTLU Studies
Letter	July 9, 2009	CMC advised Little Salmon-Carmacks First Nation of the heritage and archaeology study plans and invited them to contact Vector with any questions or concerns.
Letter	March 8, 2012	CMC provided a copy of the Historic Resource Impact Assessment of the Proposed Freegold Road Extension report to Little Salmon-Carmacks First Nation.
Meeting	June 5, 2012	CMC provided overview of project and the proposed access options. Little Salmon-Carmacks First Nation raised concerns regarding road development, access control, traffic management, and effects on traditional use of the area including subsistence harvesting.
Meeting	December 3, 2012	Meeting with Chief & Council to discuss the Project.
Meeting	February 12, 2013	<p>CMC completed land use and socio-economic effects assessments that considered potential traffic levels and effects from the Freegold Road and associated traffic. Mitigation to address potential adverse effects were developed. Potential traffic effects are discussed in Sections 17, 18 and 19.</p> <p>A by-pass will be constructed in the vicinity of the Village of Carmacks to mitigate adverse effects from potential increased traffic.</p> <p>Socio-economic monitoring and adaptive management are proposed.</p> <p>CMC will develop and implement a Road Use Plan (Section 22.3) and CMC will monitor project socio-economic effects and adapt management measures where required (Section 17.4.2).</p>

Table B.18.4-4 2014-2015 Summary of Consultation with Little Salmon/Carmacks First Nation Regarding TKTLU Studies

Event Type (Activity)	Date	Discussions related to TKTLU Studies
Meeting	June 17, 2014	Technical meeting and field trip; TLU discussed
Meeting	June 19, 2014	Fisheries Technical Session; TLU discussed
Meeting	June 24, 2014	Socio-economic Technical Session. LSCFN could consider working with SFN to complete a TLU; requires a cooperation agreement between the First Nations. Important to LSCFN that FN is "in control" of prepping a TLU. LSCFN to submit a work plan and budget for a TLU to CMC by July 2014
Meeting	July 29, 2014	Community meeting; TLU discussed
Letter	September 1, 2014	Letter from LSCFN to CMC asking about progress of addressing data gaps in socio-economic study (TLU)
Letter	October 11, 2014	CMC proposed Freegold Road Working Group to discuss road plan with TK holders and wildlife experts
Letter	October 17, 2014	LSCFN to CMC regarding TLU
Meeting	November 19, 2014	Community Meeting
Letter	March 16, 2015	Letter from CMC to LSCFN stating that CMC has submitted the SIR to YESAB, but that many issues LSCFN still considers outstanding (TLUS) can be worked on during the YESAB review phase.
Letter	May 29, 2015	Letter from CMC to LSCFN requesting community meeting and further discussions with LSCFN consulting team.
Email	June 7, 2015	Email from LSCFN to CMC to say that the schedule is full for LSCFN for the foreseeable future and they will be in touch ASAP.
Email	July 22, 2015	Email from LSCFN to CMC to say that they are unable to attend the Tailings Workshop on August 26, 2015.
Meeting	August 26, 2015	Tailings Management Facility Workshop: LSCFN technical consultant attended and raised concerns about closure and impacts to wildlife from the TMF.
Meeting	October 1, 2015	Wildlife Working Group Meeting: SCFN staff attended and raised concerns about access along the Freegold Road and impacts to traditional hunting areas.

Tr'ondëk Hwëch'in First Nation

CMC introduced the Casino Project to Tr'ondëk Hwëch'in First Nation (TH) in May 2009. Subsequently, CMC met with members of TH in May 2010, February 2012, and in April, May and September 2013, including the community Open House in September 2013 (see details in Section 2.3.5 of the Proposal). Following Proposal submission, TH expressed to YESAB that CMC had not met their consultation obligation; in particular they expressed concerns about salmon habitat, water quality and forty-mile caribou as well as suitable material for heap leach pad construction.

In 2014 and 2015 CMC has continued consultation with TH, which has resulted in multiple technical meetings, mainly with regards to fisheries, water quality and caribou. In those discussions, the topic of traditional land use was discussed at the April 16-17, 2015 meeting. TH has stated that the Project should not affect the traditional pursuits of the First Nation. CMC and TH entered into a co-operation agreement for Project Assessment in July 2015.

White River First Nation

WRFN provided CMC with a report asserting the northern boundary of the White River First Nation's Traditional Territory, entitled "WRFN: Consideration of the Northern Boundary" (Easton et al., 2013). WRFN also provided YESAB with a report entitled "Compilation of Information Relating to Coffee Creek/White River Areas, January, 2014" (Dobrowolsky, 2014) in its response to the resumption of the adequacy review process in November, 2014 (YOR-2014-0002-268-1). CMC has considered these reports and incorporated them into the summary of traditional land use provided below in section B.18.3.1.2. The 2014 Dobrowolsky report itself is a compilation of the Coffee Creek Traditional Knowledge Summary (Winton, 2012) prepared for Tr'ondëk Hwëch'in, and the Easton et al. report.

In developing the Project Proposal, CMC used the Government of Yukon Traditional Territories of Yukon First Nations (Yukon Environment, 2012) and Umbrella Final Agreement to identify the boundaries of the White River First Nation Traditional Territories. White River has subsequently stated that their asserted traditional territory encompasses the Project area (YOR-2014-0002-279-1 and YOR-2014-0002-398-1), as defined in the Easton et al. report. This asserted traditional territory is represented in the summary of traditional land use provided below – specifically in Figure B.18.3-3.

WRFN have requested a TKTLU study specific to WRFN (YOR-2014-0002-398-1). As such, in 2015 CMC met with WRFN to discuss opportunities for funding of a WRFN TLU study through Canadian Northern Economic Development Agency (CanNor). CMC assisted WRFN in preparing a funding application to CanNor to progress its Traditional Land Use Study development. CMC will continue to support and assist WRFN in gathering TK and TLU information for consideration and incorporation into the Project Proposal. Further, if WRFN is able to secure funding for a TLU study, CMC will consider and integrate this information into the Project as well as into the establishment of the socio-economic monitoring program.

Champagne and Aishihik First Nations Consultation

In September 2013, CMC contacted the Champagne and Aishihik First Nations by letter and followed up with a meeting at which CMC introduced the Project. The Champagne and Aishihik First Nations have not indicated interests in the area of the Project as it is not located within their Traditional Territory. Interest was expressed in participating in economic opportunities if possible.

Kluane First Nation

In June 2013, CMC contacted the Kluane First Nation by letter and e-mail and introduced the Project. The Kluane First Nations followed-up with CMC and advised that they believe the Project may affect Kluane First Nation Traditional Territory and requested that they have an opportunity to participate in Project information sessions and the Project Proposal application process prior to the Project Proposal being submitted to YESAB. CMC advised the Kluane First Nation of a YESAB meeting planned in the 3rd quarter of 2013 regarding the access road and wildlife. CMC welcomed the Kluane First Nation to attend the meeting in Whitehorse. However, the Kluane First Nation did not attend the meeting.

Subsequently, CMC and consultants met Kluane First Nation representatives in Beaver Creek. Representation included a KFN Counsellor, the KFN Executive Director and staff of the KFN. An overview of the Project was provided and a discussion about road access took place. It was confirmed that the proposed access route is from Carmacks and not from Burwash Landing as was earlier proposed. It was apparent at the meeting that KFN's primary interest was to clarify that the proposed access route had changed and was no longer proposed to cross KFN Traditional Territory. They requested this clarification in writing.

In October 2013, CMC sent the Kluane First Nation a letter confirming that the Burwash Landing access route option is no longer being considered due to environmental sensitivities and that the Freegold Road is the proposed access route. No further consultation has been conducted with Kluane First Nation.

B.18.4.1.2 Traditional Land Use

CMC's Project Proposal has been informed extensively by TKTLU gained from a variety of sources during the course of baseline data collection, beginning in 2008. The major sources of information include:

- *Opening the Land: a Study of the Impacts of the Casino Trail on the Northern Tutchone of Pelly Crossing and Carmacks, Yukon Territory* (Pearse and Weinstein 1988);
- *The Agreement on the Casino Trail Project* (Yukon Government, 1988);
- *The Casino Trail Local Resource Group Workshop and Report* (Casino Trail Local Resource Group, 1989)
- *Community-Based Fish and Wildlife Work Plan Little Salmon Carmacks First Nation Traditional Territory 2012-2017* (Little Salmon/Carmacks Fish and Wildlife Planning Team 2011);
- *WRFN: Consideration of the Northern Boundary* (Easton et al., 2013); and
- *Compilation of Information Relating to Coffee Creek/White River Areas* (Dobrowolsky, 2014).

This understanding, and examples of how this information was used is summarized in this section.

The LSCFN, SFN and Nacho Nyak Dun people are Northern Tutchone, part of the Athapaskan language group. The WRFN is a group of Northern Tutchone and Upper Tanana language groups closely related through traditional marriages, merged by the Canadian Government into a single White River Indian Band in the early 1950s (WRFN, ND). The WRFN were then further amalgamated with the Southern Tutchone speaking members of the Burwash Band; but were subsequently split into the Kluane First Nation, centered in Burwash and the White River First Nation, centered in Beaver Creek. The Tutchone of the Yukon Territory are a relatively small population whose ancestors were held together in the past by their contiguous territories, inter-marriage and closely related dialects (McClellan, 1981).

First Nations (FN) people in the area participate in a variety of traditional land uses, including hunting, trapping and fishing. The collection of plants for food and medicine is a traditional and current practice of FN peoples. The same basic hunting/gathering cycle was followed by all Tutchone FN from approximately May through October. Salmon and other freshwater fish were caught and dried for storage. Later in the summer hunting for whatever game was available in the upland areas was pursued and the meat dried and stored in caches scattered around the area (McClellan, 1981). As moose populations increased and caribou dwindled the Tutchone became increasingly more dependent on moose (McClellan, 1981). Many large and small animals as well as birds were caught by snares and bows and arrows.

Northern Tutchone peoples traditionally relied on the gathering and harvesting of plants as a source of food and medicine or for tools and goods. In the spring, birch bark and sap were used to construct canoes and baskets. In the summer, the Northern Tutchone gathered berries and other edible or medicinal plants (Gotthardt, 1987). This was also a time when stones, copper, birch bark and spruce roots were collected to make tools and utensils. During times of extreme hunger in winter, FN people sometimes collected dried roots, berries and mushrooms from squirrel and mouse caches.

The SFN people originally lived in Fort Selkirk where they used to go by the Hucha Huda name. In the early days, the Selkirk people had a trading relationship with the Coastal Tlingit and would meet to trade during the summer fish camps on the site where Fort Selkirk was to be built by the Hudson's Bay Company (SFN, 2013; Yukon Bureau of Statistics, 2013a).

After the fur-trading fort was built, the SFN people settled there on a more permanent basis, continuing to trap, fish, hunt and gather year-round in their traditional areas. With the construction of the Klondike Highway the SFN moved to Minto and later on, settled in Pelly Crossing and other communities. Fort Selkirk was closed in 1852 (Easton et al., 2013). Today, Fort Selkirk is an important heritage site and is co-managed by the SFN and the Government of Yukon. Traditionally, SFN people relied on the land and one another for survival, travelling by foot over long distances for hunting, trading, and celebrations (SFN, 2013). Culture, traditions, customs and survival skills were passed to children, who learned by listening and practicing. SFN maintains strong links to hunting with many members obtaining a significant portion of their food supply through this means (Yukon Community Profiles, 2004).

The LSCFN traditional territory is rich in renewable and non-renewable resources. Parts of the year are spent hunting, trapping, fishing and gathering flora for food and medicines in their traditional territory. A wide variety of game, including birds, water fowl, large game, wolf, wolverine, fox and marten, is sought for food, clothing and other uses (Yukon Bureau of Statistics, 2013b). The oral history of the LSCFN reveals early contacts and trade relationships with explorers and traders in the area. Since earliest times, the people lived on the land, using the rich supply of game animals, fish, birds and plants, and travelling throughout their traditional territory throughout the year.

Hunting, trapping, fishing, and gathering remain important traditional activities for members of SFN and are carried out in a cycle from approximately May through October. Caribou was once the principal species hunted for food, but as the caribou populations declined, moose became increasingly important and is now the major food source hunted (McClellan, 1981). Salmon and other freshwater fish are caught and either dried or frozen for consumption. Fish camps are often used in season by FN people. When the salmon are spawning in the Pelly River, for example, Pelly Crossing is nearly deserted, as people are out catching and drying fish for later use (Cardinal, 2009). Plants are gathered for food, medicine, or for use in constructing tools or goods, with summer being the season for most of this activity (Gotthardt, 1987), though spring has historically been important for birch bark and sap to be gathered for canoes and baskets.

LSCFN also carries out traditional activities based on the season with various parts of the year spent hunting, trapping, fishing, and gathering for food, medicines and goods throughout their territory. A wide variety of birds, waterfowl, large game, wolf, wolverine, fox, and marten are harvested for food, clothing, and other uses (Yukon Bureau of Statistics, 2013b). Plants gathered include Arctic raspberry, Labrador tea, cranberries, blackberries, stoneberries, and mushrooms (Nicholson, 2002).

The loss of the Northern Tutchone language and traditional practices were noted as concerns by community representatives. Tutchone elders have developed booklets on Northern Tutchone history and culture intended for schools and incorporation into the curricula (LSCFN, 2013, pers. comm.; Tantalus, 2013, pers. comm.).

Traditional activities play an important role in providing food, medicine, and materials and in supplementing income and the purchase of foodstuffs/materials from stores. There is an interrelationship between traditional (bush economy) and employment (cash economy), with the latter helping fund traditional activities. As more distant areas are more costly to access, they are not used as often and limited income is derived from them. Yet, more distant areas remain important and are harvested when game/fish/plant numbers are high and increased demands lead to these areas being accessed again. Gathering is more frequently practised than trapping, and the historical flexibility of where and when to trap is now limited by the requirements of registered traplines and specific areas to harvest (Pearse and Weinstein, 1988). Harvests of animals, fish, or plants are managed to ensure that populations are sustainable and activities are moved or rotated throughout the traditional territories based on availability and regeneration of the populations. Subsistence harvesting activities also represent an invaluable cultural and traditional experience for Aboriginal harvesters and a meaningful recreational pursuit (AECOM, 2009).

Important areas for traditional land uses including hunting, trapping, fishing, and the collection of plants is discussed below. Important traditional land use areas identified through publically available information sources, and through the 2014 consultation with LSCFN (for sites along the Freegold Road) are shown on Figure B.18.3-1.

Figure B.18.3-1 includes key areas identified for habitat protection to preserve habitat, encourage conservation and support FN harvesting practices (Environment Yukon, 2012 pers. comm.) in the Northern Tutchone planning region include the following:

- Devil's Elbow Habitat Protection Area;
- Horseshoe Slough Habitat Protection Area;
- Big Island Habitat Protection Area;
- The Ddhaw Ghro Habitat Protection Area;
- The Lhutsaw Wetland Habitat Protection Area; and
- Nordenskiold Habitat Protection Area.

These areas are designated as Habitat Protection Areas under Yukon's *Wildlife Act* (SFN, Government of Canada and Government of Yukon, 1997; and Government of Yukon, 2002), and are well outside the regional study area of the Project.

Places of Cultural Importance

Spiritual or aesthetic sites that were the focus of traditional use in the past have been identified in the vicinity of the Project along the Yukon River (AECOM, 2009). A number of historical and archaeological sites have been identified in the immediate vicinity of the Project, including Britannia Creek, Patton Gulch, and Patton Hill. All sites have been recorded with the Yukon archaeological and place name database. Additional details regarding

historical and archaeological sites are provided in the Archaeology & Heritage Baseline (Appendix 18A). Areas assessed by CMC, and remaining to be assessed, are outlined in Figure B.18.4-1 and Figure B.18.4-2. During a trip along the Freegold Road in 2014 with members of LSCFN, various access points were identified by members of LSCFN as being important for access to culturally significant areas. These points were recorded by CMC, and are shown on Figure B.18.4-1 and Figure B.18.4-2. While site-specific GPS points are confidential, these points provide confirmation that there are access points to culturally sensitive areas along the Freegold Road, and as the Project progresses, the site-specific mitigations and accommodations will be detailed in consultation with LSCFN. These access points will be important to maintain during construction along the Freegold Road upgrade and extension.

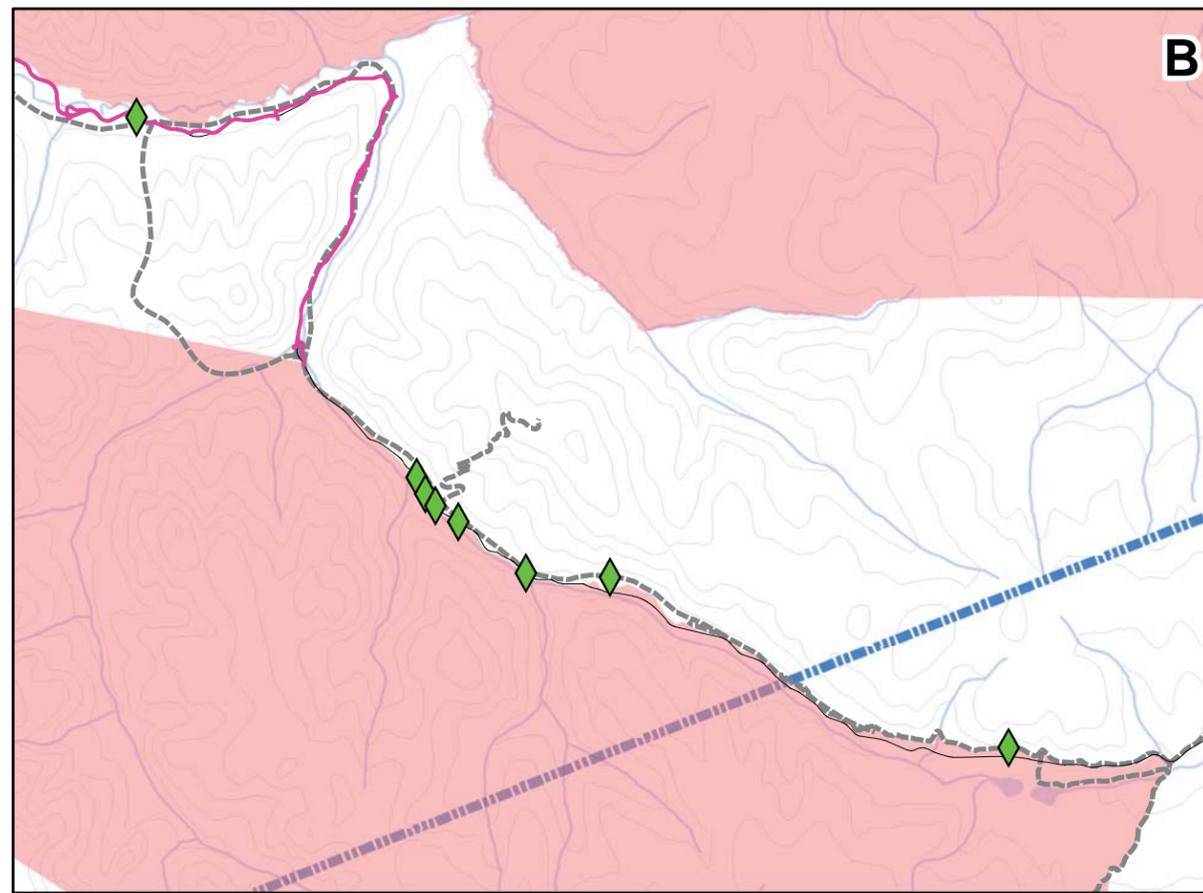
Fort Selkirk, a historic townsite 70 km east of the Project, is a traditional gathering place for SFN members and is located at the confluence of the Pelly River and Yukon River. Fort Selkirk has been used by SFN members for at least 8,000 years and was the general location of the first Hudson's Bay trading post established in 1848 (later relocated in 1852). Attacked by Chilkat Tlingit warriors who looted the post in protest to perceived interference to their trade route with interior Athapaskan First Nations, the fort was rebuilt approximately 40 years later and became an important supply point along the Yukon River. It fell into disuse during the mid- 1950s after the Klondike Highway bypassed it and Yukon River traffic declined. Many of the buildings have been restored and the Fort Selkirk Historic Site is co-managed by SFN and the Government of Yukon (AECOM, 2009). Fort Selkirk serves as a place for spiritual and cultural renewal and provides evidence of some of the historical activities of the Selkirk people (Yukon Department of Tourism and Culture, 2013). Access to Fort Selkirk is via the Yukon River or the nearby Fort Selkirk Aerodome.

Coffee Creek, west of the Project, on the Yukon River, was also an important area for the Northern Tutchone people. Coffee Creek was a trading post and steamboat landing as a result of the gold rush and staking of placer mining claims in the early 1990s (Dobrowolsky, 2014). In the 1930s there were over 125 First Nation people at Coffee Creek, who visited regularly with the Fort Selkirk people (Dobrowolsky, 2014). Coffee Creek was largely abandoned once the sternwheeler traffic ended on the Yukon River in the 1950s (Dobrowolsky, 2014). In 1999, the last full-time resident of Coffee Creek passed away (Dobrowolsky, 2014).

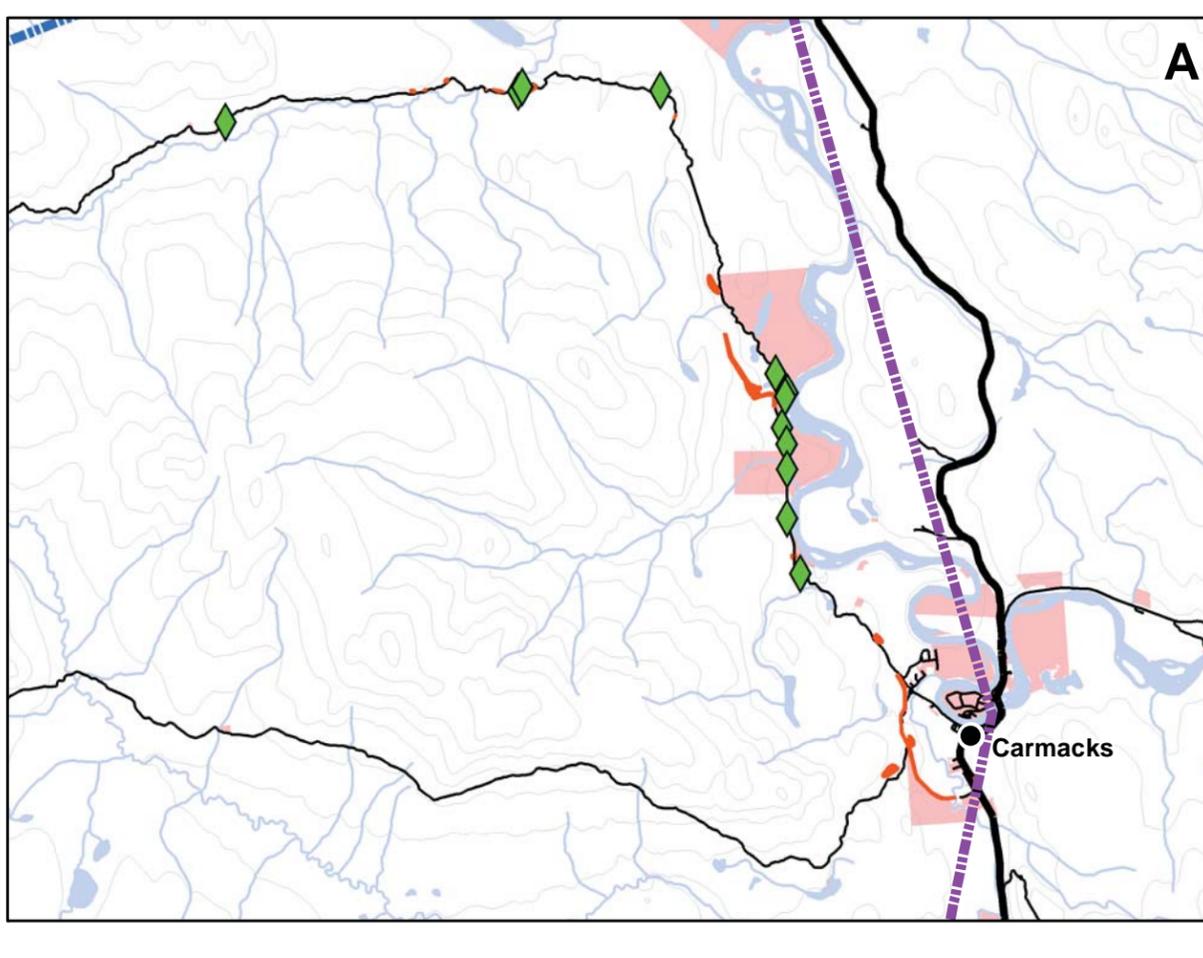
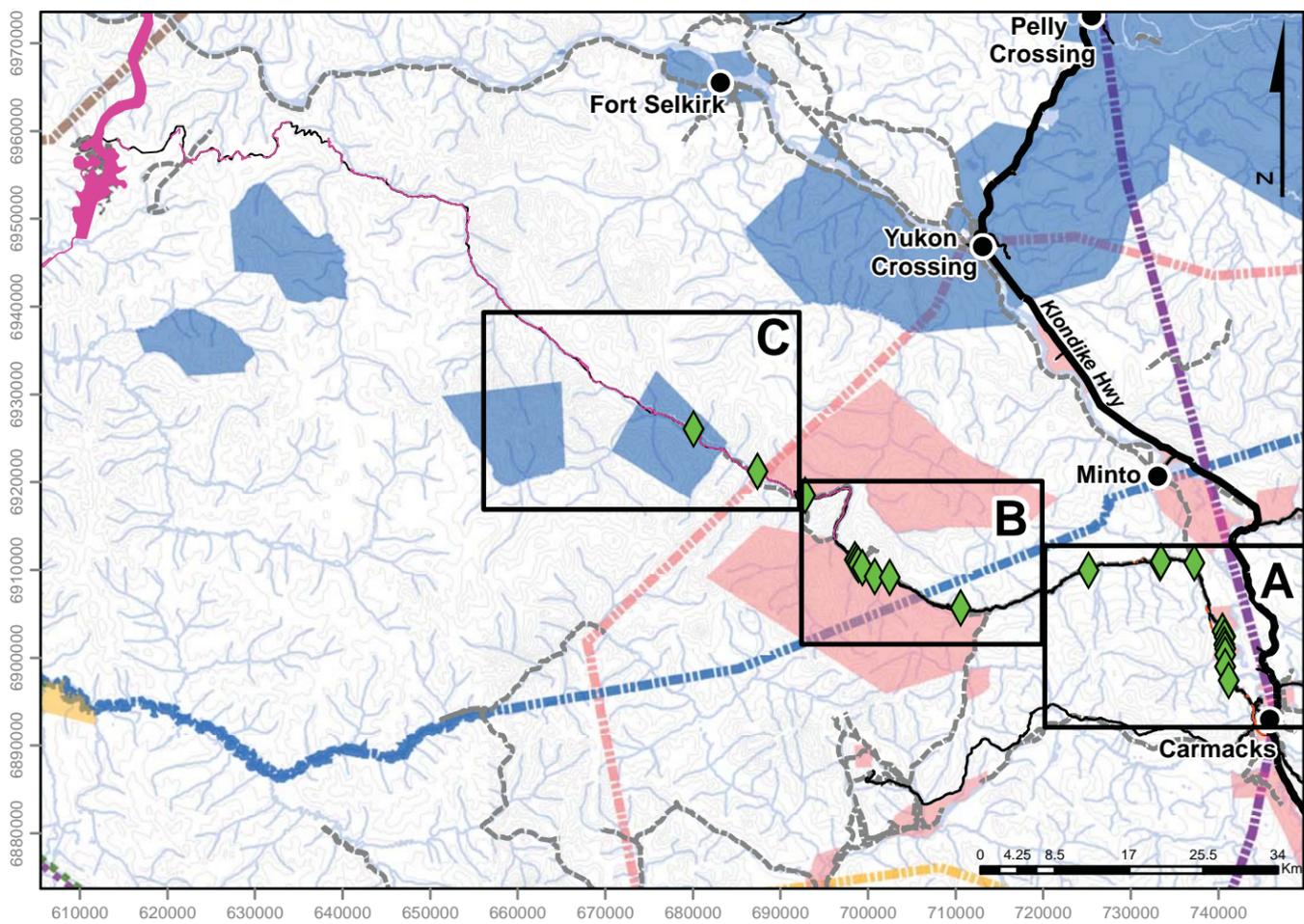
Tatlmoin Lake (east of Minto and north of Carmacks) is an important place within the territories of Selkirk people, and has been for a very long time (SFN and Gotthardt, 1992).

The Yukon Government has also identified special management areas to "maintain important features of Yukon's natural or cultural environment for the benefit of Yukon residents and all Canadians, while respecting the rights of Yukon Indian people and Yukon First Nations" (SFN and Environment Yukon, 2013). The Habitat Protection Areas and Special Management areas are shown on Figure B.18.4-3.

Figure B.18.4-1
Archaeologically Assessed
Areas and Access Points
to Areas of Cultural
Significance to LSCFN



- Access Points to Areas of Cultural Significance to LSCFN
 - Road
 - Klondike Highway
 - Trails
 - Contour
 - Watercourse
 - Waterbody
 - Proposed Polygon Facilities
- Ecofor Assessed Areas**
- Assessed
 - To be assessed

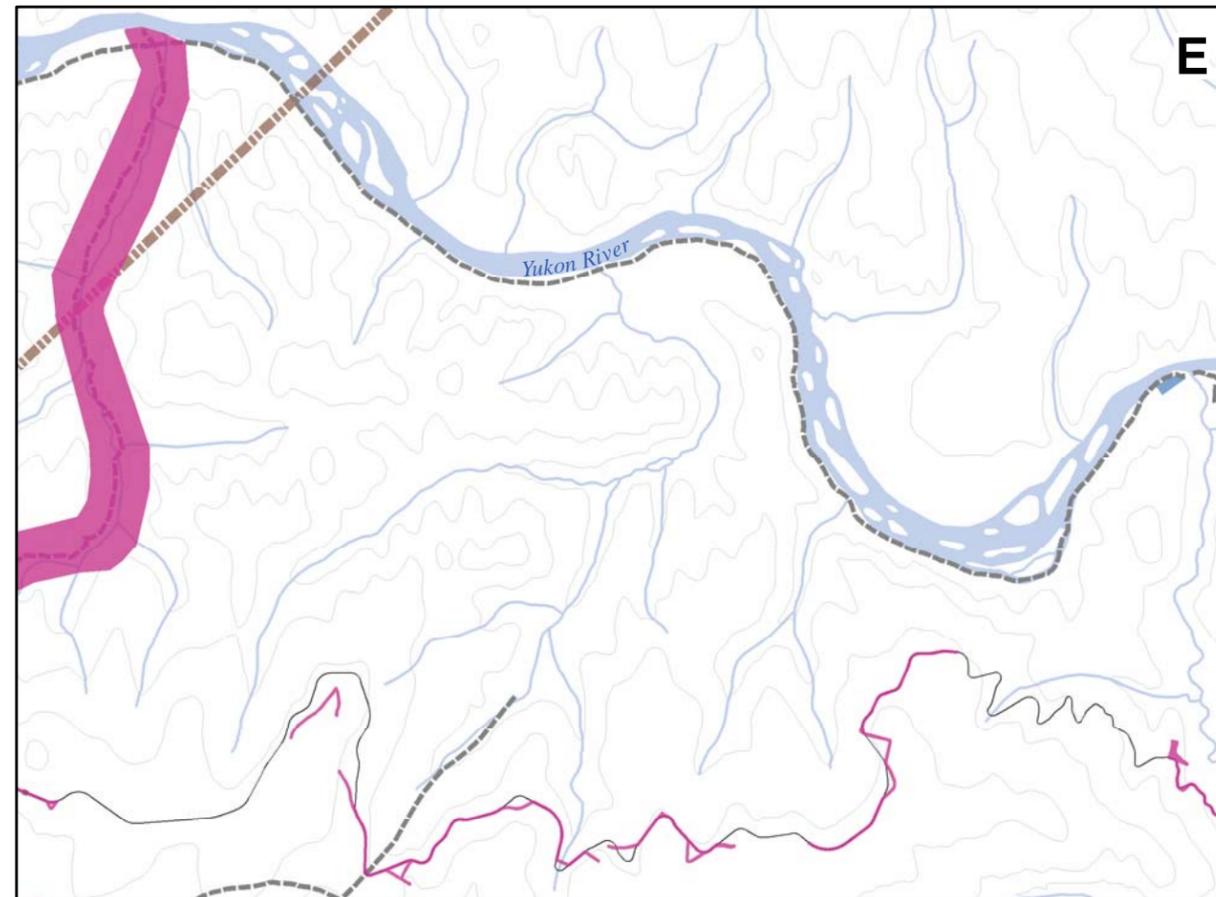
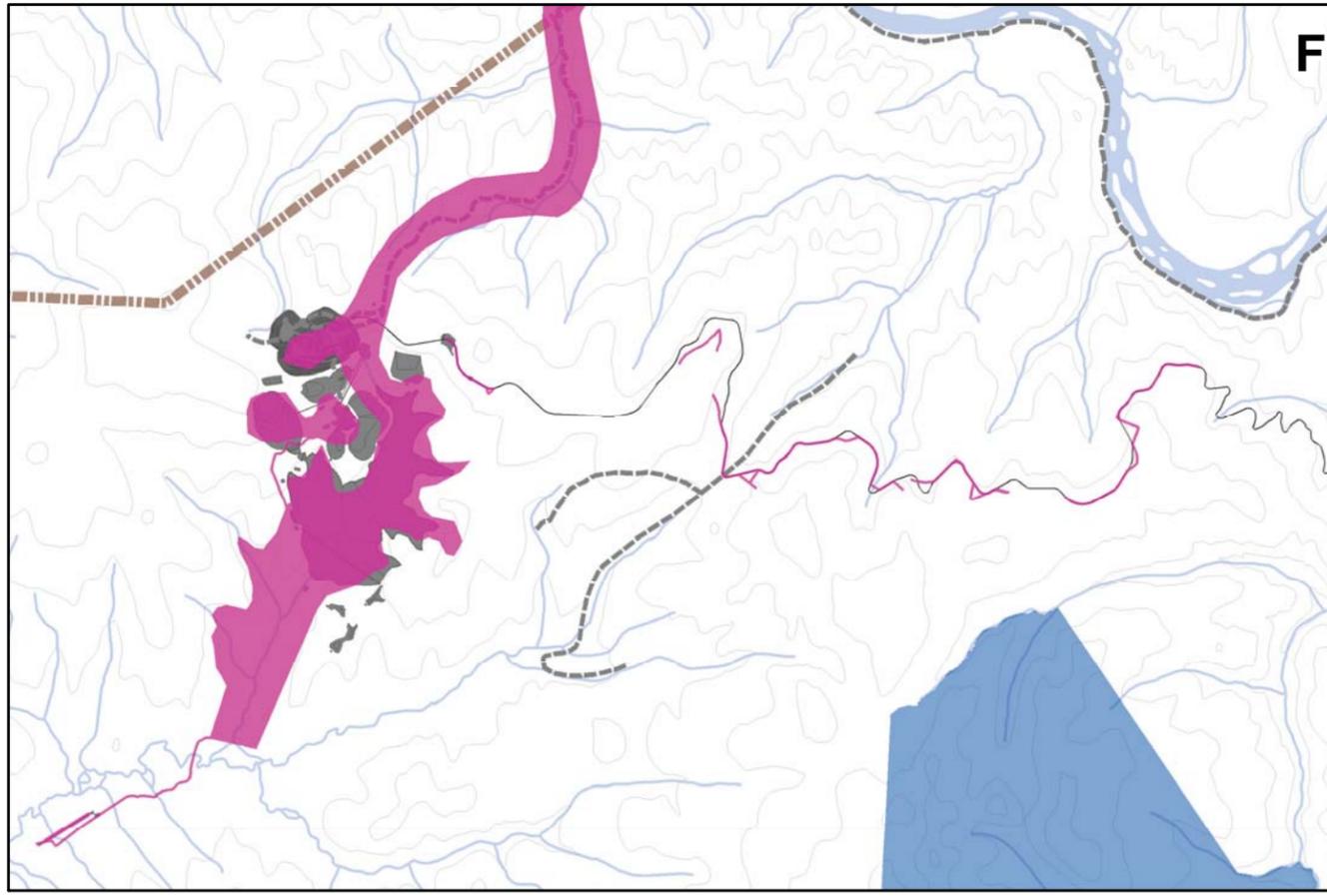


- First Nation Traditional Territories**
- Champagne and Aishihik First Nations
 - Kluane and White River First Nations
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in
 - WRFN Asserted Traditional Territory

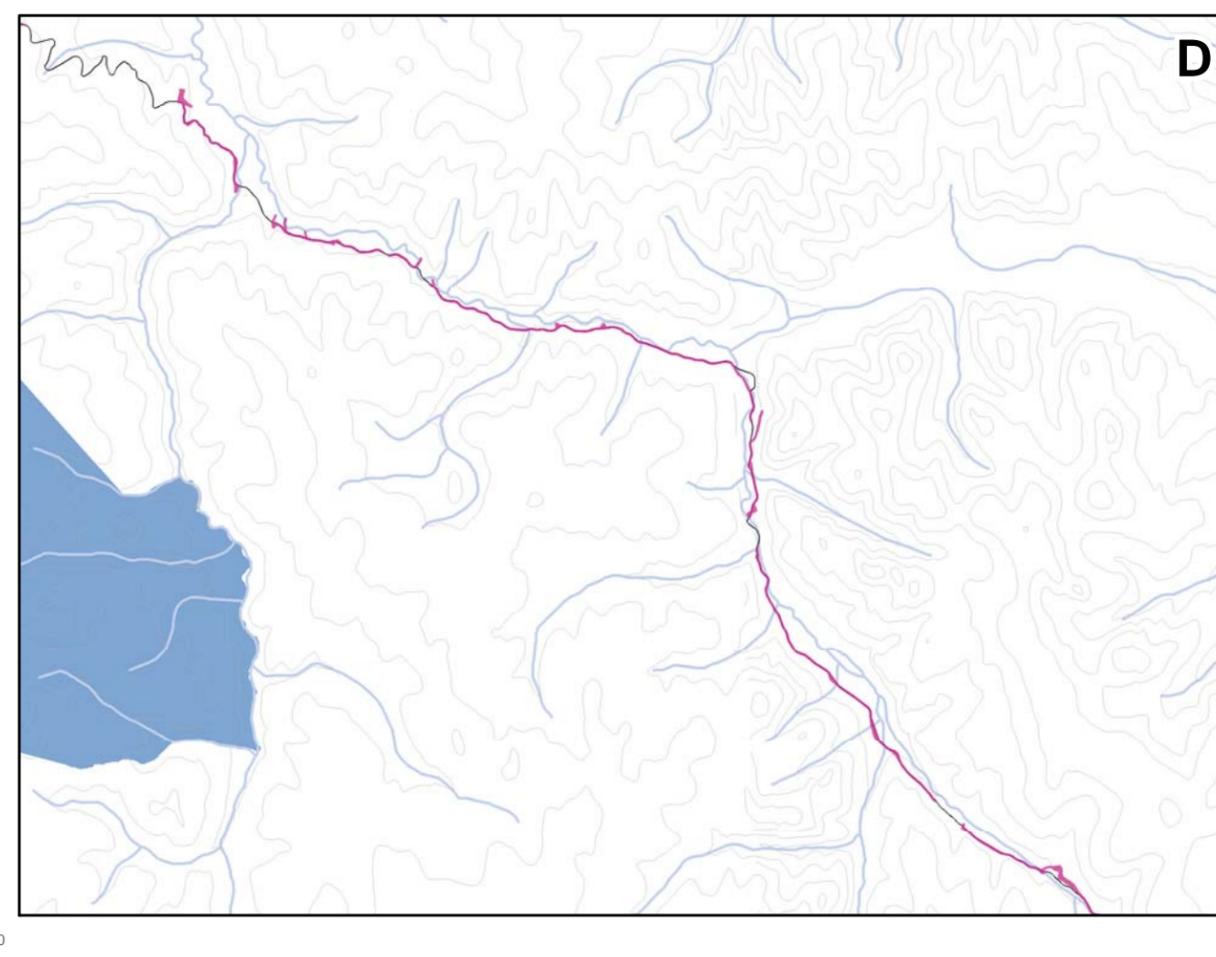
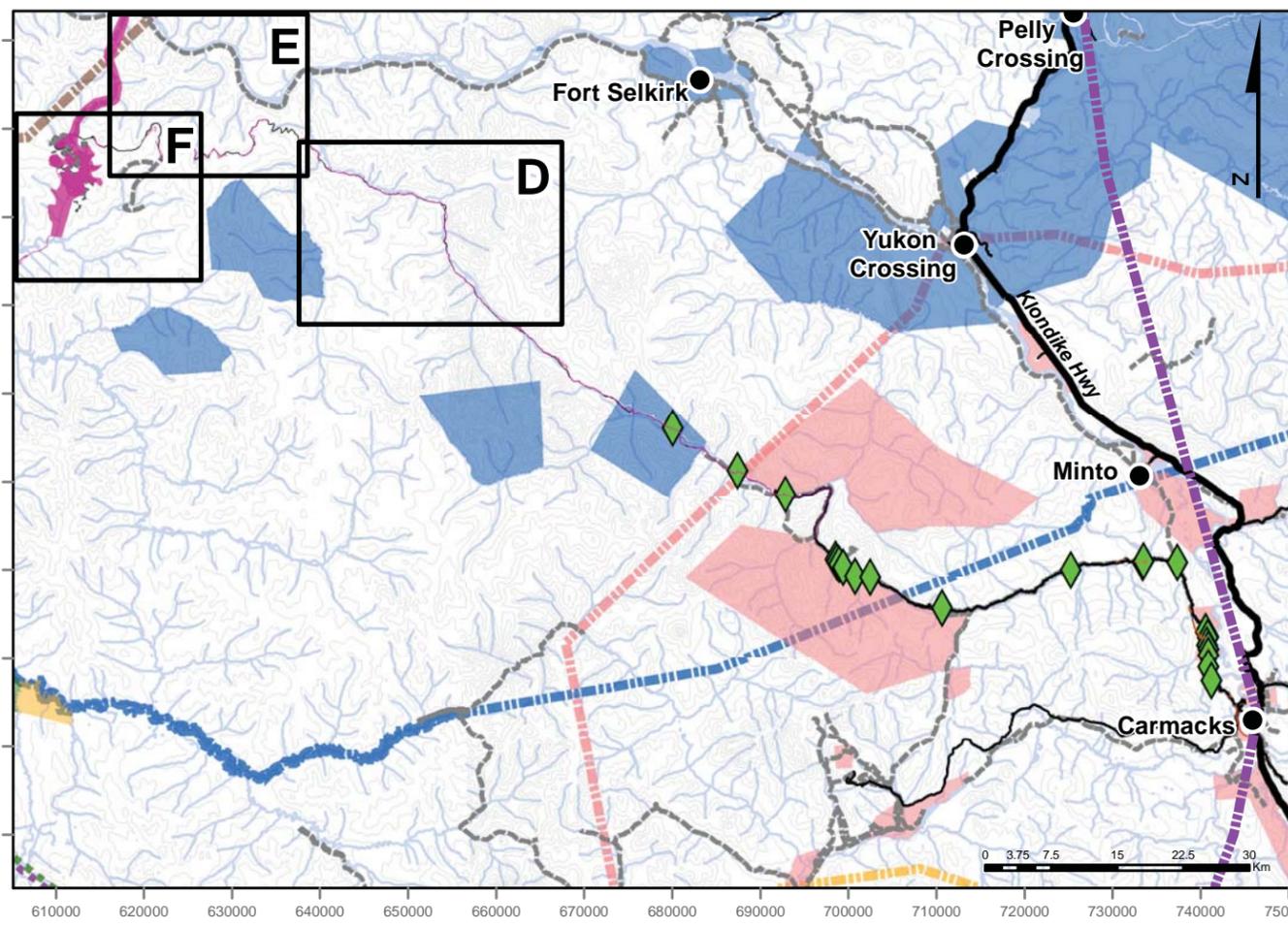
- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
 - Kluane First Nation
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in

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Figure B.18.4-2
Archaeologically Assessed Areas and Access Points to Areas of Cultural Significance to LSCFN



- Access Points to Areas of Cultural Significance to LSCFN
- Road
- Klondike Highway
- Trails
- Contour
- Watercourse
- Waterbody
- Proposed Polygon Facilities
- Ecofor Assessed Areas**
- Assessed
- To be assessed

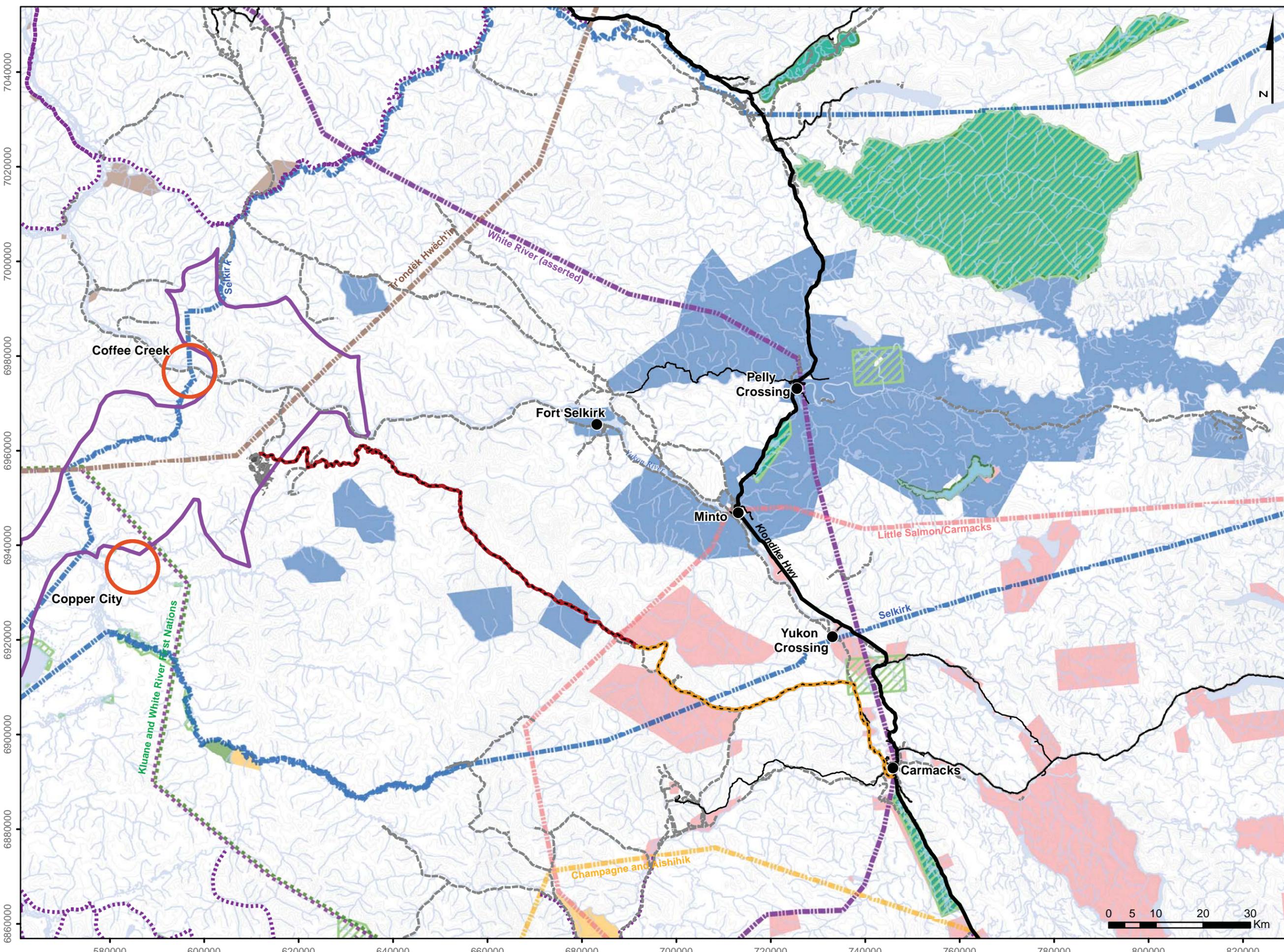


- First Nation Traditional Territories**
- Champagne and Aishihik First Nations
- Kluane and White River First Nations
- Little Salmon/Carmacks First Nation
- Selkirk First Nation
- Tr'ondëk Hwëch'in
- WRFN Asserted Traditional Territory
- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
- Kluane First Nation
- Little Salmon/Carmacks First Nation
- Selkirk First Nation
- Tr'ondëk Hwëch'in

Date: 16/12/2015
 Author: hbrown
 Coordinate System: NAD 1983 UTM Zone 7N
 Projection: Transverse Mercator
 Datum: North American 1983

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Figure B.18-4.3
Traditional Land Use:
Places of Cultural Importance



- Freegold Road Extension
- Freegold Road Upgrade
- Road
- Klondike Highway
- - - First Nation Heritage Routes
- - - Trails
- Contour
- Watercourse
- Waterbody
- Proposed Polygon Facilities
- ▨ OIC Territorial Lands
- Park and Protected Areas
- Traditional Land Use
- Location/area mentioned in Report
- "WRFN Traditional Territory: Consideration of the Northern Boundary"

- First Nation Traditional Territories**
- ▨ Champagne and Aishihik First Nations
 - ▨ Kluane and White River First Nations
 - ▨ Little Salmon/Carmacks First Nation
 - ▨ Selkirk First Nation
 - ▨ Tr'ondëk Hwëch'in
 - ▨ WRFN Asserted Traditional Territory

- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
 - Kluane First Nation
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in

Date: 16/12/2015
 Author: hbrown
 Coordinate System: NAD 1983 UTM Zone 7N
 Projection: Transverse Mercator
 Datum: North American 1983

Hunting

A 2011 SFN newsletter identified development of hunting, trapping and the traditional economy as a priority (SFN, 2011). SFN maintains strong links to hunting with many members obtaining a significant portion of their food supply through this means (Yukon Community Profiles, 2004). Similarly, a significant proportion of LSCFN residents hunt to meet their families' food needs. LSCFN families hunt one to two moose per year (LSCFN, 2013, pers. comm.). Other First Nations record the importance of year round hunting for moose and hare, and seasonal hunting of muskrat, beaver, caribou, bear and sheep (Easton et al., 2013). Harvested meat can have a high replacement cost value for northern and Aboriginal households.

Migrating fowl are hunted as they pass through the region and settle on lakes. Although trumpeter swans and goose eggs are protected from hunting, other birds remain staples within the subsistence diet, particularly the black duck (Easton et al., 2013).

In the early 1960s, the people of Little Salmon and Carmacks described their traditional hunting territory as extending almost to the Yukon and Pelly Rivers in the northwest, to the upper drainage of the Nisling, south almost to Hutshi and Lake Labarge, and east to include the lower Big Salmon River and all of Little Salmon Lake (Gotthardt, 1986). Records indicate Selkirk people travelling from Tatmain Lake to Ptarmigan Mountain, east of the Project area, for hunting sheep, caribou, moose and gopher and setting up camp to dry meat (SFN and Gotthardt, 1992).

As a result of Final Agreements between Yukon First Nations and government, a total of eleven FN hold the title to approximately 32,000 km² of land. An estimated two thirds of this is classified as Category A lands (granting the title holder surface and subsurface ownership) and balance is Category B (the title holder is only entitled to surface rights) and fee simple lands (typically designated as special areas). Hunting on FN Lands requires consent from the FN that holds title to the land however exceptions include (Environment Yukon, 2013d):

- Hunting is permitted without consent on undeveloped Category B settlement lands; however, harvesting bison and elk is prohibited;
- Hunting water fowl is permitted on settlement lands where there is a waterfront right-of-way; and
- Gravel bars and shoreline below the high water mark are accessible when hunting by boat in proximity to First Nations lands.

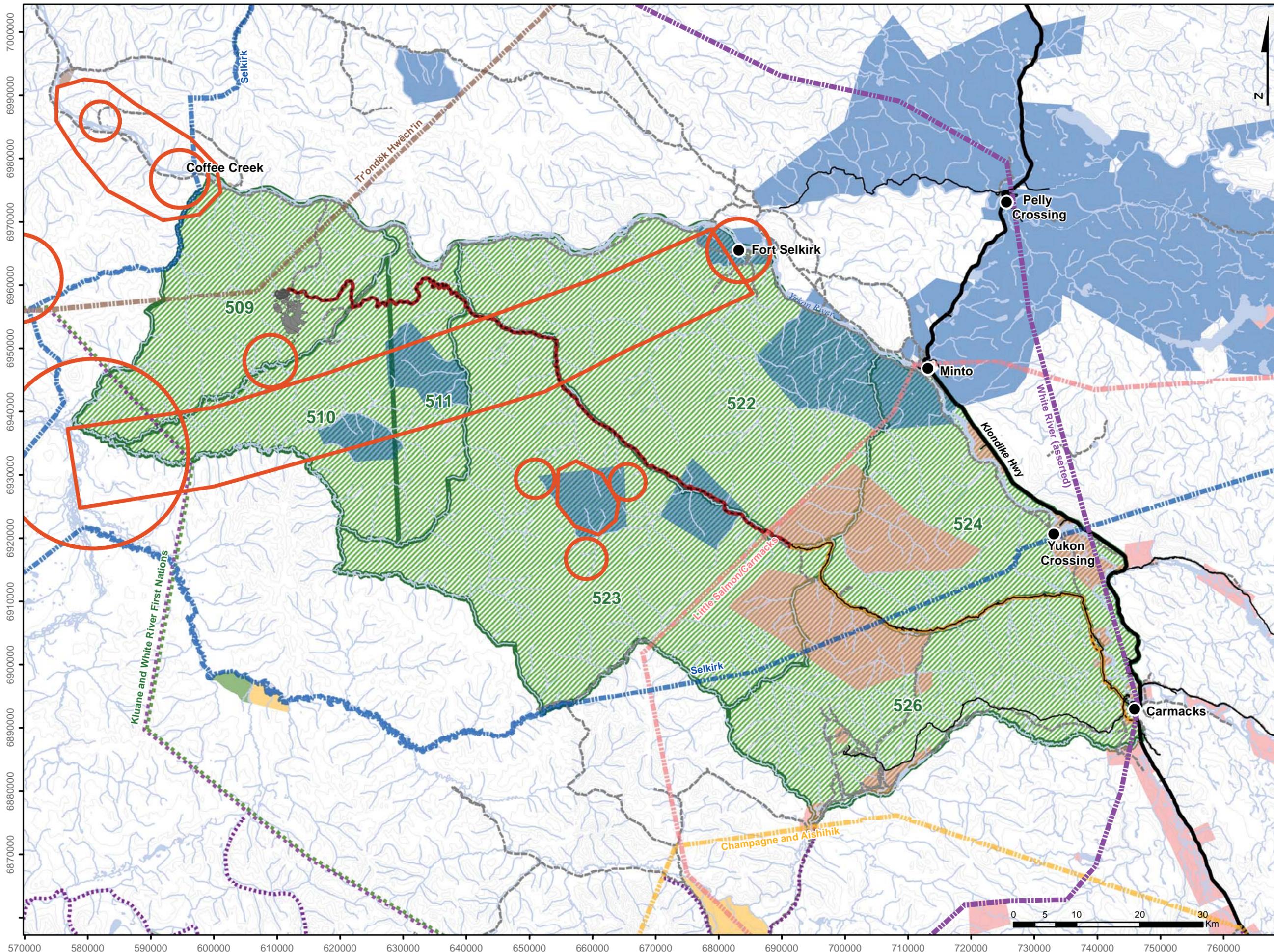
Some First Nations harvest data can be inferred from an assessment of hunting efforts (Environment Yukon, 2003). Areas accessible by boat were most frequented, followed by hiking and driving access. Approximately 97% of moose hunters reported hunting for subsistence purposes, not trophies (Environment Yukon, 2003).

The areas around Apex and Prospector Mountains and the headwaters of Coffee and Casino Creeks are described as marten homeland. Other areas identified as important to hunting is on the highlands between upper Big Creek and Hayes Creek, which are particularly good marten habitat. Sheep are hunted in the area around Prospector Mountain and in winter in the lower reaches of Big Creek (Figure B.18.4-4). FNs have expressed concern that the road and attendant mining activity will impair the capacity of these special places to harbour sustainable populations of animals.

Wetlands are also important areas for hunting, fishing and medicinal plants. Wetlands are common hunting locations for waterfowl (ducks, geese, cranes) and other wildlife such as beaver, muskrat, moose and caribou and freshwater shrimp (Mease, 2008).

Of note is that the Game Management Subzones (GMS) that are accessed along the Freegold Road, and along the Casino Trail (522, 523, 524, 526) were closed due to hunting pressure in the 1980s, and remain closed. The GMS around the proposed mine site (509, 510, 511) remain open, but are relatively remote and have been subjected to relatively little hunting pressure (see the Wildlife Baseline Report – Appendix A.12B for more details).

Figure B.18.4-4
Hunting Game Management
Subzones and Traditional
Use Areas



- Freegold Road Extension
- Freegold Road Upgrade
- Road
- Klondike Highway
- First Nation Heritage Routes
- Trails
- Contour
- Watercourse
- Waterbody
- Proposed Polygon Facilities
- Game Management Subzone
- Traditional Use Area

- First Nation Traditional Territories**
- Champagne and Aishihik First Nations
 - Kluane and White River First Nations
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in
 - WRFN Asserted Traditional Territory

- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
 - Kluane First Nation
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in

Date: 16/12/2015
 Author: hbrown
 Coordinate System: NAD 1983 UTM Zone 7N
 Projection: Transverse Mercator
 Datum: North American 1983



Trapping

Trapping in the Yukon is managed under the *Wildlife Act* as well as the Council of Yukon First Nations Umbrella Final Agreement (including individual First Nation Final Agreements) (Council of Yukon First Nations, 1990). The Government of Yukon regulates trapping activities under the *Wildlife Act* (Government of Yukon, 2002). In the Yukon, 14 different species of furbearing mammals are trapped. They are:

- Beaver
- Coyote
- Wolf
- Marten
- Muskrat
- Fisher
- Coloured Fox
- Wolverine
- Mink
- Otter
- Arctic Fox
- Lynx
- Squirrel
- Weasel

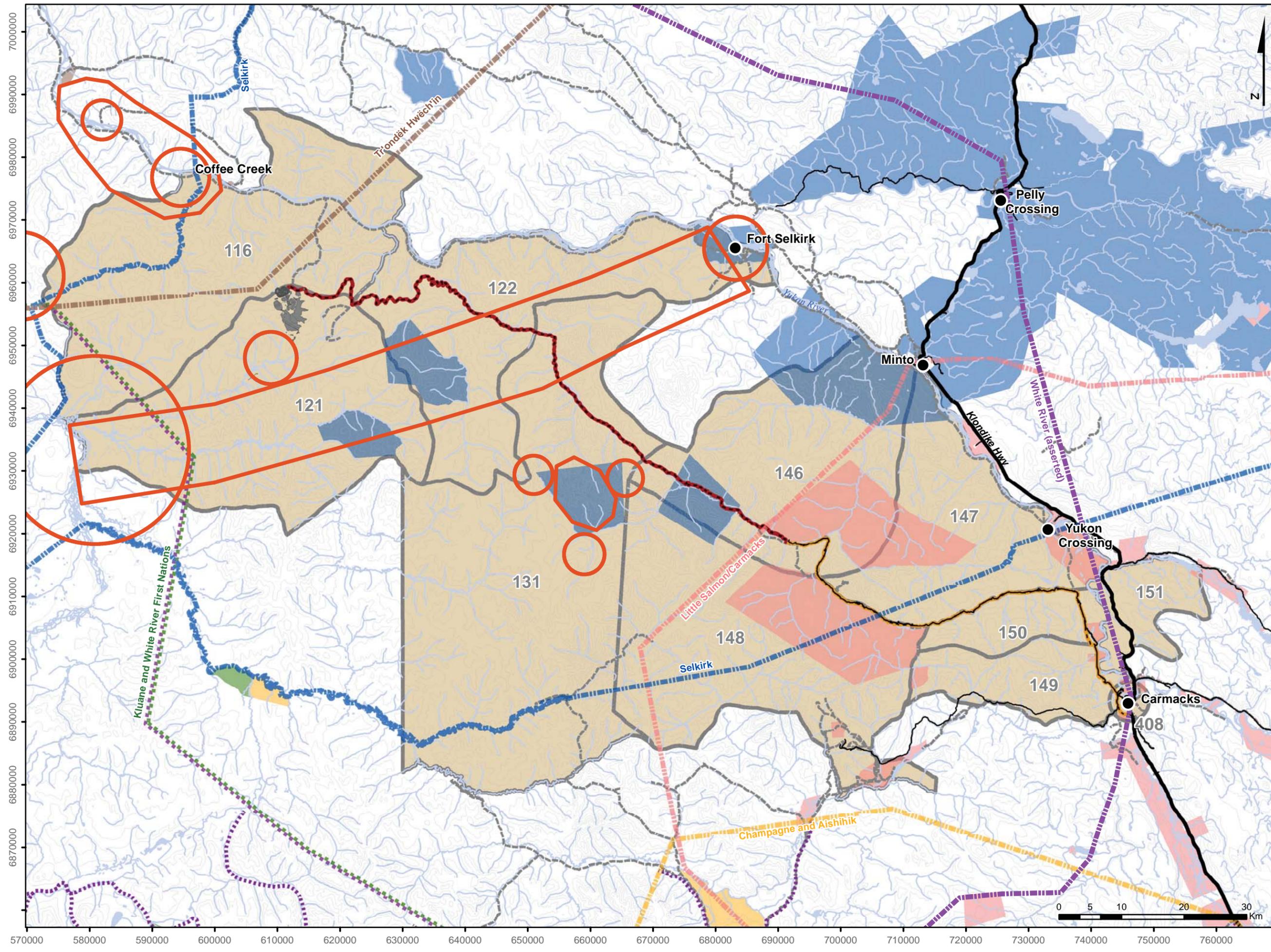
A registered trapping concession is a parcel of land on which the holder is granted the rights to harvest furbearing animals. There are a total of 333 registered trapping concessions and 18 group areas (these are typically held by a family or FN) in the Yukon. There are approximately 400 trapping licenses in the Yukon the majority of which are held by registered trapping concession holders (the balance is held by assistant trappers). The trapping concession awards harvesting rights of the furbearing mammals to the holder for 5 years at a time (Environment Yukon, 2013a).

Trapper training is an important requirement for licensed trappers and concession holders (Environment Yukon, 2013b). Environment Yukon offers four-day-long (minimum 28 hours) trapper training workshops between October and March. The minimum age to participate is 12. It is estimated that less than a third of the available trapping concessions are active because the return on hides has decreased while the cost to maintain lines (increasing fuel costs) have increased (Hunting and Trapping Wolves in Yukon, 2011b).

Trapping was and still is a traditional activity for many FN in the Yukon, providing economic and sustenance benefits for both FN and non-FN residents. Trapping, which generally occurs in the winter months, is a way of life for many and a means of employment. An estimated 50% of trappers in the Yukon are FN (Environment Yukon, 2013a). Trapping was described as an activity that contributes to trappers' lives by allowing them to be present on the land and connected to the wilderness and wildlife that inhabit these areas (Registered Trapline Holders 2012, pers. comm.).

There are 11 registered trapping concessions that overlap or border the mine site or the Freegold Road Upgrade and/or Extension (Figure B.18.4-5). The owners of these traplines were contacted in 2012 and 2013 prior to Project Proposal submission and also in June 2015 (see Section B.2 for more details on communication with trapline concession holders). Traplines in the Project area are often remote, and two registered trapline holders indicated that access to the traplines can be time-consuming and costly (Registered Trapline Holders, 2012 pers. comm.). The trapping season generally occurs from January to March, although this may differ from trapline to trapline. Species most commonly targeted in the two traplines referred to above include wolf, wolverine, lynx and marten, while the species most commonly caught include marten and lynx (Registered Trapline Holders, 2012 pers. comm.). Another interview with a key informant revealed that Lynx, wolves, wolverines, squirrels and beaver are trapped in the area. Lynx is amongst the most valuable of the aforementioned species and is directly tied to the rabbit population, a food source for the Lynx (Registered Trapper, 2013 pers. comm.). A 2011 SFN Newsletter identified development of trapping infrastructure and the traditional economy as priorities (SFN, 2011). Similarly the LSCFN Integrated Community Sustainability Plan also identifies subsistence hunting, fishing and trapping as a way of life for their membership (Inukshuk Planning and Development, 2007).

Figure B.18.4-5
Trapping Concessions and Traditional Use Areas



- Freegold Road Extension
- Freegold Road Upgrade
- Road
- Klondike Highway
- First Nation Heritage Routes
- Trails
- Contour
- Watercourse
- Waterbody
- Proposed Polygon Facilities
- Trapping Concessions
- Traditional Use Area

- First Nation Traditional Territories**
- Champagne and Aishihik First Nations
 - Kluane and White River First Nations
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in
 - WRFN Asserted Traditional Territory

- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
 - Kluane First Nation
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in

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Fishing

As with hunting, FN, residents and non-residents pursue the activity for a variety of different reasons ranging from subsistence to sport. Fish can make up 30-50% of the diet in any one year (Easton et al., 2013). The FN people would live in winter villages near lakes where they would use nets to capture fish under the ice (Morrell, 1991). This source of protein would augment their winter food cache of dried meat, berries and roots. Fishing is still considered an important component of traditional FN culture; many will spend a few weeks every fall fishing at their family's traditional fish camp. Chinook salmon, broad whitefish and lake whitefish are the most important species in the First Nation's fisheries in the Pelly drainage (Morrell, 1991). Chum salmon are taken by SFN members at Minto (Morrell, 1991). Fisheries for salmon and for resident species have been central to the First Nations' economies of the Pelly River system throughout history and continue to be important in the subsistence economies (Morrell, 1991). The salmon caught are frozen or dried and consumed over the winter. Today's FN are still known to use the nets placed under the surface of the ice to catch fish (SFN and Gotthardt, 1992).

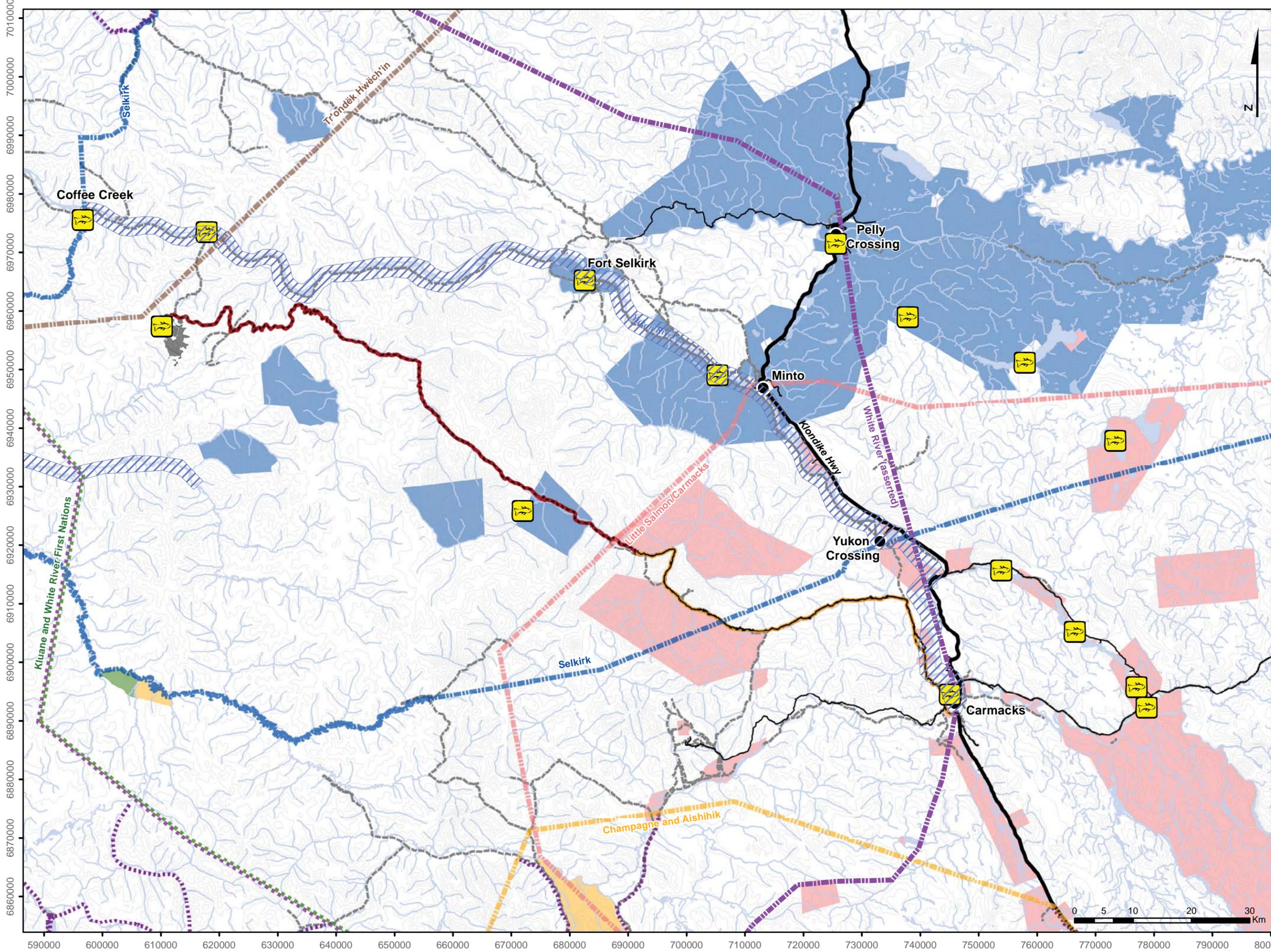
The Yukon River, Tatchun River, and Ethel Lake are popular fishing destinations in the study area. The species found in these waterways include Arctic Grayling, Northern Pike, Burbot, Inconnu, and Chinook salmon (Fishing on Yukon Time: A guide to Fishing in Yukon (2011-2012), Easton et al., 2013). Big Creek was an important fishing site for residents of both Selkirk and Carmacks. Its outlet was a valuable place for grayling, whitefish, chum salmon, and king salmon. In the middle reaches, people fished for whitefish, grayling and kings; while in the upper reaches kings and grayling could still be caught. The creek has a fall run of grayling, and in low water years people could easily catch them in shallow pools (Pearse and Weinstein, 1988). East of the White River, the WRFN had salmon fisheries on the Yukon River at Coffee Creek (Figure B.18.4-6) and south of the Project area, on the Donjek, Klotossin, and Nisling Rivers (Easton et al., 2013).

At the head of Mica Creek, spawning whitefish were fished late in the fall (SFN and Gotthardt, 1992). The mouth of Mica Creek on the Pelly River was an important grayling and whitefish fishing site. In summertime, people went to Fort Selkirk or the Pelly River for salmon fishing; in early fall, they went to Minto for dog salmon by the trail along Legha Mān (SFN and Gotthardt, 1992).

The only stocked lake within the RSA is Gloria Lake II, the second lake on the left-hand side when travelling up the Freegold Road, about 14 km north of Carmacks (Environment Yukon, 2012). Anglers report good luck catching rainbows in the 1-2 kg (2-4 lbs) range. A gentle slope at the north end of the lake provides the easiest access route for launching a small boat, but a boat is not necessary. The shoreline is clear enough to walk around and to permit casting (Environment Yukon, 2012).

CASINO

**Figure B.18.4-6
Traditional Fishing Areas**



- Freegold Road Extension
- Freegold Road Upgrade
- Road
- Klondike Highway
- First Nation Heritage Routes
- Trails
- Contour
- Watercourse
- Waterbody
- Proposed Polygon Facilities
- Traditional Fishing Area
- Traditional Fisheries Locations

- First Nation Traditional Territories**
- Champagne and Aishihik First Nations
 - Kluane and White River First Nations
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in
 - WRFN Asserted Traditional Territory

- First Nation Settlement Lands**
- Champagne and Aishihik First Nations
 - Kluane First Nation
 - Little Salmon/Carmacks First Nation
 - Selkirk First Nation
 - Tr'ondëk Hwëch'in

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Plant Collection

Plants are gathered for food, medicine, or for use in constructing tools or goods, with summer being the season for most of this activity. Receveur and Kuhnlein (1998) completed a territory-wide study of dietary benefits and risks associated with the consumption of traditional foods by Yukon First Nation people. They had the following observations: 1) traditional foods are consumed 57% of the year (80% in summer, and 40% in winter), 2) 58% of the households surveyed collect plants, 3) plant foods are consumed in summer and to a lesser extent, winter, 4) berries are consumed by the most number of people compared to other plants; in descending order of the top 10 species by summer use (blueberries, wild raspberries, low bush cranberries, wild strawberries, high bush cranberries, soapberries, crowberries, Labrador tea, mushrooms, balsam fir), 5) the younger generation (20-40) consumes more market food than older generations, including fewer berries, mushrooms, and wild rhubarb (Receveur and Kuhnlein, 1998).

LSCFN members collect Arctic Raspberry, Labrador Tea, cranberries, blackberries, stone berries and mushrooms in their traditional territory (Nicholson, 2002). In Yukon First Nation diets, typical edible plants include arctic dock (*Rumex arcticus*), fireweed *Epilobium angustifolium*), wild onions/chives (*Allium schoenoprasum*), dandelion leaves (*Taraxacum officinale*), wild rhubarb (*Polygonum alaskanum*), bear root (*Hedysarum alpinum*), Labrador tea leaves (*Ledum* spp.), Bolete mushrooms (*Leccinum* spp.), puff balls (*Lycoperdon* spp.), morels (*Morchella* spp.), shaggy mane mushrooms (*Coprinus comatus*), blueberry (*Vaccinium* spp.), crowberry (*Empetrum nigrum*), low bush cranberry (*V. vitis-idaea*), high bush cranberry (*Viburnum edule*), soapberry (*Shepherdia canadensis*), strawberry (*Fragaria* spp.), cloudberry (*Rubus chamaemorus*), rosehips (*Rosa acicularis*), currants and gooseberry (*Ribes* spp.), and Saskatoon berry (*Amelanchier alnifolia*) (Nardelli and Wein, 1996; Receveur and Kuhnlein, 1998).

Wetlands are also important locations for medicinal plants such as: cranberries that are used for various reasons such as urinary infections; blueberries for inner healing; and the *chen gho'* (puff-balls) that were used, among other things, as poultices for chest infections (Mease, 2008).

Trees species, including willow and spruce are important for a variety of traditional uses, including sewing and net making, medicine, gum, ointment, glue and heat. Birch wood was used for carving snowshoes, canoe frames, bows, sleds and the bark used to make containers, house lining, and sled and boat skins (Easton et al., 2013). Spring has historically been important for birch bark and sap to be gathered for canoes and baskets (Gotthardt, 1987).

Current access to plant collection sites tend to be limited to the area around the Freegold Road, as there is easy access to these areas either via truck or car, or into the bush via ATV or snowmobile.

The following plant species, discussed above, were observed during the rare plant surveys conducted in 2010 and 2012 (from Attachment C of the Vegetation Baseline Report – Appendix 11A):

- arctic dock (*Rumex arcticus*),
- fireweed (*Epilobium angustifolium*),
- dandelion leaves (*Taraxacum officinale*),
- wild rhubarb (*Polygonum alaskanum*),
- bear root (*Hedysarum alpinum*),
- Labrador tea leaves (*Ledum* spp.),
- soapberry (*Shepherdia canadensis*),
- strawberry (*Fragaria* spp.),
- cloudberry (*Rubus chamaemorus*),
- rosehips (*Rosa acicularis*),
- currants and gooseberry (*Ribes* spp.),
- wild raspberries (*Rubus idaeus*),

- blueberry (*Vaccinium* spp.),
- crowberry (*Empetrum nigrum*),
- low bush cranberry (*Vaccinium vitis-idaea*),
- high bush cranberry (*Viburnum edule*),
- willow (*Salix* spp.),
- spruce (*Picea* spp.), and
- birch (*Betula* spp.).

Ecosystems in which edible and medicinal traditional plants are found include the areas in the Local Study Area that are set out below. The LSA includes a 1 km buffer on either side of the 120 km length of the Freegold Road Extension, and the mine site, which includes Britannia Creek, Canadian Creek and Casino Creek watersheds, and upper Dip Creek. All proposed infrastructure associated with the mine, including the Yukon River pipeline and access road, and airstrip and access road is located within the LSA. See the Vegetation Baseline Report (Appendix 11A) for more details.

- *Subalpine bioclimate zone* — The subalpine bioclimate zone comprises ~36% of the LSA and is comprised predominately of subalpine moist shrub (e.g., dwarf birch (*Betula glandulosa*)), wet shrub (e.g., spruce-shrub on steep north facing slopes) and tall shrub vegetation communities. There is also a small component of mid to high elevation dry shrub communities that include mountain cranberry (*Vaccinium vitisidaea*), common bearberry (*Arctostaphylos uva-ursi*) and crowberry (*Empetrum nigrum*).
- *Boreal high bioclimate zone* - The boreal high bioclimate zone comprises ~47% of the LSA, of which 37% is comprised of moist broadleaf forest (Fbw), coniferous forest (Fc), sparse coniferous forest (Fcs) and mixedwood forest (Fm) that include tree species Alaska birch, and black and white spruce, and shrub species dwarf birch, Labrador tea, mountain cranberry, prickly rose, currant/gooseberry and willow.
- *Boreal low and boreal high bioclimate zone* – The boreal low and boreal high bioclimate zone comprises ~9% of the LSA. This zone includes shrub species such as prickly rose, grey alder, high bush cranberry and red osier dogwood, with Labrador tea, mountain cranberry, and cloudberry common in the understory.

B.18.4.1.3 Incorporation of Traditional Knowledge and Traditional Land Use into the Project Proposal

During Project design, the consultations with First Nations about their traditional land use led to significant decisions about the proposed Project that was submitted to YESAB. These decisions were informed by the various meetings held with First Nations, the review of draft reports with First Nations and a review of publicly available information regarding traditional land use, as well as economic, environmental and technical considerations. The main Project changes made to reflect the importance of traditional land use include:

- Methods of Transportation – to avoid impacts to the culturally important Yukon River, CMC discounted transportation options that included barging along or crossing of the Yukon River (see Section 4.8.4.1).
- Selection of access road route – originally the access road route was the “Onion Creek” route to the port of Haines. Following consultation with First Nations, and further analysis of the environmental issues and potential impacts and First Nations interests, the Freegold Road Upgrade and Freegold Road Extension option was developed. Discussed further below.
- Tailings Management Facility location – while the TMF location in Canadian Creek, just above the confluence with Britannia Creek had the lowest capital, closure and post-closure costs, this option was discounted as it had the highest potential for groundwater quality impacts and impacts to the Yukon River, which is a culturally significant river (see Section 4.8.4.4 and Appendix B.4B for alternatives assessments).

- Incorporation of short-span bridges to minimize in-stream works, and potential effects on fish and fish habitat – short-span bridges will be used, wherever possible to minimize the installation of culverts. While more expensive, CMC has committed to minimizing impacts to fish and fish habitat wherever possible. The Freegold Road extension intersects areas of importance to traditional fishing (e.g., Big Creek), which will be protected in all ways possible.
- Freegold Road Extension – route refinements – A number of options for detailed routing were examined and discussed with First Nations over a period of several years. The final routing that was proposed is intended to carefully balance First Nation interests, particularly as they related to concerns over wildlife protection. The proposed route offered the best alternative by proposing the road upgrade along an existing impacted corridor, avoiding the sensitive habitats of several species (including salmon and sheep), and providing a safe constructible corridor to support the transportation of supplies and ore.
- Freegold Road Upgrade Nordenskoild bridge bypass – CMC adopted this bypass as part of the access design early in the project in response to concerns from the Carmacks community including concerns brought forward from First Nation members, about truck traffic through the community.
- Freegold Road Extension access control and management - a significant number of commitments as outlined in the Project Proposal, all of which are in response to both general and specific concerns brought forward in community meetings and discussions with both LSCFN and Selkirk FN are set out in CMC's Road Use Plan (Appendix A.22E).

B.18.4.1.3.1 Access Road Route Selection

Below is a summary of the access road route selection in reference to incorporation of traditional land use. A full discussion of the route selection process can be found in Section 4.8.4.2, Section A.4.2.2 and Appendix A.4.B.

A preliminary study examining transportation options for the Project (Project Transportation Scoping Study, Appendix 4A.B Information on Alternative Access Road Alignments) was conducted in 2008 by Associated Engineering. Associated Engineering examined seven alternative routes for an all-weather road access to the mine as well as alternative modes of transportation including barge, pipeline, rail, air, and truck. It was concluded that trucking presents the most reliable means of transporting concentrate and supplies to and from the Project and the Onion Creek route to the port of Haines would be the most economic alignment. Upon further review, CMC determined that the port at Skagway offers the advantage of developing a dedicated terminal and space for receiving and storage of concentrates.

Of the seven access road alignments/concepts considered by CMC since 2008, four of the seven access road alignments were screened out from further evaluation for reasons presented in Table B.18.4-5. Reasons include a consideration of socio-economic acceptability, primarily due to influence on traditional hunting and fishing activities.

Table B.18.4-5 Preliminary Access Route Concepts

Route Concept	Rationale Provided in the Proposal	Additional Rationale and Supporting Information
<i>Aishihik Road:</i> Casino Mine Site via Onion Creek to Alaska Highway to Aishihik Road	This route would follow the same alignment as Onion Creek from the mine site and east of the wetland to a crossing of the Nisling River close to Onion	This route was considered a high risk option because: <ul style="list-style-type: none"> • Crosses areas of potentially significant and active First Nations traditional use • Multiple fish species habitat at the north end of

Route Concept	Rationale Provided in the Proposal	Additional Rationale and Supporting Information
Intersection	<p>Creek. It would then follow the south slopes of the Nisling River Valley, before turning south to follow along the existing, summer-only Aishihik Lake Road to the Alaska Highway. This route was excluded from further consideration due to potential challenges with permitting because it follows the Nisling River area which is known wildlife habitat.</p>	<p>Aishihik Lake, including Nisling River salmon</p> <ul style="list-style-type: none"> • Crosses Aishihik caribou range • In proximity to approximately 20 parcels of settlement land and passes four First Nations traditional territories • Crosses Osprey nesting areas • Additional impact on Wood Bison core range • Crosses waterfowl and sharp-tailed Grouse nesting habitats • Salmon suitability in Aishihik drainage is unknown • Affects eleven trapping concessions and one group concession, in mostly undeveloped areas • Adjacent to additional outfitter camp
<p><i>East Route: New Mine Access to Nisling River to East Route</i></p>	<p>This route would follow the same alignment as Onion Creek from the mine site and east of the wetland to a crossing of the Nisling River close to Onion Creek. It would then follow the south slopes of the Nisling River Valley, before turning south to follow along the existing Aishihik Lake Road to the Alaska Highway. This route was excluded from further consideration due to potential challenges with permitting. The Nisling River area supports a healthy population of wood bison. There is also evidence of sheep and moose in the area. Up-grading the existing Aishihik Road would require agreements from the Champagne and Aishihik First Nation.</p>	<p>This route was considered a high risk option because :</p> <ul style="list-style-type: none"> • One of the longest sections of new access of all options • Crosses First Nations settlement land • Crosses five First Nations traditional territories • Significant interactions with moose winter range • Crosses Bald Eagle nesting area • Crosses winter ranges of caribou (Klaza, Kluane and Aishihik) herds • Crosses core area within Bison Management Area (although Bison is abundant) north of Aishihik Lake • Crosses three salmon bearing streams, good fish habitat (Klotassin, Nisling and Nordenskiold rivers, and Rowlinson Creek) and wetland crossing • Crosses twelve trap-line concessions and two outfitter concessions • Adjacent to a trapping at Tyrell Creek and forestry reserves • Crosses grazing lease • In proximity to one outfitter camp
<p><i>Klaza River: Mine Access to Nisling River to Klaza River Route</i></p>	<p>This route is similar to the East Route but instead of following the Nisling River east to Nansen Mine Road it would follow the more mountainous route of Klaza Creek. The purpose of pursuing this route was to avoid</p>	<p>This route was considered a high risk option because:</p> <ul style="list-style-type: none"> • Crosses through fall range and into core area of winter range of Klaza and Aishihik caribou herds • Crosses important winter habitat for thinhorn sheep • On the northern edge of the Bison Management Area (though bison are abundant)

Route Concept	Rationale Provided in the Proposal	Additional Rationale and Supporting Information
	<p>the wetland of the Nisling River. Even though it would be a slightly shorter section of new road than the East Route, it is likely to be too costly to build and to operate and was excluded from further consideration. As well, it follows known wildlife habitat and has potential challenges with permitting.</p>	<ul style="list-style-type: none"> • Crossing of high suitability salmon habitat river and salmon bearing streams including Klotassin, Nisling and Klaza rivers • Increased interaction with place and quartz mining exploration activities • Crosses four First Nations traditional territories and the settlement lands of four First Nations • Crosses eight trapping concessions
<p><i>Yukon River: Mine Access to Battle Creek to Yukon River Route</i></p>	<p>This is an extension of the Minto Route, instead of crossing the Yukon River at Minto, the road would connect with the Klondike Highway at Carmacks. This route was excluded from further consideration because objections can be expected from wildlife, tourist and sport-fishing interest groups due to its proximity to the Yukon River.</p>	<p>This route was considered to be a medium risk option because:</p> <ul style="list-style-type: none"> • Adjacent to First Nations Settlement Lands • Within one First Nations traditional territory • Northern edge of Caribou winter range and Gray falcon nesting area • Crosses two First Nations settlement land selections • Crosses three high suitability salmon habitat streams and good salmon habitat • High level of mineral claim activity resulting in increased interactions with other mine exploration activities • Route crosses trap-lines and two outfitter concessions

Of the remaining three options (Onion Creek, Minto and Freegold Road), the Onion Creek route crosses unsettled land claims and has the potential to open new access to wilderness areas. As well, outfitting concessions are known to currently exist in the area and may be affected by the development of the Onion Creek route. Approximately 100 km from the Casino Mine Site are known First Nation's traditional fishing and salmon spawning grounds and further south are known First Nation's timber and quartz mine claims. The Minto route also crosses First Nations settlement land and has the potential to open new access to wilderness areas along the route. The Freegold Road generally follows a previously impacted corridor used to access the Casino Project area, other exploration projects and placer mines in the Dawson Range, and has been previously identified as potential future access to the Casino Project by the Yukon Government.

Following a meeting with representatives of the Kluane First Nation, CMC discounted the Burwash Landing (Onion Creek) access route option.

Finally, the Casino Trail route was chosen for further discussion, as it has a long history of engineering and baseline studies with planning dating back 45 years, including the following documents:

- Socio-economic impact review (1988);
- Terrain Analysis (1986);
- Moose population inventory (1987);
- Raptor nest survey (1988); and
- Caribou inventory (1991).

In 2012, in consideration of the Freegold Road potentially opening new access to wilderness areas and affecting the Klaza caribou herd winter habitat, consultations and additional investigations were carried out by CMC to explore alternative alignments to avoid potential impacts to the Klaza caribou herd.

In August 2012, a reconnaissance of the area was undertaken (Yukon River Crossing and Minto Route Reconnaissance, Appendix A4.B Information on Alternative Access Road Alignments). The alternative corridor investigations included the following three elements:

- Yukon River Bridge - Yukon River crossing locations and connecting roads near Minto, YT.
- The Minto Route Corridors - east-west route from Yukon River near Minto west to Hayes Creek.
- The Wolverine Route Corridor - Big Creek north to Wolverine Creek and west to Hayes Creek.

In November 2012, CMC shared with First Nations an overview of the access road alternatives considered for the Project (Appendix A4.B). The materials contained in this presentation were used extensively in a range of presentations and meetings with First Nations governments, Renewable Resource Councils and community meetings. After further consultation with First Nations, CMC decided not to further pursue the Minto to Hayes Creek route.

The outcome of the meetings in which these studies were discussed was that the preferred access road alignment chosen was the Freegold Road Upgrade and Freegold Road Extension - the option presented in the Project Proposal.

B.18.4.1.4 Assessment of Effects on Traditional Land Use

The effects assessment on traditional land use activities such as hunting, trapping and fishing, was provided in Section 18 of the Project Proposal, which generally overlapped with the assessment of effects on First Nation Settlement Lands in Section 19 of the Project Proposal, and the conclusions made in those sections remain relevant. The Local Study Area (LSA) used to describe effects on places of historical, cultural and archaeological value, TK, and subsistence and recreational harvesting is a 500-m buffer around the entire Project footprint, including the mine site, Freegold Road Upgrade and Extension and Yukon River Pipeline and Airstrip (Figure 19.2-1). The Regional Study Area (RSA), is based on defined Game Management Areas, and provides a representative buffer around the LSA that overlaps land uses potentially indirectly affected by the Project (Figure 19.2-1, equivalent to the borders of the GMAs highlighted in Figure B.18.4-4).

The Project will have a potential interaction with traditional and domestic use of land in the LSA: the Project will result in a direct loss of available area for carrying out traditional activities arising from land clearing/mine operations, noise, visual disturbance, traffic conflicts, and access (Table 19.1-1).

Change in Accessible Areas Due to Project Footprint

Traditional Land Use will be affected to varying degrees as the Project progresses through construction, operations, closure and decommissioning and post closure. During construction several sections of the upgrade

to the existing Freegold Road and to the Freegold Road Extension will be built on or proximate to SFN and LSCFN settlement lands. The mine site falls within the SFN Traditional Territory. The SFN and LSCFN have historically occupied the project area and are known to participate in a variety of traditional land uses. During operations the area occupied by the Freegold Road access corridor and mine site will be unavailable for traditional land uses. Following closure and decommissioning the area occupied by the Freegold Road Extension and area within the mine site that has not been permanently withdrawn will be available for traditional land uses.

Change in Access

The construction of the Freegold Road Upgrade will provide easier access to areas frequented by FN members for traditional land use activities. The upgraded design criteria and year round management of road conditions will facilitate access and make travel safer along the entire Freegold Road corridor. There is the potential, however, for reduced access to traditional territory due to Project activities during construction, operations and closure and decommissioning activities. Conflicts between Project activities and FN traditional land use will vary; with construction activities potentially being the primary issue of concern due to multiple factors (i.e. safety, real or perceived impacts due to increased access, etc.). Once construction of the Freegold Road Upgrade is completed traffic conflicts are expected to be infrequent and short term in duration during operations and closure and decommissioning. Due to the improved design criteria for the Freegold Road Upgrade there is the potential that other land use activities (i.e. recreational hunting) may conflict with FN traditional land use activities.

Access along the Freegold Road Extension will primarily be limited to mine site traffic. Existing tenure and individual access arrangements will require co-operation and co-ordination of many parties including governments and FNs. CMC has actively encouraged the affected parties to initiation discussions to facilitate negotiation of an agreement that addresses these matters.

Change in Local Ambience

Noise and emissions from construction activities and traffic associated with the upgrade to the Freegold Road and extension along the existing Casino Trail may affect the wilderness experience associated with traditional land use activities. These effects would be reduced substantially once construction is completed. Although the mine site is considered relatively remote there is the potential for activities during all Project phases to adversely affect the local ambience and wilderness experience for FN conducting traditional land use activities proximate to the mine site. Post closure, disturbed sites will be reclaimed. The local ambience is predicted to be naturalized and returned to conditions that blend into the surrounding environment.

B.18.4.1.5 Mitigation of Project Effects on Traditional Land Use

The Project took into consideration and incorporated available TK and TLU information throughout the Proposal, keeping in mind the need to protect sensitive information and ensure confidentiality. For example, CMC selected Valued Components (VCs) taking into consideration input from First Nations and local communities. In addition, all CMC consultants that provided input into the Proposal were instructed to incorporate TK and TLU information into their disciplines to the best of their ability and a number of personal connections were made over the years between consultants and knowledge holders which informed the Proposal. TK and TLU information was received from primary and secondary sources and integrated into the Proposal. Those sources include:

- Traditional harvest of wildlife;
- Traditional harvest of plants and plant products from secondary TK information;
- Avian-specific secondary TK information;

- *Community-Based Fish and Wildlife Work Plan Little Salmon Carmacks First Nation Traditional Territory 2012-2017* (Little Salmon/Carmacks Fish and Wildlife Planning Team 2011);
- *Opening the Land: a Study of the Impacts of the Casino Trail on the Northern Tutchone of Pelly Crossing and Carmacks, Yukon Territory* (Pearse and Weinstein 1988);
- *The Casino Trail Local Resource Group Workshop and Report* (Casino Trail Local Resource Group, 1989)
- *The Agreement on the Casino Trail Project* (Yukon Government, 1988); and
- Potentially important sites along the Freegold Road.

This information is incorporated into the mitigations for effects in each section of the Project Proposal.

In relation to direct effects on land use for traditional activities, the area required for the mine infrastructure will be the greatest and it will occur during construction and operations. Following closure and decommissioning, with implementation of the Reclamation and Closure Plan, the area remaining unavailable for other land uses will be decreased significantly. The Reclamation and Closure Plan provides a preliminary outline of mitigation measures addressing the loss of area directly associated with the mine footprint for other land use activities including the following:

- All suitable soil materials in the disturbed areas prior to facility construction and development will be salvaged;
- Salvaged soil will be stockpiled for the duration of the Project and used as reclamation material upon mine areas where mining has been completed; and
- Where appropriate, reclaimed areas will be top dressed with soil and planted with native species selected in consultation with specialists familiar with the specific conditions in the area.

Potential effects associated with the various phases of the Project on the trapline concession areas and trapping tenure located within the area proposed as the access road to the airstrip will be assessed and mitigation measures identified in consultation with tenure holders.

Casino Mining Corporation has held in-depth consultations with LSCFN and SFN regarding potentially important sites along the Freegold Road Extension. These discussions about potentially important sites and relevant publically-available secondary sources of information have been incorporated into the Proposal. To mitigate for potential adverse effects to traditional uses related to the Freegold Road, CMC has proposed mitigation measures, including:

- Avoidance of known or suspected historical, cultural, or archaeological places. If the places cannot be avoided, then the necessary staged archaeological mitigation of the archaeological sites and recording and archival research as well as excavation and removal will be completed following the *Operational Policy for Heritage Resources Management on Yukon Lands* (Yukon Tourism and Culture 2010).
- The Freegold Road Extension will be managed as a privately owned and operated road with no public access from km 106 to the mine site.
- A Road Use Plan will be developed in coordination with First Nations and the Yukon Government to manage and limit public access, minimize increased hunting pressures on wildlife, reduce possible wildlife-human conflicts and protect existing wildlife-dependent land users (draft provided in Appendix A.22E).

B.18.4.1.5.1 Residual Effects

The residual socio-economic effects that are both beneficial and adverse to traditional land use are summarized in Table B.18.4-6.

The area unavailable for traditional land uses during construction, operations and closure and decommissioning is limited to the Land Use LSA. Post closure the area permanently withdrawn from other land uses is a fraction of the Land Use LSA associated with the mine site; therefore the residual effect is predicted to be not significant with a low magnitude. The frequency of this potential effect is considered to be infrequent because the area is occupied by various Project components once, but the duration of the effect is long term (lasts throughout the life of the mine).

Residual effects on traditional land use are primarily associated with reduced access to Traditional Territory due to limiting access along the Freegold Road Corridor or to the mine site area during construction, operations and closure and decommissioning. The Freegold Road Upgrade may provide easier access to the area for others whose activities may conflict with FN traditional land use activities. Potential conflicts between construction activities and Project traffic and land users will be managed by monitoring the situation and implementing a First Nation communication / engagement strategy to ensure concerns are identified and addressed. Adverse residual effects associated with limiting access within the mine site footprint are predicted to be not significant. The confidence associated with these residual effects are rated as high as the potential effect is relatively well understood and proposed mitigation measures are predicted to be successful.

A beneficial residual effect is predicted for traditional land use activities due to easier access to Traditional Territory along the Freegold Road Upgrade. This beneficial effect is estimated to be localized within the Land Use LSA and to occur through all phases of the Project.

Potential adverse residual effects associated with limiting road access along the Freegold Road Extension are predicted to be negligible with specific mitigation measures negotiated as required to address FN concerns and interests.

Table B.18.4-6 Summary of Effects on Traditional Land Use and Significance

Residual Effect	Predicted Degree of Effect After Mitigation (or Enhancement) Measures ¹								Significance of Residual Effect
	Direction	Magnitude	Geographic Extent	Duration	Frequency	Reversibility	Context	Probability of Occurrence	
Loss of area available for traditional land use activities	Adverse	Low	Localized	Long Term / permanent	Infrequent	Reversible / Irreversible	High resilience	High	Not Significant
Easier access to area for others whose activities may conflict with FN traditional land use activities (Freegold Road Upgrade)	Adverse	Low	Localized	Long Term	Frequent	Reversible	High resilience	Low / Moderate	Not Significant
Reduced access to Traditional Territory due to road construction and traffic during construction, operations and decommissioning / closure (Freegold Road Upgrade)	Adverse	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant
Negotiated road access to Traditional Territory (Freegold Road Extension)	Adverse / Neutral / Positive	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant
Easier access to area for traditional land use activities. (Freegold Road Upgrade)	Beneficial	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant
Negotiated road access to area for existing trappers and guide outfitters (Freegold Road Extension)	Adverse / Neutral	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant
Easier access to permitted concession areas for trappers (Freegold Road Upgrade)	Beneficial	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant

Residual Effect	Predicted Degree of Effect After Mitigation (or Enhancement) Measures ¹								Significance of Residual Effect
	Direction	Magnitude	Geographic Extent	Duration	Frequency	Reversibility	Context	Probability of Occurrence	
Reduced access to trapping concession areas due to road construction and traffic during construction, operations and decommissioning / closure (Freegold Road Upgrade)	Adverse	Low	Localized	Long Term	Frequent	Reversible	High resilience	High	Not Significant
Easier access to area for others whose activities may conflict with trappers (Freegold Road Upgrade)	Adverse	Low	Localized	Long Term	Frequent	Reversible	High resilience	Low / Moderate	Not Significant
Reduced wilderness experience for FN traditional land use activities (mine site, Freegold Road Upgrade and extension)	Adverse	Low	Localized	Long Term	Infrequent	Reversible	High resilience	High	Not Significant
Reduced wilderness experience for trappers utilizing the area (mine site, Freegold Road Upgrade and extension)	Adverse	Low	Localized	Long Term	Infrequent	Reversible	High resilience	Low / Moderate	Not Significant

B.18.4.2 R2-202

R2-202. An assessment of effects of the Project on TLU.

The effects assessment on traditional land use activities such as hunting, trapping and fishing, was provided in Section 18 of the Project Proposal, which generally overlapped with the assessment of effects on First Nation Settlement Lands in Section 19 of the Project Proposal, and the conclusions made in those sections remain relevant. Further details are provided in Section B.18.4.1.4 in the response to R2-201 above.

B.18.4.3 R2-203

R2-203. An assessment of effects of the Project on traditional economies.

Traditional economies in the Yukon are generally inferred to mean hunting, fishing and trapping. These activities have been considered in the assessment of potential effects of the Project on Subsistence and Recreational Harvesting in Section 18 of the Project Proposal, and in the assessment of effects on Traditional Land Uses in Section 19. The conclusions made in those sections remain relevant.

Additional assessment of effects on traditional economies including hunting, fishing, trapping and plant collection can be inferred from the following sections of the Project Proposal:

- Hunting – Wildlife (Section 12);
- Fishing – Water Quality (Section 7); Fish and Aquatic Resources (Section 10);
- Trapping – Wildlife (Section 12); and
- Plant collection – Rare Plants and Vegetative Health (Section 11).

B.18.5 HARVESTING OF PLANTS

B.18.5.1 R2-205

R2-205. A description of plant species of traditional, cultural, or economic importance within the Project footprint. Include a description of any efforts to engage First Nations or other land users in identifying plants of concern and any ground studies that sought to identify and map plants of concern. This information shall be provided as part of a Traditional Land Use study as requested in Section 15.1

The effects assessment on traditional land use activities such as hunting, trapping and fishing, was provided in Section 18 of the Project Proposal, which generally overlapped with the assessment of effects on First Nation Settlement Lands in Section 19 of the Project Proposal, and the conclusions made in those sections remain relevant. Further details are provided in Section B.18.4.1.4 in the response to R2-201 above.

B.18.6 HARVESTING OF ANIMALS

B.18.6.1 R2-206

R2-206. Provide a description of concerns raised regarding effects to traditional harvest areas and indicate the location of the areas of concern. This information shall be provided as part of a Traditional Land Use study as requested in Section 15.1.

The effects assessment on traditional land use activities such as hunting, trapping and fishing, was provided in Section 18 of the Project Proposal, which generally overlapped with the assessment of effects on First Nation Settlement Lands in Section 19 of the Project Proposal, and the conclusions made in those sections remain relevant. Further details are provided in Section B.18.4.1.4 in the response to R2-201 above.