

December 7, 2010

Pacific Booker Minerals Inc.
#1702 - 1166 Alberni Street
Vancouver, British Columbia
V6E 3Z3

Mr. Erik Tornquist
Executive Director

Dear Mr. Tornquist:

Morrison Copper/Gold Project
Fish Habitat Compensation Plan

This report presents the Fish Habitat Compensation Plan (FHCP) for the Morrison Copper/Gold Project. The FHCP was developed on the basis of the project effects on fish habitat and the compensation plan addresses the “harmful alteration, disruption or destruction of fish habitat (HADDs)” associated with the Project and the effects of reduction of productive capacity due to loss of barren fish habitat. We will work with Pacific Booker Minerals and the Department of Fisheries and Oceans (DFO) and other key stakeholders to finalize the Plan for submission in application for a Section 35(2) authorization under the *Fisheries Act*.

Please contact us if you have any questions or require any further clarification.

Yours truly,

KLOHN CRIPPEN BERGER LTD.



Harvey McLeod, P.Eng., P. Geo.
Project Director

HM/MK:tc

Pacific Booker Minerals

**Fish Habitat Compensation Plan for the
Morrison Copper/Gold Project**

December 7, 2010



EXECUTIVE SUMMARY

Pacific Booker Minerals (PBM) is proposing to develop the Morrison Copper/Gold Project (the Project) on the east side of Morrison Lake, north of Babine Lake, in north-central British Columbia (BC) (Figure 1). The Project will require construction of a Tailings Storage Facility (TSF), including tailings and seepage control dams, and other mine operations infrastructure that will cause harmful alteration, disruption or destruction (HADD) of fish habitat in the Morrison Lake watershed. Specifically, the Project will result in the loss of an estimated 1,850 m² of fish habitat in several ephemeral tributary streams on the east side of Morrison Lake. In addition, there is a reduction of the productive capacity due to a loss of an estimated 27.5 ha (275,000 m²) of non-fish bearing aquatic habitat that provides, to some limited extent, water, food, and nutrients to Morrison Lake fish stocks. Both fish-bearing and non fish-bearing habitat has “productive capacity” to produce fish and/or fish food.

Morrison Lake and Morrison Creek support numerous species of salmonids including rainbow trout, lake trout, and coho and sockeye salmon, as well as numerous non-sport fish species. Morrison Lake first and second order tributary streams support small populations of juvenile rainbow trout, coho salmon, and reddsider shiner at certain times of year. These small tributaries reach peak flow during spring freshet and become intermittent during low water periods in late summer and early fall. During low water periods, the streams contain numerous small pools separated by sections with sub-surface flows, providing marginal-value fish habitat. Fish stranded in isolated pools are subject to predation and desiccation.

PBM proposes to compensate for the displacement and/or loss of flows in the Morrison Lake tributaries in accordance with the federal *Fisheries Act* and the Department of

Fisheries and Oceans' (DFO) guiding policy of "No Net Loss" of productive capacity in fish habitat due to human activities.

A number of locations were identified as potential sites to compensate for fish habitat losses. Options were identified and screened against the DFO list of preferences for habitat compensation and the Lake Babine Nation (LBN) preference for rehabilitation and protection of fish habitat in Morrison Lake. Options were evaluated to assess the best potential for success. A shortlist of preferred options was presented to, and discussed with, DFO and LBN. The outcome of working group meetings and discussions was the fish habitat compensation plan (FHCP) outlined herein.

The guiding principle for the FHCP is to maintain the productive capacity for rainbow trout, coho, and sockeye salmon in the Morrison Lake watershed. The limited distribution of spawning, rearing, and overwintering habitat for salmonids and rainbow trout is believed to be one of the main limiting factors to fish production in the Morrison Lake watershed. Therefore, development and improvement of areas providing spawning, rearing, and overwintering habitat are the focus of the FHCP.

The FHCP compensates for:

1. Lost fish-occupied habitat including spawning and rearing areas at a ratio of 2:1 (new habitat: old habitat); and
2. Non-fish bearing aquatic habitat, which provides productive capacity in the form of water, nutrients and benthic invertebrate drift to Morrison Lake fish.

The FHCP includes the following components:

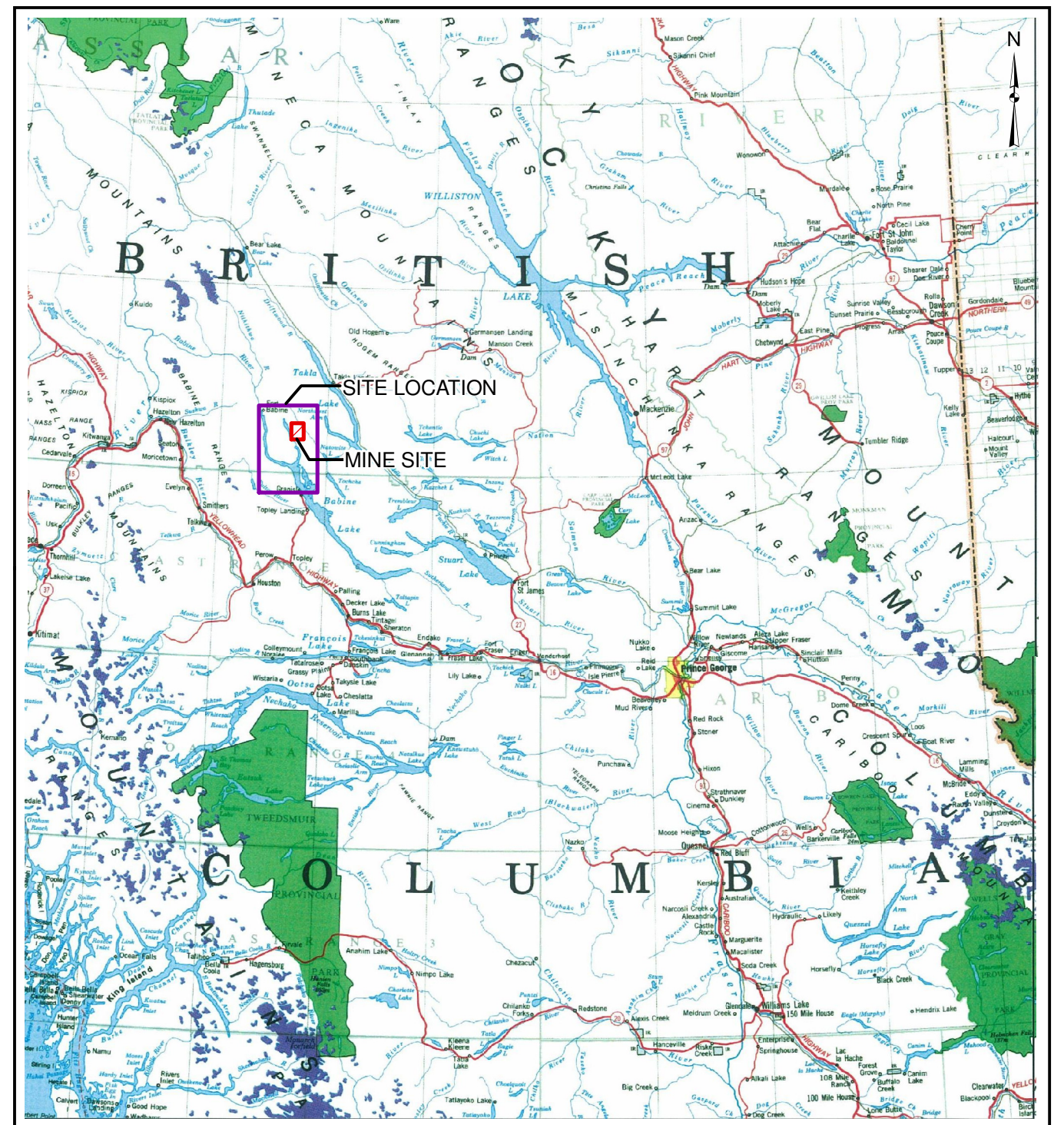
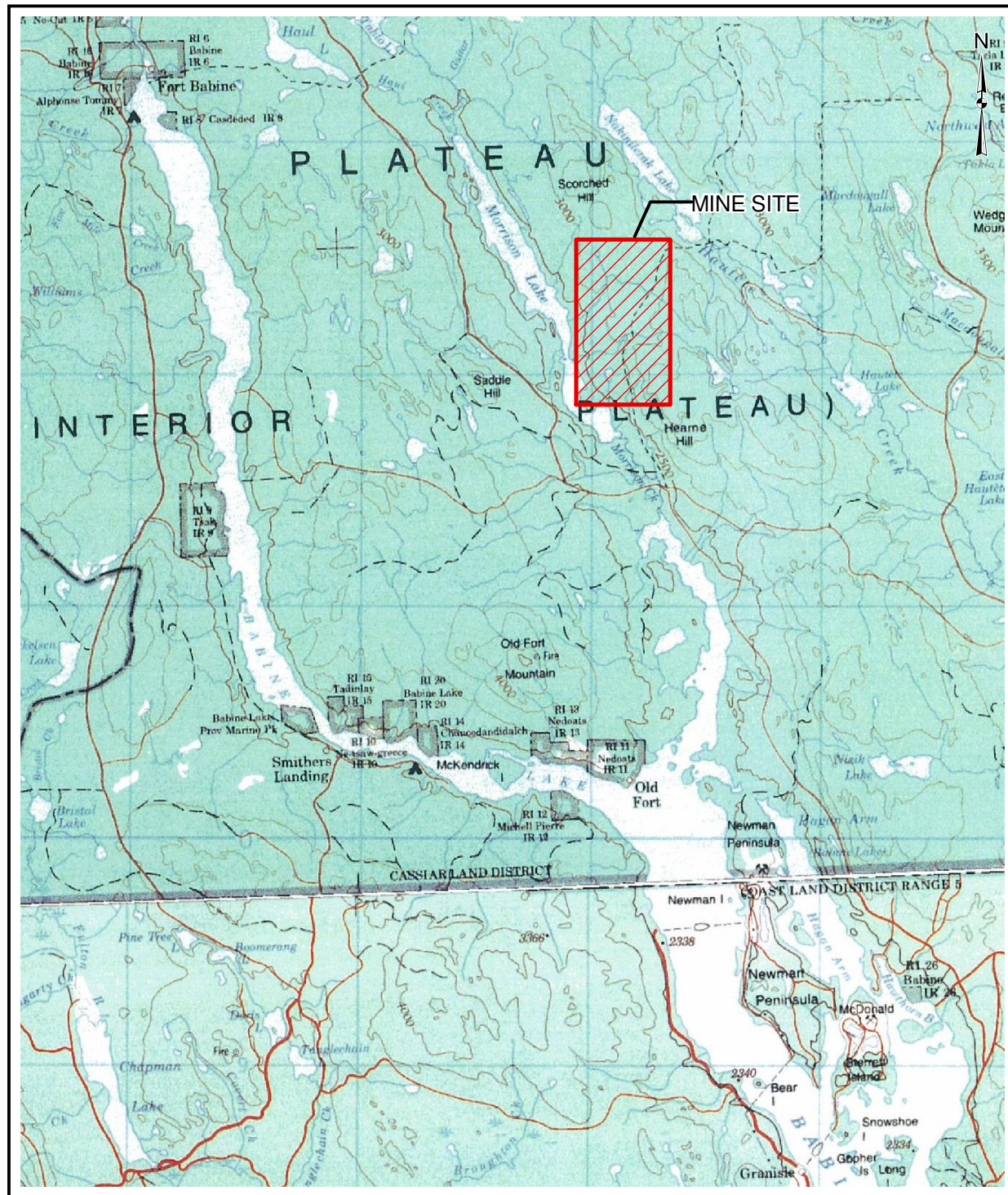
- Creation of salmonid spawning, rearing and overwintering habitat on Morrison Lake by constructing two off-lake channels on the southeast shore. This option creates a total of approximately 3,700 m² of fish habitat comprised of approximately 1,850 m² of spawning habitat and approximately 1,850 m² of rearing and overwintering habitat. This achieves a compensation ratio of 2:1 for total fish-occupied habitat; and
- Enhancement of fish habitat by improving fish access in Olympic Creek (i.e. between Olympic Lake and Morrison Lake) for spawning rainbow trout and, possibly, coho salmon. This option maintains Olympic Lake at a full-pool level, improves fish access, and enhances fish habitat within Olympic Creek thereby providing direct access for fish to previously inaccessible food and nutrients within Olympic Lake.

Fish Habitat Loss / Gain Summary

Fish Habitat	Area
Fish Bearing Area Losses (HADDs) in Morrison Lake Tributaries	1,850 m ²
Fish Bearing Area Gain from Morrison Lake off-channel FHCP	3,700 m ²
Fish Bearing Gain/Loss Ratio	2:1
Non-Fish Bearing Productive Capacity Habitat Losses in Morrison Lake Tributaries	Stream flow of 0.05 m ³ /s transporting nutrients
Increased Productive Capacity via Habitat Gain in Olympic Lake system	Increasing productive capacity by improved access to food supply.

The long term success of the FHCP will be ensured by using multiple compensation sites and fish habitat enhancement strategies. An Adaptive Management Plan has been developed, which will evaluate, the success of compensation and to identify opportunities for improvement, if necessary. For example, the Adaptive Management Plan includes several alternatives, including: 1) rehabilitation of off-channel habitats in Morrison Creek between Lake Babine and Morrison Lake to improve over-wintering and spawning habitat for salmonids; and 2) Beaver management program at regional sites. These

alternatives, or others, could be considered if the proposed alternatives do not meet the intended targets.



Notes:
1. Topography courtesy of Softmap

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PROJECT

MORRISON COPPER PROJECT

TITLE

MORRISON PROJECT REGIONAL LOCATION MAP

PROJECT No. M09382A03

FIG No. 1.0

TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY	I
1. INTRODUCTION	6
1.1 Background.....	6
1.2 Consultation	12
1.3 Purpose and Objectives.....	14
1.4 Regulatory Framework and Policy	15
1.5 Approach to Fish Habitat Compensation Planning.....	16
2. ENVIRONMENTAL SETTING	18
2.1 Physical Setting.....	18
2.2 Chemical Setting.....	20
2.3 Biological Setting.....	20
2.4 Species' Habitat Preferences.....	22
2.4.1 Rainbow Trout	22
2.4.2 Lake Trout.....	23
2.4.3 Coho and Sockeye Salmon	23
2.5 Limitations to Productive Capacity	23
3. CALCULATING HABITAT AND PRODUCTIVE CAPACITY LOSSES AND GAINS.....	26
3.1 General.....	26
3.2 Fish Bearing Habitat Losses (HADDs).....	28
3.2.1 Stream 25500 (also known as (aka) Stream 4)	28
3.2.2 Stream 29000 (aka Stream 5).....	29
3.2.3 Stream 44800 (aka Stream 6).....	30
3.2.4 Stream 53400 (aka Stream 7).....	30
3.2.5 Stream 6070 (aka Stream 10).....	31
3.2.6 Morrison Lake Shoreline at the Diffuser and Water Supply Pipelines.....	31

TABLE OF CONTENTS
(continued)

3.2.7	Summary of Affected Fish Habitat	32
3.3	Productive Capacity Losses from Barren Habitat.....	33
3.4	Habitat Balance	34
3.4.1	General.....	34
3.4.2	Fish-Bearing Habitat.....	35
3.4.3	Non Fish-Bearing Habitat	35
4.	FISH HABITAT COMPENSATION PLAN.....	37
4.1	Compensation Options.....	37
4.2	Fish Bearing Habitat Compensation	38
4.2.1	Rationale	40
4.2.2	Existing Conditions in the Off-Lake Channel Area.....	43
4.2.3	Design Details.....	43
4.3	Productive Capacity Compensation for (Non-fish Bearing Habitat).....	45
4.3.1	Existing Conditions in Olympic Lake and Olympic Creek	48
4.3.2	Rationale	48
4.3.3	Design Details.....	49
4.4	Constructability, Feasibility, and Risk.....	56
4.4.1	Off-Lake Channels.....	56
4.4.2	Olympic Creek and Olympic Lake Enhancements.....	56
4.5	Timing.....	57
4.6	Costs.....	58
5.	CONSTRUCTION MANAGEMENT PLAN	60
5.1	General.....	60
5.2	Construction Mitigation	61
5.2.1	Historical and Paleontological Resources.....	61
5.2.2	Construction Materials.....	61
5.2.3	Water Management.....	62

TABLE OF CONTENTS
(continued)

5.2.4	Erosion and Sediment Control	62
5.2.5	Vegetation	64
5.2.6	Wildlife and Habitat.....	64
5.2.7	Fish and Fish Habitat	65
5.2.8	Fish Salvage	66
5.3	Spill Response.....	66
5.4	Fuelling and Fuel Storage	68
5.5	General Equipment Cleanliness and Maintenance	69
5.6	Reclamation	69
5.6.1	Site Restoration.....	69
5.6.2	Re-vegetation	70
5.6.3	Topsoil Salvage.....	70
6.	ENVIRONMENTAL MANAGEMENT AND MONITORING.....	72
6.1	General.....	72
6.2	Construction Phase.....	72
6.2.1	General.....	72
6.3	Compliance Monitoring	73
6.4	Operation Phase – Effectiveness Monitoring	74
6.4.1	General.....	74
6.4.2	Morrison Lake Off-Channels.....	75
6.4.3	Olympic Creek and Olympic Lake Access Improvements and Habitat Enhancements	76
6.5	Beaver Management Program.....	76
6.6	Remedial Works.....	77
6.7	Reporting.....	77
7.	ADAPTIVE MANAGEMENT PLAN	78
8.	CONCLUSION.....	79

TABLE OF CONTENTS
(continued)

REFERENCES80

TABLES

Table 1.1 Project Fact Sheet 9
Table 2.1 Base Flows as a Percentage of Mean Annual Discharge in Morrison Lake
Tributaries 20
Table 3.1 Fish Bearing Habitat Displaced by Project Infrastructure or Partial/Full
Dewatering 32
Table 3.2 Habitat Balance 35
Table 4.1 Cost of the Fish Habitat Compensation Plan 58

FIGURES

Figure 1.0 Morrison Project Regional Location Map v
Figure 1.1 Morrison Copper-Gold Project Location Map 8
Figure 1.2 Location Map 11
Figure 1.3 Morrison Copper-Gold Project Fish Habitat Compensation Options 13
Figure 3.1 Waterbodies to be Lost to Infrastructure of the Morrison Copper/Gold
Project 27
Figure 4.1 Fish Habitat Compensation Plan Map 39
Figure 4.2 Off Lake Channel Locations 41
Figure 4.3 Detail of Off-Lake Channel 42
Figure 4.4 Olympic Creek Fish Access Enhancement Map 47
Figure 4.5 Olympic Creek Fish Access Works 50
Figure 4.6 Olympic Creek Proposed Fish Ladder and Control Weir 51
Figure 4.7 Olympic Creek Proposed Control Weir 52
Figure 4.8 Conceptual Design of Large Woody Debris Structures 54
Figure 4.9 Conceptual Design of Boulder Clusters 55

TABLE OF CONTENTS

(continued)

APPENDICES

- Appendix I Morrison Off-Lake Channel Compensation Plan Photos
- Appendix II Olympic Creek Compensation Works Photos
- Appendix III Fish Habitat Compensation Options (Report dated August 9, 2010)

1. INTRODUCTION

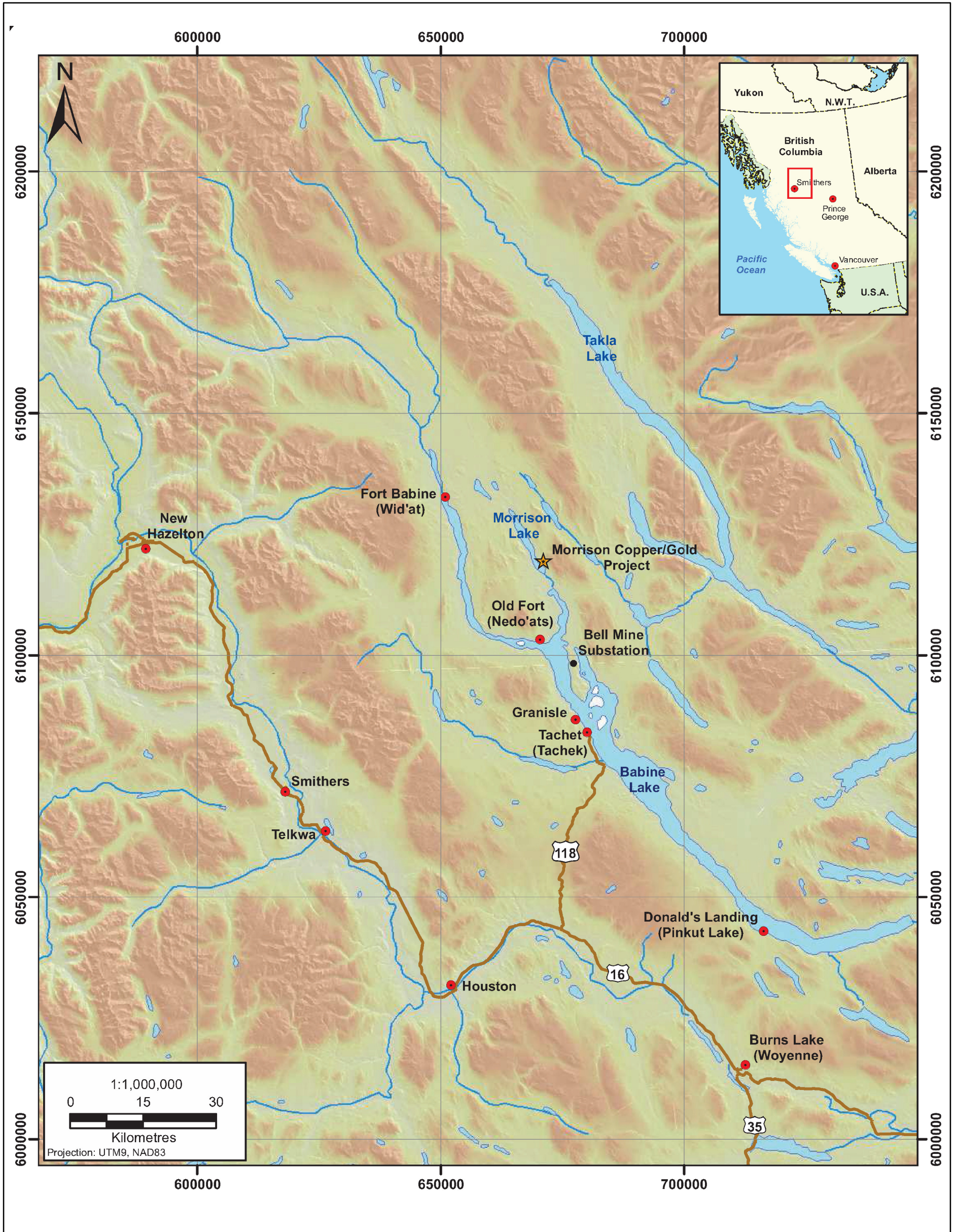
1.1 Background

Pacific Booker Minerals (PBM) is proposing to develop the Morrison Copper/Gold Project (the Project) in north-central British Columbia (BC). The Project is situated on the east side of Morrison Lake approximately 65 km northeast of Smithers and 35 km north of Granisle, BC, within the traditional territory of the LBN (Figure 1.1). The Project includes an open pit, a processing plant, a waste rock dump, low grade ore stockpiles, a tailings storage facility (TSF), a run-off collection system, mine effluent treatment plant, and associated mine infrastructure (Figure 1.2). During maximum production, the mine will process 30,000 tonnes of ore per day. Mine life with known mineable reserve is 21 years.

The Project will result in the harmful alteration, disruption, or destruction (HADD) of fish habitat in the Morrison Lake watershed due to the footprint of the project facilities and reduced flows in some of the streams. Additionally some non-fish bearing habitat will be affected resulting in loss of productive capacity. Although mitigation measures have been incorporated into the Project, some impacts to fish habitat in the Morrison Lake watershed are unavoidable. Although the federal *Fisheries Act* prohibits the HADD of fish habitat, Section 35(2) of the *Fisheries Act* allows authorization of the HADD of fish habitat if all HADDs are compensated for such that there is “no net loss of productive capacity” of fish habitat.

The FHCP was developed concurrently with the Environmental Assessment Certification Application (EACA) and in consultation with representatives from the British Columbia Environmental Assessment Office (BC EAO), Department of Fisheries and Oceans (DFO), British Columbia Ministry of Environment (MoE), Environment Canada (EC), and members of the LBN.

This document describes the fish habitat compensation plan (FHCP) developed to address expected fish habitat and productive capacity losses resulting from the Project. It describes the FHCP developed from compensation options outlined in the Draft Fish Habitat Compensation Options submitted to DFO in August 9, 2010 (KCB, 2010), which is included as Appendix III to this report. It includes descriptions and calculations of losses in productive capacity resulting from the Project's footprint and reductions in stream flows. It also includes descriptions and calculations of habitat gains associated with the fish habitat compensation works. Information on the implementation, construction, impact mitigation measures, and site restoration for the compensation areas is also included.



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PROJECT	MORRISON COPPER PROJECT
TITLE	MORRISON PROJECT LOCATION MAP
PROJECT No.	M09382A04
FIG No.	1.1

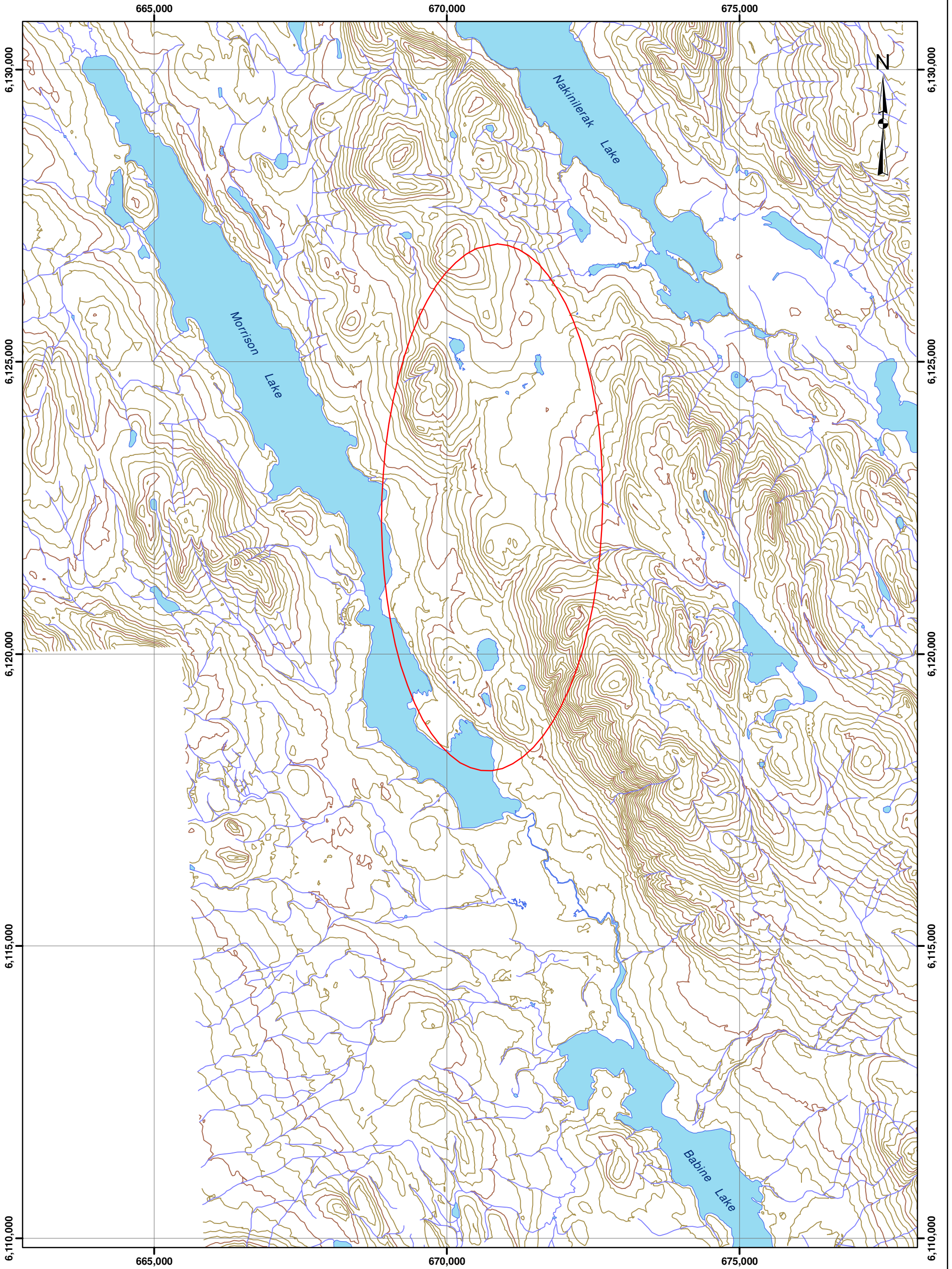
- Notes:
1. UTM Zone 9N, NAD83
 2. Map altered from Rescan Jo. 0793-001-15

Table 1.1 Project Fact Sheet

PROJECT	Morrison Copper/Gold Project
OPERATOR	Pacific Booker Minerals Inc. #1702 – 1166 Alberni Street Vancouver, BC V6E 3Z3 Telephone: 604-681-8556 Fax: 604-687-5995
	Contacts: Erik Tornquist, Executive Director, Executive VP, and Chief Operational Officer Email: e.tornquist@pacificbooker.com Don Betton, Project Manager Email: d.betton@pacificbooker.com
MINING PROPERTY OWNERSHIP	PBM has owned the Morrison property since September 8, 2006.
MINERAL TENURE	PBM's mineral tenure consists of 45 contiguous mineral claims totalling 12,027 ha; all claims are within the Omineca Mining Division. Tenure includes the Morrison property (20 units in 1 claim: ERIN 1) and the Hearne Hill property (378 units in 27 claims).
SITE LOCATION	The Project site is located on the east side of Morrison Lake, in north-central BC. . The Project site is located on Crown land, 65 km northeast of Smithers and 35 km north of Granisle, on the east side of Morrison Lake Project site coordinates are lat 55°11'24" N and long 126°19'7" W.
ACCESS	Vehicle – Travel along Highway 16 to Topley, BC, take Highway 118 north to Michelle Bay (11 km south of Granisle) where an all-season barge crosses Babine Lake to Nose Bay. Once at Nose bay, take approximately 49 km of Forest Service Roads to the site.
	Air - The Project will not require regular air access. An emergency helicopter landing site will be available during construction and operations. Smithers is the closest regional airport.
	Haul Route –Off-site, haul trucks/trailers will travel route 2C to the Port of Stewart, BC.
SITE DESCRIPTION	The mine property covers approximately 9,950 ha at elevations ranging from 730 m to 1,020 m. The mine property covers approximately 9,950 ha at elevations ranging from 730 m to 1,020 m.
PROJECT PLAN	The Project involves developing: an open pit mine; a 30,000 t/day processing plant (mill) for producing copper/gold concentrate; supporting mine facilities (e.g., warehouse, labs, etc.) and supporting infrastructure (e.g., roads, sewage, etc.) at the Project site. Off-site infrastructure includes: a 25 km, 138 kV power transmission line and corridor connecting the Bell Mine substation to the Project site; site access and locals roads; and air access.

Table 1.1 Project Fact Sheet (cont'd)

MINE DESCRIPTION	<p>Classified as a major mine, the Project will be a 30,000 t/d open pit mine operating 24 hours per day, 365 days per year for the whole of the comminution and processing system. The pit will be developed through four phases. The Phase 1 pit will be in the northwestern deposit area, the Phase 2 pit will be in the southeastern deposit area, and the Phase 3 and 4 pits will be expansions of the pits described above.</p> <p>Copper-gold-molybdenum ore will be processed at a conventional milling plant. The copper/gold concentrate will be transported to the Port of Stewart for shipment to offshore smelters. Molybdenum concentrate will be trucked to a refinery.</p> <p>The mine will receive electrical power from the BC Hydro grid.</p>
GEOLOGY	<p>The Morrison deposit is on the northern edge of the Skeena Arch within the Intermontane Belt of central BC and includes the Stikine volcanic arc terrain. The region is underlain by volcanic, clastic, and epiclastic rocks ranging in age from the Lower Jurassic to Lower Cretaceous. The deposit is a calc-alkaline copper gold porphyry. The primary copper-bearing mineral is chalcopyrite, with minor bornite occurring within the higher grade copper zones. Magnetite and pyrite are present in the low-grade core of the deposit, and molybdenum is present in smaller and somewhat spatially restricted amounts, particularly in the southeast portion of the deposit.</p>
METALS	Copper, Gold
PROCESSING	Ore will be processed on-site using crushing, grinding, and flotation to recover copper, gold, and molybdenum concentrates.
MINEABLE RESERVES	<p>The mineable reserve is estimated to be 224 Mt with an average grade of 0.330% Cu, 0.163 g/t Au and 0.004% Mo reported at a \$5.60/t NSR cut-off grade.</p> <p>The Project will produce over 1.37 billion pounds of copper, 658,090 ounces of gold, and about 10.05 million pounds of molybdenum over its operating life.</p>
LIFE OF MINE	Mine life with known mineable reserves is 21 years.
ENVIRONMENTAL APPROVALS AND PERMITTING	Provincial and Federal project approvals and permitting is required to allow the Project to proceed. In addition to the British Columbia Environmental Assessment Act (BCEAA) and the Canadian Environmental Assessment Act (CEAA), several other federal and provincial licences, permits and approvals are required.



Legend

- Major Contours
- Rivers and Streams
- Minor Contours
- Lakes and Ponds
- Approximate Mine Site

Notes:
 1. UTM Zone 9N, NAD83
 2. Contour interval is 20m.

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0 2,500 m

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PROJECT MORRISON COPPER PROJECT

TITLE LOCATION MAP

PROJECT No. M09382A04

FIG No. 1.2

1.2 Consultation

PBM consulted with LBN leadership, the communities of Granisle and Burns Lake, and regulatory agencies including DFO, MoE and MEMPR in completing environmental studies and, more recently, in developing the FHCP.

Site visits and meetings were held with agency and LBN representatives to present compensation options and visit the potential compensation areas (Figure 1.3). The off-lake channels proposed for the southeast shore of Morrison Lake, as well as improvements to Olympic Lake and Olympic Creek fish access, were identified by PBM as the preferred compensation options given the alternatives available in the area. It was also discussed with PBM and LBN representatives that a beaver management program may be a suitable enhancement of the FHCP.

MORRISON COPPER-GOLD PROJECT

FISH HABITAT COMPENSATION OPTIONS

Tahlo Tributary Lake

Habitat
Fish Bearing Impacts
Non-Fish Bearing Impacts

Habitat Area
1,850 m²
27.5 ha

Oval Lake

Olympic Lake

Nakinilerak Tributary Lake

Off-Creek Area

Tailings Storage Facility

Mine Facilities

Off-Lake Area

Rock Reef

1.3 Purpose and Objectives

The purpose of the FHCP is to compensate the HADDs resulting from the Project and the reduction of productive capacity due to loss of aquatic habitat. The specific objectives of the FHCP are to:

- Characterize and quantify HADDs of fish habitat due to Project development;
- Characterize reduction of productive capacity due to loss of barren aquatic habitat;
- Describe the quantity and quality of the habitat created and/or enhanced by the proposed compensatory works;
- Describe the rationale and objectives of the FHCP and the anticipated benefits for fish:
 - Characterization of the habitat gains expected from the compensation works (i.e., the type and amount of habitat to be created, the species that will benefit, the habitat function or capacity that will be created, improved or enhanced, and how such gains will offset the HADD and achieve no net loss in the productive capacity of fish habitat);
- Construction:
 - A detailed description of the compensation sites and planned compensation works including photographs, sketches/drawings depicting the approximate location (geographic coordinates), area, number and dimensions of compensation works and structures;
 - Details of construction such as machine access routes and construction methods;
 - Describe a mitigation plan to reduce or avoid impacts to aquatic or terrestrial resources during construction of the compensatory habitat;

- Describe a monitoring plan for construction of the proposed compensatory work to ensure the work is conducted in accordance with relevant regulatory requirements; and
- Confirmation of land tenure, legal right of access, and management authority for compensation works (i.e., evidence to support the ability of the Proponent to construct and maintain the compensation works).
- Environmental monitoring commitments (i.e., a description of compliance and effectiveness monitoring that will take place in relation to the compensation works).

1.4 Regulatory Framework and Policy

This FHCP was developed to meet the requirements of the Canadian federal *Fisheries Act* (administered by DFO) and the companion *Policy for the Management of Fish Habitat* (Fisheries and Oceans Canada, 2001). DFO's guiding principle of "no net loss of productive capacity" of fish habitat has been applied to offset unavoidable (residual) habitat losses with habitat replacement for the Project. The term productive capacity is defined as the maximum natural capacity of habitats to support aquatic organisms upon which fish depend. DFO's hierarchy of fish habitat and productive capacity of fish habitat protection or enhancement measures were considered in the development of this FHCP, and include, in order of preference:

- Relocate the project away from fish habitat to avoid the HADD;
- Where relocation is not possible or practical, redesign the project to eliminate the HADD;
- Mitigate the HADD through the application of appropriate best management practices; and, failing these three; and
- Pursue habitat compensation options to achieve a net gain of productive capacity.

DFO's policy also provides guidance on implementation procedures and preferences when compensation is required. This hierarchy of preferences is as follows:

- Replace natural habitat lost at or near the proposed project site (*i.e.* on-site option).
- Replace natural habitat lost at an off-site location.
- Increase the productive capacity of existing habitat for the affected stock.
- Supplement the fishery resource through artificial production.

1.5 Approach to Fish Habitat Compensation Planning

The main goal of the FHCP is to compensate for the loss of spawning and rearing habitat within tributary streams on the east side of Morrison Lake. Consequently, the FHCP focused on identifying areas to increase rainbow trout (*Oncorhynchus mykiss*), and coho salmon (*Oncorhynchus kisutch*), Spawning, foraging and rearing habitat through the creation of off-lake channels and access improvements to existing spawning, rearing and overwintering habitats, while providing “no net loss of productive capacity”.

Compensation planning was developed with DFO's hierarchy of preferences in mind, and through the BC EAO Environmental Assessment process. PBM also worked with DFO, MoE, BC EAO and the LBN to provide a forum for discussion and evaluation of proposed compensation options. Collaboration with interested parties has guided the development and design of technically feasible and desirable compensation options.

Compensation planning has focused on “on-site” options within the Morrison Lake watershed and was guided by intensive fisheries and aquatic ecosystem research within the Morrison Lake watershed from 2006 to 2010.

The value of existing fish habitats as “high value”, “moderate”, or “marginal”, were also considered in the design of the FHCP using DFO’s Habitat Conservation and Protection Guidelines (DFO 1998) and professional judgement. The quality of fish habitats was determined by comparing the stream morphology, substrate composition, and cover attributes of impacted stream reaches to the habitat preferences of each salmonid life stage (mainly rainbow trout and coho salmon as they are the fish species most affected by the Project) and estimating a suitability score between 1 (marginal) and 3 (high-value).