1 – BACKGROUND

1.1 INTRODUCTION

This Environmental Impact Statement (EIS) has been prepared in response to and in accordance with the EIS Guidelines issued by the federal Minister of the Environment in March of 2012. The EIS contents are pursuant to, and will be reviewed under the requirements governed by the Canadian *Environmental Assessment Act* (CEAA 2003). The EIS Guidelines were subject to regulatory agency, First Nation and public comment and review before being finalized.

1.1.1 Background

Taseko Mines Ltd. proposes to develop and operate a gold and copper mine located approximately 125 km southwest of Williams Lake, British Columbia. The Project consists of an open pit mine development and a 70,000 tonne per day concentrator facility with an average annual production of 108 million pounds of copper and 247 thousand ounces of gold production over a 20 year mine life. The Project also includes support infrastructure, associated tailings and waste rock areas, a 125 km long power transmission line, an existing concentrate load-out facility near Macalister, British Columbia and existing access from Williams Lake with construction of 2.8 km of new mine road (Figure 1.1.1).

The Project is subject to review under the Canadian Environmental Assessment Act (CEAA) given the potential requirement for Fisheries and Oceans Canada (DFO), Transport Canada and Natural Resources Canada to issue permits, approvals, authorizations and/or licences pursuant to the Fisheries Act, the Navigable Waters Protection Act (NWPA) and the Explosives Act respectively.

A previously submitted project by Taseko, known as the Prosperity Gold-Copper Mine project (herein referred to as the previous project proposal), was subject to an environmental assessment review under British Columbia's Environmental Assessment Act and a federal review panel under the CEAA in 2009-2010.

The Government of British Columbia issued an environmental assessment certificate for the previous project proposal on January 14, 2010 concluding there would be significant adverse environmental effects on fish and fish habitat but that those significant effects were justifiable in the circumstances.

The federal review panel released its report in July 2010 and concluded that the Prosperity Gold-Copper Mine project as proposed would result in significant adverse environmental effects on fish and fish habitat, on navigation, on the current use of lands and resources for traditional purposes by First Nations and on cultural heritage, and on certain potential or established Aboriginal rights or title. Additionally, the panel determined that the project would result in a significant adverse environmental effect at the local level on the users of the meadows within the Teztan Yeqox (Fish Creek) watershed due to the loss of grazing lands, the Xeni Gwet'in/Sonny Lulua trapline at the mine site and the tourism business operated by Taseko Lake Outfitters. The panel also concluded that the Prosperity Gold-Copper Mine project, in combination with past, present and reasonably foreseeable future projects would result in a significant adverse cumulative effect on grizzly bears in the South Chilcotin region and on fish and fish habitat.

In November 2010, in its response to the panel's report, the Government of Canada indicated that it accepted the conclusions of the panel as presented in its report, and, taking into consideration the report of the panel, implementation of any appropriate mitigation measures, and in weighing the socio-economic benefits and potential significant adverse environmental effects, determined that the significant adverse environmental effects could not be justified under the circumstances. In its response, the Government of Canada also noted that its decision did not preclude the Proponent from submitting a project proposal that addressed the factors considered by the panel.

Following the Government Response, Taseko undertook revisions to the mine development plan (MDP) and mine site layout to address the factors identified by the panel and submitted a project description for New Prosperity to the Canadian Environmental Assessment Agency (the Agency) for consideration. On August 9, 2011, the Agency accepted the project description, and on November 7, 2011, the Honourable Peter Kent, Minister of the Environment, announced that the Project would undergo a federal environmental assessment by way of a review panel (the Panel).

In his referral of the Project to a review panel, the Minister of the Environment instructed the Agency to design a process that will thoroughly assess whether the proposal addresses the environmental effects identified in the environmental assessment of the original Prosperity Gold-Copper Mine Project. He also directed the Agency to ensure that information obtained during the previous environmental assessment is used to the extent possible to ensure a timely decision and that the review take no more than 12 months.

The Project is also subject to the Major Resource Project Initiative led by the Major Projects Management Office, which works collaboratively with federal departments and agencies, and acts as a single window into the federal regulatory process.

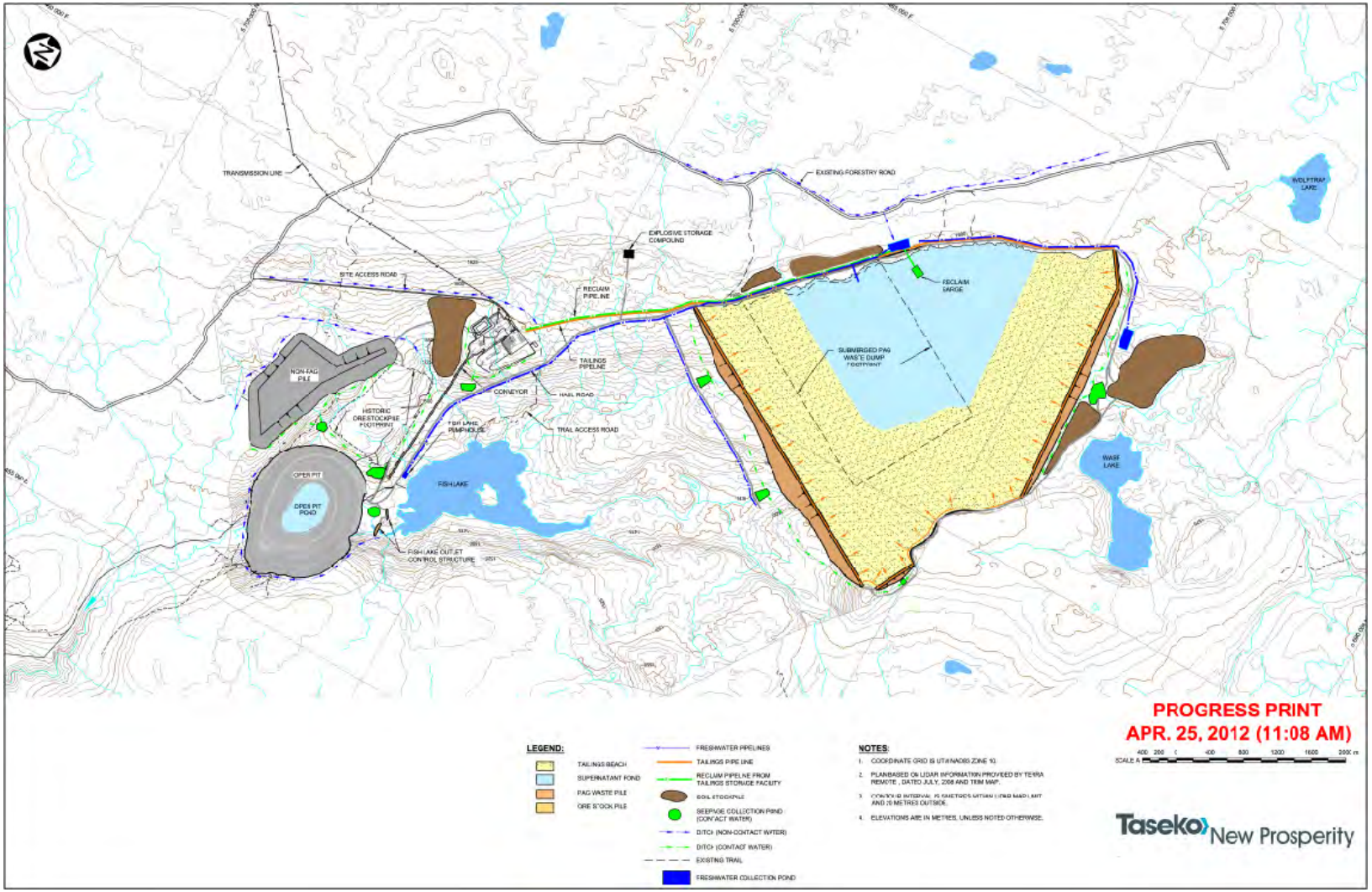

Figure 1.1.1 General Arrangement – End of Year 20 (Ultimate)

1.1.2 Approach

This EIS will be assessed by a review panel appointed by the Minister of the Environment to determine if the Project will result in significant adverse environmental effects once mitigation measures are applied. The review panel will be informed by two sources of information. For aspects of the Project that have not changed from the previous project proposal, the panel will be informed by information, submissions, testimony, findings and conclusions generated as part of the 2009/2010 review. For aspects of the Project that have changed or are new from the previous project proposal, information generated through and presented in this EIS will inform the review process in relation to those components.

The scope of this EIS focuses on aspects of the Project that have changed or are new from the previous project proposal and on corresponding changes to the environmental effects previously predicted. This EIS also consider those components and activities associated with the Project that have not changed but may result in changes to the environmental effects determinations as part of the 2009/2010 review due to implementation of the new MDP and mitigation measures. The EIS uses relevant information generated as part of the 2009/2010 review and from the previous EIS (2009) as appropriate in support of the assessment of the New Prosperity Project.

This EIS focusses on:

- Evaluating all environmental effects resulting from changes to on-site and off-site components and activities associated with the new MDP and reconfiguration of the mine site layout (including any situations not explicitly identified in these Guidelines)
- How previously identified as well as new mitigation measures will be applied
- How previous commitments will be integrated
- How recommendations from the July 2010 Panel Report have been considered, and
- The significance of any residual effects.

1.2 GUIDING PRINCIPLES

The EIS Guidelines outline a number of principles to guide the preparation and content of this EIS. These principles have been adopted and incorporated into this EIS as indicated below:

1.2.1 Environmental Assessment as a Planning Tool

This EIS, in a manner consistent with the purposes of environmental assessment outlined in the EIS Guidelines, identifies the possible environmental effects of the Project, proposes measures to mitigate adverse effects, and assesses whether there will be likely significant adverse environmental effects after mitigation measures are implemented.

1.2.2 Community Knowledge and Aboriginal Traditional Knowledge

Section 16 of the Canadian Environmental Assessment Act sets out a variety of factors that must be included in an environmental assessment.

In addition, Section 16.1 indicates that "community knowledge and aboriginal traditional knowledge may be considered in conducting an environmental assessment".

The EIS guidelines require the proponent to incorporate community and aboriginal traditional knowledge to which it has access or which is acquired through consultation activities and appropriate due diligence.

Determining what exactly falls within the term “community knowledge and aboriginal traditional knowledge” is extremely difficult. The act does not provide any definition of this term, and the Canadian Environmental Assessment Agency has developed only "interim principles” for guidance. (See http://www.ceaa.gc.ca/default.asp?lang=En&n=4A795E76-1). And even those are of limited assistance. The document states, in part:

> This principles document is intended to provide general guidance on the consideration of ATK in EA. It has been written specifically for EA practitioners. The principles are voluntary and are not intended to replace any existing legislative process or requirements. They are intended to provide a framework for the consideration of ATK, where it has been determined that the provision of ATK is both desirable and appropriate.
>
> These are interim principles. They will be replaced by more detailed guidance that will be developed by the Aboriginal Advisory Committee (AAC), a body that will be established by the Canadian Environmental Assessment Agency…
>
> Although there are many different definitions of ATK in the literature, there is no one universally accepted definition. For this reason, a definition of ATK has not been provided in this document.

To date, it does not appear that any more detailed guidance has in fact been developed, nor has a general definition been developed.

The previous panel report does not provide any additional clarity on this matter as no clear definition was provided or applied by the previous panel.

However, the EIS Guidelines state that, for the purposes of this assessment, the term should be understood to refer to knowledge acquired and accumulated by a community or aboriginal community, through generations of living in close contact with nature. This again is a very general description but Taseko has taken an all-inclusive approach that assumes community knowledge and aboriginal traditional knowledge could include all of the following:

- Knowledge related to ecosystems and their function
- Knowledge relevant to asserted or established aboriginal rights and title (which is relevant to the Crown's duty to consult and accommodate independent of the terms of the Canadian Environmental Assessment Act), and
- Knowledge related to current use of land and resources for traditional purposes by aboriginal people.

Knowledge relevant to asserted or established aboriginal rights and title is discussed in Sections 2.5.1.1, 2.6.4.3, and 2.7.5.

Knowledge related to current use of land and resources for traditional purposes by aboriginal people is discussed in Section 2.6.4.2.

Taseko believes that the most important aspect of community knowledge and aboriginal traditional knowledge with respect input to a determination of significant adverse effect on the environment is that information related to ecosystems and their function.

In developing this EIS, the proponent has relied primarily on information presented in the previous EIS supplemented by information that the previous panel identified as constituting community knowledge and aboriginal traditional knowledge, or which it referred to using similar terminology.

The information with respect to ecosystems and their function provided by aboriginal groups relates mainly to identifying specific wildlife and plant species of interest in the area as well as fish. Examples include:

Vegetation: Crowberry (*Empetrum nigrum*), Blueberry (*Vaccinium myrtilloides*), Labrador Tea (*Ledum glandulosum*), and Balsam (*Veratrum viride*)

Wildlife: Cougar (*Felis concolor*), Fisher (*Martes pennant*), squirrel (*Tamiasciurus hudsonicus*), Marten (*Martes americana*)

This information is included, where applicable, in the discussion of each of the valued ecosystem components in Section 2.7.

1.2.3 Sustainable Development

The term sustainable development is defined in the CEAA to mean "development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."

The EIS guidelines require that the proponent demonstrate how the project, including the alternative means of carrying out the project, meets this test. In particular, the proponent is required to take into account the relations and interactions among the various components of the ecosystems, including the extent to which biological diversity may be affected by the project.

These matters are discussed in more detail in the discussion of relevant valued ecosystem components in this EIS. In summary form, the project is not expected to compromise the ability of future generations to meet their own needs, for the following reasons:

- After evaluating 14 Valued Ecosystem Components and 26 Key Indicators this EIS has concluded that the proposed Project will not have any significant adverse environmental effects. These evaluations took into account the relations and interactions between ecosystem components including the extent to which biological diversity may be affected.
- While the Project will result in the depletion of this particular ore body that will be extracted through mineral development, there are extensive areas of mineralogical interest in British Columbia, and dozens or perhaps hundreds of mineral claims that are the subjects of further exploration. There is no evidence to suggest that depletion of this particular mineral ore will in any way materially impair the ability of future generations of British Columbia's to identify and develop mineral deposits necessary for their own use, although the ability to economically develop any particular mineral reserve will depend upon prevailing economic conditions and relevant regulations.
- The Project will substantially enhance the long-term social and economic viability of local communities, through training, employment, support for local businesses and development of community infrastructure. Even after mine closure, social and economic benefits will continue through the skills that have been obtained, the local infrastructure that has been improved through payment of local taxes, and the diversification of businesses within the regional economy. Of particular consequence, the Project will provide major economic benefits during a period of time for which forestry in the region will continue to suffer from pine beetle kill.
- While the original proposed project would have resulted in the loss of Fish Lake and a requirement to transplant fish from the lake into another water body, that is no longer required under the New Prosperity proposal. While the Project will eliminate a much smaller water body (Little Fish Lake) that water body does not contain a biologically distinct body of fish, as it is not capable of sustaining fish throughout the winter, and instead fish move between that area and other habitat. Further, additional fish habitat will be created as compensation. Tsilhqot’in people will continue to be able to utilize Fish Lake during the construction, operations, closure and post-closure phases of the mine.
- The Project will realize economic benefits and other social development opportunities that are strongly supported by many members of the community, local governments and local businesses.
- These lasting gains, which are discussed further in Section 2.7.3, will significantly outweigh any trade-offs that result from development of the mine, given that the Project is not expected to have any significant adverse effects, and given the mine closure and post-closure plans which will ensure minimal impact remains after the mine life has ended.

1.2.4 Precautionary Principle

The EIS guidelines state that the precautionary principle provides that in situations where scientific knowledge is incomplete, but there is a threat of serious adverse consequences, the lack of full certainty or harm shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

This description is slightly different from the federal government's own *Framework for the Application of Precaution in Science-based Decision Making About Risk* (2003) which the EIS Guidelines refer to. The federal government's Framework document states, in part:

> The application of "precaution", "the precautionary principle" or "the precautionary approach" recognizes that the absence of full scientific certainty shall not be used as a reason for postponing decisions where there is a risk of serious or irreversible harm.
>
> Governments can rarely act on the basis of full scientific certainty and cannot guarantee zero risk. Indeed, they are traditionally called upon and continue to address new or emerging risks and potential opportunities, and to manage issues where there is significant scientific uncertainty.
>
> … [E]ven though scientific information may be inconclusive, decisions will still have to be made as society expects risks to be addressed and managed and living standards enhanced.

Throughout this EIS, mitigation measures are proposed in relation to a wide range of potential adverse effects for valued ecosystem components. In many of those cases, these mitigation measures are being proposed notwithstanding the fact that there is not complete certainty that an adverse effect would occur or that it would be serious. In no part of this EIS does Taseko decline to propose appropriate mitigation measures simply because there is a lack of certainty that harm would otherwise result. As such, and for reasons noted throughout this EIS, the precautionary principle, as properly understood, has been fully respected.

The EIS guidelines go on to state, still in Section 1.2.4 concerning the precautionary principle, that in determining whether the Project is likely to cause significant adverse environmental effects, the proponent shall:

- Demonstrate that all aspects of the Project have been examined and planned in a careful and precautionary manner in order to ensure that they do not cause serious or irreversible damage to the environment and/or the human health of current or future generations
- Outline and justify the assumptions made about the effects of all aspects of the Project and the approaches taken to minimize these effects
- Evaluate alternative means of carrying out the Project and compare in light of risk avoidance, an adaptive management capacity
- In designing and operating the Project, demonstrate that priority has been given to strategies that avoid the creation of adverse effects
- Develop contingency plans that explicitly address accidents and malfunctions
- Identify any proposed follow-up and monitoring activities, particularly in areas where scientific uncertainty exists in the prediction of effects or effectiveness of proposed mitigation measures
- Discuss how the design of monitoring programs will ensure rapid response and correction where adverse effects are detected, and
- Present public views on the acceptability of all of the above.

It is not clear how these directions relate to the standard methodology for assessing whether a project is likely to cause a significant adverse environmental effect, as set out in the CEAA document entitled Reference Guide: Determining Whether A Project is Likely to Cause Significant Adverse Environmental Effects - The Requirements of the Canadian Environmental Assessment Act (http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=D213D286-1&offset=2&toc=show) or the federal government's precautionary principle Framework as discussed above.

In any case, this EIS addresses these requirements in the following ways:

- Demonstrate that all aspects of the Project have been examined and planned in a careful and precautionary manner in order to ensure that they do not cause serious or irreversible damage to the environment and/or the human health of current or future generations.

This is demonstrated by utilizing the standard methodology for assessing significant adverse effects. In the absence of significant adverse effects under the traditional methodology, there will not be serious or irreversible damage to the environment and/or human health of current or future generations.

- Outline and justify the assumptions made about the effects of all aspects of the Project and the approaches taken to minimize these effects

In each case where assumptions are made in the discussion of valued ecosystem components, the assumptions are explained and justified.

- Evaluate alternative means of carrying out the Project and compare in light of risk avoidance, an adaptive management capacity

Alternative means of carrying out the Project are considered in Section 2.4 and discussed in relation to individual valued ecosystem components as applicable.

- In designing and operating the Project, demonstrate that priority has been given to strategies that avoid the creation of adverse effects

This requirement is addressed, in the most fundamental way, through the overall design of the New Prosperity Project, which is intended specifically to avoid the significant adverse effects that the previous panel found would likely have occurred in relation to the previously proposed project. This requirement is also fulfilled through the discussion the Project description and proposed mine plan, as well as in consideration of individual valued ecosystem components.

- Develop contingency plans that explicitly address accidents and malfunctions

These issues are addressed in Section 2.7.6.

- Identify any proposed follow-up and monitoring activities, particularly in areas where scientific uncertainty exists in the prediction of effects or effectiveness of proposed mitigation measures

These activities and proposed mitigation measures are discussed in various contexts in the discussion of individual valued ecosystem components in Section 2.7 and in Sections 2.8.1 and 2.8.3.

- Discuss how the design of monitoring programs will ensure rapid response and correction where adverse effects are detected, and

These programs are discussed in various contexts in the discussion of individual valued ecosystem components in Section 2.7 and in Sections 2.8.1 and 2.8.3.

- Present public views on the acceptability of all of the above.

The requirement to report on “the public views on the acceptability of all of the above" is a very vague one, and further, it is not clear how it relates to the panel’s mandate under the *Canadian Environmental Assessment Act* to the assessment whether the Project is likely to have significant adverse effects having regard to mitigation measures that will be employed.

In any case, this EIS contains extensive information about public views on matters within the scope of this EIS (based mainly on information obtained from the prior panel process), and additional information regarding the public view’s regarding all matters within the panel’s mandate will be obtained during the panel hearings.

1.3 PREPARATION AND PRESENTATION OF THE ENVIRONMENTAL IMPACT STATEMENT

This EIS assesses the potential environmental effects of the Project and identifies the significance of adverse residual effects. While the focus of the EIS is on environmental effects associated with those aspects of the Project that have changed or are new from the previous project proposal and on corresponding changes to the environmental effects previously predicted, these aspects in relation to components and activities associated with the Project that have not changed are also assessed.

This EIS:

- Evaluates the potential environmental effects of the Project, including residual effects after the implementation of mitigation measures
- Assesses whether the components and activities of the Project that have changed from the previous project proposal will result in significant adverse environmental effects, including cumulative environmental effects
- Assesses potential environmental effects of new Project components and activities that have not been previously assessed and propose mitigation measures to alleviate any potential effects
- Describes changes to previously predicted environmental effects that may occur as a result of the implementation of the new MDP and mitigation measures
- Identifies how the Project as proposed addresses the significant adverse environmental effects that were identified in the previous project proposal
- Makes use of existing relevant information generated as part of the 2009/2010 review process, to the extent possible, and
- Identifies how commitments, mitigation measures and recommendations made as part of the 2009/2010 provincial and federal review will be incorporated into the Project design.

1.3.1 Study Strategy and Methodology

Taseko has observed the intent of the EIS Guidelines and this EIS provides sufficient information to identify all environmental effects that are likely to arise from the Project, using information from the 2009/2010 review as appropriate. This EIS focuses on how environmental effects resulting from changes to on-site and off-site New Prosperity Gold-Copper Mine Project components and activities associated with the new MDP and reconfiguration of the mine site layout, how previously identified as well as new mitigation measures are applied, how previous commitments are integrated, how recommendations from the July 2010 Panel Report have been considered, and the significance of any residual effects.

Where matters outlined in the EIS Guidelines are in the judgement of Taseko Mines Ltd. not relevant or significant to the Project they have been omitted from the EIS. Any such omissions are clearly identified and appropriate justification is provided.

In assessing the environmental effects of the Project, this EIS addresses the findings of the previous panel regarding significant adverse environmental effects, in particular, effects on:

- Aboriginal rights or title
- Current use of lands and resources for traditional purposes by First Nations and on cultural heritage resources
- Fish and fish habitat in the Project area
- Users of the meadows within Teztan Yeqoz (Fish Creek) watershed
- Xeni Gwet'in/Sonny Lulua trapline
- Taseko Lake Outfitters tourism business
- Navigation, and
- Cumulative effects on the Southern Chilcotin grizzly bear population and on fish and fish habitat.

This EIS documents how scientific, engineering, and community and Aboriginal traditional knowledge was used to reach conclusions. Assumptions are clearly identified and justified. All data, models and studies are documented such that the analyses are transparent and reproducible. All data collection methods have been specified. Where appropriate the risk of error, uncertainty, reliability and sensitivity of any data and models used to reach conclusions is indicated.

Additional technical studies and data and updates to existing information related to the new components of the Project and their interaction with those elements and features of the Project that have not changed from the previous project proposal have been included where appropriate. The EIS contains, as appendices, copies of all technical studies, inventories or other supporting technical documents relied on to complete the EIS. The EIS identifies any significant gaps in knowledge and understanding relevant to conclusions and describes steps, if any, that have been taken to address or minimize these gaps.

1.4 OUTLINE OF THE ENVIRONMENTAL IMPACT STATEMENT

This EIS incorporates all the components outlined in the EIS Guidelines and follows the Table of Contents framework precisely as detailed in the EIS Guidelines.

1.4.1 Preface

This Environmental Impact Statement (EIS) has been prepared in response to and in accordance with the EIS Guidelines issued by the federal Minister of the Environment in March of 2012. The EIS contents are pursuant to, and will be reviewed under the requirements governed by the Canadian *Environmental Assessment Act* (CEAA 2003). It has been prepared by Taseko Mines Ltd. Incorporating input and advice received from consultants and subject matter experts described in Section 1.4.2 below.

1.4.2 Acknowledgements

Preparation of the EIS for the proposed New - Prosperity Gold-Copper Mine Project has involved significant effort on the part of many contractors, leading consulting firms, specialists and supporting companies. Taseko Mines Limited wishes to acknowledge the contribution of the following organizations and individuals involved in the preparation of this EIS:

Consulting Firm	Area of Responsibility	Personnel
BGC Engineering Inc.	Hydrogeology	Trevor Crozier, M.Eng., P.Eng.
		Katherine Johnston, M.Sc., P.Eng.
Knight Piésold Ltd.	Surface Water Hydrogeology, Meteorology, Engineering Support, EA	Corey Aurala, P.Eng.
		Ken Brouwer, M.Eng., P.Eng.
		Cameron Butt, P.Geo, PMP
		Jaime Cathcart, P.Eng., Ph.D.
		Jesse Collison, M.Eng., G.I.T.
		Helge Fischer, E.I.T.
		Jim Fogarty, E.I.T.
		Graham Greenaway, M.Sc., P.Eng.
		Catriona Jackson, M.A.Sc., B.Sc. (Eng)
		Greg Johnston, M.Sc., P.Eng.
		Chandni Kher, M.Sc.
		Jessica Mackie
		Violeta Martin, P.Eng., Ph.D.
		Alexander Matheson, E.I.T.
		Erin Rainey, M.Eng., P.Eng.
		Daniel Ruane, E.I.T.
		Rod Smith, M.Eng., M.A.Sc., P.Eng.
		Greg Smyth, B.Sc.
		Marcia Wilson, P.Eng.
		Daniel Yang, M.Eng., P.Eng.
Lions Gate Consulting	Socio-Economic	Steve Nicol, MBA, CMC
		Gary Robinson, M.A.
		Randy Sunderman, B.Sc., B.A.
SRK Consulting	ARD/ML	Stephen Day, M.Sc., P.Geo.
		Dylan MacGregor, M.A.Sc., G.I.T.
		Kathleen Willman, P.Eng.
Stantec	Acoustic, Atmospheric, Terrain and Soils, Vegetation, Wildlife, Human Health and Ecological Risk	Colleen Bryden, M.Sc., R.P.Bio.
		Jonathan Chui, P.Eng., INCE
		Terry Conville, B.Sc., RPF
		Tony Dinneen, B. App. Tech., GIS
		Bryan Leece, Ph.D.

		Jennifer Mundy, B.Sc., R.P.Bio.
		Peter Reid, M.A.
		Natalie Tashe, M.Sc., P.Ag
		Kaeley Wiseman, B.A., MCP
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		Fortune Ogbebo, Ph.D., R.P.Bio.
		Greg Sykes, M.Sc., R.P.Bio.
		Tom Watson, Ph.D., R.P.Bio.
		Mike Whelen, B.Sc., R.P.Bio.
		Ryan Whitehouse, M.Sc., B.I.T.

1.4.3 Executive Summary

An Executive Summary has been prepared as a stand-alone document. It contains:

- A description of the environmental effects of the Project and the proposed environmental management and mitigation measures
- A concise description of all key components of the Project including Project components and activities that have changed or are new from the 2009/2010 project proposal as well as those that remain unchanged
- A description of any changes to previously identified environmental effects that may occur as a result of the implementation of the new MDP and mitigation measures
- A succinct description of the consultation conducted with Aboriginal groups, the public and government agencies since the 2009/2010 Project review, with a summary of the issues raised and solutions found and/or suggested during these consultations
- A general overview of the key environmental effects of the new MDP and proposed mitigation measures and follow-up programs, and
- Taseko's conclusions and significance determinations from the assessment.

The executive summary will be provided as part of the final EIS submission.

1.4.4 Abbreviations

The following abbreviations have been used throughout this EIS:

The following abbreviations have been used throughout this EIS:

%.....Percent
<..... Less Than
>.....Greater Than
°C.....Degrees Celsius
µ..... Micro
µg/m3..... Micrograms per Cubic Metre
µm..... Micrometres
µS/cm.....Microsiemens per Centimetre
AAC .....Annual Allowable Cut
AADT ..... Annual Average Daily Traffic
AAFC ..... Agriculture and Agri-Food Canada
AAQC..... Ambient Air Quality Criteria
AAQO .....Ambient Air Quality Objective (BC)
ADD ..... Average Daily Dose
AENV ..... Alberta Environment
AES.....Atmospheric Environment Services
AF .....Absorption Factor
AIA .....Archaeological Impact Assessment
ALCA .....Agriculture Land Commission Act
ALR..... Agricultural Land Reserve
ANSI ..... American National Standards Institute
AOA ..... Archaeological Overview Assessment
AP .....Acid Potential
AQOS .....Air Quality Objectives and Standards
ARD ..... Acid Rock Drainage
ASCG.....Archaeological Survey Control Grid
ASL .....Ambient Sound Level
ASU .....Archaeological Survey Unit
ATSDR.....Agency for Toxic Substances and Disease Registry
ATV.....All-Terrain Vehicle
AUM.....Animal Unit Month
BATEA..... Best Available Technology Economically Achievable
BC.....British Columbia
BCAS .....British Columbia Ambulance Service
BCASIF..... British Columbia Archaeological Site Inventory Form
BCBC.....British Columbia Building Corporation
BCCDC .....British Columbia Conservation Data Centre
BCEAA.....British Columbia Environmental Assessment Act
BCEAO ..... British Columbia Environmental Assessment Office
BCM..... Bank Cubic Metre
BCTC ..... British Columbia Transmission Corporation

BCWQG ..... British Columbia Water Quality Guidelines
BEC ..... Biogeoclimatic Ecosystem Classification
BGC ..... BGC Engineering Inc.
BMP ..... Best Management Practices
BPA ..... Bonneville Power Administrator
BSL ..... Basic Sound Level
BTEX ..... Benzene, Toluene, Ethylbenzene and Xylenes
CAC ..... Criteria Air Contaminant
CAEAL ..... Canadian Association of Environmental Analytical Laboratories
CCBAC ..... Cariboo-Chilcotin Beetle Action Coalition
CCLRMP ..... Cariboo-Chilcotin Land Resource Management Plan
CCLUP ..... Cariboo-Chilcotin Land Use Plan
CCME ..... Canadian Council of Ministers of the Environment
CCNS ..... Canadian Climate Normal Station
CCSAR ..... Central Cariboo Search and Rescue
CCTC ..... Carrier-Chilcotin Tribal Council
CDA ..... Canadian Dam Association
CDC ..... Conservation Data Centre
CDI ..... Chronic Daily Intake
CEA Agency ..... Canadian Environmental Assessment Agency
CEAA ..... Canadian Environmental Assessment Act
Ceff ..... Calculated Effective Runoff Coefficient
CEMI ..... Canadian Environmental and Metallurgical Inc.
CEPA ..... Canadian Environmental Protection Act
CEQG ..... Canadian Environmental Quality Guidelines
CESL ..... Cominco Engineering Services Limited
CH_4 ..... Methane
CLI ..... Canada Land Inventory
CMH ..... Cariboo Memorial Hospital
CMS ..... Continuous Monitoring Station
CMT ..... Culturally Modified Tree
CO ..... Carbon Monoxide
CO_2 ..... Carbon Dioxide
CO_2e ..... Carbon Dioxide Equivalent
CoPC ..... Chemical of Potential Concern
CORE ..... Commission on Resources and the Environment
COSEWIC ..... Committee on the Status of Endangered Wildlife in Canada
COTA ..... Council of Tourism Associations
cps ..... Cycles per Second
CRD ..... Cariboo Regional District
CSF ..... Cancer Slope Factor
CSL ..... Comprehensive Sound Level
CSR ..... Contaminated Sites Regulations
CTC ..... Cariboo Tribal Council
cv ..... Coefficient of Variation
CWS ..... Canada-wide Standard

dB ..... Decibel
dBA ..... A-weighted Decibels
dBC ..... C-weighted Decibels
dBL ..... Decibels, Linear
DEM ..... Digital Elevation Model
DFO ..... Department of Fisheries and Oceans
DO ..... Dissolved Oxygen
DOC ..... Dissolved Organic Carbon
EA ..... Environmental Assessment
EAA ..... Environmental Assessment Act
EAO ..... Environmental Assessment Office
EC ..... Environment Canada
EEM ..... Environmental Effects Monitoring
EI ..... Employment Insurance
EIS ..... Environmental Impact Statement
EMP ..... Environmental Management Plan
EMS ..... Environmental Management System
EPC ..... Exposure Point Concentration
EPH ..... Extractable Petroleum Hydrocarbons
EPMP ..... Environmental Protection and Management Plan
ERA ..... Ecological Risk Assessment
ERCB ..... Energy Resources Conservation Board
ERD ..... Enhanced Resource Development
ESL ..... Effects Screening Level
ESS ..... Emergency Social Services
ESSF ..... Engelmann Spruce–Subalpine Fir Zone
FRA ..... Federal Railroad Administration
FRL ..... Federal Reference Level
FRPA ..... Forest and Range Protection Act
FSP ..... Forest Stewardship Plan
ft ..... Feet
GBPU ..... Grizzly Bear Population Unit
GEV ..... Generalized Extreme Value
GHG ..... Greenhouse Gas
GIS ..... Geographic Information System
GVRD ..... Greater Vancouver Regional District
GWP ..... Global Warming Potential
ha ..... Hectares
HADD ..... Harmful Alteration, Disruption and Destruction
HAP ..... Hazardous Air Pollutant
HC ..... Health Canada
HCA ..... Heritage Conservation Act
HHERA ..... Human Health and Ecological Risk Assessment
HKP ..... Hallam Knight Piésold
HMP ..... Habitat Management Policy
HQ ..... Hazard Quotient

Hz ..... Hertz
ICC..... Indian Claims Commission
IDF ..... Inflow Design Flood
IF..... Intake Factor
IHA..... Interior Health Authority
IL .....Insertion Loss
ILCR.....Incremental Lifetime Cancer Risk
INAC ..... Department of Indian and Northern Affairs Canada
IR .....Information Request
IRM ..... Integrated Resource Management
ISO..... International Organization for Standardization
JWA ..... Jacques Whitford AXYS Ltd.
KI .....Key Indicator
km .....Kilometre
KP .....Kilometre Post
kV..... Kilovolt
L/s .....Litres per Second
LEL .....Least Effects Level
Leq.....Equivalent Continuous Sound Level
LHA..... Local Health Area
LN ..... Exceedance Noise Level
LSA .....Local Study Area
LST .....Local Standard Time
m.....Metre
m/s .....Metres per Second
m3/d..... Cubic Metres per Day
m3/s ..... Cubic Metres per Second
MAA ..... Multiple Accounts Analysis
MAE .....Multiple Accounts Evaluation
MAFF ..... Ministry of Agriculture, Food and Fisheries
MAPA..... Mines Act Permit Application
masl .....Metres Above Sea Level
MDA.....Mine Development Act
MDE.....Maximum Design Earthquake
MDL ..... Minimum Detection Limit
mE .....Metres East
MEI .....Ministry of Employment and Investment
MELP ..... Ministry of the Environment Lands and Parks
MEM ..... Ministry of Energy and Mines
MEMPR/BCMEMPR.....Ministry of Energy, Mines and Petroleum Resources
MEND .....Mine Environment Neutral Drainage
mEq/L ..... Milli-Equivalent per Litre
mg/dm2/d..... Milligram per Square Decimeter per Day
mg/L.....Milligrams per Litre
MHRCS..... Ministry of Housing, Recreation and Consumer Services
ML.....Metal Leaching

mm ..... Millimetre
Mm3 ..... Million Square Metres
MMER ..... Metal Mining Effluent Regulations
mN ..... Metres North
MOE/BCMOE ..... Ministry of Environment
MOELP ..... Ministry of Environment, Lands and Parks
MOF ..... Ministry of Forests
MOFR/BCMOFR ..... Ministry of Forests and Range
MOH ..... Ministry of Health
MOT ..... Ministry of Transportation
MPB ..... Mountain Pine Beetle
MS ..... Montane Spruce Zone
MSBTC ..... Ministry of Small Business, Tourism and Culture
MSC ..... Meteorological Survey of Canada
MSRM ..... Ministry of Sustainable Resource Management
MTH ..... Ministry of Transportation and Highways
MTSA ..... Ministry of Tourism Sports and the Arts
MU ..... Management Units
MWLAP ..... Ministry of Water, Land and Air Protection
N/A ..... Not Applicable
N2O ..... Nitrous Oxide
NAAQO ..... National Ambient Air Quality Objectives
NAD ..... North American Datum
ND ..... Data Not Available
NEB ..... National Energy Board
NEF ..... Noise Exposure Forecast
NEV ..... Net Economic Value
NO ..... Nitric Oxide
NO2 ..... Nitrogen Dioxide
NOAEL ..... No Observable Adverse Effects Level
non-PAG ..... Non-Potentially Acid Generating
NOx ..... Nitrous Oxides
NP ..... Neutralization Potential
NPAG ..... Non-Potential Acid Generating
NRCan ..... Natural Resources Canada
NSTC ..... Northern Shuswap Tribal Council
NStQ ..... Northern Secwepemc te Qelmucw
NTFP ..... Non-Timber Forest Products
NTU ..... Nephelometric Turbidity Units
OGMA ..... Old-Growth Management Area
OIPC ..... Office of Information and Privacy Commissioner
OME ..... Ontario Ministry of the Environment
PAG ..... Potentially Acid Generating
PAH ..... Polynuclear Aromatic Hydrocarbon
PCA ..... Principal Components Analysis
PDA ..... Project Development Area

PEL ..... Probable Effects Level
PEP ..... Provincial Emergency Program
pers. comm. ..... Personal Communication
PFLB ..... Productive Forest Land Base
PM ..... Particulate Matter
PM10 ..... Inhalable Particulate Matter (<10 µm in diameter)
PM2.5 ..... Inhalable Particulate Matter (<2.5 µm in diameter)
PMP ..... Probable Maximum Precipitation
PMRA ..... Pest Management Regulatory Agency
ppm ..... Parts per Million
PPP ..... Prediction and Prevention Plan
PRS ..... Project Report Specifications
PSAI ..... Pacific Soil Analysis Inc.
PSL ..... Predicted Sound Level
PVC ..... Polyvinylchloride
PWL ..... Sound Power Level
PY ..... Person-Year
Q ..... Directivity Factor
QA/QC ..... Quality Assurance/Quality Control
RAAD ..... Remote Access to Archaeological Data
RCMP ..... Royal Canadian Mounted Police
RFAC ..... Regional Frequency Atlas for Canada
RfD ..... Reference Dose
RIC ..... Resources Inventory Committee
RISC ..... Resources Information Standards Committee
RMA ..... Riparian Management Area
RMZ ..... Resource Management Zone
ROM ..... Run-of-Mine
ROS ..... Recreation Opportunity Spectrum
ROW ..... Right-of-Way
RPD ..... Relative Percent Difference
RSA ..... Regional Study Area
RTD ..... Reference Toxicity Dose
SADT ..... Summer Average Daily Traffic
SARA ..... Species at Risk Act
SARS ..... Severe Acute Respiratory Syndrome
SBPS ..... Sub-Boreal Pine-Spruce Zone
SBS ..... Sub-Boreal Spruce Zone
SCC ..... Source Classification Code
SD ..... Standard Deviation
SE ..... Standard Error of the Mean
SEI ..... Sensitive Ecosystem Inventory
SEIA ..... Socio-Economic Impact Assessment
SIL ..... Survey Intensity Level
SL ..... Sound Level
SLDF ..... Sierra Legal Defence Fund

SLIM ..... Small Lakes Index Management
SMU ..... Soil Map Unit
SNTC ..... Shuswap Nation Tribal Council
SO2 ..... Sulphur Dioxide
SOx ..... Oxides of Sulphur
SpC ..... Specific Conductance
SPL ..... Sound Pressure Level
SQG ..... Sediment Quality Guideline
SRD ..... Special Resource Development
SRK ..... SRK Consulting (Canada) Inc.
SRMP ..... Sustainable Resource Management Plans
STC ..... Sound Transmission Class
STL ..... Sound Transmission Loss
TC ..... Transport Canada
TCEQ ..... Texas Commission of Environmental Quality
TDI ..... Tolerable Daily Intake
TDR ..... Technical Data Report
TDS ..... Total Dissolved Solids
TEK ..... Traditional Ecological Knowledge
TEM ..... Terrestrial Ecosystem Mapping
TIC ..... Total Inorganic Carbon
TLCP ..... Transmission Line Construction Plan
TN ..... Tsilhqot'in Nation
TNG ..... Tsilhqot'in National Government
TOC ..... Total Organic Carbon
tpd ..... Tonnes per Day
TRIM ..... Terrain Resource Information Management
TRV ..... Toxicity Reference Value
TSA ..... Timber Supply Area
TSF ..... Tailings Storage Facility
TSP ..... Total Suspended Particulate
TSS ..... Total Suspended Solids
TWG ..... Technical Working Group
UBC ..... University of British Columbia
US EPA ..... United States Environmental Protection Agency
USN ..... Upper Secwepemc Nation
UTM ..... Universal Transverse Mercator
VC ..... Visitor Centre
VEC ..... Valued Environmental Component
VER ..... Valued Ecosystem Receptors
VH ..... Volatile Hydrocarbons
VOC ..... Volatile Organic Compound
VPH ..... Volatile Petroleum Hydrocarbons
VQO ..... Visual Quality Objective
VRI ..... Vegetation Resource Inventory
WCTA ..... West Chilcotin Tourism Association

WHO ..... World Health Organization
WQG ..... Water Quality Guideline
WQO ..... Water Quality Objective
WSC ..... Water Survey of Canada
WSD ..... Water Stewardship Division, BC Ministry of Environment

1.4.5 Organization of the EIS

The EIS is organized and presented following exactly the outline and Table of Contents provided in the EIS Guidelines. Appendices from the March 2009 EIS/Application are referred to in the text by their original appendix number.

1.5 USE OF CONFIDENTIAL INFORMATION

The only confidential information referred to in this EIS relates to the information collected as part of the AIA completed for the previously reviewed project. The confidential information contained in Appendix (XXX) has been removed in accordance with the procedures and requirements of the previous review process.

1.6 TABLE OF CONCORDANCE

As this EIS follows precisely the Table of Contents provided in the EIS Guidelines, no separate Table of Concordance has been provided.