

DRAFT ENVIRONMENTAL BASELINE STUDIES

2004 PROGRESS REPORTS

CHAPTER 1. INTRODUCTION

JUNE 2005

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1 Introduction

1.1 Purpose

This Draft Environmental Baseline Progress Report provides a description of the work conducted for the Northern Dynasty Mines Inc. (NDM) 2004 baseline environmental program. This Pebble Project progress report presents the characterization of the existing conditions related to environmental and social conditions of the project area and their incorporation into the project design and operation. This draft report is presented for agency and stakeholder review and comment, to ensure the approach followed and results obtained provides a comprehensive and thorough baseline environmental characterization of the Pebble Project.

1.2 Background

The Pebble Project is a proposed open pit mine for the gold, copper, molybdenum, and silver deposit located in southwestern Alaska near Lake Iliamna, as shown on Figure 1-1. NDM has commenced extensive study programs to collect the engineering, geological, environmental, and socioeconomic data necessary for a feasibility study and the preparation of applications for state and federal permits.

In July 2004, the Draft Environmental Baseline Studies, Proposed 2004 Study Plan (2004 Study Plan) was prepared by NDM. This document was submitted for agency and stakeholder review and comment. The 2004 Study Plan described the environmental baseline studies that were initiated in 2004. NDM received comments from federal agencies including the National Park Service, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration, as well as from State of Alaska agencies including the Departments of Natural Resources, Environmental Conservation and Fish & Game between July 26, 2004, and January 18, 2005. In addition, agency meetings were held for four days in late October 2004 to present and discuss preliminary summer field results and to review and discuss the baseline study programs.

1.3 Goals and Objectives

The primary goal of this progress report is to present the preliminary results of the 2004 environmental and socioeconomic baseline programs for the purpose of agency and stakeholder review. Agency and stakeholder feedback on this progress report is solicited to ensure that NDM produces a comprehensive and thorough baseline characterization of the Pebble Project. The results of the progress reports (2004 and future reports) will be used to:

- Develop sound technical basis both for project design and permitting, and for ongoing evaluation of environmental effects during mine construction, operation and closure.
- Define the methods and approach for data gathering and analysis for review by others.

This document describes the characterization of the baseline environmental and social conditions existing in the project area. These baseline environmental studies are focused on compiling and analyzing the information that will be incorporated into the sound environmental design of the project, into assessing and managing project impacts, and for rigorous project review, permitting, and impact assessment.

1.4 Approach

There are a wide variety of environmental and socioeconomic values in the project area that require the contributions of experts from a variety of disciplines. Accordingly, there has been a coordinated integration of the project's environmental and engineering teams to incorporate environmental design considerations into the project design. In addition, the baseline characterization is intended to provide the optimum amount of information for a thorough environmental and socioeconomic impact assessment.

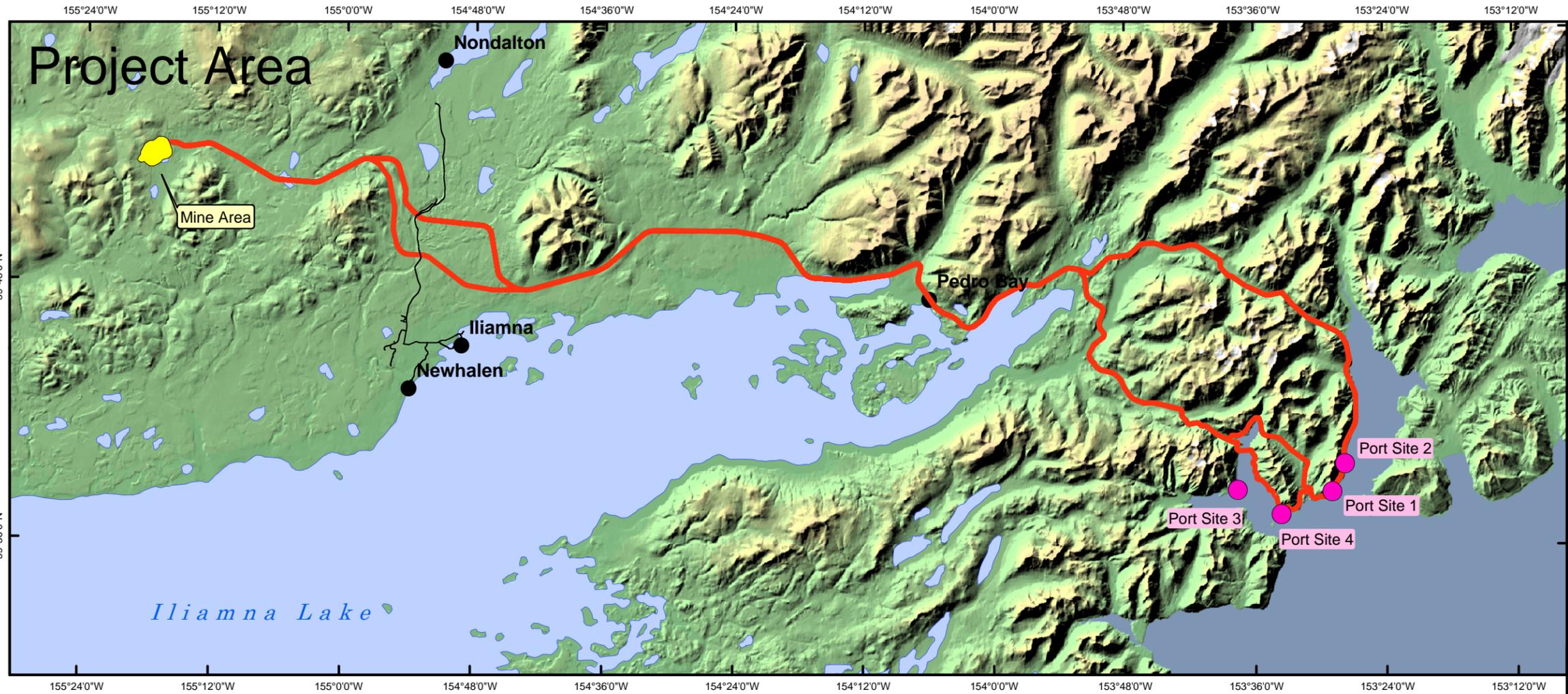
The biophysical and socioeconomic resources are characterized through detailed surveys and mapping, followed by analysis and interpretation of the data. The site conditions, such as meteorology and hydrology, are defined through site installations and regular monitoring programs. The data are used to develop site models of the existing environment and, as engineering proceeds, of the sites of potentially viable project development concepts. Each study discipline will have a unique approach, which is described in chapters that follow.

Mine development concept evaluation and optimization continue as the project engineering develops and as the assessments of the baseline data are available. In this way, environmental considerations are incorporated into the evaluation of options for the various project components and ultimately the identification of the preferred mine development concept.

The baseline programs are designed to characterize the disciplines listed in Table 1-1.

Table 1-1
Pebble Project Environmental Baseline Studies Program

Discipline	Consulting Firm
Meteorology	Hoefler Consulting Group
Noise	Michael Minor & Associates
Surface Water Hydrology	Mine — HDR Alaska, Inc. Road/Port — Bristol Environmental & Engineering Services
Groundwater Hydrogeology	Mine — Water Management Consultants / SLR Alaska, Inc. Road/Port — Bristol Environmental & Engineering Services
Water Chemistry	Mine — HDR Alaska, Inc. Road/Port — Bristol Environmental & Engineering Services
Trace Elements	Mine — SLR Alaska, Inc. Road/Port — Bristol Environmental & Engineering Services / SLR Alaska, Inc.
Geochemical Characterization and Acid Rock Drainage/Metal Leaching (ARD/ML)	Steffen Robertson and Kirsten (Canada) Inc.
Terrestrial Wildlife and Habitats	ABR, Inc. — Environmental Research & Services
Wetlands	Mine — Three Parameters Plus Road/Port — Three Parameters Plus / HDR Alaska, Inc.
Fish And Aquatic Habitat	Buell & Associates HDR Alaska, Inc. Northern Ecological Services
Marine Habitat	ABR, Inc. — Environmental Research & Services Bristol Environmental & Engineering Services PENTEC Environmental RWJ Consulting
Subsistence	Stephen R. Braund & Associates
Cultural Resources	Stephen R. Braund & Associates
Recreation	Kevin Waring & Associates
Land Use	Kevin Waring & Associates
Socioeconomics	Kevin Waring & Associates McDowell Group
Visual	Land Design North
Data Management and Geographic Information System (GIS)	Resource Data Inc.



Northern Dynasty Mines Inc.



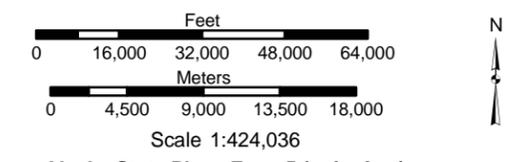
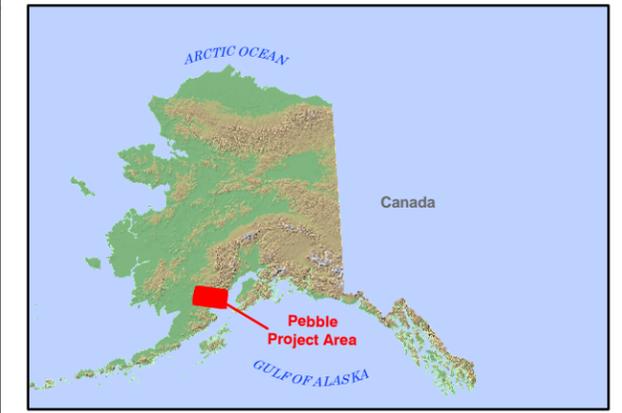
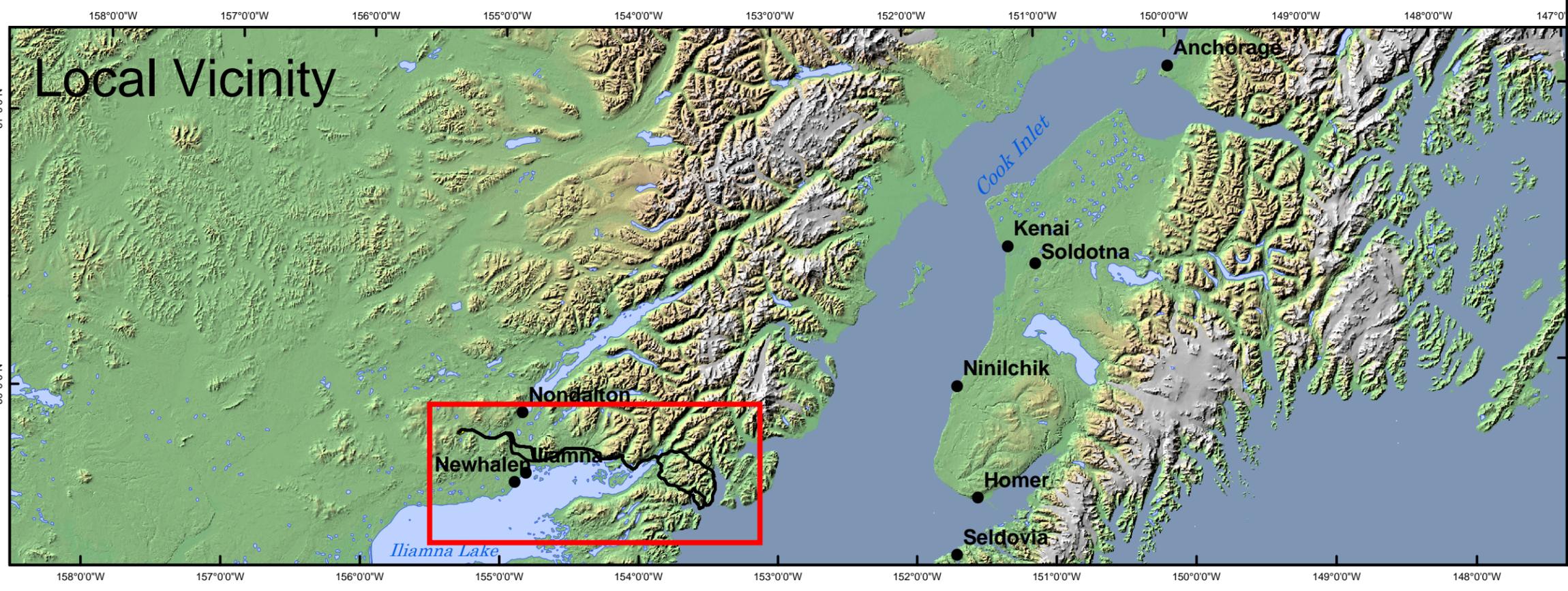
Pebble Project
General Project Location
Figure 1.1

Legend

Routes of Interest

- Routes of Interest
- Orebody
- Existing Roads
- Port Sites

Received Access Routes AutoCAD file from PN&D, 6/7/2004



Scale 1:424,036
Alaska State Plane Zone 5 (units feet)
1983 North American Datum

File: RDI_ND_SPLAN1-1_11x17L_1of1.mxd	Date: June 28, 2004
Version: 2	Author: RDI-DWR