



**DRAFT ENVIRONMENTAL BASELINE STUDIES**

**2004 PROGRESS REPORTS**

**CHAPTER 15. RECREATION**

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## ACRONYMS

ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
ADOT/PF	Alaska Department of Transportation and Public Facilities
agl	above ground level
AHRS	Alaska Heritage Resource Survey
ANCSA	Alaska Native Claims Settlement Act
APE	area of potential effect
ASTt	Arctic Small Tool tradition
BBNA	Bristol Bay Native Association
BLM	Bureau of Land Management
BP	before present
<sup>14</sup> C	Carbon 14
CRM	cultural resources management
DEM	digital elevation model
EIS	environmental impact statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FR	Federal Register
GIS	geographic information system
GMU	Game Management Unit
GPS	global positioning system
GLM	general linear model
LIDAR	light detection and ranging
M.A.	Master of Arts
MCHTWG	Mulchatna Caribou Herd Technical Working Group
mi <sup>2</sup>	square mile(s)
MMS	Minerals Management Service
MODIS	moderate resolution imaging spectroradiometer
mph	miles per hour
NASA	National Aeronautics and Space Administration
NDM	Northern Dynasty Mines Inc.
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPS	National Park Service

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NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
PSD	Prevention of Significant Deterioration
QA	quality assurance
QAPP	quality assurance project plan
SHPO	State Historic Preservation Officer
SRB&A	Stephen R. Braund & Associates
SWE	snow water equivalent
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VHF	very high frequency

## 15. RECREATION

### 15.1 Introduction

This report presents the findings of the 2004 recreation baseline study. Because the study did not begin until mid-November 2004, the work effort scheduled for 2004 was minimal. Therefore, the results reported here for the year are limited to initial research and data analysis.

### 15.2 Study Objectives

The objective of the recreation baseline study is to describe the types, locations, levels, and economic importance of current and anticipated recreational uses and activities that occur at the mine site, transportation and utility corridor, and port, and in the greater area potentially affected by project development and operations. The description is to be sufficient to support assessment of project effects on recreation in the study area.

### 15.3 Study Area

The study area for the recreation baseline study generally encompasses the lands and waters whose use for commercial and non-commercial recreation may be directly or indirectly affected by project facilities and operations. This includes on-site and off-site areas of recreational lands and waters:

- In the immediate vicinity of project facilities (mine site, road, port);
- Potentially accessed via the project facilities (e.g., via mine roads or port facilities open to public access); and
- Whose accessibility, appeal, or utility for recreation may be affected by the proposed project.

Among other areas, the study area includes Lake Clark National Park and Preserve, Katmai National Park and Preserve, the Alagnak Wild River, the McNeil River State Game Sanctuary/Refuge, and the drainage basins of the Upper and Lower Talarik, Lake Iliamna, the Kvichak, the Koktuli, the Mulchatna, and the Upper Nushagak. These areas possess outstanding public recreational resources and sustain locally and regionally important recreation-related business activities (e.g., transportation services, guiding, lodging, etc.). Due to their location in relation to the project, there will be public concern about potential project effects on them and their continuing use for recreation. Recreational uses and activities in these areas will be documented to the extent necessary to support subsequent assessment of whether and how project options may affect them.

## 15.4 Scope of Work

The research for this study was begun in mid-November 2004. The study is being conducted by Kevin Waring Associates according to the approach described in the *Draft Environmental Baseline Studies, Proposed 2004 Study Plan* (Northern Dynasty Mines Inc., 2004).

Work completed in the 2004 study entailed collection and analysis of reports and resource-agency data on recreational lands and activities in the study area.

## 15.5 Methods

The method of study employs a variety of research, analytic, and interpretive tools. There are some published information sources, but much of the most relevant data on recreation visitation and activities will need to be culled from the files of state and federal resource agencies responsible for management of public lands and/or regulation of recreational activities, including sport fishing and hunting. Knowledgeable informants, including public-agency staff, recreational users, and representatives of user and trade groups, may also contribute valuable insights into recreational patterns and trends in the study area. Information collected from the above sources will be distilled into a profile of consumptive and non-consumptive recreational uses.

An understanding of the geographic relationships between recreational uses and mine facilities and their environmental effects will be critical for assessment of effects on recreation. Therefore, interpretive maps of recreational uses and activities will be developed as part of the baseline study.

## 15.6 Results and Discussion

Because the study did not begin until mid-November 2004, there are no results to discuss.

## 15.7 Summary

Not applicable at this time.

## 15.8 References

At this time, a preliminary bibliography of sources has been compiled, but it is premature to identify a list of references to be cited in the baseline study.