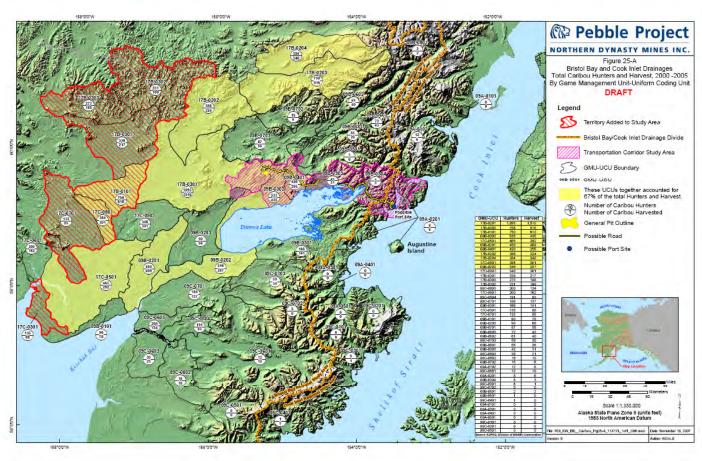
Days , 1010 , CSS, Starting

Recreation Baseline Study



Kevin Waring Associates November 30, 2007

Recreation Baseline Study

Study Objectives

- Describe and map recreational uses and activities
- Estimate economic importance of commercial recreation

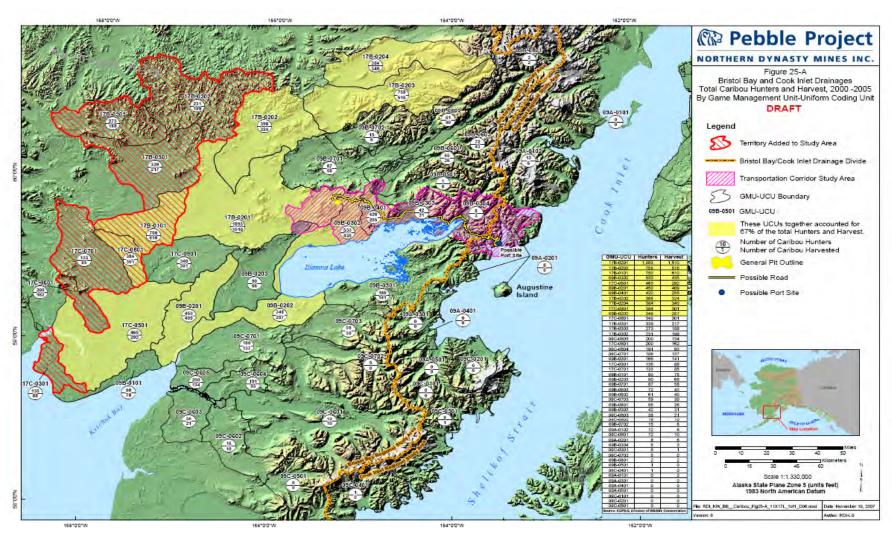
Regional Study Area

- Broadly defined to encompass lands and waters used for commercial and non-commercial recreation
 - onsite or near proposed project facilities
 - offsite in larger region potentially affected by the Pebble Project

Additions to Study Scope in 2007

- Regional Study Area expanded to include more territory in Mulchatna/Nushagak drainage
 - Big game hunting 8 more GMU-UCUs in Nushagak-Mulchatna drainage added to original 41 GMU-UCUs
 - Sportfishing 7 more sites in Nushagak River drainage added to original 48 sport fishing locations
- Additional year of sportfishing, big game hunting, and National Park Service visitor data
- 3. More analysis of sportfishing and big game hunting in study area in historical and statewide perspective
- More detailed spatial analysis of trends in big game hunting in Pebble Project vicinity

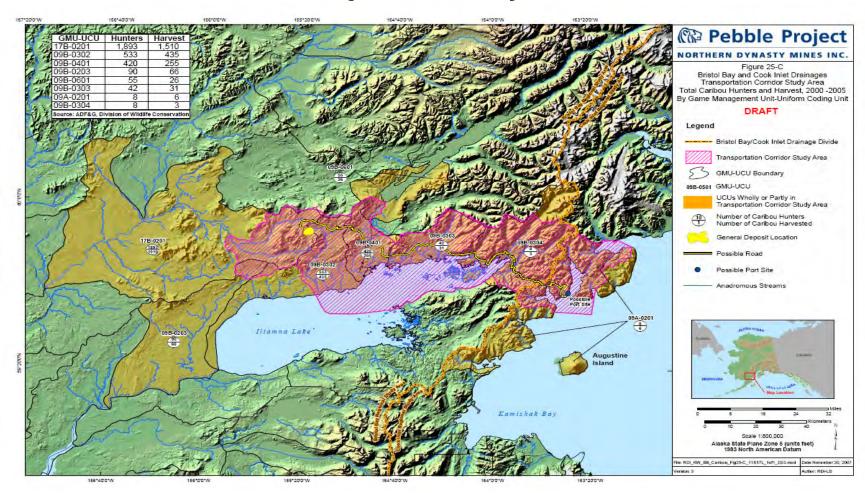
Expanded Big Game Hunting Study Area



Source: Alaska Department of Fish & Game, Wildlife Conservation Division.

Note: Similar maps for moose and brown bear in Regional Study Area.

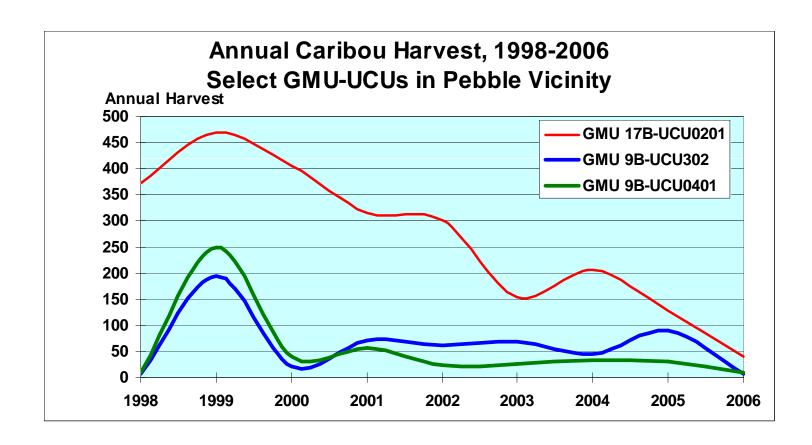
Caribou Hunters and Harvest Pebble Project Vicinity, 2000-2005



Source: Alaska Department of Fish & Game, Wildlife Conservation Division.

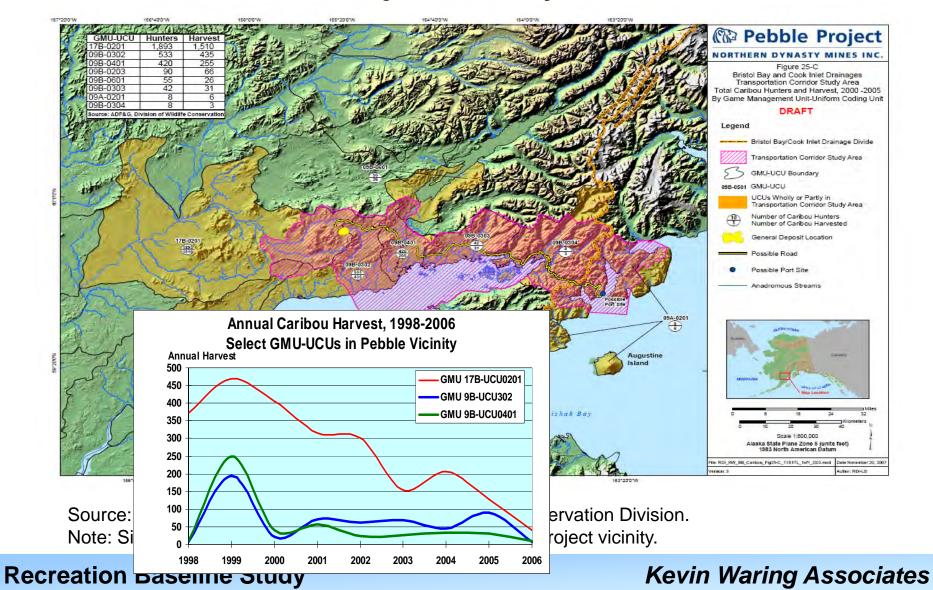
Note: Similar maps for moose and brown bear in Pebble Project vicinity.

Recent Trends in Caribou Harvest 1998-2006 in Pebble Vicinity



Source: Alaska Department of Fish & Game, Wildlife Conservation Division.

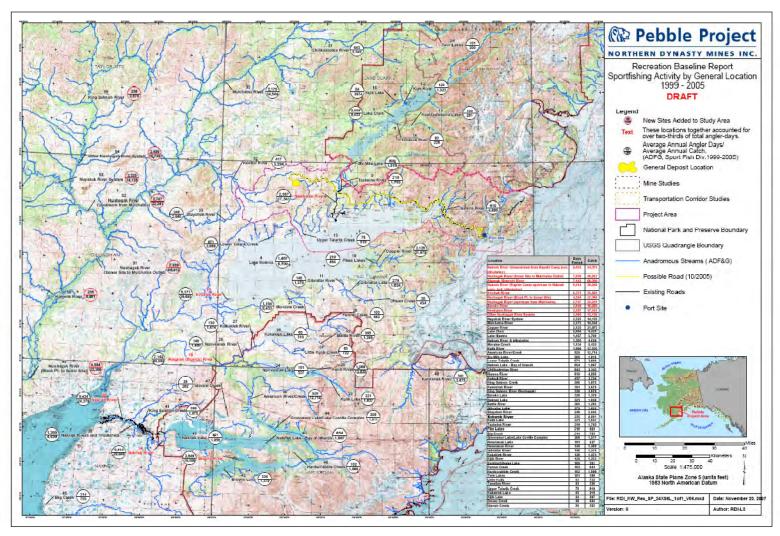
Caribou Hunters and Harvest Pebble Project Vicinity, 2000-2005



Major Findings Regarding Caribou

- 1. Ongoing decline in Mulchatna caribou herd population
- 2. Migration of Mulchatna herd away from Pebble vicinity
- 3. Ongoing decline in caribou hunting and harvest in Pebble vicinity
- 4. Need for more localized spatial analysis of caribou hunting activity in Pebble vicinity

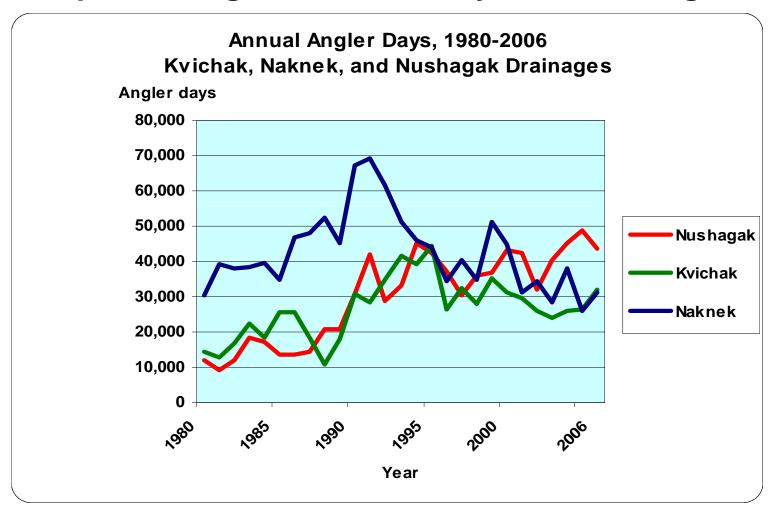
Expanded Sport Fishing Study Area



Source: Alaska Department of Fish & Game, Sport Fish Division.

Note: Maps also prepared for catch of rainbow trout, sockeye, king, dolly varden, grayling, and coho.

Sportfishing Trends in Study Area Drainages

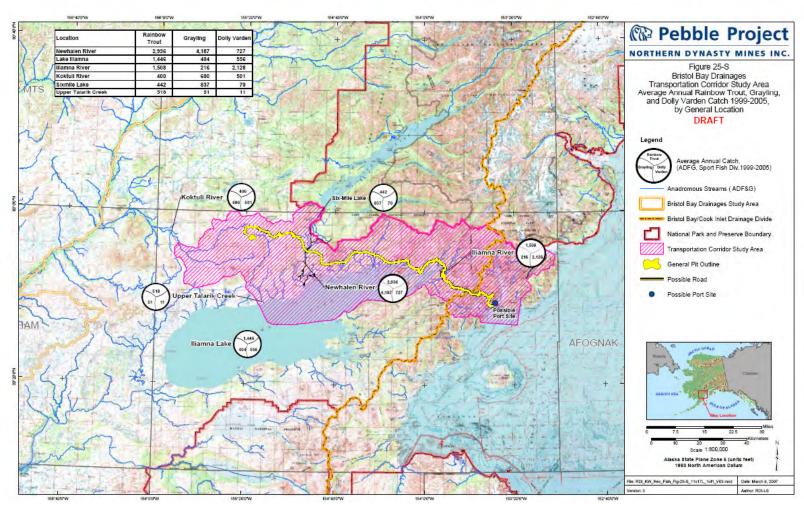


Source: Alaska Department of Fish & Game, Sport Fish Division.

Sportfishing in Study Area-wide Perspective

| Average Annual Sportfishing Effort and Catch | | | | |
|--|-------------|------|---------|------|
| 55 Locations in Study Area, 1999-2005 | | | | |
| - | Days Fished | | Catch | |
| Location | Number | Rank | Number | Rank |
| Naknek River (downstream from Rapids Camp, incl. tributaries) | 9,434 | 1 | 24,378 | 5 |
| Nushagak River (Sonar Site to Mulchatna) | 7,939 | 2 | 48,912 | 2 |
| Alagnak River | 7,142 | 3 | 60,399 | 1 |
| Naknek River (Rapids Camp upstream to Naknek Lake, Incl. tributaries) | 6,414 | 4 | 29,849 | 4 |
| Kvichak River | 5,371 | 5 | 35,885 | 3 |
| Nushagak River (Black Pt. to Sonar Site) | 4,594 | 6 | 22,366 | 6 |
| Nushagak River (upstream from Mulchatna) | 2,747 | 7 | 22,241 | 7 |
| Brooks River | 2,649 | 8 | 16,088 | 11 |
| Newhalen River | 2,567 | 9 | 17,541 | 10 |
| Other Nushagak River System | 2,498 | 10 | 15,749 | 12 |
| Lower Talarik Creek | 671 | 21 | 3,669 | 25 |
| Koktuli River | 417 | 25 | 3,234 | 27 |
| Upper Talarik Creek | 78 | 51 | 619 | 47 |
| 42 locations omitted | | | | |
| Total | 75,141 | | 458,624 | |
| Source: Alaska Department of Fish & Game, Sport Fish Division. | | | | |

Average Annual Catch, Pebble Project Vicinity Rainbow Trout, Grayling, Dolly Varden, 1999-2005



Source: Alaska Department of Fish & Game, Sport Fish Division.

Note: Updated maps also prepared for sockeye, king, and coho salmon.

Sportfishing Trends in Statewide Picture

