## **Appendix C**

# **ANILCA SECTION 810(a)**

## SUMMARY EVALUATION AND FINDINGS

#### I. INTRODUCTION

Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) requires Federal agencies having jurisdiction over lands in Alaska to evaluate the potential impacts of proposed actions on subsistence uses and needs. This analysis evaluates the potential restrictions to ANILCA Title VIII subsistence uses and needs that could result from the National Park Service (NPS) authorizing suction dredge placer gold mining operations on the Little Eldorado and Bonanza unpatented mining claims located at Gold Hill within Wrangell-St. Elias National Park and Preserve (WRST). The EA provides a detailed description of the proposed alternatives.

## II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency -

- (1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;
- (2) gives notice of, and holds, a hearing in the vicinity of the area involved; and
- (3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the national park system in Alaska. Wrangell-St. Elias National Park, containing approximately eight million one hundred and forty-seven thousand acres of public lands, and Wrangell-St. Elias National Preserve containing

approximately four million one hundred and seventeen thousand acres of public lands, was created by ANILCA, section 201(9), for the following purposes:

"To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; and to provide continued opportunities including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of <u>Title VIII</u>."

The potential for significant restriction must be evaluated for the proposed action's effect upon "...subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use."

## III. PROPOSED ACTION ON FEDERAL LANDS

A mining plan of operations (MPO) has been submitted to the National Park Service (NPS) by Chisana Mining LLC for the purpose of conducting a suction dredge placer gold mining operation on the Little Eldorado and Bonanza unpatented mining claims located at Gold Hill within Wrangell-St. Elias National Preserve. Work on the Bonanza claims would be a continuation of existing operations. The primary support camp would be located within the Little Eldorado claim group near Little Eldorado Creek, using existing structures, and temporary spike camps with tents would be used to support work on the Bonanza claims. The proposed operations include the use of suction dredges with an intake diameter of 6 inches or less, high bankers, and pump to feed the high bankers. A metal detector will be used for exploratory activities in bench deposits or the creek bed. Access is via fixed-wing aircraft to the Chicken Creek Airstrip, then via off-road vehicle to the claim groups. This access is authorized by an existing Right Of Way Certificate of Access (RWCA), issued to Chisana Mining LLC by the NPS in 2013. The operation would occur between June 1 and September 30 each year, with the exact dates depending upon the weather conditions.

The Bonanza and Little Eldorado claims were previously mined. Virtually all stream bottoms in the Bonanza Creek area have been affected, and many adjacent upland benches have also been mined or otherwise developed. No mining operations have been conducted or approved by the NPS on the Little Eldorado claims since WRST was established in 1980. Placer mining on the Bonanza claims has been authorized by NPS since 1988. For more details on the alternatives see the EA.

Alternative A – No Mining Operations Authorized on Little El and Bonanza Group Claims (No Action): Under this alternative, the NPS Alaska Regional Director would not approve the operator's proposed mining plan of operations. As a result, authorized mining would not occur on the Little Eldorado and Bonanza claims at Gold Hill. This alternative provides a baseline for evaluating the changes and impacts of the proposed alternative.

Alternative B – Authorize Mining Operations on the Little Eldorado and Bonanza Claims with NPS Stipulations (Proposed Action): Under this alternative, the NPS Alaska Regional Director would approve the operator's mining plan of operations (MPO) on the Little Eldorado and Bonanza unpatented mining claims. The authorization would include NPS stipulations for resource protection (see Appendix D).

## IV. AFFECTED ENVIRONMENT

A summary of the affected environment pertinent to subsistence use is presented here. The following documents contain additional descriptions of subsistence uses within Wrangell-St. Elias National Park and Preserve:

Bleakley, Geoffrey T. 2002. Contested Ground, An Administrative History of Wrangell-St. Elias National Park and Preserve, Alaska, 1978-2001, NPS Alaska Region.

Final Environmental Impact Statement, Wilderness Recommendation, NPS Alaska Region, 1988.

Haynes, Terry L., Martha Case, James A. Fall, Libby Halpin, and Michelle Robert. 1984. *The use of Copper River salmon and other wild resources by Upper Tanana communities*, 1983-1984. ADF&G Division of Subsistence, Technical Paper No. 115.

Holen, Davin, Sarah M. Hazell, and David S. Koster, eds. 2012. Subsistence harvests and uses of wild resources by communities in the eastern interior of Alaska. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 372.

Holen, Davin, Sarah M. Hazell, and Garrett Zimpelman, eds. 2015. *The harvest and use of wild resources in selected communities of the Copper River Basin and East Glenn Highway, Alaska, 2013.* Alaska Department of Fish and Game, Division of Subsistence, Technical Paper 405.

Kukkonen, Malla, and Garrett. Zimpelman. 2012. Subsistence harvests and uses of wild resources in Chistochina, Alaska, 2009. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 370.

La Vine, Robbin, Malla Kukkonen, Bronwyn Jones, and Garrett Zimpelman. 2013. Subsistence harvests and uses of wild resources in Copper Center, Slana/Nabesna Road, Mentasta Lake, and Mentasta Pass, Alaska, 2010. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 380.

La Vine, Robbin and Garrett Zimpelman, eds. 2014. Subsistence harvests and uses of wild resources in Kenny Lake/Willow Creek, Gakona, McCarthy, and Chitina, Alaska, 2012. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 394.

Marcotte, James R. 1992. Wild fish and game harvest and use by residents of five Upper Tanana communities, Alaska, 1987-88. ADF&G Division of Subsistence, Technical Paper No. 168.

Norris, Frank. 2002. *Alaska Subsistence: A National Park Service Management History*, NPS Alaska Region.

NPS Alaska Region. 1986. General Management Plan/Land Protection Plan, Wrangell-St. Elias National Park and Preserve.

NPS Alaska Region. 2014. Wrangell-St. Elias Subsistence Management Plan.

NPS Alaska Region. Wrangell-St. Elias National Park and Preserve Subsistence Users Guide. (Updated most recently in 2005.)

Stratton, Lee, and Susan Georgette. 1984. *Use of fish and game by communities in the Copper River Basin, Alaska: a report on a 1983 household survey*. ADF&G Division of Subsistence, Technical Paper No. 107.

Subsistence uses are allowed within Wrangell-St. Elias National Park and Preserve in accordance with Titles II and VIII of ANILCA. The national preserve is open to federal subsistence uses and state-authorized general (sport) hunting, trapping and fishing activities. NPS-qualified subsistence users may engage in subsistence uses within the national park. The proposed action would take place within the national preserve.

To engage in federal subsistence hunting and wildlife harvest activities in Wrangell-St. Elias National Preserve, you must be a local rural resident who maintains a primary place of residence in a rural community or area that has a positive customary and traditional use determination for the species and the area where you wish to take fish and wildlife.

Based on 2010 U.S. Census data, the National Park Service estimates that approximately 5,200 individuals are eligible to engage in federal subsistence uses in Wrangell-St. Elias National Park and Preserve. Most of these individuals live in communities along the road system, although there are a few scattered pockets of population off of the road system, including in the Chisana area. Subsistence uses in WRST include hunting, trapping, fishing, berry picking, gathering mushrooms and other plant materials, collecting firewood, and harvesting timber for house construction. Most subsistence hunting within Wrangell-St. Elias occurs off the Nabesna and McCarthy roads and the trails that originate from them. The Copper, Nabesna, Chisana and Chitina rivers serve as popular riverine access routes for subsistence users. Most of the subsistence fishing takes place in the Copper River.

Gold was discovered near the headwaters of the Chisana River in 1913. This discovery prompted a stampede that established the town of Chisana. Miners worked the gold fields on nearby Gold Hill, establishing camps and workings. Starting in the 1920s, both mining activities and population levels significantly declined from stampede levels. The 2010 US Census lists no

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<sup>&</sup>lt;sup>1</sup> Bleakley, Geoffrey T. 2007 (revised and expanded web version). *A History of the Chisana Mining District, Alaska, 1890-1990*. NPS Alaska Region, Resources report NPS/AFARCR/CRR-96/29. (Accessed on 2/21/2013 at

http://www.nps.gov/wrst/historyculture/upload/chisanaminingdistricthistory.pdf.)

residents of Chisana, however park staff conversations with local residents suggests that a handful of people make Chisana their primary place of residence. Subsistence use by area residents centers on wildlife food resources and furbearer harvest. In this remote area, wildlife resources are used to augment store purchased goods. Residents of Chisana occasionally utilize subsistence resources on Gold Hill. The Gold Hill area has traditionally been primarily used for the harvest of caribou, sheep and moose. Subsistence hunting of the Chisana caribou herd was closed in 1994 due to declining population numbers, however the herd population has since stabilized, and a small subsistence harvest was authorized starting in the fall of 2012.

Moose, caribou, grizzly bear, and Dall sheep are all indigenous to the area. Dall sheep are most prevalent in the high mountains north and south of the area. A few sheep, mostly ewes and lambs, occupy the Gold Hill area. Grizzly bear and caribou range over the Gold Hill, Beaver Creek valley and Solo Flats areas. Moose occur in the Gold Hill area drainage bottoms and in a few higher areas with sufficient forage. Moose are more common towards the Chisana and White Rivers. The majority of meat utilized by north Wrangell residents is moose followed by caribou and then Dall sheep. Furbearers are important to subsistence trappers in the Gold Hill area. Red fox are common in the area. Wolf, covote and wolverine are common but not plentiful in the area. Lynx sometimes range into the area but usually remain at lower elevations. Trapping in the area takes place in the winter and is generally confined to the Chathenda Creek drainage. Residents of the area utilize local plant materials in their subsistence activities. Blueberries and cranberries are of primary importance. There are no timber resources in the area of proposed action. The proposed mine sites are not a traditional areas for gathering of plant materials. Freshwater fish have been observed in Cathenda Creek, into which Bonanza Creek flows. Specifically surveys conducted in 2003 show the presence of Artic grayling and round whitefish.<sup>2</sup>

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerable from previous years due to weather conditions, migration patterns, and natural population cycles.

## V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted.

The evaluation criteria are as follows:

1. the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers, (b) redistribution of subsistence resources, or (c) habitat losses;

<sup>2</sup> Markis, Joel A., Eric R. Veach, Molly B. McCormick., and Ray Hander 2004. *Freshwater Fish Inventory of Denali National Park and Preserve, Wrangell-St. Elias National Park and Preserve, and Yukon-Charley Rivers National Preserve, Central Alaska Inventory and Monitoring Network.* Wrangell-St. Elias National Park and Preserve. Copper Center, AK. Pg. 69.

- 2. what affect the action might have on subsistence fisher or hunter access; and
- 3. the potential for the action to increase fisher or hunter competition for subsistence resources.

## The potential to reduce populations:

The Chisana/Gold Hill area supports the four large mammal species (moose, caribou, Dall sheep, and grizzly bear) important to interior Alaska residents. Wildlife populations are unlikely to be significantly affected under any of the alternatives. It is possible that distribution of individual animals would change somewhat, but this is insignificant biologically. Short-term relocation would occur due to temporary avoidance of the trail corridor, airstrip, and claim area due to noise and human activity. The Dall sheep that frequent the project area normally consist of ewes and lambs, which are not legally harvestable. No mining would take place during calving or lambing in the spring. Impacts on birds would be limited to specific sites without high use and of such small acreage that impacts will be minimal or nonexistent. No critical habitat for large mammals would be damaged by the operation. Thus the operation is not expected to significantly redistribute or otherwise impact wildlife populations.

Noise created by the operation may temporarily affect hunting and foraging areas used by furbearers. Considering that the local furbearers are predominately crepuscular (active in the twilight) or nocturnal (times when the operation would be shut down) in their hunting habits, it is expected that any displacement would be minimal. Mining activity would cease at least one month prior to trapping season and would have no direct effect on fur harvest.

In conclusion, the proposed alternatives are not expected to significantly alter wildlife movements or wildlife habitat or reduce populations of important subsistence wildlife. Fish are not a significant subsistence resource in the area.

## The effect on subsistence access:

The alternatives evaluated in this analysis are not anticipated to result in a significant restriction to subsistence access. Access for federal subsistence uses in the Wrangell-St. Elias National Park and Preserve is granted pursuant to Section 811 of ANILCA. Allowed means of access by federally qualified subsistence users in WRST include motorboat, snowmachine (subject to frozen ground conditions and adequate snow cover), ORVs, and airplane (preserve only), along with non-motorized means such as foot and horses. The alternatives would have no direct impact on allowed means of subsistence access, nor would the alternatives affect the areas open to subsistence uses or access routes to those areas. Thus, none of the alternatives discussed in this analysis would affect access to subsistence uses.

## The potential to increase competition:

The proposed actions are not expected to significantly restrict or increase competition for subsistence resources on federal public lands within the affected area.

#### VI. AVAILABILITY OF OTHER LANDS

The proposed actions are consistent with NPS mandates. The applicant's right to utilize the land for mining purposes is confined within the bounds of the mining claims involved. Because all public lands within Wrangell-St. Elias National Park and Preserve have been withdrawn from mineral entry, there are no other suitable lands available for the operator to conduct mining operations. There is no allowance for use of lands outside the claim for mining purposes except for access. There are no other lands available for mining operations that would result in less impact to subsistence resources than those proposed by the operator.

For subsistence purposes, other lands remain available outside of the proposed mining area. The availability of lands near the proposed mine site and other adjacent lands would not be affected for subsistence purposes.

#### VII. ALTERNATIVES CONSIDERED

No other alternatives were identified that would reduce or eliminate the use of NPS public lands needed for subsistence purposes.

## VII. FINDINGS

This analysis concludes that neither of the alternatives discussed in this analysis would result in a significant restriction of subsistence uses.