

THE LAW OFFICE OF
GEOFFREY Y. PARKER

Phone: (907) 222-6859
Fax: (907) 277-2242

E-mail: gparker@alaska.net

634 K Street
Anchorage, Alaska 99501

**Pebble Mine: Framing Factual, Legal and Policy Questions by
Focusing on DNR's 2005 Bristol Bay Area Plan**

Prepared for Alaska Native Law Section, Alaska Bar Association
Meeting of April 14, 2010

I. Facts about Pebble Deposit: Its location, size, and chemical composition in the Bristol Bay drainages, give rise to issues.

A. Location, Size, Chemical Composition.

Location: [The 1984 and 2005 BBAP summary maps will be on the will to discuss location at headwaters of Upper Talarik Cr. in Kvichak drainage and Kotuli R. in Nushagak drainage.] Kvichak is historically the largest producer of sockeye salmon and the Nuishagak the largest producer of other species in the Bristol Bay drainages, which produce that world's greatest salmon fisheries.

Size: about 10-11 billion tons or mineralized resource (not "ore" because it is undetermined whether it can be mined economically).

Chemical composition: Issues of Acid Mine Drainage (AMD), waste storage, and perpetual care: Salmon need clean water to thrive and therefore chemical composition of host rock is important.

1. **Metallic sulfide ore body** (bornite, chalcopyrite), both copper bearing ferrous metallic sulfides.

2. **Acid Mine Drainage (AMD).** Exposing sulfides to air and water creates sulfuric acid. In solid rock the process is slow. However, ore-processing turns rock into the texture of sand or talcum powder, and exponentially increases the exposure of sulfides to air and water, and generation of sulfuric acid. Tailings, waste rock, overburden, mine structures such as open pits and underground workings, dust, and even the digestive tracts of benthic organisms are potential sources of AMD.

3. **Waste.** [NDM 2006 and Skytruth maps will be in your handout to give idea of size but not a projected design.] About 99 percent, or 10 billion tons, of waste to store, probably on public land. NDM has said 3 to 5 percent of the tailings stream will be reactive.

B. Potential effects on fish, wildlife and commercial, subsistence, and recreational uses.

1. **Issues of Potential Biological effect.**

a. **Fish.**

(i) **Sulfuric acid (AMD)** dissolves metals, such as copper.

Dissolved copper is highly toxic to salmon, and disrupts many functions (e.g., the homing instinct, ability to flee predators, reproduction, brain functions, etc.) Most studies address single elements and additive and synergistic effects are not well understood.

(ii) **Value of genetic diversity:** Hundreds of distinct salmon stocks. Overtime, genes rise and fall in importance in their contribution to success of the overall populations

b. **Game, Wildlife, Vegetation:** Salmon as fertilizer.

(i) **Game & Riparian Vegetation:** Nitrogen in bears and vegetation is marine isotope.

(ii) **Moose and caribou.** [Maps on the wall will help to identify issues of potential affects on moose and caribou.]

2. **Issues of Potential Socio-cultural and economic effect.** [Use subsistence use area maps.]

a. **Subsistence:** Assuming the most perfect permits, operation, reclamation and closure into perpetuity, are state and federal subsistence law adequate to protect subsistence from the increases in population and access that may result from Pebble and related development?

b. **Commercial fishing and recreational industries:** [Use Exh. 18 (DNR's Fredericksen BBAP Map for Roads, and Duffield) but explain not the final map]: Will there be an increase in allocation disputes over salmon, particularly Chinook salmon? What will be the effects on the wilderness-based lodge industry? NPS has already had employees of contractors for Pebble claim local rural residency and apply for subsistence permits; impact on sport hunting in preserves.

II. The statutory and regulatory scheme for permitting begins with DNR's 2005 Bristol Bay Area Plan.

A. Statutory and Regulatory Scheme DNR's Area Plans for State Lands.

Alaska Statutes (AS 38.04) require DNR to adopt land use plans for state lands to "provide for the use and management of state-owned land."¹ The plans are necessary to undertake any disposition of state land.² The plans must be based on an inventory of resources and uses.³ To do so, DNR has adopted land use planning regulations at 11 AAC Chap. 55. The plans divide the state land into "planning units," and designate the "*primary uses*" of each. DNR then issues a land classification order that converts these designated uses to corresponding land *classifications*. DNR has eighteen land classification categories established and defined in regulation at 11 AAC 55.050 -- .230 (*e.g.*, mineral, fish and wildlife habitat, public recreation, forestry, agricultural, settlement land, etc). The plans also adopt general and unit-specific *guidelines* and *statements of management intent*. All classifications are initially multiple use. However, when an undesignated use is in irreconcilable conflict with a classified, designated use, then the designated use prevails. Any unit of land can have up to three *co-classifications*. The classifications, guidelines and statements of intent guide DNR's land management during the *20-year life* of the plan.

¹ AS 38.04.065(a); see also 2005 BBAP, p. 1-5 attached (DNR permit adjudicators uses the plan in making permitting decisions).

² *Alaska Survival v. State*, 723 P.2d 1281 (Alaska 1986).

³ AS 38.04.060, AS 38.04.065(b)(4).

B. DNR's 2005 Bristol Bay Area Plan. [Use BBAP Summary Maps on the wall]

DNR's 2005 Bristol Bay Area Plan (2005 BBAP) applies to 12 million acres of state lands in the Bristol Bay drainages, including where a Pebble mine and associated infrastructure might be located.⁴ The previous 1984 BBAP⁵ had co-classified nearly the entire 12 million acres as habitat, usually as co-classifications of that were habitat and recreational land, or habitat, recreational, and mineral land or oil and gas land. In effect, co-classifying for habitat and minerals meant that mineral development had to be compatible with habitat. In contrast, DNR's 2005 BBAP drastically reduces to about 768,000 acres (by about 94 percent) the acreage previously classified or co-classified as habitat. The 2005 BBAP reclassified the land at, and in the vicinity of, the Pebble mine site from co-classifications under the 1984 BBAP as habitat and public recreation land, or as habitat, public recreation and mineral land, to *solely* mineral land under the 2005 BBAP. [The maps on the wall will show the access route, and the increase in settlement land from 13,000 acres in 1984 BBAP to 640,000 acres in 2005 BBAP, much of it proximate to Pebble and the access route, and occupying most winter moose habitat in about 3 million acres north of Iliamna Lake and east of the Mulchatna River.]

III. Some of the issues of law in *Nondalton Tribal Council et al. v. Alaska DNR*.

In *Nondalton Tribal Council et al. v. Alaska DNR*, the plaintiffs⁶ challenge the methods by which DNR devised its 2005 BBAP. The case is on-going in its early stages, is apparently the first case to challenge an area plan, and raises many issues, several may interest the Alaska Native Law Section.

- A. Issue:** Has DNR unlawfully abused discretion by adopting regulations at 11 AAC 55.050 - .230, attached, which include a "public recreation land" classification category for sport hunting and fishing, but exclude a subsistence land classification category for subsistence hunting and fishing?

The regulations arise from three statutes:

(1) AS 38.04.900(a), which requires DNR to adopt regulations necessary to carry the land use planning statutes as AS 38.04;

(2) AS 38.04.015 (Public Interest in Retaining State Land in Public Ownership) which provides in part:

⁴ DNR's 2005 BBAP is available at <http://www.dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm> (last visited April 9, 2010).

⁵ DNR's 1984 BBAP, except for its accompanying maps of habitat types and subsistence use areas for 31 villages and communities, is also available at <http://www.dnr.alaska.gov/mlw/planning/areaplans/bristol/index.htm> (last visited April 9, 2010). Most co-classifications in the 1984 Area Plan were for habitat and public recreation in conjunction with oil and gas or mineral classifications.

⁶ Nondalton Tribal Council, Koliganek Village Council, New Stuyahok Traditional Council, Ekwok Village Council, Curyung Tribal Council, Levelock Village Council, Alaska Independent Fishermen's Marketing Assoc., and Trout Unlimited.

The primary public interests in retaining areas of state land surface in public ownership are

(1) to make them available on a sustained-yield basis for a variety of beneficial uses including *subsistence*, energy development, aquaculture, forestry, grazing, sport hunting and fishing, hiking, snowmobiling, skiing, and other activities of a type which can generally be made available to more people and conducted more successfully if the land is in public rather than private ownership;

(2) * * *

(3) to protect critical wildlife habitat and areas of special scenic, recreational, scientific, or other environmental concern;

* * *

(3) AS 38.04.065(c), which provides in part:

Each regional land use plan must identify and delineate

(1) * * *

(2) areas that must be retained in state ownership and planned and *classified for various uses and purposes under AS 38.04.015.*

DNR regulations create a “public recreation land” category that includes land used for sport hunting and fishing,⁷ but they regulations lack a land classification category for subsistence hunting and fishing. In practical terms, DNR’s disparate treatment of subsistence is this: A sport hunter or fisher can go to a public meeting on a draft Bristol Bay Area Plan and urge that sport hunting and sport fishing are “primary uses” of some particular unit of state land (*e.g.*, the Koktuli River and Upper Talarik Creek drainages in the vicinity of the Pebble claims) and that they should be classified as “public recreation land.” However, a subsistence hunter or fisher who goes to the same meeting can not say that the same lands should also be classified or co-classified as subsistence land, because DNR *has no subsistence land classification category.*

B. Issue: Has DNR abused discretion or violated its own regulations by using primarily *marine-related* “fish and wildlife categories” in DNR’s 2005 BBAP to determine whether *inland uplands*, such as those at the Pebble claims a hundred miles from the coast, should be classified as fish and wildlife habitat?

The duly-adopted regulatory definition of “wildlife habitat land,” at 11 AAC 55.230 (italics added), defines the term as follows:

Land classified wildlife habitat is land which is *primarily valuable for (1) fish and wildlife resource production*, whether existing or through habitat manipulation, to supply sufficient numbers or a diversity of species *to support commercial, recreational, or traditional uses on an optimum sustained yield basis*; or (2) a unique or rare assemblage of a single or multiple species of regional, state, or national significance.

⁷ 11 AAC 55.160.

DNR's 2005 BBAP, p. 2-9 (*italics added*), uses the following *ad hoc* definition of the "Ha' (Habitat)" designation and a *primarily marine-related* list of "fish and wildlife categories" to identify and designate land as habitat, as follows:

These habitats are defined as Areas [sic] that serve as *a concentrated use area* for fish and wildlife species *during a sensitive life history stage* where alteration of the habitat and/or human disturbance could result in *a permanent loss of a population or sustained yield of the species*. Fish and wildlife categories used to identify "Ha" (Habitat) designations in this plan include the following:

- Anadromous fish spawning and rearing areas in fresh water or brackish intertidal zones
- *Estuaries* important for rearing or schooling of anadromous fish
- *Kelp beds* covering large areas that are important marine nurseries
- Pacific *herring spawning* and rearing concentrations areas
- *Eel grass beds* that are important marine nurseries
- Waterfowl and/or *shorebird* concentration areas
- *Seabird* breeding habitat within each colony area of 500 birds and a two-mile radius around major breeding colonies (more than 20,000 birds)
- Bald eagle nest sites or nest site areas, and known concentrations
- *Sea lion haulouts and rookeries*
- *Harbor seal haulouts and rookeries*
- *Walrus haulouts and rookeries*
- *Sea otter pupping areas*
- Bear concentration areas (including concentrations by season)
- Important wildlife migration corridors, including nearshore migration routes.

1. Comparing the Habitat definition at 11 AAC 55.230 to the definition in the 2005 BBAP.

11 AAC 55.230 is in terms of land "primarily valuable for . . . fish and wildlife resource production." The 2005 BBAP's *ad hoc* definition is in terms of a "concentrated use area for fish and wildlife species during a sensitive life history stage." The latter restricts habitat to species that exhibit the phenomenon of a "concentrated use area" that coincides with a "sensitive life history stage." The regulatory definition is not so limiting, and covers habitat used at all stages of the animals' life history.

11 AAC 55.230 defines the habitat classification in terms of land necessary to retain in public ownership "to support commercial, recreational, or traditional uses on an optimum sustained yield basis." The 2005 BBAP's *ad hoc* definition restricts the habitat designation to land necessary to retain in public ownership so as to avoid "a permanent loss of a population or sustained yield of the species." "Permanent loss of a population" means extinction. "Permanent loss of . . . sustained yield" is not a test that protects habitat necessary to produce a harvestable annual or periodic sustained yield, as required by the "sustained yield" clause of the Alaska Constitution, Art. VIII, Sec. 4, and AS 38.04.910(12).⁸

⁸ See also, AS 16.05.255(k)(5), 41.17.950(27).

2. The Omissions.

- a. Moose and caribou are not on this list.
- b. DNR's 2005 BBAP classifies as habitat only navigable anadromous waters (2005 BBAP, 3-323 – 3-330).
- c. ADF&G regulations under the Anadromous Fish Act apply to the beds and water from mouth to uppermost documented anadromous fish. DNR's 2005 BBAP defines "anadromous" to exclude the beds of anadromous waters used for migration and rearing and include only the beds used for spawning.
- d. DNR claims that it uses habitat classification to "accommodate" subsistence. However, the list of "fish and wildlife categories" does not mention subsistence; the 2005 BBAP reduced habitat classifications by 94 percent from 12 million upland acres co-classified as habitat (usually with recreation, minerals, or oil and gas in the 1984 BBAP) to 768,000 upland acres in the 2005 BBAP; and nothing informed rural Alaskans that they should seek a habitat classification to protect their subsistence.

3. The Net Results.

The use of primarily marine criteria drove habitat classification off the uplands and onto the tide and submerged land, as if people in up-river villages subsistence hunt for caribou and moose on tide and submerged lands.

DNR's *ad hoc* definition and list used to identify habitat in the 2005 BBAP result in a 94 percent reduction in uplands classified as habitat, from 12 million acres of uplands and shorelands under the 1984 BBAP to 768,000 under the 2005 BBAP. Fish and wildlife life habitat that lost earlier habitat classifications under the 1984 BBAP include:

- (1) the western half of Iliamna Lake and its bed. The Lake is one of Alaska's most important sockeye salmon rearing lakes, into which Upper Talarik Creek flows from the eastern portion of Pebble claims. [Note the *de facto* admission that DNR cannot protect this lake];
- (2) most anadromous fish waters that are not navigable (*e.g.*, Upper Talarik Creek); [Note the *de facto* admission that DNR cannot protect this stream];
- (3) the vast majority of moose winter habitat on state land east of the Mulchatna River corridor and north of Iliamna Lake (*i.e.*, within an area of roughly 2.5 to 3 million acres of state land), including the Upper Talarik Creek drainage, the area of Nikabuna Lakes, the area southeast of Tutna Lake, and areas along the road corridor to Pebble. ADF&G had previously identified all of these lands as "essential" moose habitat in the 1984 BBAP. The 2005 BBAP reclassifies most of these lands as mineral, settlement or resource management lands.
- (4) the caribou calving areas of the Mulchatna caribou herd at and surrounding the Pebble claims and in the upper Mulchatna drainage. ADF&G had previously identified these lands as "essential" caribou habitat, in the 1984 BBAP. The 2005 BBAP reclassifies these lands as mineral or resource management lands.
- (5) spring-, summer-, and fall-use habitat for moose along the proposed road corridor to the Pebble claims. ADF&G had previously identified this moose habitat as "important," in the 1984 BBAP. DNR's 2005 BBAP reclassifies these lands as settlement or resource management lands.

(6) several million acres of caribou winter-use habitat in the Nushagak and Kvichak drainages outside major river corridors of the Nushagak system. ADF&G had previously identified this as "essential" habitat, in the 1984 BBAP. DNR's 2005 BBAP reclassifies these lands as resource management land.

(7) most non-anadromous fish habitat not in legislatively designated conservation areas.

C. **Issue:** Has DNR abused discretion or violated its own regulations by using, in its 2005 BBAP, a definition for "recreation," for proposes of land use planning, management and permitting, including permitting Pebble mine, expressly provides that recreation does not include sport hunting and fishing?

DNR's 2005 BBAP uses an *ad hoc* definition of "recreation," is in part as follows:

* * * "Recreation" does not refer to subsistence or sport hunting and fishing.
[Underscoring original]

The duly-adopted regulation 11 AAC 55.160 defines the "public recreation land" classification category as:

Land classified public recreation is land that is suitable for recreation uses, waysides, parks, campsites, scenic overlooks, hunting, fishing or boating access sites, trail corridors, or greenbelts along bodies of water or roadways.

D. **Issue:** Has DNR abused discretion or violated Article VIII of the Alaska Constitution by defining "subsistence uses" for purposes of land management in terms of rural residents only?

DNR's 2005 BBAP at page A-13 defines "subsistence uses" in part as:

Subsistence Uses. The noncommercial, customary and traditional uses of wild, renewable resources by a resident domiciled in a rural area of the state

This *ad hoc* definition appears at odd with *McDowell v. State*, 785 P.2d 1 (Alaska 1989), which holds that Article VIII, Sections 3, 15 and 17 bar the state from limiting subsistence to rural residents. To the extent that the 2005 BBAP asserts that it manages land to protect subsistence uses (even in the absence of a subsistence land classification category), the 2005 BBAP does with respect to rural residents only, and thus is likely to protect too little land for all Alaskans' subsistence uses, to exacerbate conflicts, and force non-rural subsistence users on top of rural subsistence users, as happens in Game Management Unit (GMU) 13 and other GMU's.

Note: Aside from obvious reasons that six Tribes, AIFMA, and TU are suing DNR, note that TU and AIFMA suing DNR for its lack of a subsistence land use classification category, and that six Tribes suing DNR for its definition of recreation that excludes sport hunting and fishing. Why? Likely Answer: Any land classification that keeps state land in public ownership and producing fish and wildlife benefits all users of fish and wildlife.

E. Beyond Pebble: Several issues indicate that DNR may have abused discretion or violated statutes that require the 2005 BBAP to be based on an inventory of resources and uses. Two examples are:

1. **Mining as a co-designated use.** 2005 BBAP, p. A-3, defines "designated use" as:

Designated Use. An allowed use of major importance in a particular management unit. Activities in the unit will be managed to encourage, develop, or protect this use. * * *

a. **For 12 Million upland acres,** the 2005 BBAP states that DNR will treat mining a co-designated use on nearly all 12 million acres open to mineral entry. No inventory supports that.

b. **For 9.4 million acres** the 2005 BBAP classifies as "Resource Management Land" (see 2005 summary map), there is no other designated use than mining. Under the BBAP, a designated use prevails over undesigned uses when irreconcilable conflict occurs. So, mining prevails over habitat, subsistence and recreation on these 9.4 million acres.

2. **Lack of Subsistence Inventory on uplands and shorelands.**

a. **2005 BBAP did not map subsistence uses areas.**

Unlike the 1984 BBAP, the 2005 BBAP undertakes no comprehensive inventory of subsistence use on uplands (outside of the Nushagak drainage), to ensure that mining is compatible with subsistence and other uses, including in the Upper Talarik Creek drainage.

b. **2005 BBAP implies that subsistence is a coastal activity.**

Unit-specific statement of management intent and inventories address subsistence on 3 percent of uplands and 86 percent of tide and submerged lands.

c. **2005 BBAP ignores subsistence "high use" areas on uplands.**

The 2005 Nushagak-Mulchatna Rivers Recreation Management Plan inventories units for "high," "moderate," "low" levels of subsistence and recreational use. 2005 BBAP ignores for purposes of designating primary uses, classifying land, and creating unit specific statements of intent, when it mentions subsistence in the unit-specific statements of intent or inventories for only 3 percent of 12 million acres of upland/shoreland units.

IV. The Policy Questions:

Regardless of whatever the law is, should Pebble mine be permitted based on the 2005 BBAP, when it:

*(1) uses primarily **marine** criteria, such as whether land is a walrus haulout or an eel grass bed,, to determine whether **inland uplands** a hundred miles from the coast qualify as fish and game habitat?*

*(2) **excludes moose and caribou grounds** from the method of habitat designation?*

*(3) has **no land use classification category for subsistence hunting and fishing**, while DNR has one for **sport hunting and fishing**?*

*(4) and then, defines recreation as **excluding sport hunting and fishing**?*