

ALASKA LEGISLATURE COMMITTEE FILES, 1989-1990 8672
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Citizens' Advisory Commission on Federal Areas

June 22, 1990

250 Cushman St.
Suite 4H
Fairbanks, Alaska 99701
(907) 456-2012
Fax: 456-2039

Dear Legislator:

Since its creation in 1981, the Citizens' Advisory Commission on Federal Areas has been engaged in the task of determining the impacts of the Alaska National Interest Lands Conservation Act (ANILCA) on the people of our state and making recommendations to both state and federal agencies in order to minimize conflicts. One of the most important, and unfortunately most contentious, provisions of this federal statute has been Title VIII- Subsistence Management and Use. As you know, ANILCA Title VIII requires the state to provide for a subsistence preference for rural residents in order to retain fish and wildlife management authority on federal lands. The McDowell decision, which found that the state's subsistence law granting such a preference violated the Alaska Constitution, means that the state is no longer in compliance with the provisions of ANILCA Title VIII. Consequently, on July 1, 1990 the Secretary of the Interior and the Secretary of the Agriculture will invoke their authority under ANILCA and assume management of subsistence activities on the federal lands in Alaska.

Earlier this year, during the regular legislative session, our Commission transmitted to your office a proposal for an amendment to the Alaska Constitution. We are once again asking you to consider our proposed amendment during the upcoming special session of the legislature.

The Commission's decision to support a constitutional amendment was not one that was easily reached. Extensive debate and public testimony on this issue have led us to the conclusion that the State of Alaska must take immediate action to prevent the federal land managing agencies from assuming the management of subsistence activities on the federal lands in this state. At the time the Commission developed this proposal we felt that a constitutional amendment was the only mechanism available that would prevent a federal takeover and ensure the legislature's authority to enact a subsistence statute that would both comply with ANILCA and withstand future legal challenges.

We believe that our position favoring a constitutional amendment is further supported by the June 20, 1990 superior court decision severing the unconstitutional rural preference provisions from the remainder of the state's subsistence statute. Superior Court Judge Beverly Cutler, in that decision, stated: "(T)he supreme court's

June 22, 1990

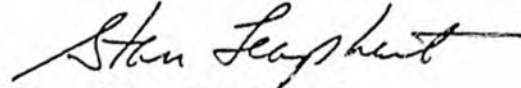
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ruling in McDowell renders compliance with ANILCA an impossibility without a constitutional amendment." Barring extensive amendments to ANILCA or a successful challenge to ANILCA Title VIII in federal court, neither of which this Commission views as likely or desirable, a constitutional amendment appears to be the state's only reasonable alternative.

Enclosed is a copy of our proposed amendment and an analysis which concludes that the people of Alaska should be the final arbiters of the subsistence question. We ask your careful consideration of our proposal. If you have any questions or if we may clarify any points, please contact our staff offices.

Sincerely,

Lew M. Williams, Jr., Chairman
CITIZENS' ADVISORY COMMISSION
ON FEDERAL AREAS



By: Stan Leaphart
Executive Director



Citizens' Advisory Commission on Federal Areas

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PROPOSAL TO AMEND THE ALASKA CONSTITUTION

"Article VIII, Constitution of the State of Alaska, is amended by adding a new section to read:

Section 19. USE OF FISH AND WILDLIFE RESOURCES FOR SUBSISTENCE. The Legislature may grant a preference in the use of fish and wildlife resources for subsistence based upon geographic, socioeconomic and cultural considerations."

ANALYSIS

Prior to the Alaska Supreme Court's decision in McDowell v. State of Alaska last December, it was widely presumed that the Alaska Legislature possessed the authority to grant a subsistence preference for rural residents in the use of Alaska's fish and game resources. The court's decision does not alter the fact that the people of Alaska, casting their votes on a 1982 state-wide ballot initiative proposing to repeal what was then Alaska's subsistence statute, overwhelmingly voted to retain the statute granting a subsistence preference in the use of Alaska's fish and game resources.

Implicit in the 1982 electoral decision is a clear public affirmation of the provisions of ANILCA Title VIII, including the term "rural". Additionally, the 1982 election affirmed the Legislature's authority to formulate a statute consistent with ANILCA. Despite the actions of the courts in McDowell and Madison, current public opinion polls demonstrate that if given the opportunity, the people of Alaska would again grant their consent to providing a preference to rural residents in the use of fish and game resources.

The constitutional amendment proposed by the Citizens' Advisory Commission on Federal Areas is intended to formally restore the Legislature's authority to grant a rural preference for subsistence. The proposed amendment does not directly grant the preference in and of itself but empowers the Legislature to do so, by statute, after considering what we have identified to be the essential relevant factors. Geographic, socioeconomic and cultural considerations are the essential relevant factors that must be weighed in defining what rural subsistence means in Alaska.

Recognizing geography as a relevant factor will allow Alaska law to say that people who live in a given location have their use of fish and game resources protected. "Rurality" cannot be defined without recognizing geography.

Recognizing socioeconomic conditions as a relevant factor allows Alaska law to say that granting a given community this protection has been done for a good public purpose based on the needs of the people who live there. It allows the Legislature to utilize socioeconomic data such as population size, employment, educational attainment, the availability of governmental services,

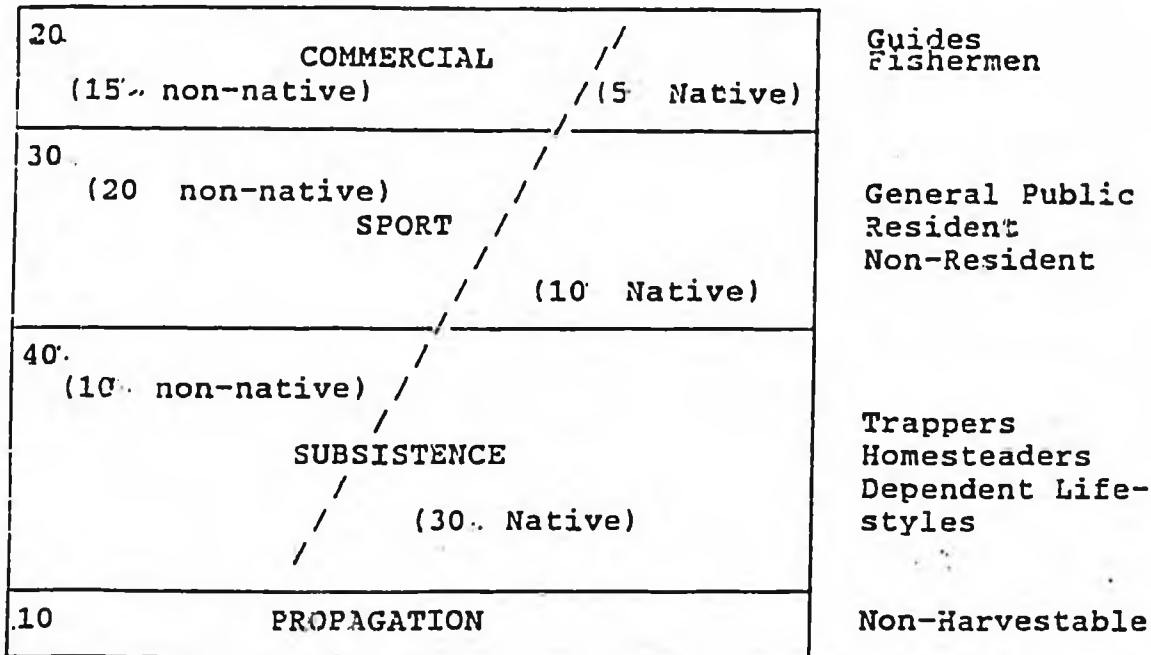
access to markets, etc. in assessing the "rurality" of a community. "Rurality" cannot be defined in geographic terms alone.

Recognizing cultural considerations as a relevant factor legitimizes the historical, customary, and traditional foundations of a community's use of fish and game resources for subsistence. "Rurality" cannot be defined in its Alaska subsistence context without recognizing the influence of culture on the landscape.

One important strength of this proposal is the relative simplicity of its language. This simplicity arises from the proposal's lack of specifics which are more appropriately addressed in a statute. A good constitution is a simple articulation of the principles by which a people purport to govern themselves. This proposal articulates the principle that the elected legislators of this state are endowed with the authority, granted by the people of Alaska, to make decisions, after appropriate consideration of the relevant factors, regarding the use of fish and game resources.

**SUGGESTED SOLUTION FOR
FISH & GAME ALLOCATION IN ALASKA**

The following is a graphic example of how Alaskans could resolve the conflicts which perennially occur in relation to fish and game allocations. This is primarily a rough outline of a system which is being considered in Yukon Territory and options for fine-tuning will most likely be necessary.



The above graphic depicts the basic philosophy of this particular proposal. If we were to enact legislation which gave basic direction to the Boards of Fish and Game, we would undoubtedly resolve many of the real or imagined allocation problems which Natives and non-natives feared under either of the systems Alaska used in the past, (no subsistence priority prior to 1978 and the rural priority post 1978). If we were to enact legislation which delineated the portions of wildlife resources which were to be allocated to each user group in times of shortages, we would have then resolved a lengthy controversy among peoples here in Alaska.

This proposal appears to be a reasonable compromise; however, it necessitates a willingness on all sides to agree to certain changes in philosophy. The anti-subsistence groups must recognize a portion of the resource pie will be allocated to Native interests. Native subsistence advocates will have to recognize the need for non-subsistence groups to partake in resource harvests at all levels. Both groups will need to join forces to request and obtain proper levels of funding from the legislature to carry out wildlife management programs which enhance target populations through habitat manipulation and the legitimate harvests of necessary levels of predator species. Also, both groups will have to come to terms on definitions of certain terms, i.e. dependent lifestyles.



Office of the Premier

P.O. Box 2703, Whitehorse, Yukon Y1A 2C6

FAX NUMBER (403) 667-3633

DATE: 20 March 1990TO: JERRY BERNETTEREPRESENTATIVE PHILLIPS OFFICE JUNEAUFAX #: 907 463-4867FROM: TONY PENIKETT'S OFFICENUMBER OF PAGES (INCLUDING COVER PAGE) 28

SPECIAL INSTRUCTIONS:

Jerry: Here, once again, is the fax I originally
attempted to send your office. Mr. Penikett has
chosen two particular sections from the agreement
which he feels would be of most importance to you.
As the entire document is 140 pages, I have mailed
the document to you. I trust these pages will be
of use. Please advise me if this fax does not
come through. But let's hope it does!! Thanks
so much for all your patience.

FAX SENT BY: Monica

SUB-AGREEMENT ON FISH AND WILDLIFE CONSERVATION AND USE

1.0 Objectives

- 1.1 To ensure Conservation is the basic principle governing the management of all Fish and Wildlife resources and their habitats.
- 1.2 To preserve and enhance the culture, identity and values of the Yukon Indian People.
- 1.3 To ensure the equal participation of Yukon Indian People with other Yukon residents in Fish and Wildlife management processes and decisions.
- 1.4 To guarantee the rights of Yukon Indian People to Harvest and to manage renewable resources on Settlement Lands.
- 1.5 To integrate the management of all renewable resources.
- 1.6 To preserve and enhance the renewable resources economy.
- 1.7 To fully integrate the relevant knowledge and experience of both the Yukon Indian People and the scientific communities in order to achieve Conservation.
- 1.8 To develop responsibilities for renewable resource management at the community level.
- 1.9 To honour the Harvesting and Wildlife management customs of the Yukon Indian People and provide for their ongoing needs for Wildlife.
- 1.10 To deal fairly and equitably with all Yukon residents who use Fish and Wildlife resources in the Settlement Area.

2.0 Definitions

- 2.1 "Big Game" means Alces alces including moose; Rangifer tarandus including caribou; Ovis spp. including sheep; Oreamnos americanus including goats; Ursus spp. including bear; Canis lupus including wolves; Gulo gulo including wolverines; Cervus elaphus including elk; Bison bison including bison and Odocoileus spp. including deer.

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- 2.2 "Board" means the Fish and Wildlife Management Board established pursuant to paragraph 4.1 of this Sub-Agreement.
- 2.3 "Category 1 Trapline" means a trapline designated as such pursuant to paragraph 11.2.
- 2.4 "Category 2 Trapline" means a trapline not designated as a Category 1 Trapline.

(Note: Commercial Use did not add anything to the definition of Use).

- 2.5 "Conservation" means the management of Fish and Wildlife populations and habitats to ensure their quality, diversity and long term optimum productivity, with the primary goal of ensuring a sustainable Harvest and its proper utilization.
- 2.6 "Conservation Area" means an area designated pursuant to a Yukon First Nation Final Agreement, or pursuant to the Laws of General Application, for the protection of Fish and Wildlife and their habitats. For greater certainty, Conservation Areas include existing or future protected areas such as national wildlife areas, territorial parks and special wildlife management areas, special fisheries management areas, national parks, national historic parks, international biological program (IBP) sites, biosphere reserves, migratory bird sanctuaries, and watershed protection areas.
- 2.7 "Council" means a Renewable Resources Council established pursuant to paragraph 5.1 of this Sub-Agreement.
- 2.8 "Edible Fish or Wildlife Product" means the flesh or organs of Fish or Wildlife that are used for food by people or domestic animals.
- 2.9 "Fish" has the same meaning as in the Fisheries Act (R.S.C. 1970, ch. F-14 s.2).
- 2.10 "Furbearers" means the following species native to the Settlement Area; Castor including beaver; Alopex including white fox or arctic fox; Lutra including otter; Lynx including lynx; Martes including martens and fishers; Mustela including weasel and mink; Ondatra including muskrat; Vulpes including red, cross, black and silver fox; Gulo including wolverine; Canis including wolves and coyotes; Marmota including marmots; Tamiasciurus including red squirrel; Spermophilus including ground squirrels.

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- 2.11 "Harvesting" means gathering, hunting, trapping, capturing or fishing in accordance with this Sub-Agreement.
- (Note: "Minister" is defined in General Provisions)
- 2.12 "Migratory Game Birds" has the same meaning as in the Migratory Birds Convention Act (R.S.C. 1970, c. M-12).
- 2.13 "National Park" means lands described in the schedules to the National Parks Act (R.S.C. 1970, c. N-13) that lie within the Settlement Area.
- 2.14 "Non-Consumptive Use" means a use of Fish and Wildlife that does not involve Harvesting.
- 2.15 "Non-edible By-product" means the fur, hide, skin, antlers, horns, skeleton or other portions of Fish and Wildlife not used for food but used for other purposes including clothing, domestic or personal decoration or art.
- 2.16 "Salmon" means Pacific Salmon of the species Oncorhynchus nerka including sockeye and kokanee; Oncorhynchus kisutch including coho; Oncorhynchus gorbuscha including pink; Oncorhynchus keta including chum; and Oncorhynchus tshawytscha including chinook.
- 2.17 "Salmon Sub-committee" means a Sub-committee of the Fish and Wildlife Board established pursuant to paragraph 4.13 to deal with issues specifically related to Salmon.
- 2.18 "Sedentary Population" means a population of Fish or Wildlife that remain in the same geographic area all year, and that do not undertake regular migrations from one distinct geographic area to another.
- 2.19 "Settlement Area" means the entire Yukon Territory except to the extent precluded by the Inuvialuit Final Agreement.
- 2.20 "Total Allowable Catch" means the total number of Salmon of a particular species and in a particular river basin which return to Canadian waters and which in the manner established by this Sub-Agreement are deemed not to be required for Conservation as defined in paragraph 2.5 of this Sub-Agreement.
- 2.21 "Total Allowable Harvest" means the total number of animals of a Fish and/or Wildlife species which in the

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manner established by this Sub-Agreement are deemed not to be required for Conservation as defined in paragraph 2.5 of this Sub-Agreement.

2.22 "Transplanted Population" means a population of a vertebrate animal that is intentionally introduced anywhere in Yukon as part of a Fish or Wildlife management program.

2.23 "Use" includes both Harvesting and non-consumptive activities.

2.24 "Wildlife" means a vertebrate animal of any species or type that is wild in the Yukon, but does not include fish.

3.0 General

3.1 This Sub-Agreement defines the responsibilities for the management of Fish and Wildlife and their habitats, while respecting the Ministers' ultimate responsibility for Fish and Wildlife and their habitats.

3.2 Where not inconsistent with this Sub-Agreement, Government shall continue to have the jurisdiction to initiate programs and to enact Legislation with respect to the Settlement Area.

3.3 The management and Harvesting of Fish, Wildlife and their habitat shall be governed by the principle of Conservation as defined in paragraph 2.5.

3.4 The exercise of the rights under this Sub-Agreement is subject to Legislation enacted for reasons of Conservation, public health or public safety, in addition to any other limitations provided for in this Sub-Agreement.

3.5 Nothing in this or any other Sub-Agreement is intended to confer rights of ownership in any Fish or Wildlife.

3.6 Recognizing the present restrictions of the Migratory Birds Convention Act, Government of Canada shall make its best efforts to achieve international agreement to permit Yukon Indian People to hunt Migratory Game Birds in the spring.

3.7 Government shall make best efforts to amend the Game Export Act to enable the transport of Wildlife products for traditional purposes across borders within the traditional Harvesting area of each Yukon First Nation.

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- 3.3 This Sub-Agreement is subject to the Migratory Birds Convention, the Porcupine Caribou Herd Management Agreement and the Pacific Salmon Treaty.
- 3.9 The rights established in Yukon First Nation Final Agreements shall not prevent Yukon residents and others from Harvesting in accordance with Legislation.
- 3.10 Nothing in this Sub-Agreement prevents any person from killing Fish and Wildlife for survival in an emergency. Any such Harvests under this paragraph shall be reported according to requirements established by the Board.
- 3.11 Nothing in this Sub-Agreement shall be construed as granting Yukon Indian People any right to buy, sell or offer for sale any migratory game bird, migratory game bird's egg or parts thereof not authorized for sale by law.
- 3.12 Conservation Areas may be established pursuant to the terms of a Yukon First Nation Final Agreement, or pursuant to the Laws of General Application.
- 3.13 Fish and Wildlife within National Parks shall be managed in accordance with the National Parks Act and regulations pursuant to that Act, and in accordance with the Old Crow, Kluane and Champagne-Aishihik Final Agreements, and the Inuvialuit Final Agreement. The responsible agencies shall coordinate the management of Fish and Wildlife populations which cross the boundaries of National Parks.
- 3.14 It is intended that there not be any duplication in the public management of Fish and Wildlife.

4.0 Fish and Wildlife Management Board

- 4.1 A Fish and Wildlife Management Board shall be established as the main instrument of Fish and Wildlife management in the Settlement Area.

Composition of the Board

- 4.2 The Board shall be comprised of six appointees of Yukon First Nations and six appointees of Government, plus a chairperson. The appointment of the Yukon First Nations' representatives shall be implemented by the Minister upon the recommendation of the Yukon First Nations. The Minister shall appoint the Government representatives within 60 days of a Government vacancy.

- 4.2.1 In the event that Yukon First Nations or Government fail to appoint their
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representatives within a reasonable time, the Board may discharge its duties with such members as have been appointed.

- 4.3 The Board shall determine its own procedures for selecting its chairperson and conducting its business. The Minister shall appoint the chairperson selected by the Board.
- 4.3.1 In the event that the Board fails to select a chairperson within 60 days of the position being vacant, the Minister shall appoint a chairperson after consultation with the Board.
- 4.4 The majority of representatives of Government and the majority of representatives of Yukon First Nations shall be Yukon residents.
- 4.5 Appointments to the Board shall be for a five year term, except for the initial appointments. One third of the initial appointments shall be made for three years, one third for four years, and one third for five years. Thereafter, the appointments shall stand for the five year terms. Board members may only be removed for cause. The Board shall determine what constitutes cause.
- 4.6 The Board shall make provision for reasonable public involvement.
- 4.7 An executive secretary to the Board and the administrative and technical support for the Board shall be provided by Government.
- 4.8 The Board shall be accountable to Government for its expenditures.
- 4.9 The Board shall prepare an annual budget, subject to review and approval by Government. The approved expenses of the Board shall be a charge on Government. Such budget shall be in accordance with Government guidelines and may include:
- 4.9.1 remuneration and travel expenses for attendance of Board members at Board and committee meetings;
- 4.9.2 the expenses of public hearings and meetings;
- 4.9.3 a budget for research, public education and other programs as may be approved by Government from time to time; and
- 4.9.4 the expenses of staff and of the operation and maintenance of the office.

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- 4.10 The annual budget of the Board in its first year of operation shall be set out in an implementation plan.

Powers and Responsibilities of the Board

- 4.11 The Board, acting in the public interest and taking into consideration all relevant factors including recommendations of the Councils, may make recommendations to the Minister and to Yukon First Nations on all matters related to Fish and Wildlife, their habitat and their management, including legislation, research, policies, and programs.
- 4.12 Without restricting the foregoing, the Board:
- 4.12.1 may recommend policies for the management of Fish and Wildlife and their habitats;
 - 4.12.2 may identify the need for, make recommendations on the content and timing of, and review and make recommendations on any Yukon Fish and Wildlife Harvesting and management plans for species included in international agreements, threatened species or populations, species or populations declared by the Minister as being of a territorial, national or international interest, and transplanted populations;
 - 4.12.3 may review and make recommendations to the Minister and to Yukon First Nations on population management plans recommended by the Councils, specifically the population goals and the management options contained within those plans;
 - 4.12.4 may, where required by species and/or population management plans, determine Total Allowable Harvest levels;
 - 4.12.5 may identify the need for, and recommend a position on, interjurisdictional agreements that affect the Conservation and Use of Yukon Fish and Wildlife resources;
 - 4.12.6 may recommend restrictions on methods of Harvesting for reasons of Conservation, public health, public safety and, in exceptional circumstances, for protection of an economic activity associated with the Use of Fish and/or Wildlife resources;
 - 4.12.7 may assist Councils in the performance of their duties;

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- 4.12.8 shall be granted status as an interested party in order to participate as a party or intervenor in the public proceeding of any agency, board or tribunal dealing with matters that affect the management and Conservation of Fish, Salmon, Wildlife and their habitat in the Yukon;
- 4.12.9 may, subject to approval of the Minister, delegate its responsibilities to a Council;
- 4.12.10 may, in consultation with the Councils and subject to Yukon First Nation Final Agreements, identify new opportunities and recommend management measures for commercial Uses of Fish and Wildlife.

Salmon Sub-Committee

- 4.13 A Sub-committee of the Board shall be established as the main instrument of Salmon management in the Settlement Area.
- 4.13.1 The Board shall assign from its membership two appointees of the Yukon First Nations and two appointees of Government to the Sub-committee;
- 4.13.2 The Minister of Fisheries and Oceans may appoint up to two additional members to the Sub-committee and, in that case, Yukon First Nations may appoint a similar number of additional members to the Sub-committee, provided that the number of Government appointees equals the number of Yukon First Nations appointees;
- 4.13.2.1 Appointments to the Sub-committee by the Board shall be for the term held by that appointee on the Board;
- 4.13.2.2 The additional appointments to the Sub-committee by the Minister of Fisheries and Oceans and by the Yukon First Nations shall be for five years;
- 4.13.3 The Salmon Sub-committee shall select a chairperson from the persons appointed to the Sub-committee;
- 4.13.3.1 In the event the Salmon Sub-committee fails to select a chairperson within 60 days of the position being vacant, the Minister of Fisheries and Oceans shall

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appoint a chairperson after consultation with the Sub-committee.

4.13.4 The Department of Fisheries and Oceans shall provide technical and administrative support to the Sub-committee as required to determine appropriate plans for Salmon management, and a senior official of the department in the Yukon shall serve the Sub-committee as Executive Secretary;

4.13.5 In accordance with this Sub-Agreement, the Salmon Sub-committee, acting in the public interest and taking into account all relevant factors including recommendations of the Councils, may make recommendations to the Minister and to Yukon First Nations on all matters related to Salmon, their habitats and management, including legislation, research, policies and programs. Without restricting the foregoing, the Salmon Sub-committee:

4.13.5.1 may recommend policies for the management of Salmon and their habitats;

4.13.5.2 may identify the need for, make recommendations on the content and timing of, and review and make recommendations on Salmon Harvesting and management plans in accordance with the terms of this Sub-Agreement;

4.13.5.3 may identify the need for, and recommend a position on, interjurisdictional agreements affecting the Use of Yukon Salmon resources;

4.13.5.4 may seek from a Council or local group input on specific aspects of a Salmon management plan;

4.13.5.5 subject to Yukon First Nation Final Agreements, may identify new opportunities and propose management measures for commercial (including commercial recreational) Use of Salmon;

4.13.5.6 shall allocate, in amount and by area, Salmon to users according to procedures to be developed by the parties;

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4.13.5.7 shall be granted status as an interested party in order to participate as an intervener or party in the public proceedings of any agency, board or tribunal dealing with matters that affect the management and Conservation of Salmon or their habitat in the Yukon.

4.13.6 The Sub-committee shall communicate its decisions to the Board, and to the Minister of Fisheries and Oceans under the process outlined in Article 6.

Board's Relationship with the Minister

4.14 Where the Board or the Salmon Sub-committee elects not to or does not carry out certain responsibilities, the Minister, and in the case of the Salmon Sub-committee the Minister of Fisheries and Oceans, may undertake to fulfill those responsibilities directly.

Renewable Resources Councils

5.1 In each Yukon First Nation's Traditional Territory, a Renewable Resources Council shall be established as a primary instrument for local Fish and Wildlife management.

Composition of the Council

5.2 The Council shall be comprised of up to ten members consisting of 50 percent appointees of the Yukon First Nation and 50 percent appointees of Government. The appointment of the Yukon First Nations' appointees shall be implemented by the Minister upon the recommendation of the Yukon First Nation. The Minister shall appoint Government representatives within 60 days of a Government vacancy on the Council.

5.3 Where a Traditional Territory is subject to the terms of a Transboundary Agreement, the representation of Yukon Indian People, members of the transboundary group and of Government, on the Council shall be as defined in the relevant Transboundary Agreement, and in any case the proportional representation of native groups and Government, not including the chairperson, shall be maintained.

5.4 The Council shall determine its own procedures for selecting its chairperson and conducting its business. The Minister shall appoint the chairperson selected by the Council.

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- 5.4.1 In the event that the Council fails to select a chairperson within 60 days of the position being vacant, the Minister shall appoint a chairperson after consultation with the Council.
- 5.5 Unless the parties otherwise agree, Council members shall be ordinarily resident within the traditional territory of that Council.
- 5.6 Appointments to the Council shall be for a five year term, except for the initial appointments. One third of the initial appointments shall be made for three years, one third for four years, and one third for five years. Thereafter, the appointments shall stand for five year terms. Council members may only be removed for cause. The Council shall determine what constitutes cause.
- 5.7 The Council shall make provision for reasonable public involvement.
- 5.8 Government shall provide administrative and technical support to the Council.

Powers and Responsibilities of Councils

- 5.9 The Council may make recommendations to the Board, and to the Salmon Sub-committee where appropriate, on Legislation, policies and programs related to Salmon, Fish and Wildlife management and habitat management.
- 5.10 Without restricting paragraph 5.9 above, the Council:
- 5.10.1 may identify the need for, make recommendations on the content and timing of, and review and make recommendations on management plans, including Harvesting plans for Fish and Wildlife species and populations;
- 5.10.2 may participate in the identification, planning and management of Conservation Areas;
- 5.10.3 may identify and recommend to the Board Harvest requirements, including Harvest requirements within the adjusted basic needs level, within guidelines established in Settlement Agreements;
- 5.10.4 may identify the need for, make recommendations on the content and timing of, and review and make recommendations on Fish and Wildlife species and population management plans for species other than the species referred to in sub-paragraph 4.12.2;
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- 5.10.5 may establish criteria and bylaws for the management of Furbearers, including reasonable levels of Use for submission to the Minister and the Yukon First Nation;
- 5.10.6 may provide local input to other resource management processes, including forest management, land, water and watershed management and land use planning;
- 5.10.7 may review and make recommendations to the Minister on allocation of commercial Fish and Wildlife outfitting opportunities;
- 5.10.8 may review applications for research permits granted by the Government agencies for Fish and Wildlife management-related research activities within the Traditional Territory. The Council shall be provided with the results of such research activities; and
- 5.10.9 shall be granted status as an interested party in order to participate as a party or intervenor in public proceedings of any agency, board or tribunal dealing with matters that effect the management and Conservation of Fish, Salmon, Wildlife and the habitat in the Yukon.

5.11 With the consent of the Minister, a Council may merge with other Councils to establish a Regional Council.

Council's Relationship with the Minister

- 5.12 Unless the Minister directs otherwise, the Council shall forward its decisions, accompanied by any proposed regulations, to the Board or to the Minister, as required by this Sub-Agreement. The procedure for Ministerial review and approval, variation, or replacement of decisions shall be as set out in Article 6 below. Where the Council forwards a decision, recommendation or plan to the Board, the Board shall take such decision, recommendation or plan into consideration in accordance with the requirements of Article 4.
- 5.13 Where a Council elects not to or does not carry out certain responsibilities, the Minister may undertake to fulfill those responsibilities directly or delegate those responsibilities to the Board.

6.0 Role of Ministers and Governments

Implementation of Board, Sub-Committee and Council Decisions

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- 6.1 All procedures set out in paragraphs 6.1 to 6.3 apply equally to decisions required by this Sub-Agreement to be forwarded to the Minister by the Board, Salmon Sub-committee and Councils.
- 6.2 Unless the Minister directs otherwise, the Board shall forward all its decisions to the Minister, accompanied by draft regulations where appropriate.
- 6.3 Unless the Minister directs otherwise, all decisions of the Board shall be kept confidential until the process in paragraph 6.4 below has been completed or the time for the process has expired.
- 6.4 The Minister may, within 60 days of the receipt of a decision under paragraphs 6.2 and 6.3 above, accept, vary, set aside or replace the decision. Any proposed variation, replacement or setting aside shall be sent back to the Board by the Minister with written reasons. The Minister may consider other information and matters of public interest.
- 6.5 The Minister may extend the time provided in paragraph 6.4 above by 30 days.
- 6.6 The Board shall within 30 days of the receipt of a variation, replacement or setting aside by the Minister pursuant to paragraph 6.4 above, make a final decision and forward it to the Minister with written reasons.
- 6.6.1 The Minister may extend the time provided under paragraph 6.6
- 6.7 The Minister may, within 30 days of receipt of a final decision, accept or vary it, or set it aside and replace it. Any proposed variation, replacement or setting aside shall be sent back to the Board by the Minister with written reasons. The Minister may consider other information and matters of public interest.
- 6.8 The Minister shall, as soon as practicable, implement:
- 6.8.1 all decisions of the Board that are accepted by the Minister under paragraph 6.4 above;
- 6.8.2 all decisions of the Minister under paragraph 6.7 above; and
- 6.8.3 subject to sub-paragraphs 6.8.1 and 6.8.2, all decisions of the Board after the expiry of the time provided in paragraphs 6.4 and 6.6.

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- 6.9 The Minister may refer any matter to the mediation process established under the Sub-Agreement on Dispute Resolution once the procedures set out in paragraphs 6.1 through 6.7 have been completed.

Judicial Review of Decisions

- 6.10 Decisions of the Board, Salmon Sub-committee and Councils shall not be subject to judicial review except pursuant to the Federal Court Act, provided that such proceedings may be taken before a Judge of the Supreme Court of the Yukon in the case of a proceeding that could be taken before the Federal Court Trial Division.

Emergency Action by the Minister

- 6.11 Where it appears to the Minister that an emergency situation has arisen which affects the well-being of Fish and Wildlife or their habitat, and where time does not permit consultation with the Board, the Minister may take such action as is necessary before consulting with the Board, Salmon Sub-Committee or the affected Council or Councils.
- 6.12 Where emergency action has been taken pursuant to paragraph 6.11 above, the Minister shall within seven days inform the Board, Salmon Sub-committee or Council and solicit their continuing advice. The Board, Salmon Sub-committee or Council may recommend to the Minister that the emergency action be terminated pending their consideration of the issue.
- 6.13 Where the Board, or in the case of Salmon where the Salmon Sub-committee agrees, the Minister may act notwithstanding paragraph 3.3.

7.0 Yukon First Nations

- 7.1 Subject to the terms of each Yukon First Nation's Final Agreement, each Yukon First Nation shall have the following powers and responsibilities to:
- 7.1.1 identify from time to time the adjusted basic needs level for the Yukon First Nation, for consideration by the Board;
 - 7.1.2 establish criteria for sub-allocation of their Harvesting quotas under sub-paragraph 7.1.3;
 - 7.1.3 sub-allocate to Yukon Indian People, or other Yukon residents, any portion of their quota for Fish and Wildlife Harvests;

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- 7.1.4 manage local populations of Fish and Wildlife within Settlement Lands, to the extent coordination with other Fish and Wildlife management programs is not deemed necessary by the Board.
- 7.1.5 participate in coordinated management programs within the Traditional Territory of that Yukon First Nation;
- 7.1.6 make recommendations to the Council on applications for research permits for Government research within its Settlement Lands;
- 7.1.7 endorse applications for research permits for private studies within its Settlement Lands;
- 7.1.8 be granted status as an interested party in order to participate as a party or intervenor in public proceedings of any agency, board or tribunal dealing with matters that affect the management and Conservation of Fish, Wildlife and the habitat in its Traditional Territory.
- 7.1.9 at the request of the Board, provide Harvest information either to the Council or the Board or to an officer with lawful authority as appropriate, including provision of data necessary for verification and in-season management.
- 7.2 Subject to the Sub-Agreement on Access, Yukon First Nations may charge a fee or obtain a benefit for granting access to Category A Settlement Lands to a Yukon resident or Yukon outfitter for Harvesting on Category A Settlement Lands, or for services provided to the Yukon resident or Yukon outfitter in connection with Harvesting Fish and Wildlife on Category A Settlement Lands.
- 7.2.1 Notwithstanding paragraph 7.2, any existing trapper whose Trapline is wholly or partially on Settlement Lands shall continue to exercise all rights as a trapper to his or her existing trapline without fee.
- 7.3 Yukon First Nations shall not charge a fee to persons other than Yukon Indian People for Harvesting any of the Yukon First Nation's quota of Fish and Wildlife.
- 7.4 Yukon First Nations, with the consent of the Minister, may contract for their responsibilities in whole or

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part to be carried out by the Council, Board or Government.

8.0 Yukon Indian People

- 8.1 Subject to Yukon First Nation Final Agreements, nothing in this Sub-Agreement affects any rights, entitlements and qualifications of Yukon Indian People to Harvest outside the Yukon.
- 8.2 Subject to Yukon First Nation Final Agreements and to sub-paragraph 4.12.6, Yukon Indian People shall have the right to employ traditional and current methods of and equipment for, non-commercial Harvesting within their Traditional Territories.
- 8.3 Subject to Yukon First Nation Final Agreements, Yukon Indian People shall have the right to give, trade, barter or sell among themselves and with beneficiaries of other adjacent Transboundary Agreements in Canada all Edible Fish and Wildlife Products Harvested by them. This right is intended to maintain traditional sharing among individuals and communities for domestic but not for commercial purposes.
- 8.4 Unless otherwise specified in Yukon First Nation Final Agreements and/or the Laws of General Application, Yukon Indian People shall have the right to give, trade, barter or sell to any person any Non-edible By-products of Fish and Wildlife that are obtained from the Harvesting of Furbearers or incidental to the non-commercial Harvest for personal Use.
- 8.5 The right to Harvest includes the right to possess and transport Fish and Wildlife parts and products in the Yukon and in other areas where provided for in a Transboundary Agreement.
- 8.6 Yukon Indian People shall be required to show proof of enrollment as Yukon Indian People under the Sub-Agreement on Eligibility and Enrollment pursuant to terms established by the Board. The Board may require Yukon Indian People to obtain permits or licences for the purpose of regulating Harvesting, but Yukon Indian People shall not be required to pay any fee or tax for any non-commercial permit or licence.
- 8.7 Where Yukon Indian People participate in resident or commercial Harvests, they shall be required to comply with the Laws of General Application.

9.0 Fish and Wildlife Use Allocation

- 9.1 The Board shall allocate from the Total Allowable Harvest, in amount and by area, Fish (except Salmon)

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and Wildlife to Harvesters and other users according to the following procedures:

Category of Uses

Basic Needs Levels

- 9.2 The species subject to basic needs provisions shall be determined for each Yukon First Nation in its Final Agreement.
- 9.3 The basic needs levels for those species shall be identified and guaranteed in each Yukon First Nation's Final Agreement.
- 9.4 Subject to Conservation requirements established by the Board, until basic needs levels are set for a Yukon First Nation, Section 17(J) of the Yukon Act shall continue to apply to those Yukon Indian People who belong to that Yukon First Nation.

Adjusted Basic Needs Levels

- 9.5 The Board may, upon the recommendation of a Council, periodically review and adjust the basic needs level for a species. In reaching its decision about adjusting the basic needs level, the Board shall take into consideration the following factors among others:
- 9.5.1 population growth and demographic change on a community and/or regional basis, including the establishment of new communities;
 - 9.5.2 changing patterns of consumption;
 - 9.5.3 the cultural and nutritional importance of Fish and Wildlife to Yukon Indian People;
 - 9.5.4 Use and Harvesting of Fish and Wildlife for personal Use by Yukon residents, and others;
 - 9.5.5 the commercial Use of Fish and Wildlife.
- 9.6 In any year the adjusted basic needs level may float upward or downward, but shall not fall below the basic needs level, unless the Yukon First Nation involved consents.

Board Allocation of Harvest

- 9.7 The portion of the Total Allowable Harvest remaining after the allocation of the basic needs level or the adjusted basic needs level shall be deemed the remaining Total Allowable Harvest.

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- 9.8 The Board shall determine the allocation of the remaining Total Allowable Harvest and shall determine the allocation of any Harvest not exclusively reserved for Yukon Indian People in Yukon First Nation Final Agreements.

Determination of Total Allowable Harvests

- 9.9 The Board may, in accordance with the provisions of this Sub-Agreement, establish, modify or remove Total Allowable Harvest levels from time to time in the Settlement Area but shall do so only if required for Conservation, public health and/or public safety and to the extent necessary to achieve those ends.
- 9.10 In addition to its powers pursuant to paragraph 9.9, the Board may further limit the quantity of a Harvest, based on the following considerations:
- 9.10.1 ability of various Fish and Wildlife species and populations to meet sustainable yield requirements as determined by scientific research and surveys and the special knowledge of Yukon Indian People;
- 9.10.2 the goals and objectives identified by species and population management plans.
- 9.11 In the allocation of Fish and Wildlife Use, non-consumptive Uses of the resources shall be taken into account.
- 9.12 The Board shall determine geographic allocations of Harvests and seasons and methods of Harvests of Fish and Wildlife, within guidelines described in Settlement Agreements.

10.0 Allocation of Salmon Harvest

Basic Needs Allocation

- 10.1 Basic needs allocations, seasons and methods of Harvesting Salmon shall be established, within guidelines described in the Umbrella Final Agreement.
- 10.2 To the extent practical, adjustments to the basic needs allocations necessitated by revised Total Allowable Catch levels shall be made in-season. Shortfalls or surpluses existing after completion of the season shall be adjusted over a maximum of four years.

Commercial Salmon Fishery

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- 10.2 The overall allocation of commercial Salmon Harvesting licenses and opportunities in each Yukon River System to Yukon First Nations shall be set out in the Umbrella Final Agreement.
- 10.4 Commercial Salmon Harvesting opportunities for each Yukon First Nation shall be set out in each Yukon First Nation's Final Agreement.
- 10.5 Yukon residents north of 65° north latitude shall have the the right of first refusal to commercial licenses for any commercial fishing in the Porcupine River, or its tributaries.

11.0 Trapline Management and Use

General Guidelines for the Councils

- 11.1 In establishing local criteria for the management and Use of Furbearers in accordance with sub-paragraph 5.9.5, the Councils shall provide for:
- 11.1.1 the maintenance and enhancement of the Yukon's wild fur industry and the Conservation of the fur resource; and
- 11.1.2 the maintenance of the integrity of the management system based upon individual trapline identity, including individual traplines within group trapping areas.

Traplines for Yukon Indian People

- 11.2 The Yukon First Nations shall have the sole right to trap on traplines designated in the future as belonging to Yukon First Nations as Category 1 Traplines, except as provided for in paragraph 11.5.
- 11.3 Paragraph 11.2 does not restrict access by Government to handle or collect animals for scientific or management reasons.

Trapline Allocation Formula

- 11.4 The minimum overall allocation of traplines in the Yukon shall be in the order of 70% held by Yukon Indian People and 30% held by other Yukon residents. The specific percentage allocation of traplines shall be negotiated with each Yukon First Nation.
- 11.4.1 Category 1 Traplines shall be designated by the parties during negotiations and shall be identified in a Schedule to the Yukon First Nation's Final Agreement.
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11.4.2 Where, in a Yukon First Nation's Traditional Territory, the overall percentage of traplines held by Yukon Indian People is less than the specific percentage allocation negotiated under paragraph 11.4 above, members of that Yukon First Nation shall have the preferential right to acquire new or vacant traplines within that Traditional Territory. Traplines acquired under this sub-paragraph may be designated as Category 1 Traplines.

11.4.3 Where, in a Yukon First Nation's Traditional Territory, the overall percentage of traplines held by Yukon Indian People is greater than the specific percentage allocation negotiated under paragraph 11.4 above, any additional traplines acquired by Yukon Indian People shall continue to be designated as Category 2 Traplines.

pline Allocation Process

11.5 The Council shall regularly review the Use of traplines and reassign all new, vacant and under-utilized traplines pursuant to criteria that it establishes in accordance with sub-paragraph 5.9.5, as follows:

11.5.1 new and vacant Category 2 Traplines shall be assigned with regard to criteria established by the Council;

11.5.2 new and vacant Category 1 Traplines shall be assigned to Yukon Indian People pursuant to criteria established by the Council and any additional criteria established by the Yukon First Nation;

11.5.3 Category 1 Traplines may be temporarily assigned to other Yukon residents but the Category 1 status of the trapline shall not change as a result;

11.5.4 Category 2 Traplines may be assigned to Yukon First Nations as Category 1 Traplines to attain the agreed-upon specific ratio, pursuant to the Yukon First Nation's Final Agreement. This transfer shall occur as Category 2 Traplines become available, and on financial terms agreeable to the existing holder of the trapline;

11.5.5 upon mutual agreement between the Yukon First Nation and the trappers concerned, and with the approval of the Council, a trade may be

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arranged between Category 1 Traplines and Category 2 Traplines, with consequent re-designation of the status of the traplines;

- 11.5.6 the parties to this Agreement-in-Principle shall agree on a process to designate Category 1 Traplines and Category 2 Traplines prior to the signing of the Umbrella Final Agreement and when a process is determined, these traplines shall be identified and described in a Schedule to the Yukon First Nation Final Agreements;
- 11.5.7 the Government of the Yukon and each Council shall maintain a register of Category 1 Traplines and Category 2 Traplines;
- 11.5.3 Paragraph 11.5 is subject to the dispute resolution process established pursuant to the Sub-Agreement on Dispute Resolution.

Compensation

- 11.6 Where a Category 2 Trapline lies wholly or in part on Settlement Lands, the holder of the trapline shall, elect either to:
- 11.6.1 retain that portion of the trapline on Settlement Lands and exercise his rights pursuant to sub-paragraph 7.2.1;
- 11.6.2 make the trapline available for transfer pursuant to sub-paragraph 11.5.4; or
- 11.6.3 surrender that portion of the trapline on Settlement Lands for compensation to be negotiated.
- 11.7 Compensation shall be provided to Yukon Indian Persons holding traplines whose Harvesting opportunities have been diminished due to other resource development activities. The Umbrella Final Agreement shall outline the process and general guidelines for compensation, including the parties responsible for compensation and consideration of any offset for benefits of that development received by the Yukon First Nation or individual Yukon Indian trappers.

Interim Protection

- 11.9 The parties agree not to reduce the number of traplines currently held by Yukon Indian People until the Yukon First Nation's Final Agreement is executed, provided the Final Agreement is attained within 36 months of the signing of this Agreement-in-Principle
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or within 24 months of commencement of negotiation of a Final Agreement with that Yukon First Nation, whichever comes sooner.

- 11.9 The trapline management program of the Government of the Yukon shall be complemented in each Traditional Territory by the bylaws and management program of the Council. The processes for the promulgation of Council bylaws shall be set out in each Yukon First Nation Final Agreement.

Trapline Development

- 11.10 Trapline holders may construct and occupy such cabins as are necessary for the reasonable use and enjoyment of traplines, and may cut necessary trails on their traplines.

Training

- 11.11 The Government of the Yukon shall provide trapper training programs for Yukon Indian People as required from time to time to encourage effective involvement of trappers in the management and development of traplines.

12.0 Conservation Areas

- 12.1 Areas not selected as Settlement Lands and possessing natural or ecological features which have significance because of their important resource values as indicated in paragraph 12.2, may be designated as Conservation Areas and subject to special management regimes.

- 12.2 Conservation Areas may be identified in Yukon First Nation Final Agreements and established by Legislation because of their:

12.2.1 critical habitat for flora and fauna;

12.2.2 aquatic and riparian values, including fish habitat and watershed significance;

12.2.3 inclusion of significant natural features and their overall Conservation values;

12.2.4 such other values or significance as may be agreed to by the parties.

- 12.3 Conservation Areas may include:

12.3.1 special wildlife and Fisheries management areas;

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- 12.3.2 territorial and national parks;
- 12.3.3 national wildlife areas;
- 12.3.4 International Biological Programme (IBP) sites;
- 12.3.5 biosphere reserves;
- 12.3.6 migratory birds sanctuaries;
- 12.3.7 watershed protection areas;
- 12.3.8 and other areas as may be agreed by the parties.

12.4 Access to Conservation Areas may be restricted subject to agreed upon management regimes.

12.5 Disputes over management regimes or the implementation of management plans shall be referred to the dispute resolution process established pursuant to the Sub-Agreement on Dispute Resolution.

12.6 Conservation Areas shall not be included in Settlement Lands.

12.7 Each Yukon First Nation shall participate in management regimes for those Conservation Areas identified in its Final Agreement in a manner to be negotiated and set out therein.

13.0 Training and Education

13.1 The parties shall immediately investigate the needs, opportunities and structures required to ensure the adequate development of human resources needed by Yukon First Nations and other Yukon residents in renewable resources management and related economic development opportunities. The parties shall design the structures necessary to fulfill these needs for development of these human resources.

14.0 Implementation Provisions

14.1 The parties shall make best efforts to pre-implement the training, and management structure provisions of this Sub-Agreement at the time of Umbrella Final Agreement.

14.2 Subject to paragraph 9.4 of this Sub-Agreement, the Government of Canada shall recommend to Parliament the repeal of Section 17(3) of the Yukon Act upon the enactment of Settlement Legislation.

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- 14.3 If at any time Parliament enacts Legislation conferring upon Yukon Indian People rights similar in nature to those now contained in Section 17(3) of the Yukon Act, the provisions of the Yukon First Nation's Final Agreement with respect to the Conservation and Use of Fish and Wildlife in the Yukon shall be null and void if the Yukon First Nation exercises any such rights.

15.0 General

- 15.1 The respective Government financial and administrative responsibilities established by this Sub-Agreement shall be determined between the Government of Canada and the Government of the Yukon before the Umbrella Final Agreement.

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FINAL DRAFT #30
OCTOBER 5, 1988

SUB-AGREEMENT ON FORESTRY IN THE YUKON

1.0 Responsibility

- 1.1 The principles agreed to in this Sub-Agreement shall not be prejudiced by the devolution of responsibility for forest management.
- 1.2 Subject to the principles in this Sub-Agreement, Yukon First Nations shall:
- 1.2.1 have the authority to manage, allocate and protect forest resources on Settlement Lands; and
- 1.2.2 participate with Government in Government's management, allocation and protection processes for forest resources on Non-Settlement Lands within their Traditional Territories.

2.0 Management

- 2.1 The management of forest resources on Settlement Lands and Non-Settlement Lands excluding National Parks within each Yukon First Nation's Traditional Territory shall be coordinated.
- 2.2 Forest management shall be conducted on the basis of the following principles:
- 2.2.1 use of forest resources shall protect essential ecological processes;
- 2.2.2 plans and operations shall be carried out with regard for watershed areas and;
- 2.2.3 long term sustainable use of forest resources shall be fostered, including, where feasible, silviculture and reforestation programs.
- 2.3 Management plans defined areas shall be developed by Government and the Yukon First Nation whose Traditional Territory is involved. For greater certainty, the following shall apply:
- 2.3.1 a forest inventory is considered to be essential for the development of a thorough forest management plan;
- 2.3.2 wherever possible, forest management plans shall be developed in accordance with regional or sub-regional land use plans and with

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reference to related renewable resources management plans; and

2.3.3 Government and the Yukon First Nation whose Traditional Territory is involved shall establish a time frame for the development of these management plans.

2.4 The process by which Yukon First Nations and Government share the management of forest resources in Traditional Territories shall be defined in Yukon First Nation Final Agreements.

Commercial Forest Harvesting

3.1 Subject to other relevant Sub-Agreements, commercial forest harvesting on Settlement and Non-Settlement Lands shall be managed to ensure:

3.1.1 the continuation of Fish and Wildlife Harvesting rights, including hunting, trapping, fishing and gathering; and

3.1.2 the protection of the environment, including habitat.

3.2 Yukon First Nations shall be involved in the allocation of commercial timber dispositions in a manner to be defined by Yukon First Nation Final Agreements.

3.3 Economic opportunities for Yukon First Nations in commercial timber operations shall be addressed in Yukon First Nation Final Agreements.

Forest Protection

4.1 Nothing in this Sub-Agreement shall obligate Government to fight forest fires on Settlement Lands, except as such obligations may be established from time to time by general policy.

4.2 Government may take such action as it deems appropriate on Settlement Lands to control or extinguish forest fires. Where time permits, consent of the affected Yukon First Nation shall first be obtained.

4.3 Yukon First Nations shall not be responsible for fighting forest fires on Undeveloped Rural Settlement Lands and shall not be liable for damages resulting from fires on such lands. This provision does not exempt persons who intentionally or negligently cause a forest fire from responsibility to fight that forest fire, or from liability for damages resulting from the forest fire.

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- 4.4 Following a Yukon First Nation Final Agreement, Government shall continue to consult with that Yukon First Nation on general priorities for fighting forest fires on its Settlement Lands and on Non-Settlement Lands adjacent thereto.
- 4.5 Before the application of pesticides or herbicides on Non-Settlement Lands in a Yukon First Nation's Traditional Territory, Government shall consult with that Yukon First Nation.
- 4.6 Yukon First Nations shall observe Laws of General Application regarding the use of pesticides and herbicides and shall consult with the appropriate Government agencies before the application of herbicides or pesticides on Settlement Lands.

5.0 Interim Measures

- 5.1 Government shall observe the following principles on an interim basis and for a reasonable period pending negotiation and ratification of Settlement Agreements:
 - 5.1.1 Government shall consult with each Yukon First Nation on general priorities for fighting forest fires in its Traditional Territory;
 - 5.1.2 no timber permits shall be issued on withdrawn lands without the consent of the Yukon First Nation whose Traditional Territory is affected;
 - 5.1.3 no new commercial timber permits or agreements for timber harvests on Crown lands in excess of 1000 cubic metres shall be issued without consultation with the Yukon First Nation whose Traditional Territory is affected;
 - 5.1.4 existing commercial timber dispositions may be renewed provided the terms and conditions of such dispositions have been met and provided the disposition meets the conditions in paragraphs 2.2, 2.3 and 3.1.
 - 5.1.5 Government shall address the immediate needs of Yukon Indian People for harvesting of fire-killed wood on Crown lands with those affected Yukon First Nations;
 - 5.1.6 Government shall consult with Yukon First Nations in the development of Legislation relating to forest resources.

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funding

6.1 Any public management boards or councils established pursuant to this Sub-Agreement shall prepare an annual budget, subject to review and approved by Government. The approved expenses of any such boards or councils, shall be a charge on Government. Such budgets shall be in accordance with Government funding guidelines.

FINAL DRAFT # 30
 OCTOBER 5, 1988

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Citizens' Advisory Commission on Federal Areas

June 22, 1990

250 Cushman St.
Suite 4H
Fairbanks, Alaska 99701
907/456-2012
Fax 456-2039

Dear Legislator:

Since its creation in 1981, the Citizens' Advisory Commission on Federal Areas has been engaged in the task of determining the impacts of the Alaska National Interest Lands Conservation Act (ANILCA) on the people of our state and making recommendations to both state and federal agencies in order to minimize conflicts. One of the most important, and unfortunately most contentious, provisions of this federal statute has been Title VIII- Subsistence Management and Use. As you know, ANILCA Title VIII requires the state to provide for a subsistence preference for rural residents in order to retain fish and wildlife management authority on federal lands. The McDowell decision, which found that the state's subsistence law granting such a preference violated the Alaska Constitution, means that the state is no longer in compliance with the provisions of ANILCA Title VIII. Consequently, on July 1, 1990 the Secretary of the Interior and the Secretary of the Agriculture will invoke their authority under ANILCA and assume management of subsistence activities on the federal lands in Alaska.

Earlier this year, during the regular legislative session, our Commission transmitted to your office a proposal for an amendment to the Alaska Constitution. We are once again asking you to consider our proposed amendment during the upcoming special session of the legislature.

The Commission's decision to support a constitutional amendment was not one that was easily reached. Extensive debate and public testimony on this issue have led us to the conclusion that the State of Alaska must take immediate action to prevent the federal land managing agencies from assuming the management of subsistence activities on the federal lands in this state. At the time the Commission developed this proposal we felt that a constitutional amendment was the only mechanism available that would prevent a federal takeover and ensure the legislature's authority to enact a subsistence statute that would both comply with ANILCA and withstand future legal challenges.

We believe that our position favoring a constitutional amendment is further supported by the June 20, 1990 superior court decision severing the unconstitutional rural preference provisions from the remainder of the state's subsistence statute. Superior Court Judge Beverly Cutler, in that decision, stated: "(T)he supreme court's

June 22, 1990

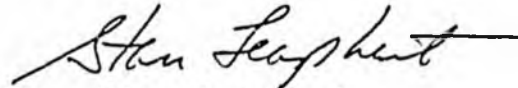
Page 2

ruling in McDowell renders compliance with ANILCA an impossibility without a constitutional amendment." Barring extensive amendments to ANILCA or a successful challenge to ANILCA Title VIII in federal court, neither of which this Commission views as likely or desirable, a constitutional amendment appears to be the state's only reasonable alternative.

Enclosed is a copy of our proposed amendment and an analysis which concludes that the people of Alaska should be the final arbiters of the subsistence question. We ask your careful consideration of our proposal. If you have any questions or if we may clarify any points, please contact our staff offices.

Sincerely,

Lew M. Williams, Jr., Chairman
CITIZENS' ADVISORY COMMISSION
ON FEDERAL AREAS



By: Stan Leaphart
Executive Director



Citizens' Advisory Commission on Federal Areas

250 Cushman St.
Suite 4H
Fairbanks, Alaska 99701
(907) 456-2012
Fax: 456-2039

PROPOSAL TO AMEND THE ALASKA CONSTITUTION

"Article VIII, Constitution of the State of Alaska, is amended by adding a new section to read:

Section 19. USE OF FISH AND WILDLIFE RESOURCES FOR SUBSISTENCE. The Legislature may grant a preference in the use of fish and wildlife resources for subsistence based upon geographic, socioeconomic and cultural considerations."

ANALYSIS

Prior to the Alaska Supreme Court's decision in McDowell v. State of Alaska last December, it was widely presumed that the Alaska Legislature possessed the authority to grant a subsistence preference for rural residents in the use of Alaska's fish and game resources. The court's decision does not alter the fact that the people of Alaska, casting their votes on a 1982 state-wide ballot initiative proposing to repeal what was then Alaska's subsistence statute, overwhelmingly voted to retain the statute granting a subsistence preference in the use of Alaska's fish and game resources.

Implicit in the 1982 electoral decision is a clear public affirmation of the provisions of ANILCA Title VIII, including the term "rural". Additionally, the 1982 election affirmed the Legislature's authority to formulate a statute consistent with ANILCA. Despite the actions of the courts in McDowell and Madison, current public opinion polls demonstrate that if given the opportunity, the people of Alaska would again grant their consent to providing a preference to rural residents in the use of fish and game resources.

The constitutional amendment proposed by the Citizens' Advisory Commission on Federal Areas is intended to formally restore the Legislature's authority to grant a rural preference for subsistence. The proposed amendment does not directly grant the preference in and of itself but empowers the Legislature to do so, by statute, after considering what we have identified to be the essential relevant factors. Geographic, socioeconomic and cultural considerations are the essential relevant factors that must be weighed in defining what rural subsistence means in Alaska.

Recognizing geography as a relevant factor will allow Alaska law to say that people who live in a given location have their use of fish and game resources protected. "Rurality" cannot be defined without recognizing geography.

Recognizing socioeconomic conditions as a relevant factor allows Alaska law to say that granting a given community this protection has been done for a good public purpose based on the needs of the people who live there. It allows the Legislature to utilize socioeconomic data such as population size, employment, educational attainment, the availability of governmental services,

access to markets, etc. in assessing the "rurality" of a community. "Rurality" cannot be defined in geographic terms alone.

Recognizing cultural considerations as a relevant factor legitimizes the historical, customary, and traditional foundations of a community's use of fish and game resources for subsistence. "Rurality" cannot be defined in its Alaska subsistence context without recognizing the influence of culture on the landscape.

One important strength of this proposal is the relative simplicity of its language. This simplicity arises from the proposal's lack of specifics which are more appropriately addressed in a statute. A good constitution is a simple articulation of the principles by which a people purport to govern themselves. This proposal articulates the principle that the elected legislators of this state are endowed with the authority, granted by the people of Alaska, to make decisions, after appropriate consideration of the relevant factors, regarding the use of fish and game resources.

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FISCAL NOTE

REQUEST:

Revision Date: _____ Agency Affected: None
 Title: State Beach Clean up/Anti dumping
 efforts BRU: _____
 Sponsor: Ulmer, Koponen, Ellis, Navarre
 Requestor: _____ Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0					
PART-TIME	0					
TEMPORARY	0					

ANALYSIS : (Attach a separate page if necessary)

Representative Cliff Davidson

Prepared by: Cliff Davidson Co-Chair House Resources Committee Phone: 465-2487
 Division: _____ Date: 2/1/89

Approved by Commissioner: _____ Date: _____
 Agency: _____

- Distribution (by preparer):
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

Original sponsors: Ulmer, Koponen,
Ellis, and Navarre

IN THE HOUSE

BY THE RESOURCES COMMITTEE

CS FOR HOUSE CONCURRENT RESOLUTION NO. 5 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

Encouraging citizen participation in
state-wide beach cleanup and anti-
dumping efforts.

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:

WHEREAS lost and accidentally and purposely discarded plastic debris,
including six-pack yokes, strapping bands, sheeting, packaging material,
dunnage, bags, particles, pellets, fishing nets, fishing line, and related
fishing gear, are annually killing at least an estimated 1,000,000 sea
birds, 100,000 marine mammals, and untold numbers of sea turtles and fish
by entanglement in the debris and ingestion of the debris; and

WHEREAS many of the fish and wildlife killed by the debris are resi-
dent wildlife of the state, and some of this wildlife are listed as deplet-
ed under the Marine Mammal Protection Act (16 U.S.C. 1361 - 1407), includ-
ing the Steller's sea lion and the northern fur seal, or endangered under
the Endangered Species Act (16 U.S.C. 1531 - 1543), including the humpback
whale, bowhead whale, and Aleutian Canada goose; and

WHEREAS plastic debris is generally persistent, durable, and nonde-
gradable, and may last for hundreds of years or longer; and

WHEREAS plastic debris deposited on the state's beaches by tidal
action, wind, waves, storms, and similar occurrences may also entangle
wildlife, and future storms and high tides may wash the plastic back into
the sea where it will continue its lethal effect, possibly for hundreds of
years; and

WHEREAS, in addition to the problems plastic debris causes to wild-
life, garbage-strewn beaches are aesthetically displeasing, discourage

1 tourism, and are costly to clean, and floating plastics also foul boat
2 propellers, block cooling intake vents, snag fishing equipment, entangle
3 submarines, and endanger divers; and

4 WHEREAS effective December 31, 1988, the Marine Plastic Pollution
5 Research and Control Act of 1987 (33 U.S.C. 1901 - 1912) prohibits vessels
6 from dumping plastics at sea and within the navigable waters of the state,
7 although certain public vessels have five years in which to comply with
8 this prohibition; and

9 WHEREAS enforcement by the United States Coast Guard of these anti-
10 dumping provisions will be difficult, especially since the Coast Guard
11 faces expanding responsibilities and a shrinking budget; and

12 WHEREAS the Marine Plastic Pollution Research and Control Act of 1987
13 contains a provision allowing an informant, in the discretion of the court,
14 to receive up to one-half of the penalty assessed against a violator of the
15 Act;

16 BE IT RESOLVED that the Alaska State Legislature strongly encourages
17 all residents of the state to participate in Coastweeks '89, a national
18 beach cleanup effort involving many public and private groups concerned
19 about the environment, by taking part in a May 1989 beach cleanup along the
20 36,000 miles of the state's accessible shoreline; and be it

21 FURTHER RESOLVED that the Alaska State Legislature encourages those
22 citizens who witness possible violations of the plastics anti-dumping law
23 to contact the Port Operations Department of their local United States
24 Coast Guard Marine Safety Office and, where possible, to provide the Coast
25 Guard with as much of the following information as possible about the
26 occurrence: date, time, location, witnesses' names, ship or vessel's name
27 and number, photographs, and a sample of the discarded plastic.

Alaska State Legislature

Representative Fran Ulmer

P. O. Box V
Juneau, Alaska 99811
(907) 465-4947



HOUSE OF REPRESENTATIVES

MEMORANDUM

TO: Rep. Davidson & Rep. Menard, Co-Chairmen
Members, House Resources Committee

FROM: Rep. Fran Ulmer

DATE: February 1, 1989

RE: HCR 5

HCR 5 encourages citizen participation in state-wide beach cleanup and anti-dumping efforts.

In the past few years, the public has become increasingly aware of the damage done by discarded plastic trash. One of the major causes of plastic-related wildlife deaths is entanglement—the trapping, and often slow starvation or strangulation, of marine mammals, birds and sea turtles by lost or discarded fishing nets and other plastic debris. The Defenders of Wildlife, who asked that I sponsor this resolution, estimate that as many as a million sea birds and 100,000 marine mammals may be dying in the North Pacific alone each year after eating plastic or becoming entangled in it.

In 1985, after marine scientists found that plastic net fragments and other plastics were killing large numbers of fur seals in the Pribilof Islands, the National Marine Fisheries Services established an entanglement office within their organization. The Entanglement Network has also been formed. This is a group of over 40 conservation, wildlife and animal welfare organizations which serve as a unified voice of the environmental community on entanglement, incidental take, and plastic debris ingestion. In Oregon, which has a much smaller coastline than Alaska, over 14 tons of litter was collected in a statewide beach cleanup conducted there last year. This resolution asks Alaskans to participate in the cleanup of our beaches in

cleanup of our beaches in hopes of saving many of our mammals and sea birds from death in these plastic snares.

HCR 5 also encourages people who witness a violation of the anti-dumping laws, to contact the proper authorities. By doing so, they may be able to collect up to one-half of any fine assessed against the violator. This provision of federal law became effective in December of 1988, and we need to make Alaskans aware of this incentive.

One small change has been made in this resolution, which is why you have a CS before you. My staff received a call from one of the persons involved in the beach cleanup effort, to alert us to the fact that it will actually take place in May this year in conjunction with a variety of other related activities. On page 2 line 19, June has been changed to May.

TRASHY

The Sea Around Us

*A disgraceful plastic tide is fouling the oceans—
and killing marine animals.
The cleanup has barely begun.*

by William H. MacKenzie

THE BROAD, sandy beaches of the Oregon coast are a magnet for visitors from all over the country. There you can feel the soft sea foam gently wash your feet in the sand, observe delicate marine life in the haven of a tidal pool, dig for clams, watch graceful pelicans glide near the surface of a bay and luxuriate in the solitude.

And you can watch as each incoming tide brings in a new crop of plastic debris.

Last September, a beach cleanup in Oregon attracted hundreds of volunteers who picked up more than 14 tons of litter that had found its way to shore. Included were chunks of styrofoam larger than baseballs, bands used for strapping boxes, plastic bottles and other containers, six-pack yokes, pieces of synthetic fishing gear, plastic bags and sheets and plastic eating utensils.

Similar artifacts of 20th century civilization wash up onto beaches around the world every day of the year. But much more floats far from shore on the sea's surface or suspended and unseen in the ocean depths, or sinks to the ocean floor.

Some people pay no attention, accepting the plastic tide as part of the landscape. Others get annoyed, but see it mainly as an esthetic irritant. Then there's Jim Coe. He gets angry. "Sometimes I get so intense about it I feel like I ought to go out and get a

black hat and a skinny tie and act like I'm on a mission from God," he says. "The whole thing has turned into a crusade of sorts, to try to make people more aware of the consequences of all this persistent debris for the marine environment."

Coe is in a better position than most people to carry out his crusade. Since 1985 he's been manager of the Marine Entanglement Research Program of the National Marine Fisheries Service (NMFS). I talked with him in his office overlooking Lake Washington on the east side of Seattle. The building is right in the middle of a wildlife preserve, and the view from his window of geese, ducks, pheasants and even an occasional coyote helps ease the tensions of his job. Coe is no stranger to environmental controversies. In 1971, when he went to work for NMFS in La Jolla, California, he found himself in the midst of a furor over the killing of tens of thousands of porpoises in tuna nets in the Pacific. He first ran an observer program to monitor the tuna fishing operations and later headed the team that designed net modifications and procedures to reduce the toll.

In 1985, after marine scientists established that net fragments and other plastics were killing large numbers of fur seals in Alaska's Pribilof Islands, NMFS set up an entanglement office and asked Coe to head it. He says the dedicated efforts of John Twiss, ex-





George Antloney, NMFS

Beached trash and a dead dolphin in the Canary Islands. A six-pack yoke, later removed, on a California sea lion on an island off Santa Barbara.

ecutive director of the Marine Mammal Commission, were crucial to getting an appropriation from Congress. "The other person who deserves an enormous amount of credit," Coe says, "is Nancy Wallace, who mobilized the environmental community and organized the Entanglement Network. The energy she generated helped focus the public—and congressional—eye on what scientists were learning about harm to wildlife."

With a budget of less than \$1 million annually, Coe is overseeing a two-pronged program. One focus is research on the sources, types, distribution and impacts of marine debris, particularly plastics and other long-lasting materials. This part of the program also involves looking at what to do about the problem, including examining technologies to deal with waste generated on vessels at sea and identifying ways to reduce the hazard of persistent waste materials before they enter the marine environment, such as developing plastics that break down in a controlled period or encouraging the use of alternative materials that are less persistent or hazardous.

The second component of Coe's program is public education—making people aware of the extent of the problem and what they can do about it. This is being carried out both at home and in international forums. The international effort already has

Jose L. Gonzalez Bruce Coleman, Inc.

resulted in seminars in Japan, Taiwan and South Korea.

Coe has no delusions about the scope of the task ahead of him. Researchers have reported bottles, plastic sheeting and styrofoam cups even on the remote beaches of the Beaufort Sea off arctic Alaska. A plastic Godzilla toy recently was found on a beach on the small island of Laysan 1,000 miles northwest of Honolulu—along with disposable lighters and plastic pellets, the raw material for manufactured products.

The world's merchant fleets alone dump an estimated 450,000 plastic, 4.8 million metal and 300,000 glass containers into the sea every day, along with many thousands of plastic eating utensils, ropes and cargo-strapping bands. Carmen Blondin, a deputy assistant administrator of the National Oceanic and Atmospheric Administration (NOAA), told members of the House Subcommittee on Coast Guard and Navigation at a 1986 hearing that the world's commercial fishing vessels lose or discard up to 135,000 tons of plastic fishing gear each year. Fishing boats have been estimated to be the source of another 340,000 tons of waste annually, including more than 23,000 tons of plastic packaging materials.

Recreational boaters and beach vacationers add their share. The U.S. Coast Guard has estimated that they jettison a pound and a half of trash per person per day into the nation's coastal waters. Los Angeles beachgoers alone are reported to leave behind 75 tons of trash every week. Some of it is collected by cleanup crews, but much is claimed by the tides.

The sheer volume of plastic waste defies any accurate reckoning, but unquestionably it is overwhelming. Ironically, it includes some trash we believe we have disposed of safely. An estimated 9 million tons a year of solid waste generated in the United States end up being dumped at sea, and about 700,000 tons of this are plastic. More is discharged from sewage treatment plants, and combined storm and sanitary sewer systems carry trash to the sea during heavy rain-



storms. More is swept seaward from land-based disposal sites along coastal waterways.

Whatever the grand total, it surely is rising steeply. Al Pruter, a specialist in plastics at Natural Resources Consultants of Seattle, says, "With the constant increase in production and use of plastics, it wouldn't surprise me if our annual crop of plastic waste has tripled over the last ten years."

With so much plastic in the marine environment, as in our daily lives, it can be hard to remember how short a time these synthetic materials have been with us. Only in the 1940s did use of long-lasting plastic products become cost-effective and widespread. It didn't take long for manufacturers to warm up to plastic's light weight, adaptability, durability and low cost. But the qualities that made plastic attractive to manufacturers and consumers, particularly its durability and low cost, have made it a menace at sea. Plastic debris kills marine mammals, seabirds, turtles and nontarget fish by the millions each year, and causes untold harm to countless others.

Seabirds and marine mammals all too readily become entangled in debris, particularly abandoned fishing nets known as ghost nets. Because

the victims are mostly out of sight of human census-takers, reckonings of the toll are necessarily very rough, but at least 100,000 marine mammals are believed to die annually in nets and debris, either by drowning or from exhaustion and starvation. Young seals play with plastic packing-bands, net fragments and other floating objects that then get caught around their necks and strangle them as they grow. Young Hawaiian monk seals—an endangered species—have become entangled in netting and then snagged on coral reefs.

Great whales are victims, too. In the last six years, 79 whale deaths from entanglement have been reported off the coasts of North America. The true death toll is probably considerably higher. Whales also have been seen ingesting plastic.

Plastic trash is one of the reasons almost all the world's sea turtles are on the endangered list. Ingestion of plastics by leatherback turtles has been documented in New York, New Jersey, French Guiana, South Africa and France. The same is happening to green turtles in the coastal waters of Japan, Central America and Australia, olive ridley turtles off the western coast of Mexico and hawksbills near Costa Rica. The turtles appar-



Michigan Department of Natural Resources

Six-pack holders head the list of plastic packaging products that kill many marine animals, like this gull.

synthetics. The annex also would require that ports provide facilities for receiving refuse generated by merchant ships. But before it can go into effect, the annex must be ratified by nations representing 50 percent of the gross tonnage of the world's shipping fleet. That goal is proving difficult to achieve. Ratification by the United States, long awaited, would bring the total to about 45 percent, and action by other countries that could be expected to follow suit would probably bring the annex over the top. Observers believe this may come about within the next six months, after which Congress will need to pass legislation enabling the United States to comply.

Jim Coe sees Annex V as a useful step toward cleaning up the seas. "The general freedom of the seas for disposal of trash seems to persist in the minds of many," he says. "It's just a matter of 'out of sight, out of mind.' There's never going to be an enforcement regime that's going to be able to bust everybody who throws stuff overboard. But that doesn't detract from the importance of Annex V and national legislation aimed at the same problem. All the pressures together create greater awareness of the problem and increase people's inclination to behave differently. So Annex V is part of an education effort, because in the end people aren't going to do something about the problem unless they want to."

More economically feasible technologies are available for large vessels such as tankers and cruise liners than for fishing boats and other small vessels, according to Coe. But systems on larger vessels are only as good as the people who operate them. "They're just not all sailor-proof," he says, "so if some dummy walks up and starts punching buttons, the system falls apart or disconnects or blows apart." As for the smaller vessels whose owners can't afford compaction equipment, Coe sees just plain

sorting and storage as the likely method of dealing with most refuse. "We're not talking about a really difficult solution here—they can either keep it or they can throw it over the side," he says.

But stowing trash on board will accomplish little unless it is properly handled when the vessels reach port. It will not do, obviously, to repeat an incident reported in the October, 1986, issue of the *Alaska Fisherman's Journal*. In that case a fisherman saved all his plastic garbage for several weeks, deposited it in a dumpster at a cannery in False Pass, Alaska, then that night watched with chagrin as a cannery worker picked up the dumpster with a forklift, drove it out to the end of the dock and dumped the contents into the outgoing tide.

Awaiting action in Congress are seven bills to ban the use of certain nondegradable plastics, assess the impacts of discarded plastics on the environment and particularly on fish and wildlife, develop recommendations on actions to alleviate the problem, and deal with problems caused by driftnets. There is high interest in these measures on Capitol Hill, and hearings are likely this summer.

Volunteer efforts are growing at the state level, witness the spread of Oregon's citizen beach cleanup. Last September there were similar campaigns in 14 other states. But as helpful as these activities are in focusing attention on the problem, new rafts of trash are disgorged on the cleaned-up beaches by the next tides. Al Pruter of Natural Resources Consultants says: "The problem will continue unless steps are taken to reduce the amounts of plastics entering the oceans or to alter the persistent character of plastics."

In Newport, Oregon, the former option is being addressed by people like Fran Recht. She is the director of a one-year NMFS-funded pilot program to limit vessel-generated debris. Jim Coe calls her "a five-foot-tall ball of fire." She approaches her present job with the same dedication that motivated her recent stint as a Peace Corps volunteer in Latin America.

ently mistake floating plastic bags for jellyfish, one of their favorite foods. Sea turtles also become entangled in monofilament fishing line and are unable to feed, swim or surface to breathe.

Seabirds such as shearwaters become trapped in fishing nets at the surface when they see the fish but not the net and dive into the webbing. Murres are trapped when they dive several meters down into a net. Fifty of the 280 species of seabirds in the North and South Atlantic, North and South Pacific and sub-Antarctic are known to have eaten plastics. They suffer blocked passages, ulcerations, toxic accumulations, decreased appetite and strangulation, often fatally. Almost three-fourths of Laysan Island albatross carcasses examined by researchers in a 1966 study were found to have plastic in their stomachs or gizzards. The young birds apparently had been fed plastic pellets their parents picked up at sea.

Efforts to combat the plastic tide are not yet keeping pace with its growth. At the international level, efforts are under way to win U.S. ratification of Annex V to the 1973 Marine Pollution (MARPOL) Convention, which would ban at-sea dumping of all persistent plastics and

Most of Recht's work is educating people on the consequences of dumping at sea and encouraging all vessels to bring waste back to port, where it can be collected at adequate and convenient facilities. In a ten-foot by 20-foot nondescript building on the waterfront, she drafts plans, designs posters, makes phone calls and figures out ways to draw attention to the problem. Then she walks along the docks greeting fishermen and cajoling them into putting warning signs in their boats about damage done by plastics at sea.

Under Recht's guidance the port of Newport already has done a study of garbage-handling facilities. "That's helped us find out what's in the waste stream, some of which we've found can be sold for recycling," she says. "That could be a potential source of money for other ports to run programs like mine without government grants."

Recht also has worked with shore-side fish processors on several projects, among them supplying more trash receptacles at dockside and attaching messages about the plastics problem to their payment checks to fishermen. She has persuaded the Coast Guard Auxiliary, a volunteer group that teaches boating safety, to put more emphasis on the importance of keeping plastic debris out of the waters, and at her urging the sheriff's department decided to include references to the hazards of marine debris in its talks to school children about law enforcement. Through her efforts, posters and newspaper articles about the problem adorn the walls of a restaurant frequented by high school students. "We really have to get into the education system to effect long-term change if we want this to be more than a one-shot government-funded program," Recht says.

But plastics are proliferating faster than ways are being found to deal with them. A famous scene from the 1967 satirical film "The Graduate" captured the wave of the future nicely. A businessman told Dustin Hoffman at a suburban party, "I just want to

say one word to you, one word. Plastics." Hoffman stood for a moment bewildered. Then the man added, "There's a great future in plastics."

He was right. Witness plastic soda bottles, plastic microwaveable frozen food trays, plastic fast-food packaging. Campbell's Soup is testing plastic and cardboard boxes and microwave-ready plastic bowls. Even Army field rations now come in camouflaged, heat-sealed plastic wrappers. In a strange twist, the more short-lived the manufactured goods we buy, the more we are packaging them in indestructible containers. Production has doubled in the last ten years, with the plastics industry now synthesizing and using about 22 million tons of resin annually.

Plastic products are multiplying because manufacturers find they enhance their position in the marketplace, and the consumer is responding. Much of the reason, however, is because disposal and the impact of all these products on the environment are not reflected in the price of the packaged product. "If the environmental costs were factored in and passed on to consumers," says Al Manville, Defenders of Wildlife biologist and chairman of the Entanglement Network, "we'd be generating a lot less trash."

So far, state efforts to create economic incentives against dumping trash are limited to litter taxes and deposits on containers. Washington has a litter tax on the gross proceeds of businesses that make and sell containers. The \$2.5 million it yields annually pays for public education and youth programs to clean up litter. California is just beginning a recycling incentive system based on payment by manufacturers of one cent per container. Recycling centers run as private businesses accept the used containers and refund the one cent to consumers out of money paid by processors of the recyclable product, who are reimbursed from the state fund. Deposits will go up annually for the next several years unless at least 65 percent of all containers of each type sold are not redeemed by consumers.





Neal Martin/ Oregon Dept. of Fish and Wildlife

Plastic bottles and other junk off the Bay of Biscay in Spain after a storm. Above, a mallard in northern Oregon that was lucky—it was saved by a beach cleanup volunteer.

Eleven states—Alaska, California, Connecticut, Delaware, Maine, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont—have banned nonbiodegradable six-pack holders and other can-connecting devices. But not all these bans are effective. A recent study by the Oregon liquor control board found a high degree of compliance with the law, but not all the rings were found to decompose within the required 120-day time limit and under all circumstances. In fact, rings placed in water for up to five months simply did not decompose, and they are expected to remain indefinitely in the marine environment.

Yet a recently completed research project of the Research Triangle Institute in North Carolina concluded that technology now available can make plastics that break down on exposure to light and biological organisms. If widely used, this could make some of the plastic debris much less hazardous to marine life. It is effective with polypropylene and polyethylene products such as containers, ropes and the packaging bands frequently implicated in maiming and strangling young seals and sea lions.

For fishing gear, the picture is more complicated. While gear can be made that will degrade within a given time period, there are special problems with

Pavlar Kuech/ Photo Researchers

some types of gear. And Defenders' Manville says it would be a mistake to depend on degradability as a total solution to the plastics problem. "For one thing, even if it works, it still takes time," he says. "And some degradable plastics shred up into sharp-edged spikes while they are breaking down, and thus are even more dangerous to wildlife. And there's a big unknown here: we just don't know what the byproducts of plastic degradation are going to do to the environment."

In Oregon, Sara Vickerman of Defenders has persuaded legislators to introduce a bill—one of many legislative proposals in the state aimed at limiting plastic debris—to generate revenue by assessing a fee on the plastic products that harm wildlife in the marine environment, and to educate the public by requiring a warning label on these products. Such a proposal seems more promising than banning a particular product or type of packaging, a suggestion that has generally met with stiff industry opposition as undue interference with the free market. Proposals to ban the use of plastic containers have failed in New Jersey and New York.

Several states are taking a different tack by promoting research on plastics recycling. Michigan awarded \$600,000 to a company to develop a system to convert mixed waste plastics into other products, and New Jersey is contributing funds to the Center for Plastics Recycling Research at Rutgers University. Established by

the Society of the Plastics Industry, the center receives the bulk of its funds from industry.

There are some hopeful developments in plastics recycling. Some plastics, for example, can be recycled and used as insulation material in buildings. But recycling-research programs are complicated by the thousands of varieties of plastics in use and the fact that some cannot be remelted and formed into new products. Moreover, types of plastic that look alike may require a chemical or burn test to tell them apart. Without being able to separate out large amounts of specific types of plastics, recycling is not likely to be profitable. Federal regulations bar the reuse and recycling of plastics for some food packaging. All this means that recycling is a complicated alternative. Similarly, degradable plastics may lose the very qualities that have made plastics attractive—durability and adaptability.

All of these avenues—degradability, recycling, improvements in laws and enforcement on dumping, and cutting down on waste—must be taken to effect any real improvement, according to Defenders' Manville. Waste reduction is the surest and most environmentally sound, he believes, and he thinks the way to achieve it is to pass costs of disposal and cleanup on to consumers. "If every plastic bag cost a dollar or two, we'd be a lot more interested in reusing them," he says. Americans may seem wedded to a throwaway lifestyle, but Manville

Neal Maine/Oregon Dept. of Fish and Wildlife



Gillnetting constricts the head of a luckless California sea lion on one of the Farallon Islands. A bird skeleton gripped by fishnet lies on an Oregon beach. A trout in Michigan grew up in the unyielding embrace of the pull tab from a beverage can.

believes we are capable of change. "Look at how many of us gave up cigarettes," he points out. "I don't think plastic's as addictive as tobacco."

Like Jim Coe, Manville believes most people vastly underestimate the danger of plastics in the marine environment. He also points out that there have been recent reports of humans entangled in plastic: propellers fouled and divers caught in net fragments. "When we realize we're one of the species that suffer from plastic trash," he says, "maybe we'll sit up and take notice." □

William H. MacKenzie is a Portland, Oregon, journalist who formerly served as counsel to the House Subcommittee on Fisheries and Wildlife Conservation and the Environment.



Michigan Department of Natural Resources

Jack D. Swenson



TRACKING PLASTIC IN THE PACIFIC

A visit to the westernmost Aleutians proves that a growing scourge is reaching our remotest beaches

Article and photographs by Albert M. Manville II

AS THE PUBLIC is beginning to realize, discarded plastic trash is increasingly causing suffering, disfigurement and death among marine animals around the world. One of the chief causes of plastic-related wildlife deaths is entanglement—the trapping, and often slow starvation or strangulation, of seabirds, marine mammals and sea turtles by lost or discarded fishing nets and other plastic debris.

Unknown numbers of seabirds, mammals and fish also die after eating plastic particles, either from broken-down finished plastic products or from raw materials used in plastics manufacturing. Still another threat to wildlife is posed by the ingestion of floating plastic bags by hungry sea turtles, which often mis-

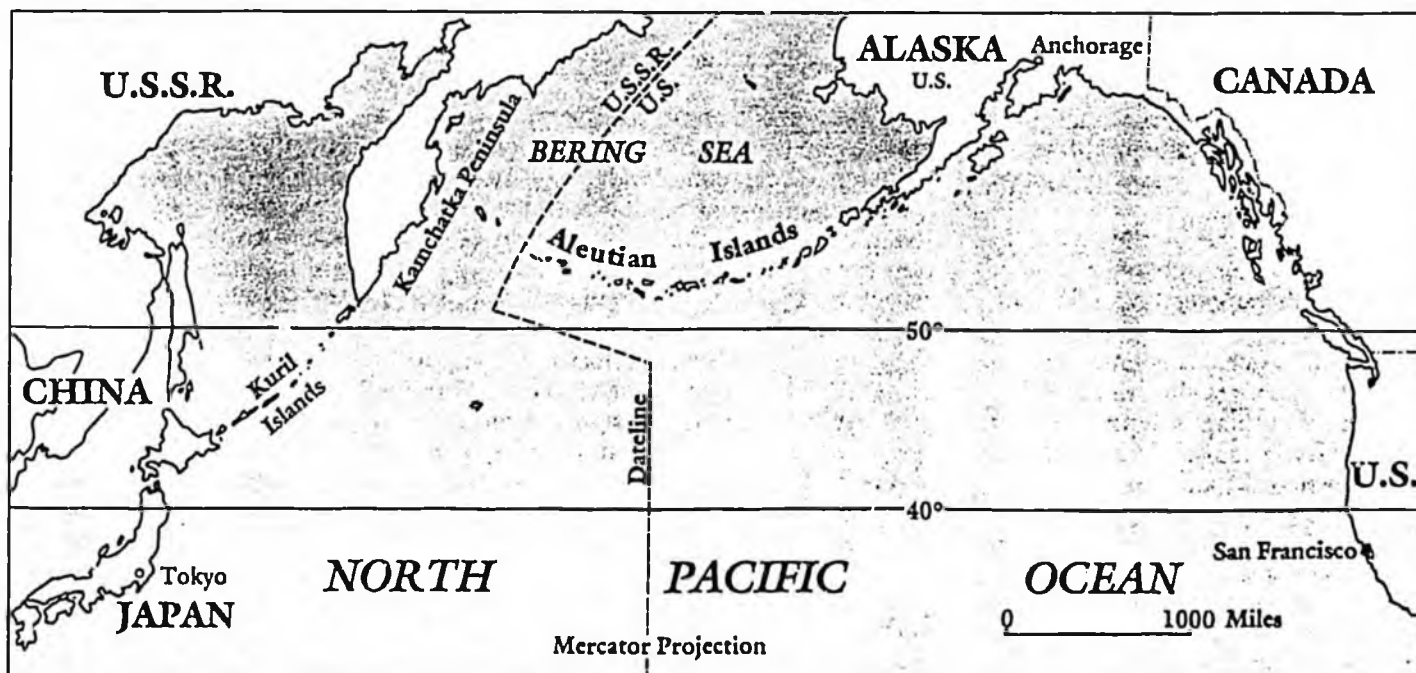
take them for jellyfish. Once swallowed, the bags often lodge in the turtles' stomachs, where they block the digestive tract and produce ulcers and starvation.

The exact extent of wildlife mortality caused by plastics pollution is hard to gauge, since most marine animal deaths occur out of sight of human beings. However, a slightly different but related problem, the incidental taking of non-targeted animals in active salmon driftnets, is easier to measure. This kills an estimated 750,000 seabirds each year in the North Pacific alone. Researchers believe that in addition, 125,000 North Pacific marine mammals die in active driftnets annually. And it is believed that as many as a million seabirds and 100,000 marine mammals may be dying

in this region each year after eating plastic or becoming entangled in it.

The United States, with six percent of the world's population, is the source of perhaps a third of the plastic waste found in the oceans of the Northern Hemisphere. In 1985 alone we used some 48 billion pounds of plastics, of which we discarded 1.4 billion pounds into the oceans. In 1987 our national plastics use grew to 53 billion pounds, and a recent report by the Society of the Plastics Industry projects that it will reach 76 billion pounds by the year 2000. Plastics use by other nations also is growing. What will this mean for marine wildlife?

As chair of the Washington, D.C.-based Entanglement Network Coalition, I recently traveled to Alaska to see what discarded plastics may be



doing to the waters surrounding the Aleutian Islands, a region rich in marine life. At the invitation of the U.S. Fish and Wildlife Service, I joined Captain Alvin Bayer and the crew of the new research vessel *Tiglav* on a tour of the westernmost islands in the Aleutian chain, in order to look for plastic trash on 25 of North America's most remote beaches.

Plastic entanglement, especially in trawl net fragments and packing bands, has been well documented as a leading cause of deaths of northern fur seals in the North Pacific, where the seals are declining by four to eight percent annually. Entanglement is blamed for killing perhaps 30,000 to 50,000 a year.

Just outside our 200-mile limit, in this isolated area far from where most Americans live, fishing boats from a number of nations create a special entanglement threat by setting out tens of thousands of miles of driftnet every night during the five-month fishing season. Driftnets get their name from the fact that commercial fishermen do not anchor them but let them

drift in the ocean catching fish automatically. This practice virtually guarantees regular losses of plastic netting to the ocean, as well as the deaths of seabirds and marine mammals. Some 700 boats from Japan, Taiwan and South Korea put out an estimated 20,500 miles of driftnet each night in international waters in the North Pacific. The National Marine Fisheries Service estimates that the Japanese alone lose about 12 miles of net per night, or about 639 miles every season. In addition, plastic debris is dumped into the North Pacific by naval and fishing vessels from the bordering nations.

The Aleutians, totaling some 3.9 million acres, extend more than 1,100 miles from Unimak Island west to Attu Island. Of more than 200 named islands, islets and rocks in the chain, most of them treeless, I visited seven of the westernmost, three of them situated in the Near Island group named for its proximity to the Soviet Union. These islands were unlike anything I'd ever imagined. Volcanic in origin, they boast mountains over

4,000 feet in altitude, shorelines that are frequently indented with fjords, and several-thousand-foot cliffs that drop abruptly to the ocean.

Because these islands are a barrier between the Pacific Ocean and the Bering Sea, the waters around them are roiled by ocean upwellings, tidal surges and ever-present tidal rips—places where two currents come together, rich nutrients are brought up and plankton are concentrated, in turn attracting fish and seabirds. Unfortunately, such areas also tend to collect plastic trash that has been discarded elsewhere and carried along by the currents.

Even in July, most of the outer Aleutians were still covered with a patchwork of snowfields, especially in their upper elevations. Frequent fogs and low-lying clouds provided a nearly continuous dampening of the lush vegetation, which consists of tall, herbaceous meadows as well as li-

Some of 28 rope coils and pieces, 13 trawl net sections and other plastic debris at Etienne Cove, Attu Island.





The Tiglax waits off Little Kiska Island. On North Bight Beach on Buldir Island, expedition members Nancy Norvell, Mike Boylan and Vern Byrd inspect a dead glaucous-winged gull on a piece of trawl net.



chens, mosses and low alpine plants. This rich environment provides nesting habitats for several million seabirds of 25 different species. It also supports the endangered Aleutian Canada goose, three common raptors and other waterfowl. Arctic foxes and Norway rats were introduced here, the former for fur, the latter by mistake. The foxes especially have had a significant impact on native birds.

Along with sperm, minke, killer and Steiner's beaked whales, the world's largest sea lions are found in the Aleutians. Adult bull Steller's sea lions can weigh nearly a ton. I also saw sea otters, harbor seals, northern fur seals and Dall's porpoises.

My plan for surveying beaches for plastic was simple. First I selected sample sites 100 yards long. Then I counted plastic items found at these sites from the water's edge up through high storm-tide level. I also photographed all the beaches and collected representative plastic samples.

As I soon discovered, there were good reasons why surveys had probably never been done before on many of these beaches. Not only are they remote, but the seas around them are unpredictable and storms come up quickly. Access was mostly by inflatable Zodiak, and the swell of the waves was a formidable hazard. Massive kelp beds around the islands also

made Zodiak landings difficult. Then there was the fog: we were in the clear one moment, enshrouded the next. Because of the danger of capsizing in the icy water, we all wore bulky Mustang survival suits and carried two-way radios and other survival equipment as we rode the Zodiaks in to the beaches.

Shielded by their protective harbors from storms and strong currents, the first few beaches I visited on Shemya and Attu islands had only small amounts of plastic. But even the most protected beaches had some debris; at least 15 items were deposited on the cleanest of them.

Then, as the *Tiglax* rounded Wrangell Point on Attu, site of the westernmost beach in North America (it is so far west it is located in the Eastern Hemisphere), I saw in the distance a myriad of colored dots on the shore. They turned out to be plastic floats for trawl nets and crab pots, and the beach was littered with them. After dropping anchor and fighting the usual battle to get the Zodiak through the kelp, we carefully approached the beach without disturbing 13 sleeping bull Steller's sea lions. One had his head on a plastic buoy. Another lay on a plastic trawl net. The sea lions soon awoke and lumbered toward the water, all the while bellowing, growling and barking at us.

My survey of this beach recorded the following array of plastic items: 34 bottles, seven bottle caps and lids, nine fish-sorting baskets, a beer crate, three plates, two hard hats and two beverage coolers. In addition, I found nine strapping bands, nine pieces of

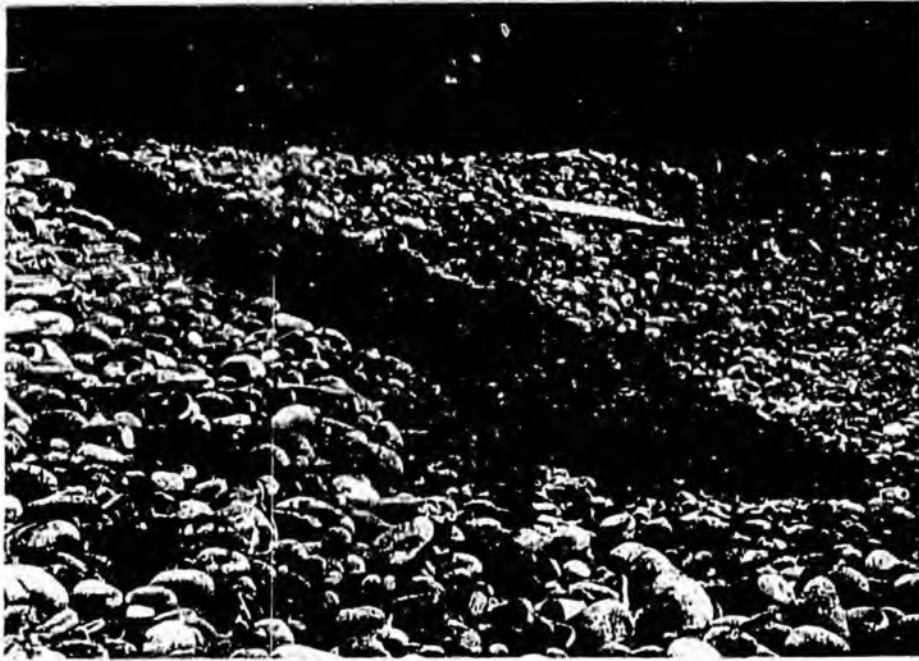
polystyrene foam, 47 hard plastic buoys and 80 foam plastic buoys. On the same beach were 110 nets, most of them trawl nets, but also including a few gillnets; and 179 pieces or complete coils of plastic rope. There were even three orange drift cards from a National Marine Fisheries Service study of the forces causing oil to move along the ocean surface. On this one beach I counted 511 items representing 27 varieties of plastic.

As four of us from the *Tiglax* surveyed the beaches on northern Attu for sea lions, another disturbing trend became evident. An FWS count of sea lions here in 1979 turned up 5,705 animals; we sighted only 811. Could plastic trash be one reason for the decline? I found no dead sea lions entangled in plastic, but for unknown reasons the Steller's sea lion population worldwide has dropped 50 percent in the last decade. In the eastern Aleutians, a 50-percent fall-off in the Steller's sea lion population has been observed since 1957. More research is definitely needed to determine whether this decline is linked to plastic entanglement. On Buldir Island I did photograph a bull sea lion with a massive entanglement scar on its neck. It looked as if the plastic were still imbedded in the bull's flesh, but I couldn't get close enough to be sure. I received reports of other sea lions with entanglement scars on Kiska Island.

On the 2.3 miles of beach on seven islands that I covered during the trip, I tallied 3,159 plastic items in 67 different product categories. On the average, each beach yielded 126 different pieces of plastic. But this total



Top, trawl net, monofilament driftnet and other plastic on Buldir Island. Left, Tiglax first mate Kevin Bell holds a plastic naval ordnance container on Kiska. On Buldir, a Steller's sea lion's neck bears a massive entanglement scar.



accounts only for what was visible, not for what doubtless lay hidden under debris, sand and rocks. Since Alaska boasts some 36,000 miles of coastline, my survey results undoubtedly represent only a tiny fraction of the state's beach debris problem. The next storm could easily wash this plastic back into the ocean to continue its lethal journey through the marine environment. Or a storm could just as easily reveal additional plastic that has floated in on the water, or plastic nets that have temporarily disappeared beneath the water's surface

This section of trawl net on Buldir Island probably came from a Soviet or Japanese fishing boat. The pink inflatable plastic buoy in the Buldir Steller's sea lion rookery below is from the Alaskan king crab fishery.



because of entangled debris and dead wildlife.

The most prevalent of the 67 different kinds of items I found was plastic rope. Pieces of it, and sometimes complete coils, accounted for 706 of the 3,159 plastic articles I tallied. The next most common type of debris consisted of 535 foam plastic buoys from gillnets. The discarded plastic appeared to come from ships, oil-drilling platforms or land sources and included products from Japan, South Korea, China, Taiwan, the Soviet Union, Norway and the United States.

Most of the plastic lacked convenient identification markings. Previous reports indicated that most beach litter found on Amchitka Island was from Japanese and Soviet fishing vessels. My findings in the outer Aleutians are consistent with earlier researchers' discoveries of enormous quantities of trawl web nets on Amchitka. Trawl nets, large webs dragged along the ocean bottom, are used to harvest salmon, walleye pollock, cod and other fish in this region.

The outer Aleutians appear to be a paradise for birds. Troubling, though, is the possibility that plastics may be taking a heavy toll on their populations. I found hundreds of dead seabirds on the beaches, some wrapped in plastic. Given the decomposition of the carcasses, it usually was impossible to determine the cause of their deaths. But my initial analysis suggests that more research on seabird mortality definitely needs to be conducted in the outer Aleutians. The birds that seem most abundant here are least auklets, estimated to number 1.3 million on Buldir and Kiska islands. In flight, least auklets and crested auklets resembled a large cloud of smoke as we sighted them from a distance while steaming toward their Buldir rookery. Among the common birds in the islands are tufted and horned puffins, thick-billed and common murrelets, black-legged kittiwakes, red-faced and pelagic cormorants, forked-tailed and Leach's storm petrels and glaucous winged gulls.

What is astounding about many of these birds is their diving prowess. Murrelets, for example, have been found diving to depths of more than 600 feet, and crested auklets to depths below 120 feet. The tufted puffin can dive at least 450 feet below the ocean's surface in search of fish, squid or



Potential victims of the Pacific's spreading burden of plastic are this mother Pacific harbor seal guarding a concealed pup and the black-legged kittiwakes thronging an oceanside cliff, in both cases on Buldir Island.

other prey. It's worth asking whether this increases the birds' chances of drowning in plastic "ghost nets" and other debris lurking below the surface.

What does the future hold for these birds? What entanglement threats may lie ahead of the huge bull Steller's sea lion that I accidentally surprised on one island while changing my film behind a boulder where he was sleeping? Fortunately, 35 nations have now ratified Annex V of the MARPOL (International Marine Pollution) Treaty which bans the disposal of plastic wastes from commercial and other private vessels. The United States ratified the MARPOL Protocol late last year after an extensive public-education campaign by environmentalists, and last December President Reagan signed legislation implementing the treaty and prohibiting plastic dump-

ing by any vessel within our 200-mile Exclusive Economic Zone. The U.S. Navy last June accepted and began implementing recommendations to phase out its plastics dumping over the next five years.

The campaign to make our increasingly plastics-dependent world safe for marine wildlife, however, still has much to accomplish. As we disembarked from the *Tiglux* at the end of our ten-day research voyage, I observed that our trash had been carefully stored on board for proper disposal later. The plastic debris floating in the harbor at Adak Naval Air Station, however, had not been handled so carefully. Perhaps it had been pitched overboard by deckhands on some non-naval vessel still out at sea.

To reduce the plastics threat, conservationists need to work for strict enforcement of the 1987 Marine Plastic Pollution Research and Control Act after it takes effect this December. We must also ensure that the federal government carries out its mandate under the Driftnet Impact Monitoring, Assessment and Control Act to negotiate with foreign nations over reducing and ultimately eliminating the killing of marine life by driftnets and related equipment.

Congress should require use of degradable nets and marking and registration of driftnets, trawl nets and purse seines, as proposed in testimony supported by a majority of the Entanglement Network Coalition in 1987. Finally, it seems clear that significantly larger appropriations are needed to support research on seabird and marine mammal deaths in the outer Aleutians and elsewhere. What we found last July on those 2.3 miles of beaches is surely only a hint of a much larger problem. Many questions remain about entanglement, other impacts of plastic on marine organisms and the decline of wildlife populations in the region. But with the federal government facing a deficit problem and a host of competing claims on its financial resources, conservationists may have to expend some effort to make sure that those questions are answered. □

Albert M. Manville, Defenders' senior staff wildlife biologist, is a member of the Navy's Ad Hoc Advisory Committee on Plastics and has testified about plastic pollution problems before several congressional committees.

H C R

6

HOUSE COMMITTEE REPORT

(9)

Date Referred: January 20, 1989

FURTHER REFERRALS:

Date of Committee Action: 1-31-89

The RESOURCES Committee recommends that:

HOUSE CONCURRENT RESOLUTION NO. 6 [COAL MINING AT WISHBONE HILL]
Supporting the development of coal mining at Wishbone Hill.

[] be replaced with _____ [] the same title
[] have attached amendment(s) [] a new title

- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(S):

- fiscal impact
- zero fiscal note
- zero with analysis

APPROVES PREVIOUS:

- fiscal note(s) published: _____
- zero fiscal notes(s) published: _____

SIGNING DO PASS:

SIGNING OTHER THAN DO PASS:
(Do Not Pass, No Recommendation, Amend)

Richard J. Jolley
Bob J. Sharp
Bill Hudson
Mike Davis
Mike
Sam Munn
Mike Hovane
Cliff Davidson

Walt Furnace No Rec
B
Mike Hovane - NO REC

Sam Munn
 Chairman's signature
 Co-Chair

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: Supporting the development
of coal mining at Wishbone Hill
Sponsor: Menard, Larson, Zawacki, Gruenberg
Requestor: House Resources Committee

Agency Affected: Department of Natural Resources
BRU: _____
Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
---------	---	---	---	---	---	---

REVENUE	0	0	0	0	0	0
---------	---	---	---	---	---	---

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS : (Attach a separate page if necessary)

Prepared by: Representative Curt Menard *CLM* Phone: 465-4944
Division: Co-Chair, House Resources Committee Date: 1/31/89

Approved by Commissioner: _____ Date: _____
Agency: _____

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(s)

FISCAL NOTE

REQUEST:

Revision Date: 2/15/89 Dept. Revenue
 Title: Relating to export of Alaska Oil Agency Affected: _____
 BRU: _____
 Sponsor: M. Davis, Koponen, Navarre, Gruenberg Components: _____
 Requestor: House Resources Committee

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		-0-	-0-	-0-	-0-	-0-

CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
----------------	-----	-----	-----	-----	-----	-----

REVENUE	-0-	-0-	-0-	-0-	-0-	-0-
----------------	-----	-----	-----	-----	-----	-----

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL		-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME	-0-	-0-	-0-	-0-	-0-	-0-
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS : (Attach a separate page if necessary)

Prepared by: Co-Chairman Davidson Phone: 465-2487
 Division: House Resources Committee Date: 2/16/89

Approved by Commissioner: _____ Date: _____
 Agency: _____

Distribution (by preparer):
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

BRIEFING PAPER

WISHBONE HILL COAL DEVELOPMENT/
GLENN HIGHWAY IMPROVEMENTS
MILEPOST 35-56

January 31, 1989

A reconnaissance study which evaluated the Glenn Highway improvements related to the development of the Wishbone Hill Coal Mine was forwarded to the mine developers on December 21. A meeting was held on January 12 between representatives of McKinley Mining Consultants, Idemitsu Kosan Co. Ltd., Alaska Industrial Development and Export Authority, and the department to discuss these improvements and the mine development. This meeting was very positive and a close working relationship is anticipated between the mine developers and the department. At the present time, this proposed coal mine development appears to be viable and proceeding in a manner which indicates the project will begin operation in late 1991 as proposed by the developers.

A meeting between the department and the FHWA was held on January 23 and 24 to review and conduct a field survey of the Glenn Highway improvements associated with this coal mine. The cost estimate for the Glenn Highway safety and capacity improvements desirable to accommodate the coal haul operation associated with this mine development is estimated to range between \$9-10 million. If a decision is made to proceed with the development of the Glenn Highway improvements on a schedule corresponding to the extent possible with the beginning of coal haul operations in mid to late 1991, the highway improvement construction phase funding should be programmed in FFY'90 or FFY'91.

Other projects which may need to be delayed to accommodate this funding change should be identified, reviewed and tentatively approved prior to meeting with the mine developers to conceptually agree on a course of action for financing and scheduling the highway improvements. The next meeting with the mine developers on this project is proposed for the middle of February to achieve conceptual agreement on financing and scheduling road improvements. We expect to know by this meeting what aspects of the Glenn Highway improvements associated with this proposed coal haul activity the FHWA is willing to participate in financing.

By late February, Central Region will have recommendations developed regarding the budget adjustments necessary to accommodate the inclusion of the Glenn Highway improvements associated with this project. Prior to formalizing any budget modifications to accommodate these highway improvements, an agreement regarding cost sharing needs to be approved by the department and the mine developers. Once agreement has been reached between the department and the mine developers and Central Region's recommended budget modifications have been reviewed and approved by the Commissioner, the necessary CIP budget adjustment documents will be forwarded for inclusion in the Governor's budget. This is expected to be accomplished by early March.

The following schedule summarizes the actions anticipated in the immediate future to address the Glenn Highway improvements:

Briefing Paper
Page 2

- January 23-24 Meeting with FHWA to review the proposed highway improvements.
- Early February Central Region develops draft budget modifications for the Commissioner's review to accommodate the highway improvements.
- Mid-February Meet with mine developers to achieve conceptual agreement on financing highway improvements.
- Early March Formal agreement on highway improvement financing developed and approved by the department and the mine developers.
- Early March Budget modifications forwarded to the Governor's Office.

RM:kc

A M E N D M E N T

OFFERED IN THE HOUSE

BY MENARD

TO: HCR 6

Page 2, line 4:

After "operation"

Insert "; and be it

FURTHER RESOLVED that the legislature urges the Alaska Railroad to continue in its cooperation with Idemitsu Kosan, Ltd. in the development of a reasonable transportation tariff"

-6-

We have examined the roadway in light of what would be appropriate and feasible to do, and with regard to the traffic levels that are anticipated, with and without the Wishbone Hill project.

Since these demands would be significantly different depending on whether the roadway is used for truck haul of Wishbone Hill Coal in addition to the normal traffic placed on it, we have shown features due to the Wishbone Project separately. We assume legal loads are used.

The primary areas of our concern are:

1. Safety
2. Structural integrity
3. User convenience and costs
4. Construction contained within existing right of way.

The scope of the proposed improvements is limited to the existing R/W in order to accomplish the work before the Wishbone Hill development would begin using the road to haul coal.

A description of what exists, proposed improvements, and their estimated cost follows:

SEGMENT 1 - Parks to Old Glenn Intersection in Palmer.

The existing roadway was constructed in 1966-70. A 60 mph design speed was used. The pavement is 40 feet wide. A resurfacing project is scheduled for 1991. Due to a change of design standards for stopping sight distance (SSD), one vertical curve within the portion that would be used for coal haul does not have the desired SSD.

It is proposed that this vertical curve be regraded, and that the pavement be overlaid with 3" HBP, throughout the entire segment.

This work is estimated to cost:

Regrading	\$500,000.00
Overlay	<u>\$1,235,000.00</u>
Total	\$2,035,000.00

-7-

Additional work that would be required by the coal haul traffic in this segment:

2" more pavement in the regraded section.

Construction of an intersection at the railroad coal loading site access.

This work is estimated to cost:

Extra Pavement:	\$75,000.00
Intersection:	\$265,000.00
Total	\$340,000.00

SEGMENT 2 Old Glenn Intersection in Palmer to Buffalo Mine Road (BMR).

The existing roadway was constructed in the 1940's and 1950's. The pavement is approximately 24' wide. With the exception of one curve, the horizontal alignment meets current 60 mph standards. The vertical alignment is defective in providing adequate SSD in a number of locations.

It is proposed that this roadway be reconstructed, to meet required SSD, and to provide shoulders.

That portion of the segment from Old Glenn Intersection to Fishhook-Willow Road (FWR) would be reconstructed to a 55 mph design speed. A Northbound climbing lane would be provided for this entire portion. The pavement width would provide for: 4' Southbound shoulder, 2-12 lanes, 1-12 climbing lane, 4' Northbound shoulder, for a total width of 44'.

This portion of the segment would serve as a frontage road when the Parks to MF 109 project is built.

The remaining part of the segment, from FWR to BMR, would be built to a 60 mph design speed, with the exception of the horizontal curve at sta. 1770±, which would require a waiver to a 55 mph design speed. Two 12' driving lanes and two 8' shoulders would be provided, for a pavement width of 40'.

The existing right of way from the beginning of segment 2 through Section 9 (approximately one half mile before BMR) is a minimum of 100' wide, 50' each side of centerline. This width is adequate to contain the proposed facility. The width of right of way in the remainder of Segment 2 is variable, based on prescriptive use.

-4-

This variable width segment could be used to transition to the existing facility, or 100' right of way could be acquired. Cost of the 3.6 Acres of right of way is estimated to be \$10,000.00.

Maximum realignment consistent with existing R/W would be done at the wind erosion area near sta.1680± (FWR).

Most of this portion of the segment would serve as mainline when the Parks to MP 109 project is built. At that time the curve at sta.1770± would be rebuilt to 60 mph standards.

The Segment 2 reconstruction is estimated to cost \$3,500,000.00.

Additional work that would be required by the coal haul traffic in this segment:

2" more pavement in the entire segment to provide structural strength required for coal haul.

This work is estimated to cost \$1,100,000.00.

SEGMENT 3 BMR to Wishbone Hill Access Intersection.

The existing roadway was constructed in the 1940's and 1980's. The pavement is approximately 24' wide. Horizontal curves are as sharp as 19 degrees. Grades exceed 7.5%.

These elements are consistent with a design speed of about 30 mph.

Due to the constraints imposed by the existing R/W, alignment reconstruction to a currently accepted design speed is not possible. This roadway will connect to the existing wayside when the Parks to MP 109 project is built. Consequently capital expenditure on this segment would be attributable to safety under the coal haul traffic.

It is recommended that an intersection be constructed at the mine access road. Usable paved shoulders at least four feet wide should be provided, requiring a paved width of 32'. A Southbound climbing lane should be provided at Moose Creek Hill.

This work is estimated to cost about \$2,000,000.00. Upon more precise definition of the work to be performed in this segment the estimate should be refined.

COST SUMMARY

A. Without Wishbone Hill

Segment 1	\$2,025,000.00
Segment 2	3,600,000.00
Segment 3	0.00
TOTAL	\$5,625,000.00*

B. Wishbone Hill Features

Segment 1	\$ 340,000.00 *
Segment 2	1,100,000.00 *
Segment 3	2,000,000.00
TOTAL	\$3,440,000.00

C. Combined Cost

Segment 1	\$2,375,000.00
Segment 2	4,700,000.00
Segment 3	2,000,000.00
TOTAL	\$9,075,000.00

GRAND TOTAL \$9,075,000.00

* FHWA Eligible

-10-

TYPICAL SECTIONS

Typical sections on each section of the Glenn Highway discussed in this study are found in Appendix H, Plan & Profile Sheets, Sheet #2.

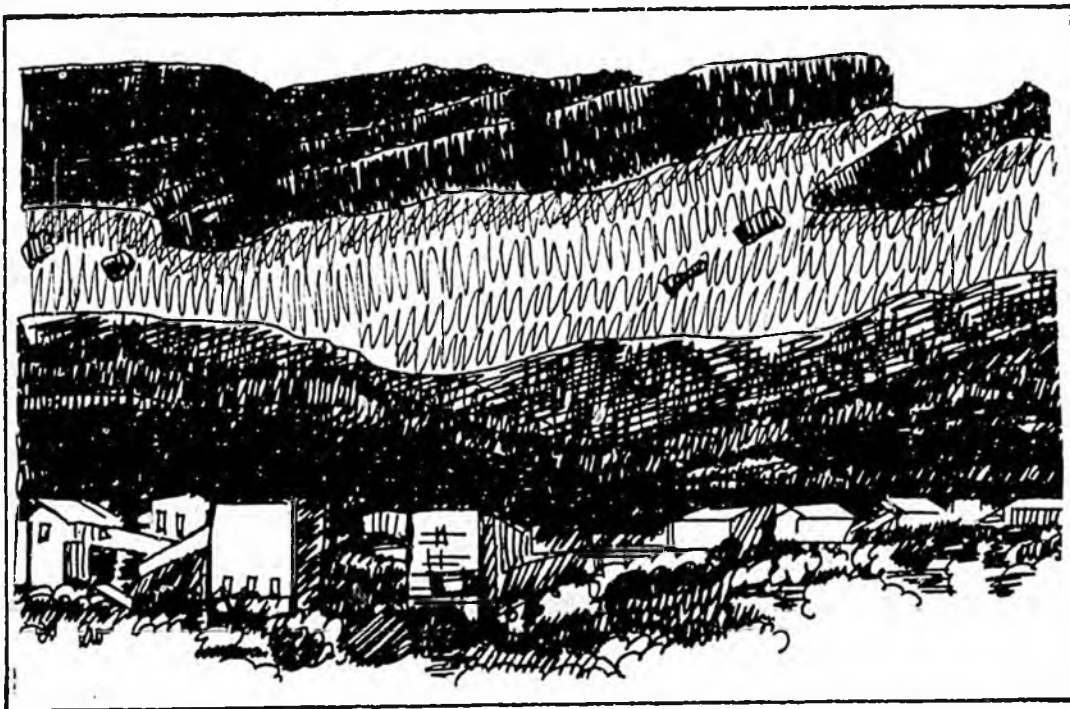
BRIDGES

There is only one bridge structure present in the study area. This is located at Moose Creek (Milepost 54.7). No widening is proposed for this existing 24 foot wide bridge.

ENVIRONMENTAL ANALYSIS

The Department of Transportation and Public Facilities Environmental Section conducted a quick review of the project and expressed their opinion of environmental concerns and permit requirements. This written opinion is included in Appendix F.

Matanuska-Susitna Borough
CAPITAL IMPROVEMENT PROGRAM
FY '90



*Wishbone Hill
Coal Project*

MATANUSKA-SUSITNA BOROUGH
CAPITAL IMPROVEMENT PROGRAM
FY90

-- WISHBONE HILL COAL MINE --

Fred Lloyd
Assemblyman

Eleanor Malapanes
Assemblyman

Norm Levesque
Assemblyman

Theodore Smith
Assemblyman

Dorothy A. Jones
Mayor

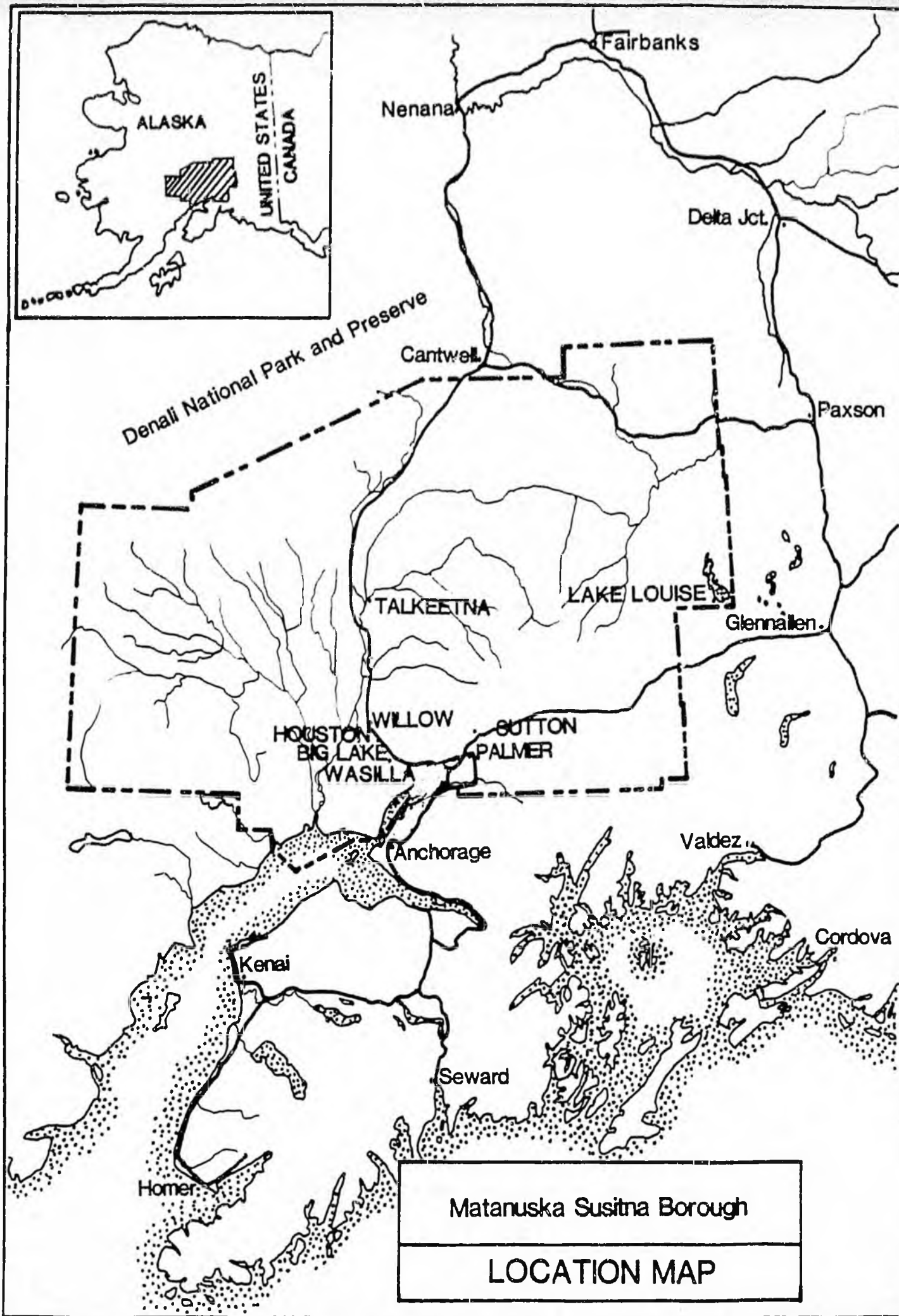
Gary Silvers
Assemblyman

Rose Palmquist
Assemblyman

Steven Cypra
Assemblyman

John Hale
Manager

P.O. Box 1608
PALMER, ALASKA 99645





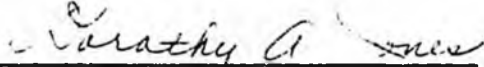
Matanuska-Susitna Borough

BOX B. PALMER, ALASKA 99645 • PHONE 745-4801

BOROUGH ASSEMBLY

Providing the necessary infrastructure to facilitate the development of the Wishbone Hill Coal Mine is one of the Borough's top three priorities for FY90. The Wishbone Hill Coal Mine is a private sector development in which the State and Borough are working with Idemitsu Kosan, Ltd., the largest independent oil company in Japan, to develop a coal mine in the Wishbone Hill Coal Field within the Matanuska-Susitna Borough. Exploration efforts were initiated in 1983 and have progressed to the acquisition of permits. Operations are scheduled to commence in mid-1991.

To date, project expenditures have exceeded \$4.0 million dollars. This money has been used to define an economic coal reserve base and initiate permitting and detailed engineering activities. As currently envisioned the mine will produce approximately one million metric tons of clean coal per year. Employment at full production would consist of 185 full time jobs with an annual payroll of ten million dollars per year. During these harsh economic times it is vital for both the Borough and State to encourage development and diversification of the economy. The proposed coal mine fulfills these two objectives. The Borough respectfully requests your consideration of the Wishbone Hill coal mine capital improvement program.


Dorothy A. Jones
Mayor
Matanuska-Susitna Borough

MATANUSKA-SUSITNA BOROUGH ²,
RESOLUTION SERIAL NO. 88-229 (Substitute)

A RESOLUTION OF THE ASSEMBLY OF THE MATANUSKA-SUSITNA BOROUGH REQUESTING
STATE FUNDING FOR THE MATANUSKA-SUSITNA BOROUGH'S TOP CAPITAL
IMPROVEMENT PROJECTS

WHEREAS, citizens of the Matanuska-Susitna Borough continue to experience severe economic hardships through loss of jobs, homes, and local businesses due to the existing economic recession; and

WHEREAS, the Matanuska-Susitna Borough is aware of State spending constraints caused by the existing economic recession; and

WHEREAS, the Matanuska-Susitna Borough is struggling to provide only the basic services to its residents; and

WHEREAS, the Matanuska-Susitna Borough continues to adjust its operating and capital budgets to reduce costs, eliminate unnecessary functions and emphasize activity and projects that will stimulate and diversify the economy; and

WHEREAS, the top priority projects are considered to be most essential and beneficial in helping to improve and create a more stabilized economic base for the Matanuska-Susitna Borough; and

WHEREAS, the Borough is proceeding with three significant economic development projects; and

WHEREAS, these projects include the Point MacKenzie Port, Hatcher Pass Ski Development and the Wishbone Hill Coal Mining Development; and

WHEREAS, the Assembly has identified these three projects equally as the Matanuska-Susitna Borough's top capital improvement projects for FY90; and

NOW, THEREFORE, BE IT RESOLVED that the Matanuska-Susitna Borough respectfully requests funding for the Borough's top FY90 Capital Improvement projects which are: Point MacKenzie Port, Hatcher Pass Ski Resort Development, and Wishbone Hill Coal Development.

BE IT FURTHER RESOLVED that the Matanuska-Susitna Borough respectfully requests funding be provided to the Alaska Department of Transportation and Public Facilities for improvements to portions of the Hatcher Pass Road (Willow Fishhook) and Glenn Highway projects.

AND BE IT FURTHER RESOLVED that funding for the Point MacKenzie Port project be made as a direct appropriation to the Matanuska-Susitna Borough.

APPROVED by the Matanuska-Susitna Borough Assembly this 5
day of January, 1989.

Dorothy A. Jones
Dorothy A. Jones, Mayor

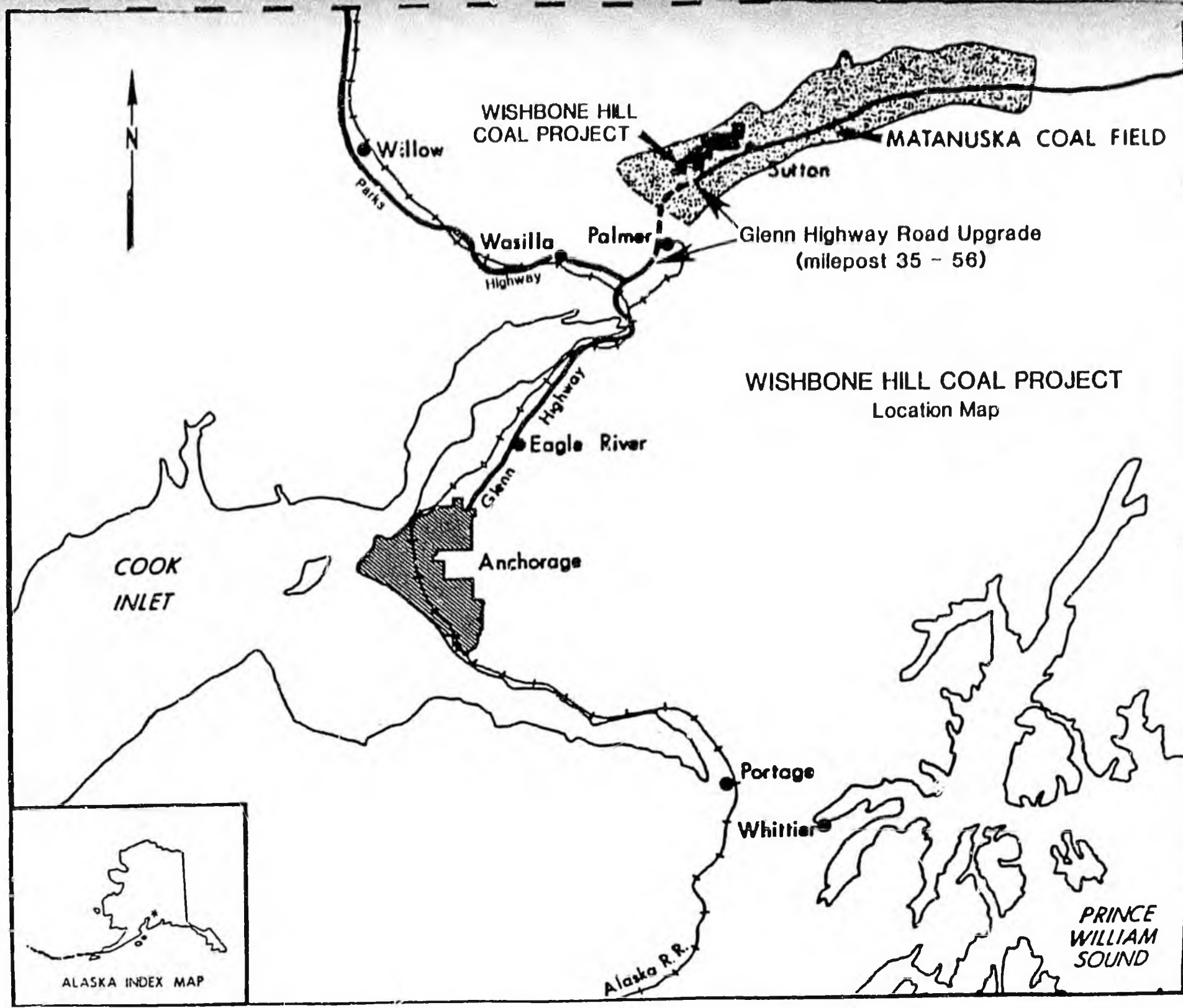
ATTEST:

Linda Dahl
Linda Dahl, Borough Clerk

(SEAL)

WISHBONE HILL COAL MINE IMPROVEMENTS

PROJECT	COST (in thousands)
1. Glenn Highway Upgrade (milepost 35 to milepost 56)	\$ <u>9,075</u>
TOTAL	\$ 9,075



WISHBONE HILL
COAL PROJECT

MATANUSKA COAL FIELD

Willow

Sutton

Wasilla

Palmer

Glenn Highway Road Upgrade
(milepost 35 - 56)

Highway

Eagle River

WISHBONE HILL COAL PROJECT
Location Map

Anchorage

COOK
INLET

Portage

Whittier

PRINCE
WILLIAM
SOUND

Alaska R.R.

ALASKA INDEX MAP

PROJECT TITLE: Glenn Highway Upgrade (milepost 35 to milepost 56)

PROJECT DESCRIPTION: Rehabilitation, reconstruction and widening of twenty-one (21) miles of the Glenn Highway from milepost 35 to milepost 56.

DISCUSSION: This project consists of reconstructing twenty-one miles of the Glenn Highway, a public road that has been sub-standard for many years, in order to facilitate the development of the Wishbone Hill coal mine by Idemitsu Kosan, Ltd. Idemitsu Kosan is the largest independent oil company in Japan and is actively involved in coal development and mining activities world wide. Improvements to the Glenn Highway will remove hazardous locations, improve sight distances, provide for shoulders and improve the overall driveability of the highway. In addition to facilitating the mine's development, the road's improvements will benefit commuter travel, school bus transportation and tourist travel on one of the State's most popular tourist routes.

The mine, as currently envisioned, would produce approximately one million metric tons of clean coal per year. Employment at full production would consist of 185 full time jobs with an annual payroll of ten million dollars per year. To date, project expenditures have exceeded \$4.0 million dollars.

ANTICIPATED COST: \$9,075,000

DESCRIPTION OF COAL PROJECT:

The Wishbone Hill Coal Mine project is a private sector development in which the State of Alaska and the Matanuska-Susitna Borough governments are working with Idemitsu Kcsan, Ltd., the largest independent oil company in Japan, to develop a coal mine in the Wishbone Hill Coal Field within the Matanuska-Susitna Borough. Exploration efforts were initiated in 1983 and have progressed to the final feasibility phase. Operations are scheduled to commence in mid-1991.

Wishbone Hill is a surface coal development located in south central Alaska, approximately 45 miles northeast of Anchorage. The project consists of eight state coal leases that are 100 percent owned by Idemitsu Alaska, Inc., a subsidiary of Idemitsu Kosan Co., Ltd. Idemitsu Kosan is the largest independent oil company in Japan and is actively involved in coal development and mining activities world wide. They currently use coal in their oil refineries as well as supply coal, gas and oil to many of the Japanese power utilities.

Exploration and development work on the proposed Wishbone Hill coal project has been in progress since 1983. To date, approximately 150 exploration and development holes have been completed in the project area. Through this work, a surface mineable reserve of high quality bituminous coal sufficient for a 12 to 14 year mine life has been defined. The most recent feasibility study, completed in 1988, indicates that this coal can compete internationally on a cost and quality basis.

The Wishbone Hill Project is one of the closest Free World sources of bituminous coal to the nations of the Pacific Rim. Compared to other Alaskan and international coals, substantial transportation advantages exist for the Wishbone Hill coal because of Alaska's proximity to the Pacific Rim, the project's easy access to the Alaskan rail and a new coal loadout terminal at the nearby port of Seward. Idemitsu Kosan, Ltd., is currently finalizing arrangements with Japanese power utilities which are scheduled to have new power generating units coming on-line in 1990 and 1991. Therefore, it is imperative that the Wishbone Hill Project be fully permitted and into production by 1991 to accommodate this market opportunity.

To date, project expenditures have exceeded \$4.0 million dollars. This money has been used to define an economic coal reserve base and initiate permitting and detailed engineering activities. The current project schedule anticipates that all of the necessary permits and approval will be secured by mid-1990 to accommodate a 1991 start-up. The mine, as currently envisioned, would produce approximately one million metric tons of clear coal per year.

Employment at full production would consist of 185 full time jobs with an annual payroll of ten million dollars per year.

The Wishbone Hill Coal project is a prime example of the type of project being sought by the State and Borough. Public sector capital investment and cooperation will generate a substantially larger private sector investment. Idemitsu Kosan, Ltd., has already expended over \$4.0 million in the exploration, feasibility analysis and permitting phases of this project. This project will generate significant positive impacts in the service sectors of the economy, especially in the mining support, commodities, and transportation sectors of the economy. The Wishbone Hill Coal Project will not detract from other projects within the State because not only is the quality and quantity of the coal vastly different than other coal projects, the markets are also different.

In addition, the project will affect the national economy by providing an opportunity to improve the trade imbalance between the United States and Japan. Because this project is an export based project, new funds for capital and operating expenses will enter the Alaskan economy and will add to Alaska's exports. Export based industries also typically have larger employment and income multipliers than non-export based industries which will benefit the Alaskan economy.

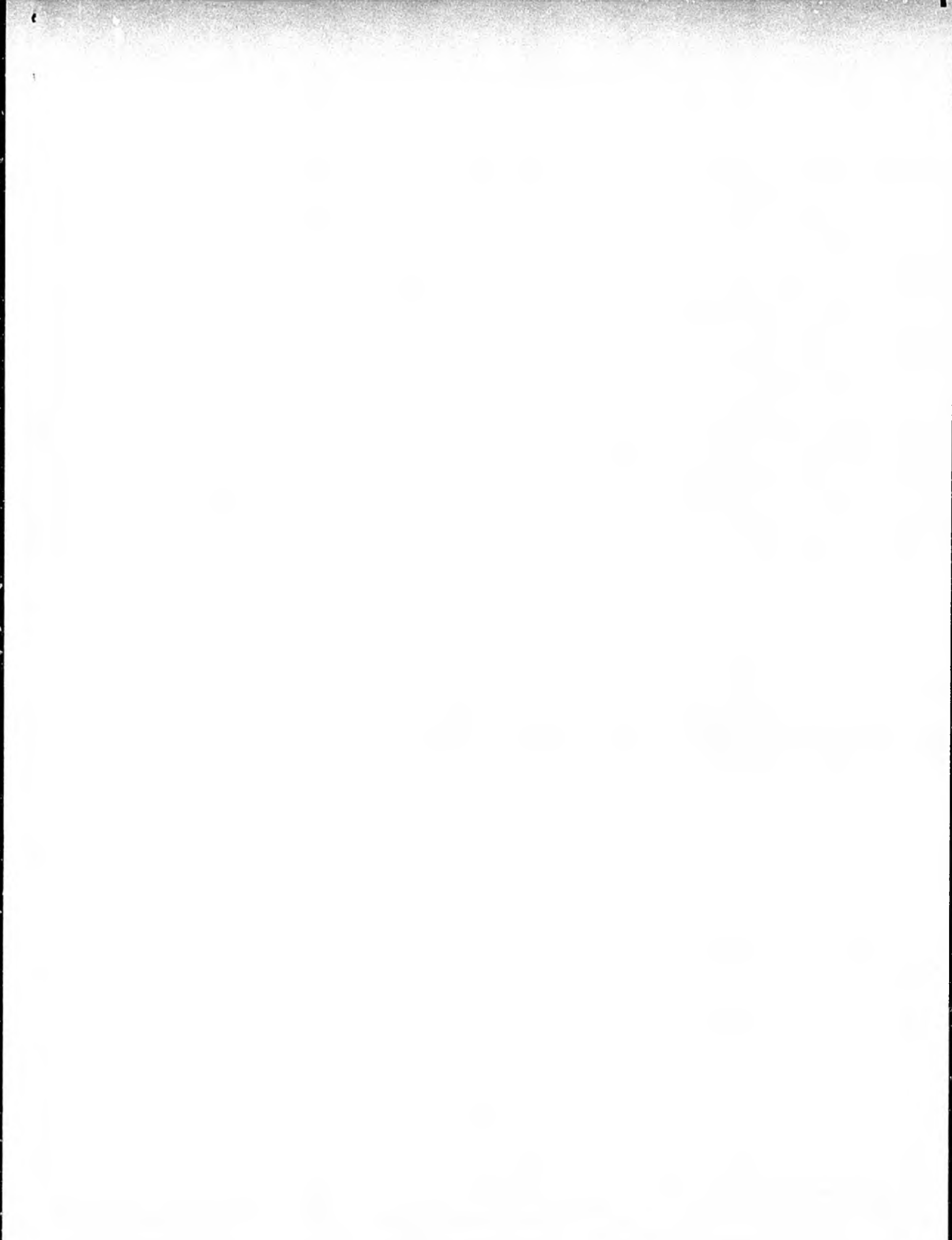
EMPLOYMENT IMPACT:

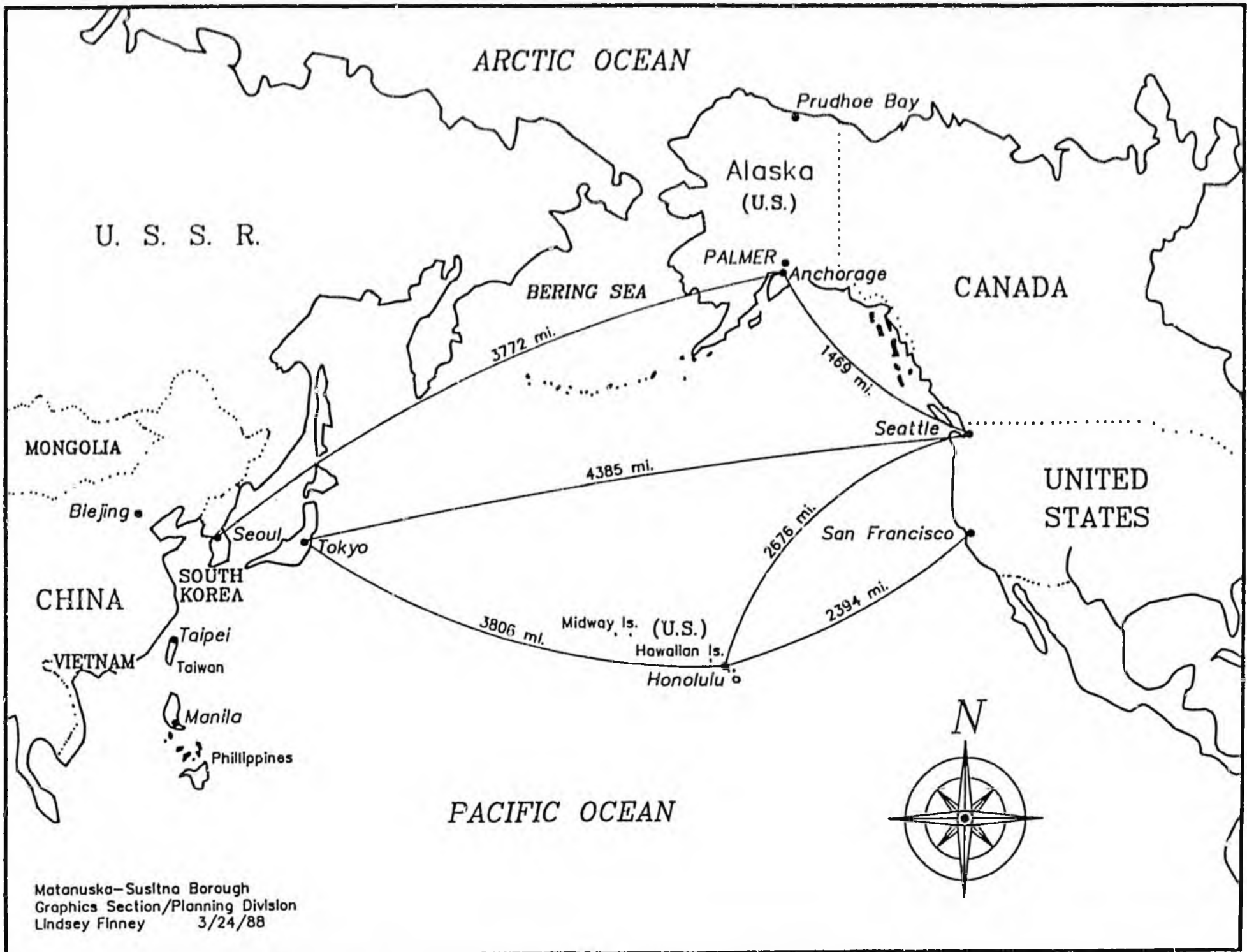
Long Term: 185 full-time, year round new jobs

Likelihood of Imported Labor: Very Minimal

OPERATING AND MAINTENANCE COSTS:

All operating, maintenance and reclamation costs will be borne by the private sector developer, Idemitsu Kosan, Ltd.





Matanuska-Susitna Borough
 Graphics Section/Planning Division
 Lindsey Finney 3/24/88