# ALASKA DEPARTMENT OF FISH AND GAME JUNEAU, ALASKA

STATE OF ALASKA
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DEPARTMENT OF FISH AND GAME James W. Brooks, Commissioner

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# REPORT OF 1974, 1975 AND 1976 SURVEY-INVENTORY ACTIVITIESLAND EVALUATION AND GAMF LABORATORY

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Volume XIII

Project Progress Report

Federal Aid in Wildlife Restoration

Projects W-17-6, W-17-7 and W-17-8, Jobs 20 and 21

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(Printed June 1976)

### JOB PROGRESS REPORT

State:

Alaska

Project Nos:

W-17-6, W-17-7 and W-17-8

Project Title: Land Evaluation

Section:

Lands (Region II and III)

Job Nos:

20 and 21

Period Covered:

January 1, 1974 to June 30, 1976

The Lands Section's activities for the last half of project year 1974 and project years 1975 and 1976 are presented. There is extensive discussion of the Joint Federal-State Land Use Planning Commission and interrelationships with federal, state, local and private interests.

### PROGRESS REPORT

### LANDS ACTIVITIES REGIONS II & III

# Objectives:

The major objectives of the Habitat Protection Section (HPS) as relates to Lands Activities are:

- 1. To insure wildlife values are considered in all development projects, land use and classification activities which impact wildlife habitats.
- 2. To participate in land use planning efforts of other agencies.
- 3. To delineate important habitat areas for legislative designation as refuges, critical habitats or sanctuaries.
- 4. To identify access routes to important public wildlife use areas.

### Procedures:

The Section accomplishes its objectives by:

- Compiling biological data for synthesis into state, federal and local agency planning and classification systems.
- 2. Disseminating project proposals to appropriate area staff and incorporating their responses into habitat protection stipulations.
- 3. Maintaining close liaison with all land use or managing entities such as the Bureau of Land Management, U.S. Forest Service, U.S. Fish & Wildlife Service, National Marine Fisheries Service, Army Corps of Engineers, National Park Service, Alaska Department of Natural Resources, Alaska Department of Environmental Conservation, local governments and Native corporations in order to:
  - a. Evaluate state, federal, local and private land classifications, sales, timber harvest and material sales to insure consideration of wildlife habitat values.
  - b. Review proposed seismic, drilling, water use, mining and other permits to assure consideration of wildlife habitat values.
  - c. Review and/or develop environmental impact statements in accordance with the National Environmental Policy Act of 1969 (PL 91-190).
- 4. Maintaining close liaison with major land users such as the Alaska Miners Association, conservation organizations, major industries, etc.
- 5. Compiling necessary information as requested by the divisions of the Department and participating in their programs whenever practicable.

# Project Activities

During this report period (January 1, 1974 through December 31, 1975) the Habitat Protection Section continued to be the branch of the Department with the highest rate of turnover in personnel. On July 1, 1975 two additional Lands positions were created in Region II. The Lands Coordinator began specializing on refuges, sanctuaries and critical habitats. One of the new positions is a Planning Coordinator who works with state, federal or local planning agencies providing them wildlife habitat information for their planning and classification activities. The other new position is to develop cooperative agreements with Native corporations as well as maintain and update existing cooperative agreements with other agencies.

# Alaska Joint State/Federal Land Use Planning Commission (L.U.P.C.)

Coordination work with the LUPC continued to heavily involve the Region II Lands Coordinator for the first half of 1974. In July of '74 the LUPC created a Habitat Biologist position to do the work formerly done by our Lands Coordinator thus relieving the Department from such heavy involvement. Even so, we still had considerable participation in LUPC activities through 1974 and 1975.

Early in '74 the LUPC was analyzing the Kenai National Moose Range pursuant to a provision in the Alaska Native Claims Settlement Act (ANCSA) which directed the federal government to evaluate all existing withdrawals to assure they were still serving their established purpose. The Kenai Borough and Cook Inlet Native Association asked the LUPC to do this for the Moose Range hoping some lands would be found in excess and made available for selection. The LUPC concluded all lands are still necessary to the range.

In mid 1974 the LUPC's staff began developing a statewide framework plan. Two approaches were used, the traditional and an alternate futures scheme. The former analyzes resources and their potential for development as tempered by economic realities. The latter considers various alternate futures, e.g. maximum rapid growth vs. no growth vs. something in between, then a decision making body picks one as a goal. Our input was to the traditional approach since the alternate futures proved unrealistic in the rapidly changing economic environment of Alaska.

At the request of the National Park Service, the LUPC attempted to develop an overall land use plan for the Mt. McKinley area including the present park, proposed extensions and an area of environmental concern adjoining the proposed south extension. Our input consisted of preparing overlays illustrating the distribution of existing wildlife resources, their potential for development and an economic analysis of their existing and potential uses. Our analysis showed that potentially, at least, the wildlife resources can compete economically with any other resource use in the area.

### Federal Agencies

### Bureau of Land Management (BLM)

In accordance with the Memorandum of Understanding established between our agencies during 1968, each agency continued to notify the other of major plans in order to avoid conflict between agency objectives, Annual meetings at the district-region level were conducted to assure adequate communication and high rapport between agencies. For instance, at the Region III 1975 meeting, the status of the newly revised agreement between our agencies, cooperative management plans regarding the Washington Creek burn in the Fairbanks area, endangered species and critical habitat area designations, cooperative youth conservation corps projects, cooperative North Slope haul road plans, off-road vehicle regulations and planning, cooperative review of development projects, the role of BLM as resouce manager on military withdrawal areas, function of the Habitat Protection Section within the Department of Fish and Game were topics of discussion.

BLM hosted a wildlife workshop at Anchorage to discuss items such as the the above on a statewide basis. There had been a continuing dialogue regarding the Sikes Act (Public Law 93-452) but the Act and its ramifications, and the proposed supplement to the master Memorandum of Understanding between our agencies addressing implementation of the Sikes Act, were discussed in detail.

In general, both agencies are profiting from the increased coordination and cooperation. This situation is most easily observed in the BLM land actions which reflect department concerns. The Section also played a major role in the review process of draft environmental impact statements prepared by the Department of the Interior such as the voluminous "The Alaska Natural Gas Transportation System" and "Proposed Surface Management of Federally Owned Coal Resources and Coal Mining Operating Regulations."

The Alaska Native Claims Settlement Act (Public Law 92-203) of December 18, 1971, provided for the transfer of 44 million acres of public domain to the private ownership of Native village and regional corporations. Upon transfer of these public lands to private holdings, public access will be barred unless reserved by a specific easement. Section 17(b) of the Act authorizes and directs the Secretary of the Interior to reserve necessary public easements across transferred lands. With the aid of department personnel throughout the state, the Section has submitted to BLM requests to reserve these public easements to safeguard sportsmen's access to known hunting and fishing areas. During the report period approximately 2500 easement nominations were submitted pertaining to 218 village selections, four regional selections and four Native reserves. The easement identification process is a massive undertaking but is the only procedure available to retain some public access to favored recreation areas.

On BLM's recommendation we filed a request for patent to the Bear Lake Airstrip including the extensions to the two runways. We also recommended to BLM that they include a 300 foot buffer zone for bald eagles along the Chilkat River in the Klukwan Indian Reservation land patent.

# Bureau of Outdoor Recreation (BOR)

The Bureau of Outdoor Recreation is one of four agencies authorized by Congess to study and establish recommendations for d-2 land withdrawals as authorized by Section 17(d)(2) of the previously cited Alaska Native Claims Settlement Act. BOR established 31 priority rivers in Alaska to study for possible inclusion in the National Wild & Scenic Rivers Program. The Habitat Protection Section continued the coordination of the department's involvement in the actual field review and document preparation.

# U.S. Army

Along with the Anchorage area Game Biologist we assisted the Fort Richardson Resource Section in a project to rehabilitate approximately 120 acres of moose winter range.

# Army Corps of Engineers (ACE)

Actions in or about a navigable waterway require a Section 10 permit authorized by the 1899 River & Harbor Act from the U.S. Corps of Engineers. The Section continued coordination of comments from the various divisions of our department regarding the environmental impact of specific proposals. The proposed Section 404 dredge and fill regulations by the Corps will undoubtedly increase contact between agencies. Also, we will encourage mutual field review sessions of actions such as gold dredging operations affecting a floodplain of a major waterway.

We also coordinated the review of draft EIS's prepared by the Corps for various projects affecting navigable waters such as the "Lost River Mining Project" on the Seward Peninsula and the "offshore Oil & Gas Development, the Alaskan Arctic Coast."

Major involvement in the ongoing construction of the Chena River Flood Control Project in the Fairbanks vicinity continued.

# U.S. Coast Guard (USCG)

To reduce impact to fish and game values the Section continued to review Public Notices issued by the Coast Guard regarding proposed bridge crossings, groins, etc. affecting navigable waterways. We also reviewed a draft EIS concerning the construction of communication facilities at Tok and other areas of Alaska entitled, "Gulf of Alaska, Loran-C Chain."

# Environmental Protection Agency (EPA)

The interagency approach was adopted to review the recent resurgence in gold mining activities stimulated by the increased price of gold. Considerable debate occurred regarding the EPA prepared draft EIS entitled, "The Energy Company of Alaska Topping Plant, North Pole, Alaska." Sporadic review of EPA draft discharge permits occurred and efforts to assure solicitation of department concerns were initiated.

### U.S. Fish & Wildlife Service (F&WS) and National Marine Fisheries Service (NMFS)

The subject agencies play a major role in the review of proposals that require federal authorization and/or environmental impact statement preparation. Because of the similarity in goals, the Section continued its active coordination with these agencies.

This Section solicited comments from the managing divisions of the Department on the Aleutian Islands' Refuge Wilderness Study and prepared the response to U.S. Fish & Wildlife Service.

# U.S. Forest Service (USFS)

The enactment of ANCSA designated the Forest Service as one of four management agencies that could acquire new reserves in Alaska. During 1974, the Section was involved in review of these and other proposed withdrawals as established by Section 17(d)(2) of the Act.

We also processed the review of the Chugach National Forest Land Use Plan, Barry Arm Timber Sale and general off-road vehicle (ORV) use plan. We provided furbearer population and harvest data in the Prince William Sound area. We participated in the annual ADF&G-Chugach Forest coordination meeting.

# National Parks Service (NPS)

The Section reviewed and responded to the Katmai National Monument Wilderness Proposal.

### U.S. Navy

The United States Navy is charged by Congress to explore the Naval Petroleum Reserve Number Four (NPR-4) located in Northwest Alaska, to establish its potential for oil and gas development. Considerable effort was expended attempting to develop a cooperative relationship with the Navy. Although some success was attained, the Navy was extremely reluctant to adopt policies and procedures that have been proven effective on adjacent oil and gas lands owned by the State and Federal governments.

During the report period several thousand miles of geophysical program utilizing high explosive charges were conducted during the winter months. Although these programs were generally accomplished in accordance with stipulations affecting adjacent state and federal lands, the Navy would not observe the request by this and other agencies to prohibit their contractor from detonating an explosive charge closer than 1/4 mile from waterbodies important to overwintering fishes. In fact, the Navy conducted a geophysical program over the objection of this department in Teshekpuk Lake which is known to overwinter a large population of fish.

After a field investigation in March 1974, we advised the Navy of some potential problems regarding an oil-gas well in the Cape Halkett area. We were assured our concerns were not valid; however, our foresight was later borne out. The well site was located in a shallow marsh, petroleum products leaked to the surrounding area, summer use of surface vehicles caused extensive damage to the surrounding tundra, etc. The department is extremely concerned that such activities during the summer (thaw) months could be extremely injurious to the abundant shorebird and waterfowl populations in the area. Due to inadequate staffing, we were unfortunately unable to monitor the Navy's activities as closely as desired. Upon threat of a law suit by the State, the Navy was only cooperative to a limited degree. Although exploration activities could be far more destructive, it would take little effort by the Navy to render their program totally acceptable to State and Federal agencies.

### State Agencies

# Department of Environmental Conservation (DEC)

As previously mentioned, an interagency team composed of state and federal agency representatives assessed the gold mining activities in Interior Alaska. The Department of Environmental Conservation's primary interest is the administration of the State Water Quality Standards (18 AAC 70). This brought us in close contact with this agency as our mutual objective is to protect the aquatic environment.

# Department of Highways (ADH)

The Alaska Department of Highways continued approaching this department with proposed projects when in the conceptual stage. This procedure has proven extremely beneficial to all involved as it avoids conflicts which is a savings in both time and money for all concerned.

ADH was the lead state agency in the monitoring of construction of the North Slope Haul Road from the Yukon River. Their primary function was to assure the Alyeska Pipeline Service Company constructed the road in accordance with secondary highway standards. Prior to the establishment of the Joint Fish & Wildlife Advisory Team (JFWAT), the regional HPS staff handled all Alyeska generated requests. Regional staff was able to effect a major change in the proposed alignment of the Haul Road in the vicinity of the Sagwon Bluffs on the Sagavanirktok River. The relocation was necessary to reduce the impact of the road on raptors nesting on the Sagwon Bluffs. Bluff areas in the Arctic are limited and therefore support incredible densities of aeries. Two active Peregrine falcon (Peregrinus anatum) aeries were observed on the Sagwon Bluffs. The area was later submitted to the Alaska Legislature for Classification as critical habitat but action is pending.

We assessed a potential gravel removal project from the barrier bars of China Poot Bay. We, along with other agencies, opposed the project and Highways withdrew their Corps' permit application.

The Wood Canyon alternate to the Copper River Highway was reviewed and comments submitted.

# Department of Natural Resources (DNR)

As previously mentioned, one of our new positions is the Department's liaison to DNR's Planning & Research Section which is responsible for the State's Land Use Planning & Classification System. Our efforts should gain a more meaningful habitat classification system and greater tenure for wildlife values.

# Alaska Division of Lands (ADL)

Needless to say the Habitat Protection Section's effort dictates the development and maintenance of a harmonious working relationship with the State's land managing agency. The coordination and rapport has increased to the point that this department reviews almost every proposed ADL action ranging from land planning, land classification, land disposal, timber sales, material

sales, water use allocations, etc. The department also reviews development plans for mining, oil and gas exploration, etc. prior to ADL final action. Stipulations to avoid or minimize impact to fish and game values are always incorporated in authorizations issued by the Minerals Section of ADL.

Ironically we have not received the same cooperation from the Water Resouces Section of the ADL. Water Resources will often issue a material sale authorization subject to solicitation of this department's statute stipulations; however, the applicant often choses not to solicit same. Similarly, Water Resources will overappropriate use of water from important watercourses or fail to issue water use authorizations. An example of the latter was encountered in the Prudhoe Bay vicinity of the North Slope during the spring of 1975. Since there is no flow of water beneath the ice surface during the late winter months, the water extracted from the deep pools important to overwintering fish in the vicinity is not replenished. Extensive areas were dewatered during the winter of 1974-1975. At our insistence the Water Resources Section issued water use allocations for the following winter. However, they would not make their allocations subject to immediate cancellation so this department concurrently issued Alaska Statutes, Title 16 authorizations to protect fishery values. Our objective is to eventually discourage use of water from the major rivers during the critical winter months (January through May). Several approaches to develop dependable sources of water were undertaken by the oil industry such as the deepening of shallow upland pothole lakes.

The use of jetted (buried) high explosive charges in the Beaufort Sea to obtain geophysical data during the winter months has been of extreme concern to this department for several years. Explosive charges are known to be detrimental to fishes and ringed seals in the vicinity. Seismic activity is also a known disturbance to denning polar bear. We encouraged the Department of Natural Resources to issue a notice prohibiting future use of high explosive charges.

In preparation for a proposed oil and gas lease sale adjacent to state lands in the Beaufort Sea, the Division of Lands hosted an interagency group which authored the proposed lease agreements. This is a marked deviation from past activities where leases were issued over the objection or without solicitation of other agency views. Because of the reduction in conflict and possibly litigation, this current planning process will undoubtedly prove mutually beneficial to the State of Alaska and the oil and gas leaseholders.

As previously mentioned, prior to the establishment of the Joint Fish & Wildlife Advisory Team to handle requests generated by the Alyeska Pipeline Service Company, these demands were handled by the existing regional staffs. Due to limited personnel (one biologist) and other responsibilities, this proved an extreme hardship. Even after the establishment of JFWAT the demands largely generated by service industries to the pipeline increased many fold. For example, the total numbers of state and federal solicitations in Region III completed over the last five years were as follows: 1971-59, 1972-83, 1973-122, 1974-493, and 1975-454.

A multi-disciplinary land use planning team was established in 1974 to develop a workable management plan in the Delta Junction area. The team is comprised of representatives from various state and federal agencies, local government and special interest groups. The first stage, completed in May 1975, was the preparation of a fish and game resource inventory for the area. Planning goals and objectives were completed in October 1975. At the end of the report period resource priority areas and land use recommendations for these

areas were being developed. Recommendations will likely include the establishment of a game management area (primarily for bison), a wildlife refuge on Clearwater Lake, designated rights-of-way to hunting and fishing areas, and recommendations for classification by the legislature of a number of sheep mineral licks as critical habitat areas and Peregrine falcon aerie locations as endangered species habitat. The team also recommended ADL develop an administrative wildlife habitat land clasification.

The Delta area planning effort is the second major land use planning project undertaken on state lands in Alaska. The previous land planning effort on state lands occurred in the Haines area in Southeast Alaska. As the State of Alaska continues to complete its selection of lands, planning efforts such as these will provide a forum for consideration of resource values in land management decisions. Most importantly it will provide an opportunity for proper consideration of wildlife populations and habitat prior to commitment of the land resource to another use.

# Division of Oil & Gas

We reviewed and commented on several proposed oil and gas lease sales, one of which, the 29th sale in Kachemak Bay, achieved considerable notoriety. We had considerable input in the presale phase and pointed out the extensive marine resources and their value to the Kachemak Bay economy. The Department's position was to emphasize the serious need to develop the petroleum resource using the most stringent controls and safest technology available, rather than to oppose the sale. Local opposition, particularly commercial fishermen, eventually challenged the sale because no public hearing was held. A Kachemak Bay Defense Fund was formed and a suit was filed to negate the sale. The Lower Court rejected the suit and the case is on appeal to the State Supreme Court.

# Division of Parks

We processed the Department's response on a land use plan for the Caines Head Area of Resurrection Bay and the draft Denali State Park management plan.

### Department of Law

Assistance was provided the Attorney General's office on a case involving the illegal blocking of access to the Granite Creek Trail.

### Local Government

### Anchorage Municipality

A plan to make the Westchester Lagoon a waterfowl sanctuary and enhance the nesting habitat was submitted to the Municipality of Anchorage Assembly who adopted it. A series of berms and islands have been constructed. When completed, the project will have a covered viewing and photography area and interpretive signs to aid in bird identification.

# Fairbanks North Star Borough

Review of proposed zoning and pollution control ordinances and assisting the recreation planning staff continued.

# North Slope Borough

Communication with this massive borough commenced.

### Others

The sewer plans for the cities of Girdwood and Valdez were reviewed.

# General & Multi-Agency Activities

### Critical Habitats

On critical habitat related matters, suggested areas were reviewed, written up in a standard form, land status checked, legal descriptions determined and the areas delineated on 1:63,000 or 1:250,000 scale maps. Also, some time was spent reworking the critical habitat policy statement to be presented at the Habitat Protection Section's meeting in mid-March 1976. Part of the policy will be to solicit from all biologists, areas of critical concerns from a fish and game standpoint, catalogue them, and then do something to protect the areas either through legislative action or inter-agency cooperation.

Critical Habitat legislative summaries for the 1976 nominations were drafted for the Arctic caribou herd calving grounds, Kamishak-Chinita Bays, Delta and Toklat rivers fall chum salmon spawning grounds, Howe Island snow goose colony, Kruzof Island clam beaches, Orca Inlet and Copper River Delta tidelands. These summaries identified the location, the importance of the habitat to the wildlife resource, the national and state significance and legal description of the land requested.

### Refuges

In 1974, communication with the Alaska Waterfowl Association (AWA) concerning their position on potential State waterfowl refuges resulted in legislative proposals for the establishment of the 22,000 acre Palmer Hayflats and 13,000 acre Goose Bay State Game Refuges. The bills passed both houses and were signed by the Governor on May 29, 1975.

During 1975, several meetings were held with the Game Division and AWA. The consensus was the Susitna Flats, Trading Bay, Redoubt Bay, Yakutat and Dry Bay areas and the Mendenhall Flats were most appropriate for refuge nomination.

The Delta Junction area was visited and seriously considered for refuge nomination. However, the Region III Habitat Protection Section staff had already initiated an intensive land use planning program with the intention of obtaining the same goals sought under refuge status.

Many people, including some department staff members, associate the word "refuge" with non-hunting. It was felt that protecting the best hunting and waterfowl marsh areas through the legislative refuge classification system might actually be jeopardizing the hunting use. To correct this situation, a legislative bill proposing a Fish & Wildlife Management Area Statute Classification was drafted and sent to the department's entire field staff for comments and suggestions.

A local wetlands area called the Point Woronsof Marsh, adjacent and north of the Potter Point State Game Refuge, should have been included within the Potter Refuge. Efforts were made to obtain approximately 600 acres of this waterfowl habitat through an interagency land management transfer from ADL. Since this marsh is located adjacent to the Anchorage International Airport, the State Director of Aviation felt the transfer of the land to our Department would increase the hazards of bird/aircraft collisions. The matter is in abeyance until a proposed north-south runway is either built or dropped.

The Chugach Electric Association, a local power company, has been pressing to construct a high voltage overhead power line through the middle of the Palmer Hayflats State Game Refuge. Their draft environmental impact statement and project proposal were received and reviewed. The proposed marsh crossing would create a serious conflict with any future waterfowl habitat development, add an additional waterfowl flight hazard, reduce the harvest and hunter success and produce a permanent eye-sore. We contacted several refuge managers in California to obtain additional information identifying the adverse effects of power lines on waterfowl. They sent photographs of power lines near marsh areas, and suggested the power line should be kept out of any waterfowl production or hunting areas. Obviously we opposed the proposed alignment.

Another problem concerning the Palmer Hayflats involved Coffee Point. There are about six to eight sections of land included in the Palmer Hayflats that were selected under the Mental Health Section of the Statehood Act and never tentatively approved for patent, nor patented. If the State has overdrawn Mental Health selections, the land would be available for selection by Eklutna Village. Because this land is within Eklutna Village's core township, ANSCA requires they select it. In this event, we have identified easements to safeguard sportsmen's access.

## Fairbanks Wildlife Management Area

This Section continued to administer the 1700 acre Fairbanks Wildlife Management Area (FWMS) essentially located in the heart of the City of Fairbanks. An advisory committee composed of interested persons and representatives of the various user groups was established. The purpose of the group is to encourage input from the community to reduce conflict, provide for maximum use of the area, and assist the department in accomplishing its management objectives for the area. The Section oversaw the acquistion and installation of more than 1900 feet of split-rail cedar fencing and other necessary administrative efforts until late in the calendar 1974 year when the Division of Game of this Department assumed administration of the FWMA.

# Others

Other general activities were many and varied. We supplied information on the Department's critical habitat legislation to Alberta, Canada. We

reviewed the department's proposed statewide waterfowl plan. The Alaska Garden Club was given background specifics on the Potter Marsh land acquisition bill. An alarm was received concerning a possible closure of the Burma Road near Palmer; a follow-up showed it was still open, requiring no injunctions.

We notified attorneys for Pacific Alaska LNG Co. of probable dock construction-salmon interactions, approving of both a time extension on the Ninilchik harbor dredging and temporary beaching of 15 barges near Jackson Point in Port Valdez.

We reviewed the City of Homer's land use plan for the Homer Spit.

During 1975 we assisted in the survey of breeding waterfowl of the Upper Cook Inlet marshes. This survey showed these habitats may be twice as valuable as previously thought.

We worked with the State Forester to delineate let-burn areas (where fire would result in improved game habitat a few years after burning) on 20 million acres soon to be patented to the State. This could result in a fire suppression cost savings of \$.7 million to \$1.7 million for the State.

A thorough issue-analysis of the Habitat Protection Section's authorities and responsibilities was undertaken (Appendix I). Some of the findings have already been implemented, others need further study.

The Granite Creek Ranch (near Sutton) blocked an important access route only two days before the 1975 moose season opened. This same group closed the trail the previous year. At that time we persuaded them to open a trail through another part of their land, thus securing public access for that season. Since they closed it again this year, we now have the Attorney General's office working on the problem. Hopefully we will gain permanent access by the 1976 fall hunting season.

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### APPENDIX I

### RE-EVALUATION OF THE LANDS SECTION

The title <u>Lands Section</u> probably referred to that portion of Game Division's staff, Ronald J. Somerville, then Joseph R. Blum who in those days were the first two permanent employees concerned with and who initiated habitat considerations for the Department of Fish and Game. Since then, the Section has gone through many changes and lots of people. The following analysis, at least in the Southcentral Region, should be of help as well as explain the situation as it exists today:

First of all the Lands Section is now referred to as the Habitat Protection Section and in the Southcentral Region is comprised of one Regional Supervisor, one Lands Coordinator, one Access Project Leader, one Projects Review Coordinator and one Clerk Typist III.

The addition of the word Protection to our Section title resulted from the Habitat Section's FY 75 Issue Analysis evaluation by Jeff Morrison, BRC, Department of Administration, and from, basically, statute mandates of (a) AS 16.05.070, Protection of anadromous fish streams; (b) AS 16.20.060, protection of State game refuges and, (c) AS 16.20.260, delineation and protection of critical fish and wildlife habitat.

There are two other groups (Kachemak Bay and Pipeline) working in the Habitat Section which at this time I don't believe is related to the subject and won't be discussed. So to get on with the revised Lands Section analysis, several additional Title 16 statutes, Mike Smith's "FY 75 Issue Analysis," some of Game Division's policy statements, our present activities and concerns are addressed.

Since the passage of the Alaska Native Claims Settlement Act which included authority for the Department of the Interior's d-1, d-2 agency proposals, the entire land ownership/management situation in Alaska will and has drastically changed. The land picture will change from one where millions of acres were at the public's disposal for a multitude of summer and winter public recreational uses with fire dependent habitat and wildlife, in many cases, to be left to their own ways to compliment or detract from each other.

The private ownership of over 44 million acres of land, the Federal ownership of over 207 million acres could, on an annual basis, shift emphasis over and increase the public (resident & non-resident) utilization and demand of the State's wildlife resources existing naturally on the 80-103 million acres of State land.

At this point in time, who can say what type of use will be allowed on private and federal lands? However, we, as the Fish and Wildlife Habitat Protection Section of the Alaska Department of Fish and Game can obviously, historically and presently, see the amount of base wildlife habitat land dwindle as it has in many other parts of the United States.

Nearly all of the other states have gone to land acquisition programs to maintain and/or increase wildlife populations through habitat enhancement, development and rehabilitation.

If you consider the trend in total big/small game harvest and the regulations governing season and bag limits for the last 10 years you will realize that the opportunity to hunt and the sizes of bag limits have seriously been reduced.

Since a majority of our salaries and programs are PR funded and derived from basically the sportsman, I think most people would agree that we have or should have a significant responsibility to the people supporting our existence.

Ask yourself a few questions, i.e., what has the department provided the hunter that wasn't already here? Have we been able to maintain or increase the supply of wildlife, the size of bag limits or the opportunity to hunt? Have we been able to avoid wildlife population "cyclic" ups and downs? Have we provided what the public wants? Can the answers be anything but generally no to these questions? What has been done to reverse this situation?

Something in addition to the species management plans can be done to reverse this trend and I feel the Habitat Protection Section can contribute a significant amount in assisting the Department and the Game Division in doing so.

I hope to point out here that not only does the Habitat Protection Section have a responsibility in assisting the management divisions, it has explicit and implicit constitutional and statutory responsibilities to itself [the department and section], the wildlife resource and to the people who fund our existence.

In 1971 the State Legislature of Alaska created the Division of Fisheries Rehabilitation, Enhancement and Development. The Statute Section's AS 16.05.090 and AS 16.05.092 establishes a precedent whereby the responsibilities for rehabilitation, enhancement and development have been separated from the responsibilities of research, management (Survey & Inventory) and the commercial aspects previously associated with the divisions of Sport Fish and Commercial Fisheries.

There now exists a similar need in identifying and separating the responsibilities for wildlife habitat rehabilitation, enhancement and development from the overall statewide wildlife research and management (S&I) programs within our Department (Game Division). Don't misunderstand this statement; the responsibility for wildlife research, Survey and Inventory of wildlife populations, conducting controlled hunts, analysis of biological data for purposes of properly managing the comsumptive and nonconsumptive use, and regulation recommendations to the Board of Fish and Game is still the very heart of the Game Division's responsibilities. What I am attempting to point out is that the present and future wildlife research, survey and inventory workload is so immense that habitat acquisition, its rehabilitation, enhancement and development, habitat identification and classification aspects have been, but should not be neglected; and that the Habitat Section with proper funding is the logical State organization to take on the responsibilities within the Department.

Within the Alaska Game Management Policies publication written by the Division of Game, under the species policy statement as well as the general policy statement, reference is made to the "Department recognizing the importance of maintaining suitable habitat for wildlife species." However, the policy statements only advocates the development and implementation of comprehensive resource use planning and not an intensive land acquisition, rehabilitation, enhancement

or development program. In addition, under the moose, caribou, deer, sheep, goat, brown bear, black bear, wolf, wolverine, sea lion, sea otter, fur-bearers, small game and waterfowl policy statements, reference is made to habitat manipulation i.e., "A few areas may be reserved for scientific studies where (see above species) populations and/or habitat can be manipulated." (emphasis added.)

The Habitat Protection Section, to the best of my knowledge, had little or no input into the drafting of the Department's Game Management Policies. The department's stand on enhancement and rehabilitation is weak and not consistent with our constitutional or statutory mandates as will be pointed out later.

One of the very few positive statements regarding rehabilitation, enhancement and development which exists in the Department's Game Management Policies appears under the moose policy statement (last paragraph p. 6), it is as follows: "Protection and manipulation of habitat are of foremost importance in moose management. Much of the most productive moose range is in early post-disturbance successional stages. Therefore, disturbances such as fire, logging in small blocks, and selective land clearing will be encouraged where moose production is the best use of the land. When possible the Department will engage in habitat manipulation by the use of fire, mechanical means or other methods." No mention was made of land control. This is one of the situations where the Habitat Protection Section can take the initiative, and assist the Game Division and reverse the downward trend our resource and hunting is in.

In areas where the existence of moose populations or other wildlife species are endangered, because of maturing vegetation or habitat changes, the protection, rehabilitation and enhancement of the habitat should also be the responsibility of the Habitat Section.

Authority explicit in:

Article 4. Endangered Species. Sec. 16.20.180. Declaration of purpose.

The legislature recognizes that, due to growth and development, certain species or subspecies of fish and wildlife are now and may in the future be threatened with extinction. The purpose of Sections 180-210 of this chapter is to establish a program for their continued conservation, protection, restoration and propagation. (Section 1 ch 115 SLA 1971).

and:

Sec. 16.20.185. Protection of habitat. On land under their respective jurisdictions, the <u>commissioner of fish and game</u> and the commissioner of natural resources <u>shall take</u> measures to preserve the natural habitat of species or subspecies of fish and wildlife that are recognized as threatened with extinction. (Section 1 ch 115 SLA 1971).

and implicit in the previously mentioned underlined moose policy statements.

The Lands Section has recently introduced a program designed to identify key wildlife habitat and hunting areas in Southcentral Alaska for the purposes of public recognition, ADL's land classification and protection, done under our authority implicit in AS 16.05.020(2) powers of the Commissioner. The Lands Section has also had direct input in the drafting of two recently passed refuges, the Goose Bay and Palmer Hay Flats wildlife refuges, authority to do so implicit in paragraph two (2) under the Department's waterfowl policy statement, page 6, and AS 16.05.020(2) powers of the Commissioner and Article 1 AS 16.20.020 protection and preservation of wildlife habitat.

Additional Habitat Protection responsibilities will materialize when monies are legislatively appropriated for the purchase of private lands within the Potter Point State Game Refuge, authority implicit in AS 16.050(2):

"Powers and duties of the Commissioner, through the appropriate State agency, acquire by gift, purchase or lease, or other lawful means, lands, buildings, water, rights-of-way, or other necessary or proper real or personal property when the acquisition is in the interest furthering an objective or purpose of the department and the state;" and (4) "accept money from any person under conditions requiring the use of the money for specific purposes in the furtherance of the protection, rehabilitation, propagation, preservation, or investigation of the fish and game resources of the State or in settlement of claims for damages to fish and game resources."

Additional Habitat Protection authority was identified by Mike Smith and Commissioner Wally Noerenberg; Smith in 1972, in a memo discussing the Section's budget, stated: "The Habitat Section has the unusual position in the Department in that it crosses all divisional lines and has the responsibility of representing the Department as opposed to a division or a section. [sic] Noerenberg, in a memorandum to the then Governor Egan regarding, again, the Habitat Section's budget, stated that in Land Use Planning "We are the fish and game experts," as well as "The Habitat BRU is the only unit in the state government specifically designed to evaluate, delineate and protect fish and game habitat..."

So to sum up the Habitat [Protection] Section's responsibilities, and authority, the following list is included:

# Habitat Protection [Enhancement, Development and Rehabilitation] Section

Department Management Policies, Commissioner's Opinions, Statutory Authority and the State Constitution Mandate defining the Habitat Section's Duties and Responsibilities.

### Statute Authority

- A. AS 16.05.020 FUNCTIONS OF THE COMMISSIONER (2) manage, protect, maintain, improve, and extend the fish, game and aquatic plant resource of the state in the interest of the economy and general well-being of the state;
- B. AS 16.05.050 POWERS AND DUTIES OF COMMISSIONER. The commissioner has, but not by way of limitation, the following powers and duties:

- (1) assist the United States Fish and Wildlife Service in the enforcement of federal laws and regulations pertaining to fish and game;
- (2) through the appropriate state agency, acquire by gift purchase, or lease, or other lawful means, lands, buildings, water rights-of-way, or other necessary or proper real or personal property when the acquisition is in the interest of furthering an objective or purpose of the department and the state;
- (3) <u>design and construct</u> hatcheries; pipe lines, rearing ponds fishway, <u>and other projects beneficial for the fish and game resources of the state;</u>
- (4) accept money from any person under conditions requiring the use of the money for specific purposes in the furtherance of the protection, rehabilitation, propagation, preservation, or investigation of the fish and game resources of the state or in settlement of claims for damages to fish or game resources;
- C. AS 16.05.090 ORGANIZATION OF THE DEPARTMENT. [The creation of the Habitat Protection Section.]
- D. AS 16.05.092 DUTIES OF DIVISION OF FISHERIES REHABILITATION, ENHANCEMENT, AND DEVELOPMENT. Note: The legislative mandate and recognition to separate the habitat responsibilities of rehabilitation, enhancement, and development from research, management and the commercial aspects of the Sport Fish and Commercial Fisheries responsibilities is implicit enough that similar action should be considered regarding the state's wildlife resource.
- E. AS 16.05.130 DIVERSION OF FUNDS PROHIBITED. No funds accruing to the state from sport fishing and hunting licenses or permit fees may be diverted to a purpose other than [for] the protection, propagation [enhancement, development], investigation, and restoration [enhancement, development] of sport fish and game resources and the expenses of administration of the sport fish and game divisions of the department.
- F. AS 16.05.150 ENFORCEMENT AUTHORITY. The following persons are peace officers of the state and they shall enforce this chapter:

  (1) an employee of the department authorized by the commissioner.
- G. AS 16.05.870 PROTECTION OF FISH AND GAME. [The protection of anadromous fish streams.]
- H. AS 16.20.020 STATE GAME REFUGES [Purpose]. The purpose of this chapter is to protect and preserve the natural habitat and game populations in certain designated areas of the state.
- I. Sec. 16.20.040 REGULATIONS. The board shall, under ch. 5 of this title, establish regulations governing the taking of game on state game refuges it considers advisable for conservation and protection [of game and habitat] purposes. (Sec. 4, ch 114 SLA 1960)

- J. Sec. 16.20.050 MULTIPLE LAND USE. Where the use, lease or disposal of real property in state game refuges created by sections 10-80 of this chapter is under the control or jurisdiction of the state, whether through federal permit or state ownership, the responsible state department or agency shall notify the commissioner of fish and game before initiating any use, lease or disposal of real property. The commissioner shall acknowledge receipt of notice by return mail. (Sec. 5, ch 114 SLA 1960)
- K. Sec. 16.20.060 SUBMISSION OF PLANS AND SPECIFICATIONS. If the commissioner so determines, he shall, in the letter of acknowledgment, require the person or governmental agency to submit full plans for the anticipated use, full plans and specifications of proposed construction work, complete plans and specifications for the proper protection of fish and game, and the approximate date when the construction or work is to commence, and shall require the person or governmental agency to obtain the written approval of the commissioner as to the sufficiency of the plans or specifications before construction is commenced. The commissioner shall abide by the principle which recognizes preferences among beneficial uses as more particularly set forth in art. VIII of the State constitution. (Sec. 5, ch 114 SLA 1960)
- L. AS 16.20.180 ENDANGERED SPECIES. Declaration of purpose. The legislature recognizes that, due to growth and development, certain species of fish and wildlife are now and may in the future be threatened with extinction. The purpose of sections 180-210 of this chapter is to establish a program for their continued conservation, protection, restoration and propagation. (Sec. 1 ch 115 SLA 1971)
- M. Sec. 16.20.185 PROTECTION OF HABITAT. On land under their respective jursidictions, the commissioner of fish and game and the commissioner of natural resources shall take measures to preserve the natural habitat of species or subspecies of fish and wildlife that are recognized as threatened with extinction. (Sec. 1, ch 115 SLA 1971)

# Department Game Management Policies

- A. General Policy Statement: (1) The Department recognizes the singular importance of maintaining suitable habitat for all wildlife species..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- B. Moose Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for moose..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."; (3) "Protection and manipulation of habitat are of foremost importance in moose management. Much of the most productive moose range is in early post-disturbance successional stages. Therefore, disturbances such as fire, logging in small blocks, and selective land clearing will be encouraged where moose production is the best use of the land. When possible the Department will engage in habitat manipulation by the use of fire, mechanical means, or other methods." (4) "Some moose populations depend upon climax sub-alpine, successional riparian, or marshy lowland plant communities for vital activities such as mating, calving and feeding. These critical areas will be recognized, designated and protected."

- C. Caribou Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for caribou..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- D. <u>Elk Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for elk..."; (2) Habitat protection and manipulation are important to elk management...therefore disturbances such as fire, logging in small blocks, and selective land clearing will be encouraged where elk production is the best use of the land."
- E. <u>Deer Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for deer..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- F. <u>Dall Sheep Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for dall sheep..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- G. Mountain Goat Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for mountain goat..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- H. Bison Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for bison...."
- I. <u>Musk Ox Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for Musk Ox...."
- J. <u>Brown/Grizzly Bear Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for Brown/Grizzly Bear..."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- K. <u>Polar Bear Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for polar bear...."
- L. Black Bear Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for black bear..." (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- M. <u>Wolf Policy Statement</u>: (1) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- N. <u>Wolverine Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for wolverine...."; (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- O. <u>Seal Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for seal...."

- P. <u>Sea Lion Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for sea lion...;" (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- Q. Sea Otter Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for sea otter...;" (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- R. <u>Walrus Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for walrus...."
- S. <u>Furbearer Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for furbearers...;" (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- T. Small Game Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for small game...;" (2) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated."
- U. Raptor Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for raptors...."
- V. Waterfowl Policy Statement: (1) "The Department recognizes the singular importance of maintaining suitable habitat for waterfowl...;" (2) "The Department will protect key waterfowl areas to assure future waterfowl-related recreational opportunities;" (3) "A few areas may be reserved for scientific studies where game populations and/or habitat can be manipulated;" (4) "The Department recognizes the need to provide access for and control of waterfowl hunters and observers;" (5) "In areas where waterfowl are managed for maximum recreational opportunity access may take the form of roads, airstrips, trails and boat landings."
- W. <u>Unclassified Game Policy Statement</u>: (1) "The Department recognizes the singular importance of maintaining suitable habitat for unclassified game."

# Commissioner and Chief of Habitat Statements

- A. Mike Smith, 1972 memorandum discussing Section budget: "The Habitat Section has the unusual position in the department in that it crosses all divisional lines and has the responsibility of representing the Department as opposed to a division or a section." [sic]
- B. Wally Noerenberg, Commissioner, 1971, in a memorandum to the then Governor William Egan discussing the habitat's sections budget stated that in Land Use Planning: "We are the fish and game experts..." as well as: "The Habitat BRU is the only unit in the state government specifically designed to evaluate, delineate and protect fish and game habitat...."

# State Constitution Mandate: Article VIII - Natural Resources

Statement Of Policy SECTION 1. It is the policy of the State to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest.

General Authority SECTION 2. The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people.

Common Use

SECTION 3. Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.

Sustained Use

SECTION 4. Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed and maintained on the sustained yield principle, subject to preferences among beneficial uses.

Water Rights

SECTION 13. All surface and subsurface waters reserved to the people for common use, except mineral and medicinal waters, are subject to appropriation. Priority of appropriation shall give prior right. Except for public water supply, an appropriation of water shall be limited to stated purposes and subject to preferences among beneficial uses, concurrent or otherwise, as prescribed by law, and to the general reservation of fish and wildlife.

Now, therefore, the Land Section study [programs] are revised to include our statutory responsibilities and present activities.

### Lands Section -- Habitat Protection Section

(Programs - Five Parts)
Program I

- I. Name of Study: Land Evaluation
  - A. <u>Objective</u>: To assure that key wildlife habitat areas are identified and protected through the orderly selection, land classification, purchase, and/or establishment of cooperative agreements with other land managing agencies.
  - B. <u>Justification</u>: In Alaska a major portion of the key wildlife habitat areas required for the animal population's yearly survival have not been specifically identified classified nor have the wildlife or public [economical] values been enumerated.

In order to secure habitat for perpetual wildlife use and public use of the wildlife resource the value of wildlife to the public, the magnitude of the wildlife resource in the particular area delineated as well as its public/local government support must be identified.

Under the authority of AS 16.05.020.(2); 16.05.050.(1-4); 16.05.130.; 16.05.090.; 16.20.020,040,050,060; 16.20.180., and 16.20.185 the personnel in the Habitat [Protection] Section act on behalf of the commissioner in recommending what lands should be selected for wildlife values including recommendations and initiating legislative and Alaska Division of Lands land classifications of: State Refuges, State Sanctuaries, Critical Habitat, Resource Management, Reserved Use, Watershed and Public Recreation; land purchases; land leases; and cooperative agreements regarding use of wildlife habitat with other land managing agencies, corporations and/or private individuals.

The responsibility of the review of land use activities and drafting comments establishing activity stipulations under program II Habitat Protection depend heavily on this program.

C. Procedures: Key wildlife habitat areas will be identified by contacting the specific area biologists for total assimilation of their knowledge on specific wildlife area use, public use, public and economic values. When a lack of information exists, other sources of information will be sought. Alternatives to be considered, but not limited to are: make specific requests of the respective divisions for the necessary information; have the Habitat Section budget to contract out the requested work; have the Habitat Section gather the information itself; and/or make budget requests for new positions to accomplish the necessary work.

Depending on the wildlife use of the habitat and the value of the wildlife and habitat to the state/public, one or more of the legislative or ADL land classification categories will be sought.

# Lands Section -- Habitat Protection Section

### Program II

# II. Name of Study: Habitat Protection

- A. Objective: To assure that wildlife values and key fish and wildlife habitat areas are considered in all private/governmental land activities, and to submit recommendations [stipulations] for the orderly pursuit of renewable and non-renewable resource exploration and production on wildlife lands.
- B. <u>Justification</u>: Oil production and exploration, hard rock, strip and placer mining, timber harvests, pipeline and highway construction, water use, land disposal, grazing leases and agricultural pursuits are a source of continued concern as to their eliminating/displacement affect on fish and game populations and their associated habitat. [These activities have and are increasing at an accelerated rate within the state and cannot entirely be reviewed/commented on thoroughly/timely by the present level of staffing.]

Under the authority of AS 16.05.020; 16.05.090; 16.05.130; 16.05.150; 16.05.870; 16.20.020, 040, 050, 060; 16.20.180, and 16.20.185, the personnel in the Habitat Protection Section act on behalf of the Commissioner in recommending which land activity procedures are acceptable to safeguard the fish and wildlife and their associated habitat of the state.

In addition to its statutory permitting function, the Habitat Protection Review Section reviews and comments upon fish and wildlife related aspects of requests from other agencies which are required to obtain fish and wildlife input from the Department of Fish and Game. Examples, with authority requiring input, include:

### Federal:

- a. Corps of Engineers
  - 1. Dredging, channelization of flood control projects (Fish and Wildlife Coordination Act of 1958).
  - 2. Refuse permits (Executive Order 11574, 12/70).
  - 3. Harbors
- b. U.S. Geological Survey Outer continental shelf oil and gas drilling permits (National Environmental Policy Act, 1969).
- c. U.S. Coast Guard navigational aids construction (Fish and Wildlife Coordination Act, 1958).

# State:

- a. Department of Natural Resources
  - 1. Comments on oil and gas lease operation plans and other land use operations on State lands (letter of agreement between DNR and ADF&G, 4/70).
  - 2. Comments on water use applications (AS45.15.080).
- C. Procedures: Biologists of the Department research and management divisions shall be contacted for specific comments regarding the effects of the land activities on the fish and wildlife in their area. When a lack of information exists other sources of information will be sought. Alternatives to be considered, but not limited to are: make specific requests of the respective division for the information; have the Habitat Section budget to contract out the requested work; have the Habitat Section gather the information itself; and/or make budget requests for new positions to accomplish the necessary work.

### Lands Section -- Habitat Protection Section

### Program III

- III. Name of Study: Wildlife Habitat Acquisition, Enhancement, Development and Rehabilitation
  - A. <u>Objective</u>: To assure that the state's wildlife resources have sufficient amounts of acceptable habitat that will provide the necessary food, water and cover required by wildlife to maintain and/or increase their populations; to do all things necessary through habitat acquisition, enhancement, rehabilitation, and development programs to insure perpetual and increasing production and public use of the wildlife species of Alaska's land, waters and continental shelf areas.
  - B. <u>Justification</u>: Throughout history the people of Alaska have depended on the fish and wildlife resources for their daily and winter supply of food. Many segments of today's human population still depend on waterfowl, moose, deer, caribou, Dall sheep, elk, bison, black bear, mountain goat, marine mammals, small game and some furbearing animals wholly or in part to supplement the household food larder.

Article VIII [Natural Resources] Sections 1, 2, 3 and 4 of the Alaska State Constitution explicitly directs that the fish and wildlife and other replenishable resources be further developed, reclaimed, maintained and utilized for the maximum benefit of its people as well as be subject to preferences among beneficial uses.

The local, state and federal governments fire suppression programs have effectively allowed the early post-disturbance successional plant community stages, which are the most productive stages for most wildlife, to mature and become mostly unuseful to the primary food producing wildlife species. The loss and maturation of wildlife habitat, severe climatic conditions and the human development of land have displaced and in some cases eliminated animal populations in significant numbers in areas throughout Alaska. The natural human population increases in Alaska as well as the tremendous increase of workers and families arriving here to work directly or indirectly on the Alaskan pipeline have dramatically increased the demand for wildlife species.

The combination of all the natural and human influences on the state's wildlife and their associated habitat the last ten (10) years have changed the state's hunting regulations and affected the hunters' opportunity to harvest several game species by reducing their seasons and bag limits and restricting the methods and means.

The nation's historical and present economic state indicates that a national financial crash is possible. Many people are already looking forward to "living off the land."

The divisions of the Department, except the F.R.E.D. Division, have traditionally acted in a research and people/wildlife management advisory capacity. Under the authority of AS 16.05.020 (2); 16.05.050 (2, 3, 4); 16.05.090; 16.05.092 [implicit]; 16.05.130; 16.05.150; 16.20.020, 040, 050, 060; 16.20.180 and 16.20.185, the personnel in the Habitat [Protection] Section shall act on behalf of the Commissioner in recommending what lands shall be enhanced and

also shall act in the capacity to insure that the state's wildlife resources have sufficient amounts of acceptable food, water and cover; as well as do all things necessary through habitat acquisition, enhancement, rehabilitation and development to insure perpetual and increasing production and public use of the wildlife species of Alaska's lands waters and continental shelf areas.

C. Procedures: The status and production of wildlife species in areas throughout the state shall be identified by contacting the specific area biologists for total assimilation of their knowledge; divisional data banks will be reviewed in most cases on the ground or aerial examinations will be made to supplement existing data; existing sources of information will be used to create an overall computerized fish and wildlife and habitat data bank.

Rehabilitation, enhancement, and development methods applied will be standard techniques recognized and used by other organizations throughout the world. Alternatives to be considered, but not limited to are: make specific requests of the respective division or agency to identify the technique; have the Habitat Section budget for purposes of contracting out the requested work; have the Habitat Section determine the method to be utilized; and/or make budget requests for new positions to accomplish the necessary work.

In situations where habitat suitable for enhancement exists on lands under other than State land managing agencies, cooperative agreements will be sought to accomplish the necessary work.

Enhancement project priorities may be set by, but not limited to, economic value, public use [demand/requirements] and the Habitat Section's foresight.

# Lands Section -- Habitat Protection Section

### Program IV

- IV. Name of Study: Public Access
  - A. Objective: (1) To assure that access for public use to all state [Public] lands and waters is provided the people of the State of Alaska. (2) To provide land managing agencies with fish/wildlife/recreation access information for consideration in their land use planning.
  - В. Justification: The Alaska State Constitution clearly identifies the state's intent and importance of public access to the state's natural resources in Article 8, section one: the Statement of Policy; in section two: the General Authority; in section four: Sustained vield; and section five: Facilities and improvements, i.e. section one: "It is the policy of the State to encourage...the development of its resources by making them available [access] for maximum use...; section two: "The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State including land and waters, for the maximum benefit of its people;" section four: "Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed and maintained on the sustained yield principle [by providing access]...; section five: "The legislature may provide for facilities, improvements, and services [including access] to assure greater utilization, development, reclamation...to assure fuller utilization, development of the fisheries, wildlife, and waters."
  - C. Procedures: The status of existing access in areas throughout the state shall be identified by contacting the specific area biologists for total assimilation of their knowledge; divisional data banks will be reviewed and updated; and in most cases on the ground or aerial examinations will be made to supplement or update existing data. When a lack of information exists, other sources of information will be sought. Alternatives to be considered, but not limited to are: make specific requests of the respective divisions for the necessary information; have the Habitat Protection Section budget to contract out the requested work; have the Habitat Protection Section gather the information itself, and/or make budget requests for new positions to accomplish the necessary work.

One or more of the existing state land classifications will be sought to protect the perpetual use of existing hunting, fishing, and/or other recreational access routes used by the public.

The personnel of the Habitat Protection Section will attempt to determine where additional access routes will be needed and make recommendations to the respective land managing agency for classification and protection.

For access routes existing on lands under the control of other than state land managing agencies, cooperative agreements and/or recommendations for access protection and public use will be sought.

[For additional information regarding the Access Program see Appendix I attached.]

# Lands Section -- Habitat Protection Section

### Program V

- V. Name of Study: Land Use Planning
  - A. <u>Objective</u>: To assure that wildlife values, key wildlife habitat areas, public wildlife use and interests are considered at all levels of land use planning by private, local, state and federal land managing agencies.
  - B. Justifications: Even when the Alaska Native Claims Settlement Act (ANCSA) is considered, over 85 percent of the land will still be under jurisdiction of state and federal government land managing agencies. A close liason is required between the Department and these agencies to insure that current and proposed activities [land use] do not exclude in their planning considerations the fish and wildlife resources nor the effect of the land use on the fish and wildlife and the associated habitat. Until recent department priority changes the "Habitat Section" was the only unit of State government which input fish and wildlife data and requirements to the various planning levels. Some examples, including citations to the authority requiring fish and game input, are as follows:

### Federal:

- a. Participation on multidisciplinary planning teams for National Forest lands (Memorandum of Understanding between USFS and ADF&G, 9/71).
- b. Input for establishment of Multiple Use Classification Areas on public lands (Memorandum of Understanding between BLM and ADF&G, 12/65 and 6/68; two supplemental Memoranda of Understanding, 1970).
- c. Identification and protection of habitat on military lands (Cooperative Plan among ALCOM, BSF&W and ADF&G, 2/61).

In addition to the above agencies, comments are requested by the Corps of Engineers, USF&WS, EPA and BOR on water related activities and projects.

# Federal/State:

a. State participation on Resource Planning Team of Joint Federal/State Land Use Planning Commission (cooperative planning agreement among BLM, Department of Natural Resources (DNR) and ADF&G, 10/71). Mt. Mckinley Planning Group, Capital Site Selection Committee.

- Joint planning for cooperative management of certain federal lands;
  - 1. Copper River Delta Management Area (cooperative agreement among USFS, DNR and ADF&G, 4/62).
  - 2. Stikine River Management Area (cooperative agreement among USFS, DNR and ADF&G, 8/62).
  - 3. Chickaloon Flats Management Area (cooperative agreement among USFS, BSF&W, DNR and ADF&G, 9/71).

### State:

- a. Location and design review of highway projects (memorandum of agreement between Department of Highways and ADF&G, 10/63).
- b. Review of State land classification, water use applications and disposal actions memorandum of understanding between DNR and ADF&G [Draft stage].

### Local Government:

- a. Cooperative management planning for important wildlife areas (recreation and education).
  - 1. Susitna Flats Resource Management Area (cooperative agreement among the Matanuska-Susitna Borough, DNR and ADF&G, 12/70).
  - 2. Potter Point State Game Refuge (Anchorage Borough and ADF&G).

Since passage of the National Environmental Policy Act of 1969 (pl. 91-190), the requirements for fish and wildlife input to Environmental Impact Statements (EIS) for "major federal actions" has increased at a phenomenal rate. These inputs and reviews have covered federal park, wild and scenic rivers and wilderness proposals, as well as the EIS for the trans-Alaska pipeline and numerous smaller projects. The Habitat Section has assumed this responsibility within the Department of Fish and Game. In addition to reviewing EIS's from authoring agencies, often in several draft forms, the Section has written, or closely assisted in the writing of, several EIS's for Department of Highways' construction projects (e.g. Copper River Highway) and also for fisheries rehabilitation, enhancement and development projects for the F.R.E.D. Division of the Department of Fish and Game (e.g. Akalura Lake red salmon rehabilitation).

Thus, in addition to the lead role in its statutory charges, the Habitat Section acts as the Department of Fish and Game's contact for other agencies charged with regulatory or permitting functions that require deference to fish and wildlife values.

### Private:

- a. Early location and design input to major projects.
  - 1. Trans-Alaska Pipeline

- 2. El Paso Natural Gas Pipeline (Prudhoe Bay to Gulf of Alaska).
- Lost River Mining Development.

# b. Miscellaneous

- Gold mining.
- 2. Boat dock.
- 3. Irrigation.

### JOB PROGRESS REPORT (RESEARCH)

State:

Alaska

Cooperator:

Charles Lucier

Project Nos.:

W-17-6, W-17-7

Project Title: Laboratory Services

and W-17-8

Period Covered:

January 1, 1974 to June 30, 1976

### INTRODUCTION AND OBJECTIVES

The Laboratory Section continued to support divisional activities in the state. The laboratory's main objective has been one of support through technical assistance to game biologists and game technicians. A lesser but important objective has been the familiarization of entrance level biologists with the laboratory functions and its relationship to Survey and Inventory and Research work.

### WORK PERFORMED

The laboratory Monthly Reports give a detailed breakdown of specimen and other jobs, as well as leave and holidays.

### Tooth Processing and Aging

Brown and grizzly bear tooth processing for aging purposes dominated Region II laboratory work as in years past. Moose specimens followed bear work in the amount of time used. Recorded specimen work amounted to 62 percent while support activities used roughly 38 percent of job time in the Region II lab.

Mr. Tim Smith, an Alaska Cooperative Wildlife Research Unit graduate student, visited the Anchorage laboratory and learned how to thin section and age incisors of muskoxen by use of a power rotary saw and ultraviolet fluorescence microscope.

### Disease and Parasite Activities

No disease organisms were isolated from six individual game animals' tissues submitted for tests at the State-Federal Laboratory, at Palmer, and the Virology Rabies Unit, at Fairbanks, Alaska. Parasitized snowshoe hares and moose tissues that were examined contained common tapeworm cysts.

# Work Reports

Meticulous reporting of employee activities has at least one potential drawback: this may encourage over emphasis on productivity and neglect of thought. The writer also has recognized the distortion that the category "support" lends to laboratory reports. Beginning in early 1973, therefore, all activities that bear directly on specimen work in the laboratory or field were credited to species rather than to administration. This way of reporting avoids a myopic standard of "busyness."

### Field Work and Other Duties

Laboratory personnel participated in management of the February 4-9, 1974 permit moose hunt held at Fort Richardson, in the Anchorage area. Specimen work associated with the hunt included drying of marrows, weighing and measuring of fetuses, preparation of blood for disease studies and shipment of tissues for chemical analysis.

Game surveys occupied about 11 percent of the 3-man Anchorage laboratory staff's on the job time. The laboratory coordinator did not participate in surveys. The two assistants were absent from the laboratory for game surveys about 17 percent of their job time. Work outside the laboratory is of course essential to the training and welfare of these persons. Outside experience enhances employees' work attitudes in the laboratory and their capabilities elsewhere when they are promoted.

Laboratory personnel answered numerous phoned public inquiries relating to game species, as well as calls directed specifically to the laboratory. Telephone duty, though sometimes disruptive has raised the laboratory workers' awareness of game regulations and their public relations skills.

A laboratory staff member, Dr. Ronald Modafferi suggested a simple and cheap postal card format for answering hunters' game animal age requests. The card has proved to be very useful. Dr. Modafferi also assisted in the video taping of information about bear sealing and aging for local television.

Copies of Instructions: <u>Laboratory Diagnosis and Confirmation of Rabies</u>, 3pp., issued by the Alaska Division of Public Health, were distributed to game biologsits with copies of <u>Rabies In Alaska</u>, <u>Prevention and Control Arctic Health Research Center Report No. III, by Robert L. Rausch.</u>

Laboratory and specimen preparation instructions that were written or revised include:

- 1/ Plastic Embedding, Thin Sectioning and Mounting of Game Teeth for Aging by the Ultraviolet Fluorescence Method. 8 pages.
- 2/ Counting Tooth Cementum Annuli Using the Ultraviolet Fluorescence Technique. 14 pages.
- 3/ Carinogenic Compound Results from Mixing Hydrochloric Acid and Formaldehyde (extracted from Chemical and Engineering News, page 13, January 8, 1973). 1 page.
- 4/ Operation of the Cryostat. 4 pages.
- Decalcification, Microsectioning, Staining and Slide Mounting of Big Game Teeth Illustrated. 1 page. Eleven illustrative photographs were taken by Ms. Dorothy Pattison, who also contributed excellent illustrative photos to accompany items 1, 2 and 4 above. Writing and rewriting was done by the Laboratory Coordinator, Charles Lucier. Copies of the written instructions are attached to this report.

PREPARED AND SUMBITTED BY:

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