Analysis of Laws Governing Access Across Federal Lands: Options for Access in Alaska

February 1979

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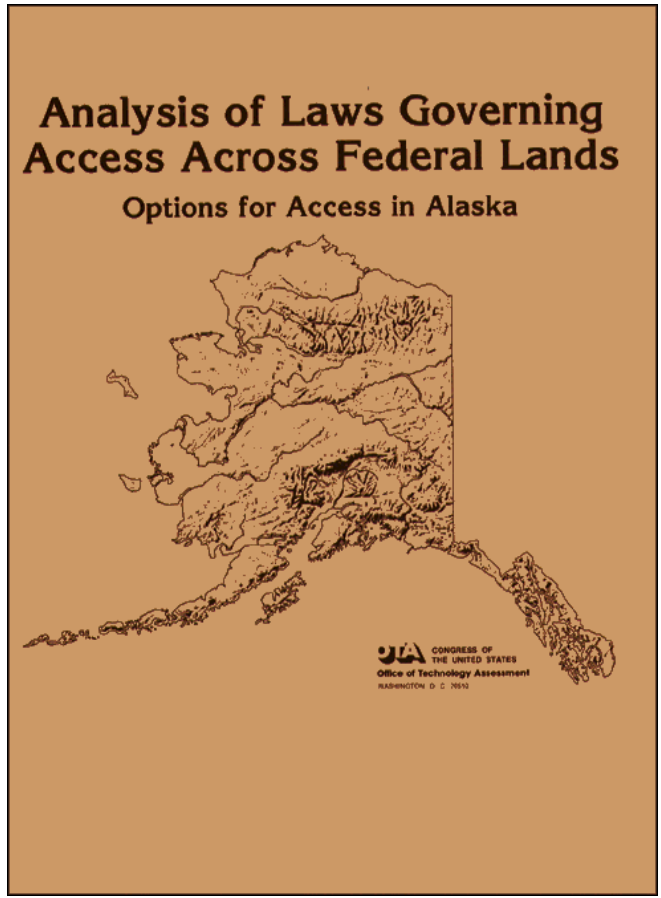

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Foreword

This analysis was conducted in response to a request from the Technology Assessment Board that the Office of Technology Assessment [OTA) examine the effects of Federal laws, policies, and practices on access through Federal lands to non-Federal mineral-bearing lands. The report analyzes the laws governing Federal land management systems, the laws specifically applicable to Alaskan lands, and the major environmental and land-planning laws that affect access across Federal land management systems.

Prior to Alaska statehood, the Federal Government owned over 99 percent of the land in the State. The Alaska Statehood Act and the Alaska Native Claims Settlement Act provide for conveyance of about 40 percent of the land to the State and to Native Regional and Village Corporations. Congressional intent, expressed at the time of passage of these Acts, was to provide land and resources, including minerals, to create an economic base for these non-Federal parties.

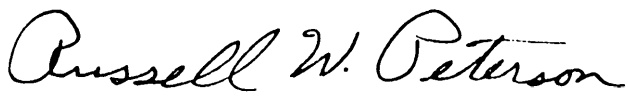
Following conveyance of State and Native lands, 60 percent of Alaska will remain in Federal ownership. These Federal lands will be managed by a number of different agencies under provisions of several laws. Access is a legal right to use certain lands for a specific purpose and access across Federal to State, Native, and privately held lands is a prominent issue for several reasons. Among these are the extent and nature of the Federal landholdings and the limited surface transportation network. Compared to the contiguous United States, only a small portion of Alaska is served by road or rail; and access for resource development is closely related to the improvement and expansion of these systems. Whether or not access across Federal lands for non-Federal mineral development is an appropriate use of these lands is one element in the intense public debate about the future management of the Federal lands.

This report is particularly relevant to the current congressional deliberations about Alaska National Interest Lands legislation. The 96th Congress has before it bills calling for the classification of portions of the remaining Federal lands in the State as national parks, wildlife refuges, national forests, wilderness areas, and wild and scenic rivers. Initiated under the provisions of section 17(d)(2) of the Alaska Native Claims Settlement Act, these bills could have a substantial effect on the future course of mineral resource development on both Federal and non-Federal lands. The decision of whether or not to allow Federal lands in Alaska to be used for access requires consideration of many values. These values include

wilderness preservation, resource development, wildlife maintenance, and the subsistence culture of Native and other rural Alaskan citizens.

The report presents five policy alternatives, or options, for congressional consideration. They constitute a range of approaches to access policy for Federal lands in Alaska. The options were structured to highlight these alternative approaches so that the advantages and disadvantages of each choice would become more apparent. No single option will meet the requirements of all interest groups, but a combination of several could provide a comprehensive approach to access policy.

Congress' final decision about the availability of access through Federal lands in Alaska for mineral developments on non-Federal lands will have long-range implications for the economy of the State and for conservation of the national interest lands, This report provides information to assist Congress in resolving this important issue.



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OTA wishes to acknowledge the contribution of the two Alaska working groups that were convened to discuss the needs for access across Federal lands for mineral development on non-Federal lands and the environmental and social impacts of access.

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University of Alaska, October 18-20,1977

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Univ. of Arizona Pan Technology Inc.

Alaska Groups

A large number of individuals and organizations in Alaska provided information for the assessment and reviewed draft documents circulated by OTA. While the contributions of these various groups are acknowledged, OTA assumes full responsibility for the content of this assessment report. A list of groups from the contiguous United States that contributed to the problem evaluation phase of the assessment is provided in appendix C.

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Alaska Miners Association, Inc.
Alaska Native Foundation
Alaska Native Land Manager's Association
Bear Creek Mining Company
Bering Straits Native Corporation
Bristol Bay Native Corporation
Citizens for Management of Alaska Lands
Doyon, Limited
Fairbanks Industrial Development Corporation
Federal-State Land Use Planning Commission for Alaska
Great Lands Exploration
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Hawley & Associates
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Resource Associates, Inc.
Sealaska Corporation
Standard Oil of California
Usibelli Coal Co.
WGM, Inc.
Wilderness Society

State of Alaska

Department of Commerce and Economic Development
  Division of Economic Enterprise
  Division of Energy and Power Development
Department of Environmental Conservation
Department of Fish and Game
Department of Natural Resources
  Division of Geological and Geophysical Surveys
Department of Transportation and Public Facilities
Legislative Affairs Agency
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Office of the Governor
  Division of Policy Development and Planning
  Office of Pipeline Surveillance
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  Institute of Social and Economic Research

United States Government

Federal Power Commission
  Alaska Power Administration
Department of Agriculture
  Forest Service
Department of the Army
  Corps of Engineers
Department of the Interior
  Bureau of Land Management
  Bureau of Mines
  Fish and Wildlife Service
  Geological Survey
  National Park Service
Department of Transportation
  Alaska Railroad Administration

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Executive Summary



Photo Credit. OTA Staff

The Alaska Railroad and the highway connecting Fairbanks and Anchorage, Alaska, looking south from near Nenana, Alaska

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Executive Summary

Rarely has the conflict between resource development and protection of the natural environment been more severe than in Alaska. The largest State is a treasury of natural beauty, wildlife, and wilderness on a scale that does not exist in the rest of the Nation. At the same time, it has an abundance of natural resources that may be needed in the future. For decades, distance, climate, and lack of development combined to enforce de facto preservation of Alaska's natural treasures. The barriers that have protected Alaska's environment have been lowered by technology, by local development, and by an increased demand for resources.

At one time nearly all of Alaska's 375 million acres were vacant and unappropriated Federal lands. Little attention was given to establishing management policies to govern land use. With the exception of Alaska Natives, few used these vast lands and resources. The waves of exploration and exploitation that accompanied the booms in furs, gold, and oil left most of the State untouched.

Now, for the first time, there is a reasonable prospect for natural resource development throughout the State, and plans are being made for many such projects. Economic development has been accompanied by a major restructuring of landownership and land management policy in Alaska that began in 1959 with the admission of Alaska as a State and may well continue into the 1990's. Each step of this process of change has been dogged with controversy. Often the debate has turned on the resolution of the conflict between the use of land for its economic resources and the preservation and protection of land for its natural values.

The most recent development in this process of change has grown out of legislative actions taken in 1971 to resolve an earlier controversy—the assertion of claims to almost all of Alaska by native Indians, Eskimos, and

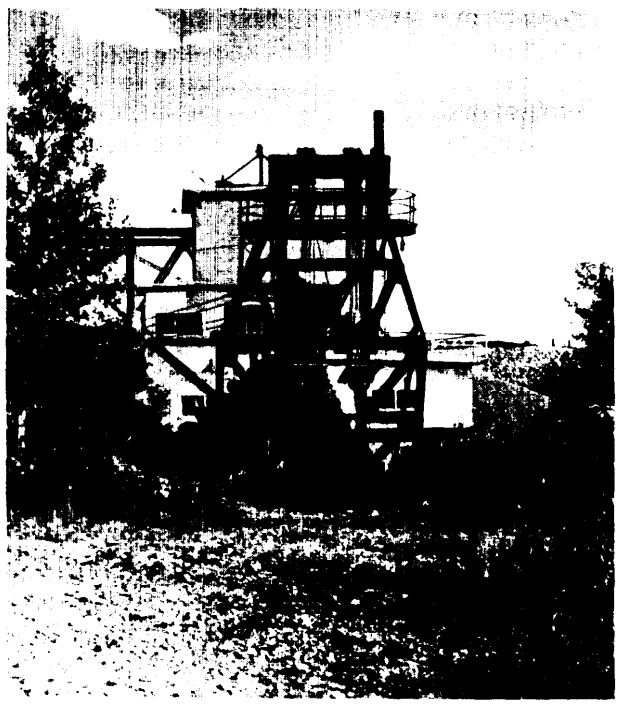

Photo Credit: OTA Staff

Inactive gold dredge near Fairbanks, Alaska. Placer mining for gold is underway in some areas of Alaska and interest in hardrock mining is growing

Aleuts. The Alaska Native Claims Settlement Act (ANCSA) extinguished all aboriginal land claims and, in compensation, gave Alaskan Natives $962.5 million and the right to select 44 million acres of Federal lands in the State. Conflicts over the Native land claims had slowed State land selections under the Alaska Statehood Act and threatened to impede construction of the Trans-Alaska Oil Pipeline. ANCSA removed a major obstacle to the pipeline and paved the way for conveyances to the State and to Native groups that will shift approximately 40 percent of Alaska's land to non-Federal ownership.

ALASKA NATIONAL INTEREST LANDS

ANCSA also addressed the management of Federal lands in the State. A key provision, section 17(d)(2), directed the Secretary of the Interior to withdraw up to 80 million acres of land that he deemed suitable for potential inclusion in the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems. The Secretary was to study these lands and make recommendations to Congress. To protect the national interest in these lands, commonly called "d-2" lands, prior to congressional action, they were withdrawn from all forms of appropriation under the public land laws, the mining and mineral leasing laws, and from selection by the State or Native regional corporations. Statutory authority for these withdrawals expired on December 18, 1978.

Many proposals for Alaska National Interest Lands have been introduced in Congress since passage of ANCSA. During the 95th Congress, extensive hearings were held on Alaska Lands legislation before House and Senate committees. In May 1978, the House passed H.R. 39, which would have set aside over 100 million acres of Federal lands as national parks, forests, wildlife refuges, wild and scenic rivers, and wilderness areas. In October 1978, the Senate adjourned without acting on the Alaska Lands Bill.

Prior to the expiration of the "d-2" withdrawals, a series of executive actions dramatically altered the Federal land management pattern in Alaska. On November 16, 1978, the Secretary of the Interior used his emergency authority under section 204(e) of the Federal Land Policy and Management Act to withdraw all public lands in Alaska covered by congressional or administration "d-2" proposals from mineral entry or selection by the State of Alaska. This emergency withdrawal of some 110 million acres is effective for 3 years.

On December 1, 1978, President Carter invoked the Antiquities Act of 1906 to create 17 new national monuments in Alaska. These monuments, totaling some 56 million acres, include 13 new national parks, 2 new national wildlife refuges, and 2 national forest areas previously proposed for wilderness designation. National monuments are closed to all disposition under the public land laws including the mining and mineral leasing laws. National monument status can be modified or revoked only by congressional action.

On December 1, the President also announced that the Secretary of the Interior would initiate further action under section 204(c) of the Federal Land Policy and Management Act to protect approximately 40 million acres of proposed wildlife refuges under 20-year withdrawals. Section 204(j) of the Act provides that the Secretary of the Interior may not modify or revoke any withdrawal made under the Act that adds lands to the National Wildlife Refuge System. An additional 11.2 million acres of proposed wilderness areas in the Tongass and Chugach National Forests would be protected under a 2-year withdrawal from location under the mining laws and from State selection. Application for this withdrawal to protect natural values and in aid of legislation was submitted to the Department of the Interior by the Secretary of Agriculture on November 28, 1978. In announcing these withdrawals, the President

declared his intention to seek legislation permanently setting aside these areas and an additional 10 million acres included in the November emergency withdrawals.

The outcome of congressional decisions on Alaska lands could have a particularly strong impact on the future course of mineral resource development in Alaska. Although Federal lands have most often played a major role in mineral resource development because they contain rich mineral deposits, they are also important as routes for access to areas of mineral potential, both on and off the Federal lands.

The conditions under which a given area of Federal land may be used for access are determined to a large extent by the land classification system into which the land has been placed. Each system—parks, forests, wildlife refuges, wild and scenic rivers, wilderness, and public lands—has its own rules. In the West and in Alaska, where much of the land is in Federal ownership, the use of Federal lands for access is an important element of land management policy. For understandable reasons, the mineral industry favors policies that encourage such use, while environmental and conservation interests oppose them.

OTA ASSESSMENT

At the request of the Technology Assessment Board, OTA conducted an assessment of how Federal laws, policies, and practices related to the use of Federal lands for access purposes influence hardrock mining on non-Federal lands. The focus of the assessment is on access for non-Federal mineral resource development, that is, the ability to reach mineral-bearing lands and to remove the materials produced.

The assessment was national in scope and specifically examined Alaska and several Western States with a high percentage of Federal land and an active mining industry. OTA selected study areas in Eastern and Western States as well as in Alaska. Because of the timeliness and relevance of the materials assembled during the assessment to current congressional consideration of Alaska National Interest Lands legislation, assessment results were made available for the use of Members of Congress, their legislative staffs, and various committees as the study progressed.

ACCESS ACROSS FEDERAL LANDS

Access is the ability to reach certain lands. It includes the right to use lands for private rights-of-way and for transportation systems. Permission to cross Federal lands is generally obtained through a special use permit, a right-of-way, or an easement granted under the authority of the agency managing the land. This report is concerned with two types of access needs associated with hardrock mineral development:

—Private rights-of-way across Federal lands to reach non-Federal lands or to reach existing transportation systems; and

—Rights-of-way across Federal lands for transportation systems (roads, highways, railways, ports) to serve public needs in general and mineral transportation in particular.

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SERIOUSNESS OF ACCESS PROBLEMS IN ALASKA

An independent OTA analysis of five Alaskan study areas gives a perspective of the seriousness of the problems associated with access across Federal lands in Alaska. For each study area, OTA evaluated the need to use Federal lands for access to non-Federal lands. The evaluation was based on current information about State and Native land selections, transportation availability, and location of mineral deposits. As the final conveyances of State and Native selections proceed, non-Federal landownership patterns on which the evaluation was made could be altered. Information concerning the location of mineral deposits is also increasing. Thus, OTA's evaluation could be subject to some modification in response to shifts in landownership or mineral development activity. Generally, however, OTA found that:

- The need for rights-of-way across Federal lands to reach non-Federal minerals is a localized problem that is likely to occur in scattered instances. The need for rights-of-way across Federal lands to reach existing surface transportation is also likely to occur infrequently,

- In some regions of Alaska, mineral resource development will require the improvement of existing transportation in order to move the bulk mineral products to market. In those regions served by existing surface transportation, non-Federal lands are largely contiguous, and a minimal need exists for rights-of-way across Federal lands for transportation routes to serve non-Federal mineral areas.

- In regions that are not served by existing surface transportation systems and that are isolated from the rest of the State and each other by Federal lands, new transportation systems will have to be constructed to transport hardrock minerals. In these areas, the development of surface transportation systems to accommodate mineral resource production or for other public purposes will involve long distances and rights-of-way over Federal, State, and Native lands. The need to cross Federal lands in some remote areas of Alaska is likely to arise regardless of whether a statewide or regional transportation system approach is adopted.

The surface transportation network in Alaska is not extensive compared with that in other States. The primary means of transportation between most areas of the State is by airplane. The existing combination of air and surface transportation is adequate to move people and goods for most present needs. It is technically and economically feasible to ship precious metals by air, but most other hardrock minerals require transportation systems that can move large volumes of bulky material over long distances at a relatively low cost.

The planning and development of surface transportation systems is normally a State function. There is, at present, no consensus on the appropriate transportation system or combination of systems to serve Alaska's community development and resource needs. Various interests have advanced arguments for building new surface transportation routes or improving existing routes at public expense, for extensions to the system financed by potential resource developers, and for little additional development, This assessment does not consider the relative merits of any of these positions, nor does it weigh the costs and benefits of alternative transportation strategies. Rather, it addresses how Federal policies on the use of Federal lands for access, including use for the development of transportation systems, affect hardrock mineral development on non-Federal land.

After conveyance of State and Native land selections, 60 percent of Alaska's lands will remain in Federal ownership. Because of the vast Federal areas involved, the patchwork distribution of non-Federal lands, and the limited extent of existing surface transportation, access across Federal lands may be required to reach non-Federal lands. The access policies of Federal land management agencies could exert substantial influence over the development of resources in isolated non-Federal areas.

FEDERAL LAWS

Because Federal land management policies are likely to exert a strong influence over access across Federal lands in Alaska, this report reviews those Federal laws affecting access to minerals on non-Federal lands. The laws are divided into three categories:

1. Federal Land Management Laws—Laws and regulations providing for access across units of the six Federal land management systems: public lands, National Park System, National Wildlife Refuge System, National Forest System, National Wild and Scenic Rivers System, and National Wilderness Preservation System.

2. Federal Laws Relating to Alaska Lands and Mineral Resources-The Alaska Statehood Act, the Alaska Native Claims Settlement Act, the Trans-Alaska Pipeline Authorization Act, the Alaska Natural Gas Transportation Act of 1976, and the Naval Petroleum Reserves Production Act of 1976.

3. Federal Land Planning and Environmental Laws—These laws can affect the availability of access through various procedural and substantive requirements. The report analyzes the impact on access of the National Environmental Policy Act of 1969, section 4(f) of the Department of Transportation Act, the Endangered Species Act, the Clean Air Act, the Clean Water Act, and the Coastal Zone Management Act.

FEDERAL LAND MANAGEMENT LAWS

Each Federal land management system has its own rules governing access for mineral development on non-Federal lands. Two factors determine the terms and conditions placed on access use of Federal lands: (1) the classification of the affected land, and (2) the proposed use for which access is needed. Land managers for every system, including the Wilderness System, have statutory authority to grant some rights-of-way. The availability of such grants and the nature of any conditions imposed reflect the general purposes for which the affected unit is managed.

Public Lands

The Bureau of Land Management (BLM) administers the public lands under laws that require application of multiple use principles. The Secretary of the Interior has ample authority under the comprehensive provisions of Title V of the Federal Land Policy and Management Act of 1976 (FLPMA) to issue rights-of-way across the public lands, except designated wilderness areas, for access to non-Federal lands, for roads, highways, railroads, and other transportation systems and facilities, and for other purposes. Section 603 of FLPMA requires that the BLM inventory for wilderness values all roadless areas of 5,000 acres or more and all roadless islands in the public lands. Potential wilderness areas are placed in a wilderness study classification and must be managed to protect

wilderness values until completion of administrative review and congressional action. The requirement for protective management limits the Secretary's discretion to approve any use of wilderness study areas, including rights-of-way, that might conflict with or impair wilderness values.

National Park System

The National Park Service manages units of the park system to conserve scenic and natural values and preserve them for the enjoyment of future generations. There is no statutory provision expressly authorizing rights-of-way across lands in the National Park System for access to non-Federal lands or for transportation systems. The approval of rights-of-way and other access uses of national park lands is a matter left to the management discretion of the Secretary of the Interior and the local park superintendent. Access use of park lands must be in conformance with the purposes of the park system and of the individual unit to be crossed.

National Wildlife Refuge System

The Fish and Wildlife Service manages the wildlife refuge system as part of a national program of wildlife conservation and rehabilitation. Rights-of-way across lands in the National Wildlife Refuge System may be allowed if the proposed use is compatible with the purposes of the refuge, and the applicant agrees to pay the fair market value for such use.

National Forest System

The Forest Service manages the national forests on a multiple-use sustained-yield basis. The Secretary of Agriculture has ample authority to grant rights-of-way across national forest lands, except designated wilderness areas, under the comprehensive provisions of Title V of the Federal Land Policy and Management Act of 1976. Rights-of-way for roads and trails may also be granted under provisions that authorize the development of the National Forest Transportation System.

National Wild and Scenic Rivers System

Wild and scenic rivers are managed by the Federal or State agency that had managerial responsibility for these areas prior to their designation. These rivers are managed to preserve and protect them in a free-flowing condition for present and future generations. Rights-of-way across units of the National Wild and Scenic Rivers System administered by the Department of the Interior are granted under laws applicable to the National Park System regardless of the managing agency. Rights-of-way over units managed by the Department of Agriculture are governed by laws applicable to the National Forest System. Any conditions placed on the issuance of any such right-of-way must be related to the purposes of the Wild and Scenic Rivers Act.

National Wilderness Preservation System

Units of the wilderness system are administered by the Federal agency that had managerial responsibility for these areas prior to their designation. Wilderness areas are managed under protective rules to conserve their wilderness character. The Wilderness Act of **1964** forbids any temporary or permanent roads or the use of mechanized modes of transportation in designated wilderness areas—except as specifically provided by Congress. The use of lands in the National Wilderness Preservation System for access purposes is limited to the specific exceptions recognized in the Wilderness Act. These include: existing private rights; management and emergency purposes; access to private or State lands completely surrounded by a national forest or public lands wilderness area; use of airplanes and motorboats in areas where such use predates wilderness designation; ingress and egress to valid mining claims and other valid occupancies wholly within a national forest or public lands wilderness area; facilities authorized by the President in the national interest within a national forest or public lands wilderness area; and other exceptions specifically approved by Congress. The exceptions applicable to national forest and public lands wilderness

areas do not apply to park or refuge wilderness areas. The exceptions for completely surrounded non-Federal lands or other lands wholly within a wilderness area may not provide adequate assurance of access to some isolated but nonsurrounded non-Federal areas in Alaska. Construction of surface transportation systems through wilderness areas requires specific congressional approval.

Access Across Federal Lands in Alaska

Congressional designation of Alaska National Interest Lands will reduce many of the uncertainties about the potential use for access of Federal lands in Alaska. It is impossible to predict what response a land management agency will make to a given request for access. However, when land classifications are established, reasonable assumptions concerning the availability or nonavailability of Federal lands for access uses will be possible.



Photo Credit: Boyd Norton ©, courtesy of Alaska Coalition
Mount Drum in the Wrangell-St. Elias area exemplifies Alaska's spectacular scenery

Given existing laws and policies, access should be available across most units of the public lands and the forest system, except designated wilderness areas and wilderness study areas. Access across units of the National Wildlife Refuge System is allowed if it does not pose a threat to protected wildlife. Because of the high degree of protective management afforded parks, wild and scenic rivers, and wilderness areas, use of these lands for access to non-Federal areas or for transportation routes is strictly limited. On park and refuge wilderness areas, an act of Congress would be required to allow any significant access.

In all systems, but particularly the more protected, the availability of access may well turn on the factual issue of whether alternative routes or means of access exist. Each system makes some provision for special consideration of requests from non-Federal landowners whose property is wholly surrounded by Federal lands. The question of alternative routes is also critical in considering the extension of any federally funded public transportation network across lands used for parks or wildlife refuges. Such projects may be approved only if there is no feasible alternative.

Enactment of d-2 legislation will not end all the uncertainties about which land management policies will be applied to Federal lands. As a result of the BLM wilderness review, additional Federal lands could be placed under wilderness protection in the future. This possibility creates some uncertainty about the future availability of access across the public lands. BLM wilderness areas are to be managed according to provisions of the Wilderness Act that are applicable to the national forest wilderness areas. The BLM will give priority to review of wilderness potential of public land roadless areas in the lower 48

States. Wilderness inventory of Alaska public lands will be deferred until after congressional action on d-2 proposals and conveyance of Native selections. This delay will provide an opportunity for non-Federal landownership patterns and access needs to emerge.

FEDERAL LAWS RELATING TO ALASKA'S LANDS AND MINERAL RESOURCES

The Alaska Statehood Act and the Alaska Native Claims Settlement Act provide for the transfer of approximately 40 percent of Alaska's land to non-Federal ownership. The development of land-based resources, including minerals, was a major intent behind these grants of Federal lands to the State and Alaska Natives.

The Alaska Statehood Act endowed the new State with grants of Federal lands and revenues. These grants were intended to provide a stable economic base for the State. Alaska received the right to select 103,350,000 acres of Federal lands, plus over 1 million acres of territorial grants of university, mental health, and school lands that were confirmed by the Statehood Act, and from 35 million to 40 million acres of submerged lands. All statehood land grants must be selected by January 3, 1984, from Federal lands that are vacant, unappropriated and, except for certain national forest lands, unreserved at the time of their selection.

The State also received a share of Federal revenues derived from natural resources within the State. Alaska is entitled to 52% percent of the annual net profits of Federal mineral leases in Alaska in lieu of State participation in the reclamation fund. (This grant is in addition to the 37%-percent revenue entitlement previously granted to the territory, thus bringing Alaska's share of Federal mineral leasing revenues to 90 percent.) The Statehood Act also gives the State the right to receive 90 percent of the net proceeds from Federal coal lands in Alaska.

The Alaska Native Claims Settlement Act (ANCSA) extinguished all Native claims to lands and hunting and fishing rights based on aboriginal title or use. In exchange, Alaska Natives were given the right to select some 44 million acres of Federal lands and to share in an Alaska Native Fund of **$962.5** million. Thirteen profit-making Native Regional Corporations were established to administer land selections and fund distributions. Native Village Corporations were also established to administer local village selections. The mineral or subsurface rights to all Native selections are vested in the Regional Corporations. Village Corporations receive surface title only, The Alaska Native Fund is dependent, in part, on contributions of $500 million from Federal and State mineral leasing revenues.

ANCSA also established the Federal-State Land Use Planning Commission for Alaska. The Commission was to identify necessary public easements across Native lands. The Secretary of the Interior was authorized to reserve specific easements across Native lands. No provision was made for easements across Federal lands to assure access to lands conveyed to Alaska Natives. Secretarial orders reserving extensive easements across Native lands have been the subject of complex litigation delaying Native land conveyances.

Three other laws relating to the role of Federal land management in the development of natural resources in Alaska were also reviewed. The Trans-Alaska Pipeline Authorization Act authorized an expedited procedure for granting a right-of-way for the Trans-Alaska Oil Pipeline. Judicial and administrative reviews of licensing and environmental proceedings were limited. The Act also authorized a reservation for additional rights-of-way for compatible uses on or adjacent to the pipeline right-of-way.

The Alaska Natural Gas Transportation Act of 1976 provided an expedited procedure for the consideration of several pending proposals to construct a natural gas pipeline from the North Slope to the lower 48 States.

This expedited procedure provided for coordinated review of right-of-way applications covering several different management systems. Final approval of the Presidential recommendation for a natural gas pipeline was provided by a congressional joint resolution.

The Naval Petroleum Reserve Production Act of 1976 transferred jurisdiction over and management of the Naval Petroleum Reserve in Alaska to the Department of the Interior. No provision is made for granting any right-of-way over the Reserve for access to non-Federal lands. The Secretary of the Interior must submit a report on the nonpetroleum values of the Reserve within 3 years.

FEDERAL LAND PLANNING AND ENVIRONMENTAL LAWS

Federal land planning and environmental laws can also influence the availability of access to non-Federal mineral areas. Some of these laws impose procedural requirements or substantive restraints on the actions of Federal land managers in reviewing and issuing rights-of-way and access permits. Other laws set environmental standards for transportation and mining activities on both Federal and non-Federal lands. Compliance with these standards is often made an express condition of rights-of-way across Federal areas.

The National Environmental Policy Act of 1969 (NEPA) requires that an environmental impact statement (EIS) be prepared for major Federal actions that significantly affect the quality of the human environment. NEPA imposes no specific environmental standards or direct restraints on access to minerals on non-Federal lands. It does, however, exert substantial indirect influence, since Federal land management agencies must comply with NEPA in their review of requests for rights-of-way across Federal lands. EIS preparation and review may lengthen the time required for approval of some rights-of-way and other permits. Applicants may be required to pay the costs of EIS preparation.

Section 4(f) of the Department of Transportation Act of 1966 bars the expenditure of Federal funds for the construction of transportation projects that require the use of lands from any public park, recreation area, wildlife refuge, or historic site of National, State, or local significance, unless there is no feasible and prudent alternative to such use and the project includes all possible planning to minimize harm to the protected lands. The Secretary of Transportation must conduct an independent review of possible alternatives before approving any federally aided transportation project using protected lands.

The Endangered Species Act of 1973 requires that all Federal agencies consider the potential impact a proposed action may have on an endangered or threatened species or a critical habitat. Agencies must consult with the Secretary of the Interior on means to eliminate or minimize any risk to a protected species or habitat. In areas that are home to unique and endangered species, compliance with the Endangered Species Act could impose additional constraints on Federal land management agencies in issuance of rights-of-way across Federal areas.

The Clean Air Act and the Clean Water Act set national standards for air and water quality. Primary responsibility for enforcement of these standards is vested in the States. Compliance with State and Federal air and water quality standards is an express condition of Federal land management system right-of-way permits. Noncompliance could lead to revocation of the right-of-way.

The Clean Air Act Amendments of 1977 imposed strict controls on increases in the levels of certain pollutants in areas where the air quality is better than the national ambient air quality standards. These amendments divide existing clean air regions into three classes according to allowable annual increments in air pollution: Class I areas where minimal additional pollution is allowed; Class II areas where moderate amounts of new pollution are allowed; and Class 111 areas where pollution levels can increase to the national

standards. Some existing national park and wilderness areas, including one park and three refuge wilderness areas in Alaska, were statutorily designated as Class I areas. No d-2 lands are in this category. Certain other existing large national parks, monuments, and refuges are Class II areas and cannot be redesignated to Class III. There are two such areas in Alaska. The only new conservation units that cannot be redesignated to Class III status are new national parks and wilderness areas that are over 10,000 acres in size. The authority to redesignate the classification of clean air areas, with the exceptions noted above, is vested in State governments. Federal land managers have only an advisory role in the redesignation process.

The Coastal Zone Management Act (CZMA) provides participating States with Federal grants to develop and administer comprehensive land management programs for their coastal zones. In addition, by requiring that Federal activities in the coastal zone must "be consistent to the maximum extent possible," with the State plan, it offers States an opportunity to influence activities on Federal lands. Federal land management agencies are subject to the consistency requirements of the CZMA. Applications for rights-of-way or other uses of Federal lands in or affecting coastal zone areas must be consistent with any approved State management program. The effect of CZMA in Alaska is unclear, because planning is incomplete.

OPTIONS FOR CONGRESSIONAL CONSIDERATION

An array of options for congressional consideration was developed in response to the assessment request to consider possible modifications of Federal access policies (table 1). These legislative policy options present a range of approaches to the policy questions of whether and for what purposes access should be permitted across Federal lands in Alaska. The options deal only with Alaska lands.

The choice of an access policy for Alaska's d-2 lands involves the balancing of many competing interests and values, not only access for the development of hardrock mineral resources on non-Federal lands. No single option was designed to meet the needs of all interest groups. Accordingly, a combination of several options may provide a more comprehensive approach to the access needs of non-Federal landowners to cross Federal areas to reach their lands and the potential need to construct major transportation systems across Federal areas to serve economic development or community needs.

The five options are:

OPTION I–THE APPLICATION OF EXISTING ACCESS POLICIES TO ALASKA ADDITIONS TO NATIONAL CONSERVATION SYSTEMS–THE STATUS QUO

Under this option, the availability of access over Federal lands would vary depending on the land management system and the geographic area involved. Access policies for Alaska conservation units and public lands would be the same as those found in other sections of the Nation, and the protections afforded Alaska lands would be consistent with the levels provided elsewhere. Any shortcomings or uncertainties in existing laws would remain. Mineral activities requiring access through parks and wilderness areas could be discouraged in areas where alternative access was not available. Some landowners might not have adequate assurance of access and of the terms and conditions under which rights-of-way may be granted.

Table 1. —Summary of Selected Congressional Action Options*

Option / Components	Option 1 Adopt Existing Access Policies	Option 2 Defer Access Decision	Option 3A & B—Limited Provisions for Alaskan Access Needs		Option 4A, B,& C Alaskan Transportation System Access Provisions	Option 5 Restriction of Access Across National Conservation System Lands
			A. Alaska Lands Right-of-Way	B. Boundary Shift and Land Exchanges To Exclude Access Routes		
ACCESS POLICY DECISION	Access through application of existing laws	Specific deferral of access questions involving d-2 designations and remaining Federal lands in Alaska until a certain date, or some event in future, or in definitely	Special right.of-way provision for Alaskan lands for access through Federal lands to surrounded, adjacent, or otherwise Isolated non-Federal lands or Interests in land	Local realinement of boundaries of conservation systerns designations to exclude access routes Land exchanges to provide access routes for non-Federal landowners, with exact locations Included in d-2 designations, or by reference to maps filed later	Use of Federal d-2 lands for Alaskan transportation system needs specifically accommodated through (a) transportation systern right.of.way provisions, or (b) designated *corridors*, or (c) new Federal-State review agency for Alaskan transportation systems	Access use of Federal d-2 lands restricted beyond existing statutory limitations. Existing private rights access to surrounded lands, and existing rights-of-way would be recognized
TIMING OF ACCESS DECISION	Now	Deferral—now, Access decision — later	Now	Now	Now	*Now*
LEGISLATIVE IMPLEMENTATION	Congress makes d-2 lands designations without any provision for nonrecreational access	Specific deferral provision in d-2 lands legislation	Provision of d-2 lands legislation —or as new authority amendment of existing right.of-way provisions	Provisions of d-2 lands legislation, or new and exchange authority	Provision of d-2 lands legislation—new authority	Provision of d-2 lands legislation, or new amendment of existing provisions— new authority
IMPLEMENTING INSTITUTIONAL ARRANGEMENT'	Existing Institutions	Existing Institutions	Existing Institutions	Existing Institutions	**(a) &** (b) Existing institutions and/or (c) a new reviewing body for Alaska transportation systems.	Existing Institutions
TRANSPORTATION SYSTEM DECISION[2]	Existing decision mechanism— Federal-State transportation planning and Federal DOT 4(f) review. Later congressional review of specific systems via program approvals and appropriations	Existing decision mechanism—transportation systems use of Federal d-2 lands delayed until policy decision	Existing decision mechanism—this option provision does not authorize rights-of-way for development of major transportation systems	Existing transportation decision mechanism–local boundary shifts would leave access routes as public lands (d-1 classification) with fewer use restrictions than parks, etc., and also available for later State selection DOT 4(f) review of route not required in most cases, land exchange would put route in non-Federal ownership	(a) & (b) Existing decision mechanisms, or (c) existing transportation decisionmaking Institutions plus new review body	Existing decision mechanism. Use of Federal conservation system lands for Alaskan transportation system not permitted without congressional approval. (The restriction is for transportation system use and would not remove existing access guarantees for non-federal landowners.)

'For a complete discussion see text
'Existing institutions include. Department of the Interior—Bureau of Land Management. National Park Service. Fish and Wildlife Service: Department of Agriculture— Forest Service
²Existing agencies involved in transportation decisionmaking Include. Department of Transportation—federal Highway Administration, Federal Aviation Administration, Federal Railroad Administration; Interstate Commerce Commission; U S. Coast Guard; Department of the Army, Corps of Engineers, and the Federal Power Commission.

OPTION 2–DEFERRAL OF CONGRESSIONAL ACTION ON AN ACCESS POLICY

This option calls for a specific deferral of access questions involving d-2 designations and remaining Federal lands in Alaska. This option would assure future congressional review of access decisions, would allow for specific studies now underway to be completed, for new studies to be initiated if needed, for final landownership patterns to be determined, and for State transportation planning to proceed. National interest lands would be protected while the access policy decisions were being made. The uncertainties about the availability of land for access purposes would continue, with delay or abandonment of mineral exploration and development activities in areas without alternative transportation. Executive agencies might be reluctant to grant access across Federal lands until the final congressional policy decision has been made.

OPTION 3–LIMITED PROVISIONS FOR ALASKAN ACCESS NEEDS

This option has two approaches: Option 3A would provide for a special right-of-way provision for Alaska conservation systems; Option 3B would provide for the exclusion of transportation system routes from conservation system classification by making minor boundary adjustments and land exchanges.

Option 3A does not authorize approval of transportation system rights-of-way through Federal conservation systems. This approach would provide non-Federal landowners with an assurance of necessary access through Federal lands for resource development subject to regulation by the land managing agencies. It would allow access for non-Federal owners requiring passage through d-2 lands, especially those whose access needs are not now covered by existing laws. This option could compromise the protective intent of conservation systems, particularly parks and wilderness designations that strictly limit conflicting use.

Under Option 3B land exchanges and realinement of exterior boundaries of conservation system units could accommodate access needs by leaving the access routes in public land classification. Natural transportation routes and historically used access would be excluded from d-2 designations by this approach. Land exchanges could permit the use of Federal lands for necessary access routes to non-Federal areas. In some areas, realinement or exchange could conflict with the purposes of conservation system designation, and might impair the ability of the managing agencies to protect the natural values of the units. Boundary adjustments to accommodate anticipated transportation routes would have to be based on potential transport needs, and could lead to the selection of speculative or controversial routes. Possible consequences could be the selection of inadequate routes for mineral production and the failure to provide some areas with routes to meet future public needs.

OPTION 4–ALASKAN TRANSPORTATION SYSTEM ACCESS PROVISIONS

Under this option, congressional authorization would be specifically provided for the development of transportation systems. Three approaches are examined: Option 4A, the enactment of a right-of-way provision for transportation systems that would be applicable to all Alaska conservation system lands; Option 4B, the reservation of specific transportation corridors through d-2 lands; and Option 4C, the establishment of a new institutional decisionmaking mechanism to review proposals for crossing conservation system lands.

Under Option 4A an Alaskan transportation system right-of-way provision would provide for approval of transportation routes in the future based on demonstrated need and specific proposals for transport systems. The Secretary of the managing department would be authorized to approve rights-of-way for major transportation systems through conser-

vation systems, which would facilitate the movement of mine products to markets, but such approval could compromise the protective purpose of conservation system designations.

Under Option 4B future routes through d-2 lands would be limited to the specific corridors designated by Congress. Other transportation routes would require approval under existing access processes. The limited data now available on future transportation needs make corridor designation difficult. This option could lead to the selection of routes that might be inadequate for future needs and to later demands for additional corridors. It could reduce the ability of the managing agency to control the harmful effects of access uses.

Under Option 4C special legislation would establish a new decisionmaking mechanism to review transportation system rights-of-way applications. The participation of interested parties (Federal and State agencies, local governments, Native Corporations, environmental groups, etc.) in the review of transportation routes across Federal lands would provide the benefit of many views to the Secretary of the managing agency when making the final access decision. This option would also assure the consideration of transportation needs in land management planning and decisionmaking.

OPTION 5–RESTRICTION OF ACCESS ACROSS NATIONAL CONSERVATION SYSTEM LANDS

This option would limit nonessential access uses of conservation lands to add a further measure of protection and preservation for their natural values. No transportation systems could be built across Federal conservation systems lands without express congressional approval. The option would not impose a complete ban on crossing Federal lands to reach non-Federal holdings. Existing access rights and the needs of non-Federal landowners to reach surrounded or other lands that have no reasonably available means of access could be accommodated. Existing access rights, Wilderness Act access exceptions, and established public use rights-of-way would be recognized. The discretion of land managers to approve the use of Federal lands for access purposes would be limited.

ACCESS TO NON-FEDERAL MINERAL LANDS IN OTHER STATES

The range of access options developed for this report apply to Alaska where access across Federal lands is an issue of widespread concern. The absence of access options for Federal lands in other States should not be interpreted as meaning that no problems exist outside Alaska. However, based on OTA interviews and contractor studies, it appears that there are few, if any, non-Federal minerals access problems in other States because of landownership or transportation patterns. OTA conducted interviews in several States with representatives of the mining industry, of local governments, of environmental groups, and of other interests. These interviews disclosed no instances where mineral development on non-Federal land was prevented by the denial of access across Federal lands. Most non-Federal mineral areas outside of Alaska are adequately served by existing transportation networks.

UPDATE–ALASKA LANDS LEGISLATION IN THE 96TH CONGRESS

As this report was being prepared for final publication, the Carter Administration fundamentally altered the context in which the Alaska Lands debate will proceed in the 96th

Congress. By Presidential action under the Antiquities Act, the management classification of **56** million acres of Federal lands was determined by the creation of 13 new national parks, 2 new national wildlife refuges, and 2 national forest monuments. An additional **40** million acres will be added to the National Wildlife Refuge System by Secretarial action under the Federal Land Policy and Management Act. These new parks, refuges, and national forest monuments will now be managed under the existing laws governing these systems. The current situation for access across these lands is similar to OTA Option 1 in this report. Thus, for about 96 million acres of public land in Alaska, the issue before Congress will be whether these lands should continue to be protected under conservation system classifications and, not as in previous debates, whether they should be protected at all.

While Executive actions creating new national monuments and wildlife refuge withdrawals have determined the management classification of most of the lands covered by the "d-2" proposals in the 95th Congress, other land management issues remain. The task of establishing a land management framework for Federal land in Alaska is not yet complete. Many policy issues such as access, additional wilderness and wild and scenic rivers protection, subsistence hunting, wildlife management, mineral resources availability, and State and Native conveyances remain to be settled.

2

Introduction

Chapter 2.--INTRODUCTION

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Introduction

This report contains information derived from an Office of Technology Assessment (OTA) assessment of the effects of Federal laws, policies, and practices on access through Federal to non-Federal lands. It makes available the results of an analysis, by the OTA staff and its consultants, of the issues associated with the legal aspects of access, and presents a range of options dealing with access through Alaska lands.

The issues concerning access through Federal lands differ in their seriousness, their detail, and their visibility. Based on data collected nationwide,[1] OTA found that Federal laws, policies, and practices are a factor in access decisions in all parts of the country; Federal land management practices are an important issue in the contiguous United States; and the land management laws and policies governing those Federal lands that are to be placed in conservation systems under pending Alaska National Interest Lands legislation are primary concerns in Alaska.

The information contained in this report is relevant to the current congressional deliberations about Alaska lands called for by section 17(d)(2) of the Alaska Native Claims Settlement Act (ANCSA), and particularly to the use of Alaska conservation lands for purposes of access to non-Federal mineral-bearing lands.

Prior to the Alaska Statehood Act and ANCSA, less than 1 percent of Alaska's land was in non-Federal ownership. There will be changes in the landownership patterns when conveyance of the Native and State lands under these Acts is completed, but approximately 60 percent or 220 million acres will remain in Federal ownership (see figure 1). The management of these federally owned lands will depend on the land management classification of specific units as designated by Congress. This report examines the existing laws under which Federal land management agencies grant access. A range of access options is presented and discussed.

Alaska land management issues are complex. They have been and continue to be the subject of intense public debate. Deciding how the land should be used is an important national public policy issue, To resolve these land use questions requires balancing many values, among which are resource development, social needs, and environmental protection. The conflict between providing for access (whether for mining or other purposes) and protecting the primitive values of the land is part of the larger public debate. Any analysis of the access process (i.e., the terms and conditions of access and how it

[1] Information gathering by public participation interviews was important to analyzing Federal laws, policies, and practices affecting access. Appendix C includes a discussion of the methodology for OTA's nationwide data gathering and analysis effort. Interest groups (nearly 600 individuals) who were contacted by OTA staff and OTA consultants and contractors are cited in the preface and in appendix C. In addition, FSLUPCA summaries of public input gathered in *1973* regarding disposition of (d)(2) lands were reviewed.

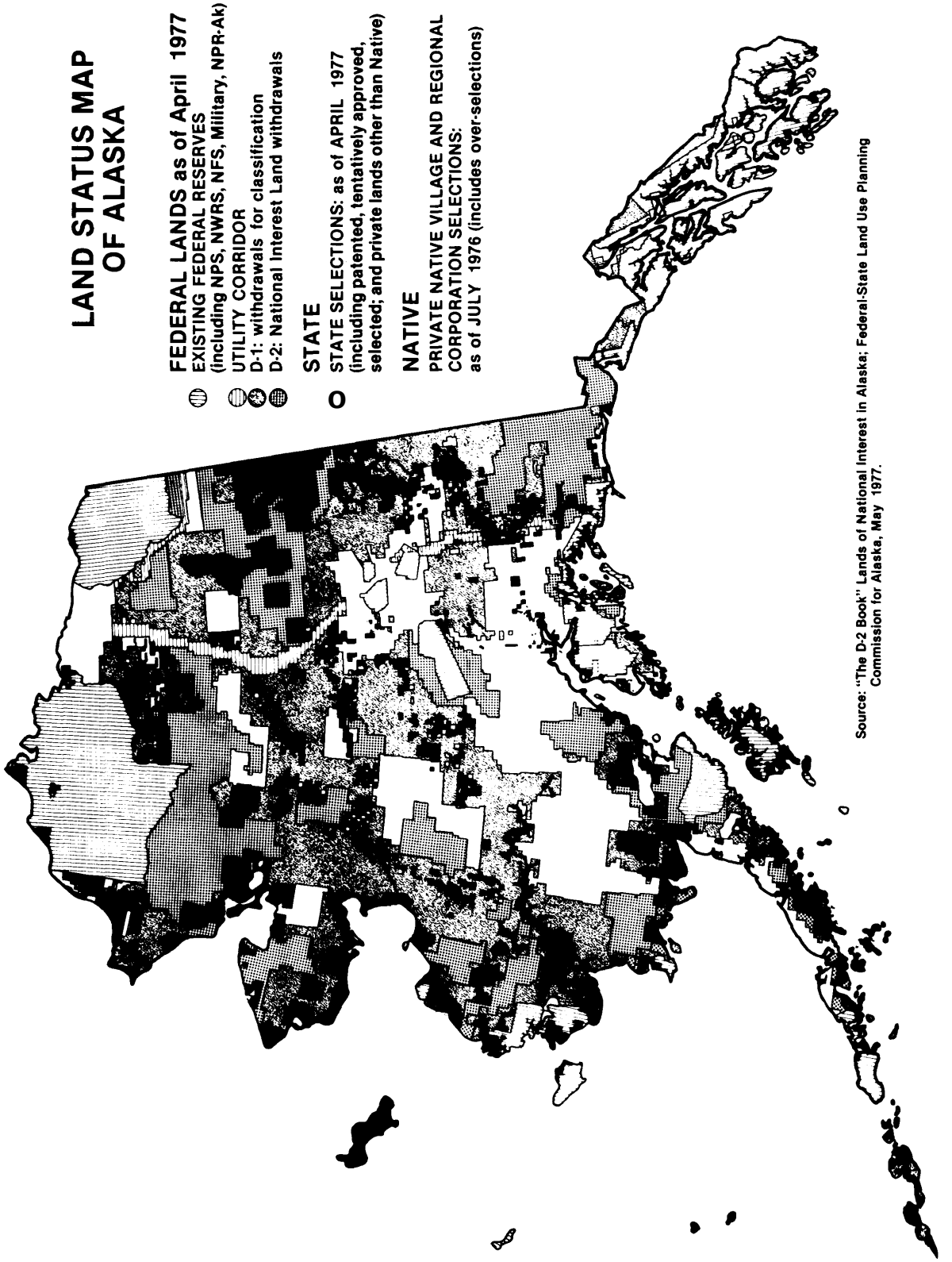

Figure 1.—Land Status Map of Alaska

might be achieved) is, therefore, closely tied to the question of whether or not access across Federal lands for non-Federal mineral development is an appropriate use of the Federal lands. Access, as a value, must be weighed against conservation and social values such as the loss of wilderness, of wildlife, and of a subsistence lifestyle.

Among the access issue-related questions are the following:

- Should an access decision be made now considering the incompleteness of information about mineral potential and the location of minerals?
- Should an access decision be made now considering the uncertainties about the timing of minerals development?
- Will facilitating access be sufficient for the development of Alaska's minerals, or will there be other determining factors, such as market restraints?

Mining interests argue that Alaska lands are important potential sources of domestic supplies of both fuel and nonfuel minerals (figure 2) As the Federal-State Land Use Planning Commission for Alaska (FSLUPCA) has stated, "The major national interests to be met in Alaska, apart from natural values, are those for energy resources and important minerals."[2]

A central issue in the debate on granting access in Alaska, particularly for the development of hardrock minerals, concerns the economics and the timing of mine development. Some contend that hardrock mining, under present market conditions, is not likely to develop in the near term (between now and 1990).[3] Mining interests, however, believe that development is possible before that date.[4] These interests argue further that exploration and mine development should be part of the economic development planning of the State and of the Native Corporations and that small mining interests in particular are vulnerable to access restrictions.[5]

Conservation interests argue that Alaska is the only State in which there are extensive areas of land with only minimal intrusion from human activities. Rural residents, particularly Aleut, Eskimo, and Indian citizens, still depend on the resources of the land and the waters for food. Thus, continued subsistence hunting, fishing, and gathering are essential to many communities. Since arctic ecosystems are relatively simple and adjust poorly to stress, many areas are vulnerable to the changes that accompany intensive uses such as mining. Regeneration rates for vegetation are slow, and wildlife populations often require extensive habitats. As a result, the environmental consequences of intensive land use, especially in the far north, are more severe than in other States, and it takes a much longer time for flora and fauna to recover.

Access for resource development is closely related to the improvement and future expansion of surface transportation systems. In order to develop hardrock mineral resources in some areas, surface facilities will have to be constructed that move large quantities of bulk ores. Compared to the contiguous United

[2] "The D-2 Book" Lands of National Interest in Alaska, FSLUPCA, May 1977, p. 17.

[3] Bradford H. Tuck, Land Use Planning, the (D)(2) Lands and Alaska Resources: Some Economic Considerations, FSLUPCA Study No. 22, August 1977.

[4] OTA Mineral Resources Workshop, Fairbanks, Alaska, August 1977. This workshop was supported in part by OTA funds and in part by workshop participants.

[5] The possible effects of access restrictions on small mining interests were identified during interviews in Alaska conducted by Dr. F. J. Wobber, OTA project director, in January 1977. An OTA Working Paper, The Economic Importance of the Small Miner and Small Mining Businesses in Alaska by C. C. Hawley and J. W. Whitney suggests that the future interests of small miners and prospectors may well be dependent upon land status, mining laws, and reasonable access, Economic benefits from small mining businesses are also discussed, See Analysis of Laws Governing Access Across Federal Lands: Options for Access in Alaska, Volume II, Working Papers (OTA M-76).

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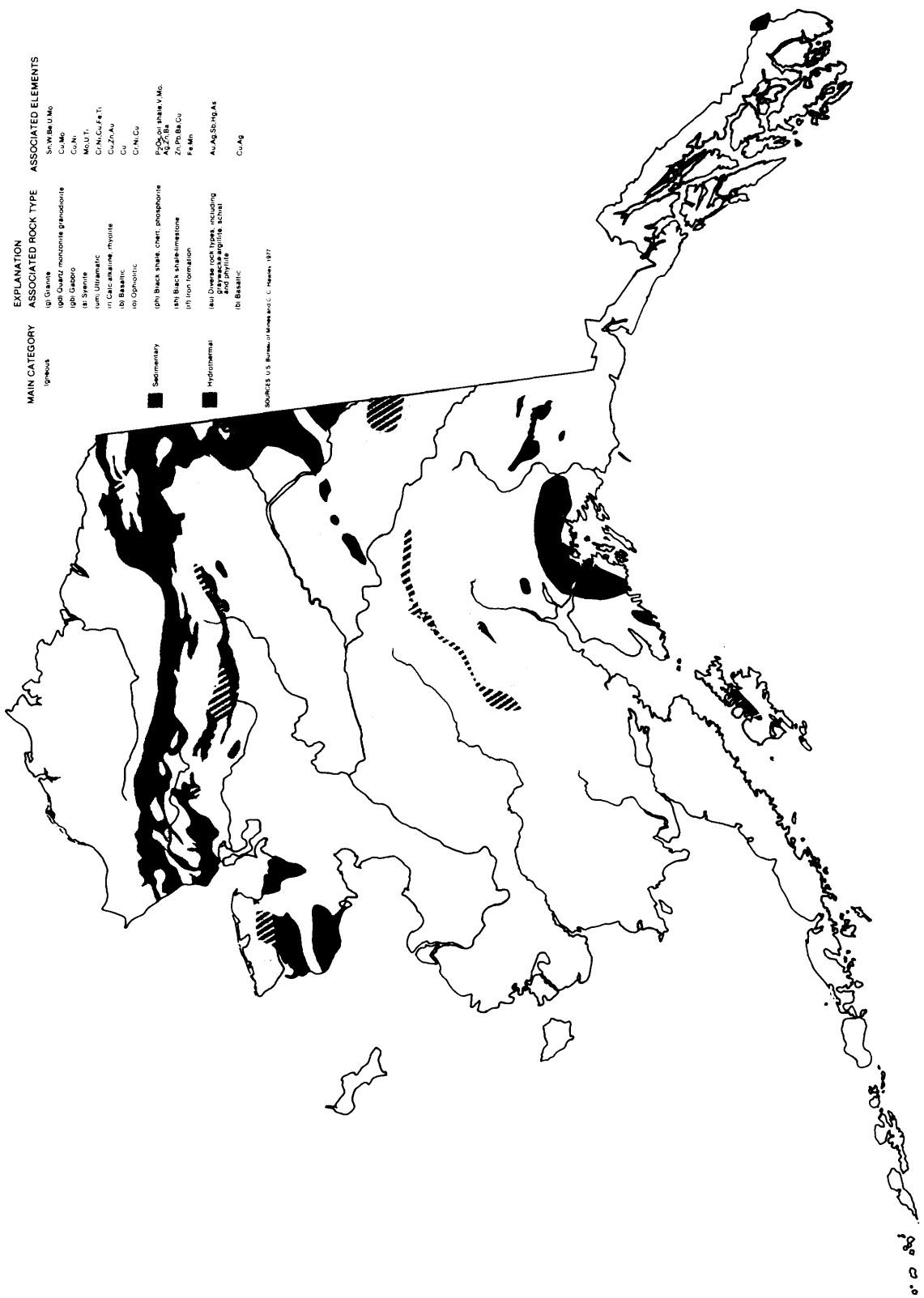


Figure 2.—Metallogenic Provinces of Alaska

States, Alaska has a limited surface transportation network (figure 3). Most of the settlements throughout the State are connected by air. But, like access, the expansion of surface transport is a controversial issue.'

Settling the uncertainties about an access policy decision can facilitate the resolution of transportation issues. But regardless of whether Congress specifically addresses the topic of transportation requirements across the proposed conservation areas, the d-2 lands access policy decisions will have implications for non-Federal landowners. Because of the large tracts of Federal lands and because of the transportation limitations, resource development on non-Federal (State and Native) lands will have to take into account nearby or adjacent Federal holdings.

In choosing in which of the various Federal conservation systems (Parks, Wildlife Refuges, Wild and Scenic Rivers, or National Forests) to place the Alaska lands (the d-2 land designations), Congress will decide about how these Federal lands will be managed. The access authority of the agencies that manage Federal lands (the Park Service, the Fish and Wildlife Service, the Forest Service, and the Bureau of Land Management) is derived from the laws that govern the various systems. Therefore, the availability of access through Federal lands is dependent on the laws and policies that govern the management system in which they are placed.

Congressional deliberations on access in Alaska range from local concerns about the surface movement of ore, to statewide concerns about the ramifications of extending surface transportation systems. These issues have implications both for the economy of the State and for the conservation values of the national interest lands.

This report is not intended to deal comprehensively with all of the issues associated with access. It reflects a more specific concern. The Technology Assessment Board approved a study to ascertain the problems of access to non-Federal land arising from Federal land policies, and the impacts of modifying those policies.[7] This authorization focused on determining the extent to which Federal policies on the use of Federal lands for access purposes influence hardrock mining on non-Federal lands.

While this assessment has been sensitive to the complex issues of land use and management in Alaska, the tasks have been limited to analyzing Federal laws, policies, and practices as they affect access through the Federal domain to non-Federal mineral-bearing lands. Issues such as the impact of large numbers of people who might cross Federal lands if access is unregulated; the social consequences of changes in the rural Alaskan lifestyle with expanded surface transportation; the reduction of wildlife and wild lands resources from increased use; and the impact of access on recreation are all of major importance in the Alaska Lands debate.[8] However, as noted above, the analysis of these issues is beyond the scope of this assessment.

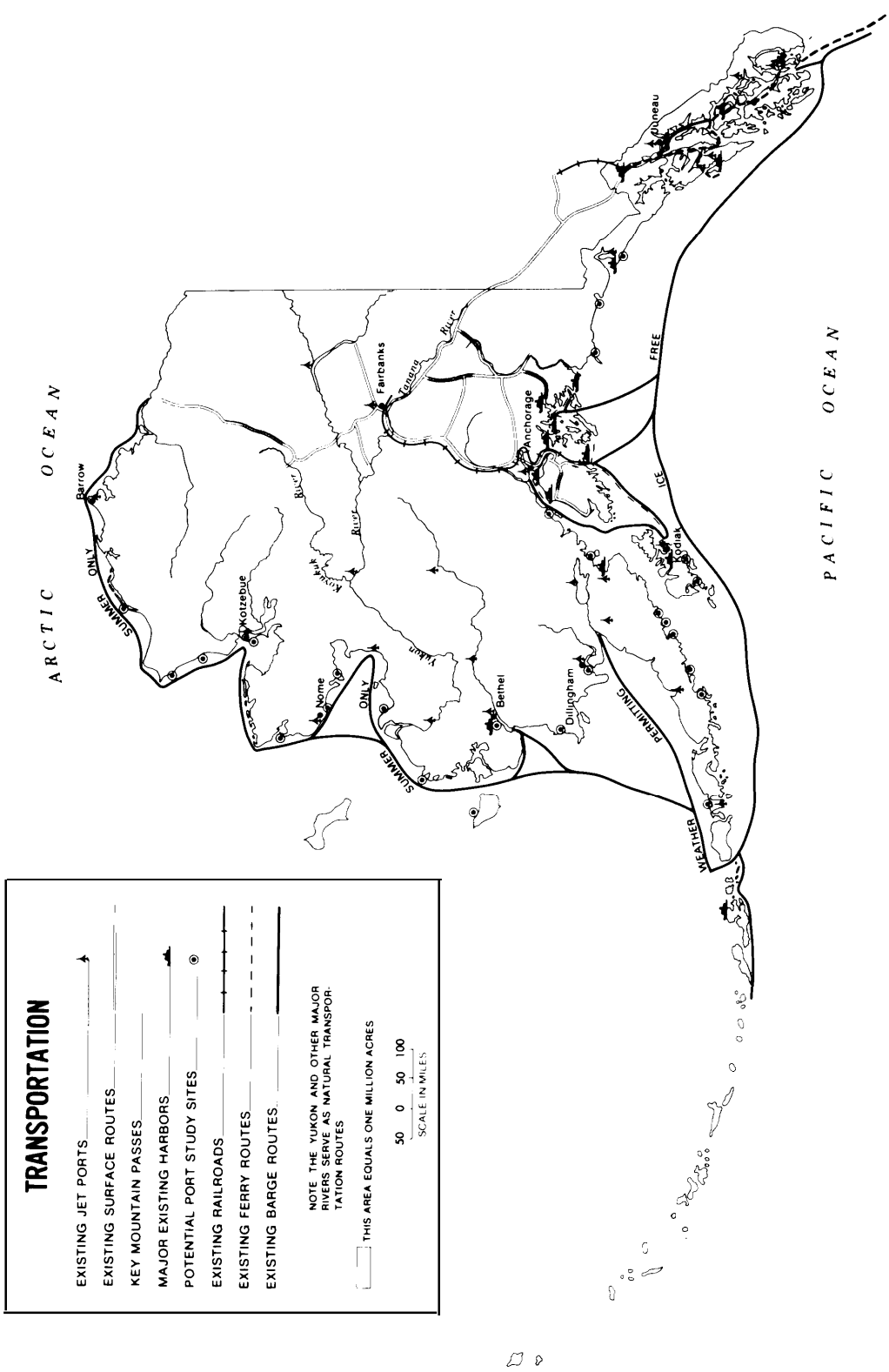
In response to a full range of views on how Congress might best respond to access issues, OTA has generated a variety of policy alternatives for congressional consideration. The development of these options drew on many sources: OTA staff interviews in Alaska; an examination of existing Federal land management laws (analyzed in this report); an independent analysis of five Alaskan geographic study areas by the OTA staff, complemented by the working papers prepared

'Paul Engelmen and Bradford Tuck with Jerry D. Kreitner and Dennis M, Dooley, Transportation and Development *of Alaska* Natural Resources, FSLUPCA Study No. 32, March 1978.

Technology Assessment Board, Summary Minutes, March 16, 1976, p. 4. See also correspondence between Senator Ted Stevens and OTA Director Daddario dated March 9, 1976 and assessment proposal dated March 12, 1976.

[8]OTA Environmental Resources Workshop, Fairbanks, Alaska, October 1977. This workshop was funded by OTA under a grant to the Wilderness Society.

Figure 3.—Transportation Networks in Alaska



SOURCE: Generalized from transportation maps in "The D-2 Book, Lands of National Interest in Alaska." Federal-State Land Use Planning Commission for Alaska, May 1977.

by contractors and consultants;[9] and discussions with congressional staff members.

In recent years, some interest groups in Alaska—such as Native Regional Corporations, mining interests, and others—have expressed concern about possible restrictions on access for natural resources development. Some also anticipate that large tracts of Federal conservation system lands will inhibit the expansion of the State's limited surface transportation network that might be needed for minerals development. In response to these concerns, OTA selected five areas for study to measure the seriousness of the access problem.

The five areas selected for intensive analysis are (figure 4): the Seward Peninsula, the Ambler River-Baird Mountains region, the Yukon-Charley-Forty Mile Rivers drainage, the Wrangell-St. Elias Mountains region, and the Mt. McKinley region.[10] The criteria for their selection included past and present mineral extraction, high scenic, wildlife, subsistence, and other values, existence or lack of surface transportation, adjoining Federal/non-Federal landholdings, and the perception by mining and environmental interests that value conflicts involving access were likely to occur in the area.

The information on study areas was gathered by OTA staff who conducted interviews, and by workshops.[11] The workshops were independently convened by conservation and mining industry representatives. All data were then re-evaluated by the OTA staff.

The analysis of these various study areas[12] gives a perspective of the seriousness of the problems associated with access through Federal lands in Alaska. Based on existing information about the location of mineral deposits, landownership patterns, and transportation availability, it was found that:

1. The need for rights-of-way across Federal lands to reach non-Federal minerals is a localized problem, likely to occur in scattered instances. Similarly, the need for rights-of-way across Federal lands to reach existing surface transportation is likely to occur infrequently.

   Rights-of-way to reach existing transportation are most likely to be required in the near term in the Yukon-Charley-Forty Mile Rivers area. Surface transportation and rights-of-way exist in the Mt. McKinley, Wrangell-St. Elias, and Yukon-Charley-Forty Mile areas where non-Federal lands are contiguous. Jurisdiction over existing transportation routes in these areas is already in non-Federal hands.

2. In some regions of Alaska, mineral development will necessitate the improvement of existing transportation and the construction of new systems. The lack of transportation modes capable of moving large volumes of bulk materials, in combination with local economic or interna-

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'Analysis of Laws Governing Access Across Federal Lands: Options for Access in Alaska, Volume II, Working Papers (OTA-M-76). Other unpublished OTA working papers addressing various questions concerning access in Alaska and other States are cited in appendix C.

[10] Six candidate study areas were identified during OTA staff interviews in Alaska. Mining and environmental groups and the Advisory Panel supported the choice of the five study areas finally selected by OTA. Despite the interest of many groups over growing minerals development activity in mineralized areas of southeastern Alaska, OTA omitted southeastern Alaska as a study area. Southeastern Alaska was excluded as a study area because OTA staff interviews suggested that the area highlighted issues of access to minerals on Federal, rather than non-Federal land.

[11] Initial interviews with Federal, State, and private interest groups in Alaska were conducted by Dr. F. J. Wobber, OTA project director, in January 1977 with followup interviews in August and in October 1977. Based on these interviews, five areas were identified and verified as representative of anticipated conflicts among mineral resources and other values that might emerge because of the need to use Federal lands for access to non-Federal land,

[12] See Working Papers, supra, note 9.

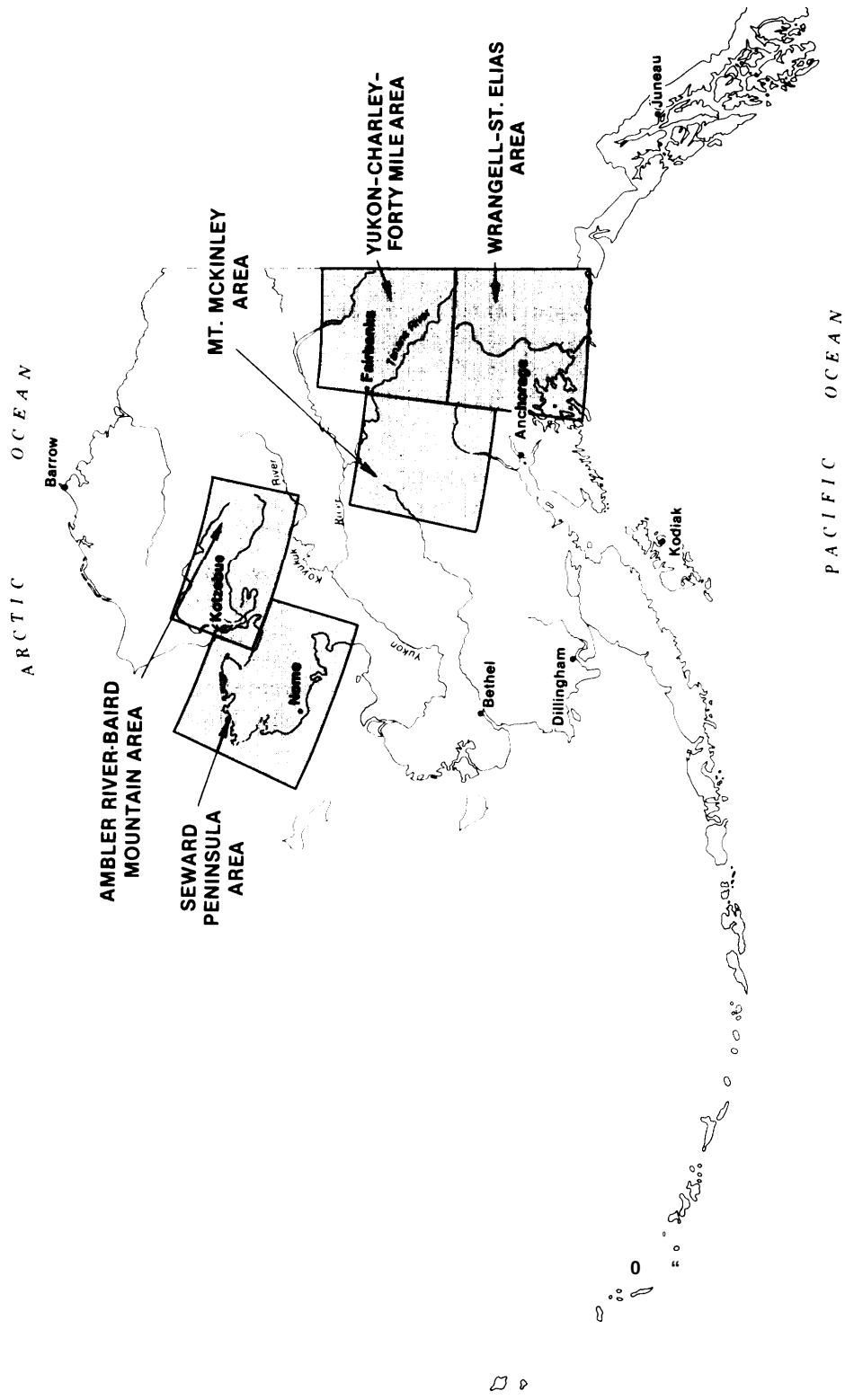

Figure 4.—Geographic Study Areas

tional market restraints, could deter the future expansion of hardrock mining in those areas.

Some areas that contain Federal holdings isolate non-Federal lands from the rest of the State and from each other. In these remote areas, such as the Seward Peninsula and the Ambler River-Baird Mountains region, the construction of new transportation systems—whether a statewide or regional approach is adopted—will involve long distances. These systems will probably have to cross lands in Federal, State, and Native ownership.

It must be noted that these conclusions could be subject to some modification as new information on mineral deposits becomes available, as State and Native selections progress, and as Congress decides on the final boundaries of d-2 lands.

Where existing air and water transportation does not serve bulk mineral production adequately, new transportation facilities will have to be constructed if resource development is to proceed. Elsewhere, improved access to existing transportation, particularly roads, is needed. The availability of rights-of-way to reach existing transportation systems or new ones, which may be developed in the future, is site specific. It depends primarily on the access provisions of existing laws that govern the particular land management system involved and the proposed access route and use.

Little published information could be found about the factors, particularly surface access use of Federal land, that influence the availability of minerals on non-Federal lands. For this reason, a special effort was made to acquire new data (see appendix C). A substantial amount of information was obtained



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through interviews conducted by OTA; additional information was obtained by consultants and contractors. To verify the results of consultant and contractor interviews, OTA conducted supplementary interviews to obtain the disparate views of the various interest groups.

A number of sources supplied background information, which proved to be particularly useful. The Congressional Research Service provided an issue brief, "Alaska National Interest Lands (d-2] Legislation, " and a special report for OTA entitled, "Access to Minerals: With Emphasis on Private Lands. " The Federal-State Land Use Planning Commission for Alaska contributed numerous internal legal memoranda, since published as "Selected Legal Memoranda, Volumes I and II. " Background data concerning non-Federal mineral resources and transportation access requirements for hardrock minerals development are contained in an OTA Working Paper titled "Assessment of Transportation Access Requirements for Minerals Exploration and Mine Development and Operation in Alaska. " Insights into the environmental and social impacts of access were provided in a workshop report, "Assessment of Environmental Penalties Introduced by Transportation Access to Alaska Non-Federal Mineral Resources" prepared by the Wilderness Society (see Vol. 11, Working Papers). Various contractor and consultant reports (see appendix C) and consultations with the Advisory panel provided additional information.

This report focuses on two topics: the access provisions of Federal laws, and options for congressional consideration that deal with the process of obtaining access across Federal lands in Alaska.

Chapter 3 is a summary of the Federal laws governing access across Federal lands. Chapter 4 describes and analyzes the access provisions of the laws that govern Federal land management systems. Chapter 5 examines Alaskan land laws, such as the Alaska Native Claims Settlement Act, the Trans-Alaska Pipeline Authorization Act, and the Alaska Statehood Act. Chapter 6 discusses major environmental and land planning laws that affect access across Federal land systems.

Chapter 7 presents five access policy options for congressional consideration. These range from an extension of the existing access policies of the Federal land management systems to the Alaskan additions to the national conservation systems, through special Alaskan right-of-way and transportation system provisions, to a statutory restriction of most access uses of conservation system (d-2) lands.

The focus of this report is on the legal dimensions of access policy, and particularly on those factors that affect hardrock minerals development. Options are presented for alternative access provisions that may prove useful during congressional deliberations on the Alaska Lands legislation.

3

Federal Laws Affecting Access

Chapter 3.- FEDERAL LAWS AFFECTING ACCESS

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3
Federal Laws Affecting Access

INTRODUCTION

A complex web of laws, regulations, policies, and agency practices controls the use of Federal lands. The availability of access use of Federal lands for any given mineral resource development project is dependent on these legal controls, as well as on economic and physical factors.

Decisions on access are rarely simple. Except in unusual circumstances, numerous alternatives are available to any party seeking surface transportation between two points of non-Federal land. There may be many possible routes, a variety of transportation modes (e.g., train, truck, barge), and a number of different protective measures to safeguard other land values. In principle, it is almost always possible to travel between any two non-Federal areas in Alaska without using Federal lands for access; airplanes or helicopters obviate the need to ever set foot on Federal lands. Meaningful access, however, generally requires the ability to use intervening Federal lands for the construction of surface transportation systems adequate to move men, machinery, and materials economically. The ultimate choice of route, transportation mode, and protective measures will be determined by the legal considerations that regulate the use of any affected Federal lands.

This report analyzes those laws that will have the greatest influence on decisions relating to the use of Federal lands in Alaska for access to mineral resources on non-Federal lands. For the purposes of this report, the analysis is confined to land in the six Federal land management systems. Lands managed by other Federal agencies for program purposes, including military reservations, Department of Energy lands, and the National Petroleum Reserve in Alaska, are not discussed. Federal lands do not include Indian reservations, which are managed by the Government in trust, nor do they include lands selected by Alaskan Regional Corporations or villages pursuant to the Alaska Native Claims Settlement Act (ANCSA).

The analysis of access to non-Federal lands does not include access to mineral claims on Federal lands, even where the claims have been patented and are in private ownership. It also does not include any consideration of access to ‘‘inholdings’ or other valid occupancies within a national park or forest.

Access is an enforceable legal right to use certain lands for a specific purpose. It may be conferred by a special use permit, by an easement, by a right-of-way or, in certain limited conditions, through public use. There are two

major types of access, private and public. Private access, on which most of this chapter is focused, is a right granted to a specific individual or corporation to use lands; generally the grantee is responsible for providing whatever facilities are needed to make access feasible. Public access involves the construction of roads and highways by the Federal, State, or local government. This may involve condemning land within one of the Federal land management systems and transferring it to the control of the Department of Transportation. The laws governing public access are covered in the review of section 4(f) of the Department of Transportation Act and the National Forest Transportation System.

The analysis of Federal laws affecting access to minerals on non-Federal lands attempted to answer the following questions, which are relevant to policy decisions on the disposition of Alaska National-Interest Lands:

- What provisions of Federal land management laws provide access across Federal lands for the development of minerals on non-Federal lands?
- What terms and conditions are placed on such access use of Federal lands?
- Do existing laws and policies governing the Federal land management systems provide rights-of-way across the public lands and national conservation systems in Alaska?
- What other Federal laws influence access across Federal lands?
- What is the impact of Federal land planning and environmental laws on access?
- What effect does the presence of federally managed areas have on mineral access and mining activities in surrounding areas?



Photo Credit: The Alaska Coalition

View of Mt. McKinley from the north on the road near the Kantishna mining district

To answer these questions, three categories of Federal laws that affect access were examined. They are:

1. Federal Land Management Laws—Laws and regulations providing for access across units of the six Federal land management systems: public lands, National Park System, National Wildlife Refuge System, National Forest System, National Wild and Scenic Rivers System, and National Wilderness Preservation System.

2. Federal Laws Relating to Alaska Lands and Mineral Resources-The Alaska Statehood Act, the Alaska Native Claims Settlement Act, the Trans-Alaska Pipeline Authorization Act, the Alaska Natural Gas Transportation Act of 1976, and the Naval Petroleum Reserves Production Act of 1976.

3. Federal Land Planning and Environmental Laws—These laws can affect the availability of access through various procedural and substantive requirements. The report analyzes the impact on access of the National Environmental Policy Act of 1969, section 4(f) of the Department of Transportation Act, the Endangered Species Act, the Clean Air Act, the Clean Water Act, and the Coastal Zone Management Act.

FEDERAL LAND MANAGEMENT SYSTEMS

Each Federal land management system has its own rules governing access for mineral development on non-Federal lands. Two factors determine the terms and conditions placed on access use of Federal lands: (1) the classification of the affected land, and (2) the proposed use for which access is needed. Land managers for every system, including the Wilderness System, have statutory authority to grant some rights-of-way. The availability of such grants and the nature of any conditions reflect the general purposes for which the affected unit is managed.

PUBLIC LANDS

The Bureau of Land Management (BLM) administers the public lands. The Secretary of the Interior has comprehensive authority under Title V of the Federal Land Policy and Management Act of 1976, (commonly known as the BLM Organic Act) to grant rights-of-way over the public lands, except lands in designated wilderness areas, Rights-of-way are specifically authorized for "roads, trails, highways, railroads, . . . airways, or other means of transportation . . . or such other necessary transportation or other systems or facilities which are in the public interest and which require rights-of-way over, upon, under, or through such lands. " This comprehensive authority provides a legal basis for rights-of-way over public land areas for access to minerals on non-Federal lands or for the construction or improvement and expansion of transportation systems. There are two limitations on this general availability of rights-of-way:

. BLM public lands wilderness areas.—The Secretary of the Interior may allow access use of public lands that are part of the National Wilderness Preservation System only as provided in the Wilderness Act of 1964. All access provisions of the Wilderness Act applicable to national forest wilderness areas are applicable to designated wilderness areas managed by the BLM. The exceptions relevant to access for purposes of non-

Federal minerals exploration and development are:

—Existing private rights.

—Continued use of aircraft and motorboats where use predates wilderness designation.

—Access to State and private lands completely surrounded by a wilderness area or exchange of the surrounded lands for other Federal land of equal value.

—Access to valid mining claims and other valid occupancies wholly within a wilderness area by means customarily enjoyed in other areas similarly situated.

—Presidentially granted exceptions for facilities, including roads, in the national interest.

—Any other exceptions expressly provided by Congress for specific wilderness areas.

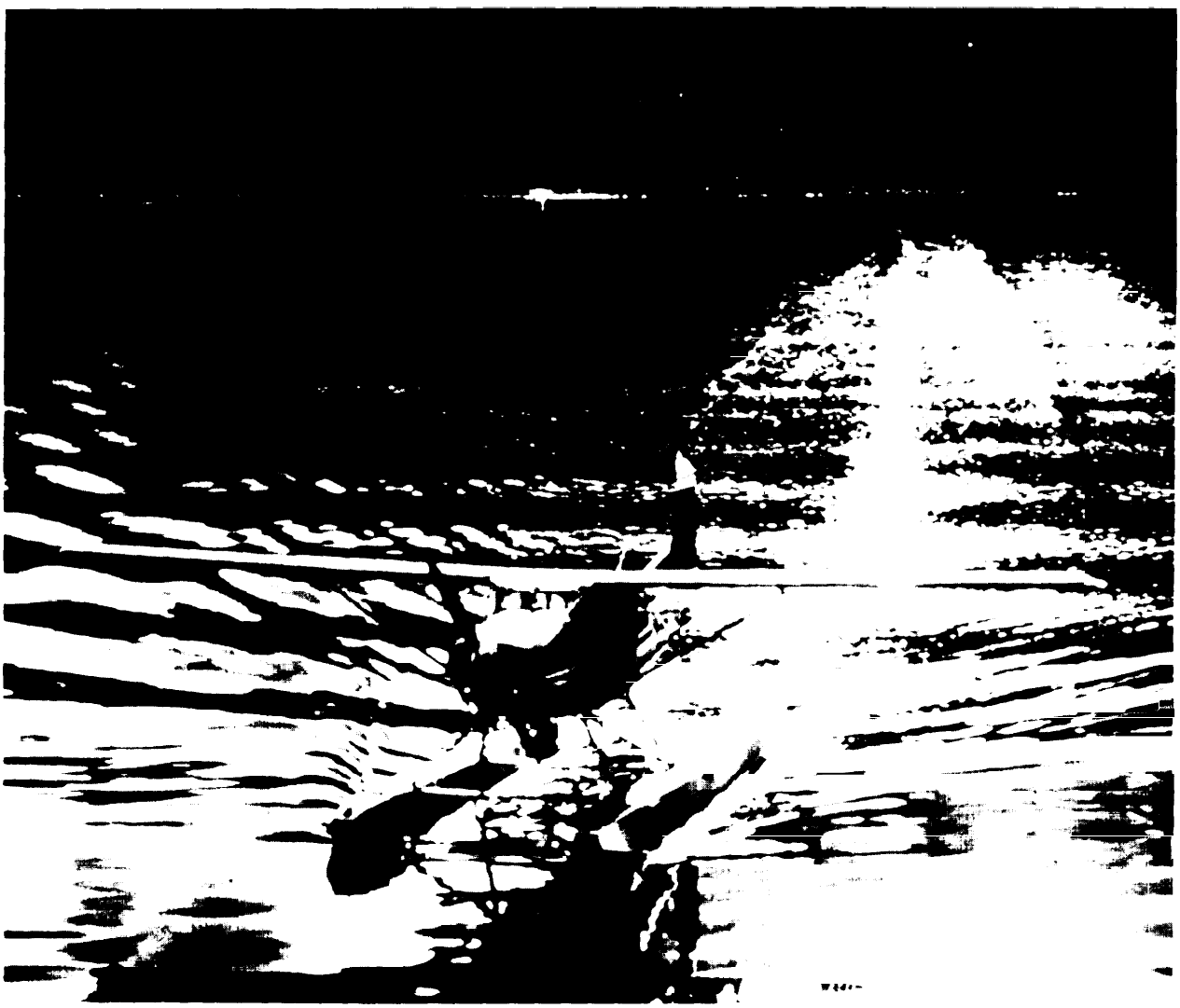

Photo Credit: The Alaska Coalition

Bush plane, a primary means for transportation of people and supplies in rural Alaska

. Public lands in wilderness study classification.—Section 603 of the BLM Organic Act requires that the BLM inventory all roadless public land areas of 5,000 acres or more and roadless islands for wilderness potential. Those areas with wilderness potential are to be classified as wilderness study areas and managed to preserve those values until completion of administrative review and congressional consideration. While rights-of-way are not prohibited in study areas, section 603 imposes restrictions on the exercise of the right-of-way authority by limiting the Secretary's discretion to approve any use that conflicts with or impairs wilderness values.

NATIONAL PARK SYSTEM

The National Park System is managed by the Secretary of the Interior through the National Park Service for the purposes of preservation of natural and historic values of park areas for the enjoyment of present and future generations. The Park Service is vested with broad discretionary authority to control activities and uses within the national parks. There is no statutory provision expressly authorizing rights-of-way through park areas for access to non-Federal lands. While the absence of a specific provision authorizing grants of rights-of-way across national parks does not bar such use, it does not provide assurance to non-Federal landholders who may need to cross park lands. This lack of any assurance of access and of the terms and conditions of rights-of-way could deter potential developers.

Non-Federal owners must rely on the general discretionary management authority of the Secretary and individual park superintendents for access through park lands. Park regulations issued under this authority



Photo Credit. The Alaska Coalition

Camping, Wrangell-St. Elias Region

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provide that special use permits may be issued for commercial and other use of existing park roads for access to private lands within or adjacent to a park for which other means of access are not otherwise reasonably available. Certain public lands statutes that are applicable to the National Park System authorize rights-of-way through park areas for electric power, communications, and water drainage and irrigation systems and facilities. The use of the right-of-way must be compatible with the public interest and with the purposes of the park system. These laws may provide rights-of-way through parks for utility systems associated with mineral resource development on non-Federal lands. These utility rights-of-way may not be used for other forms of access to non-Federal lands or for transportation systems.

NATIONAL WILDLIFE REFUGE SYSTEM

The National Wildlife Refuge System is managed by the U.S. Fish and Wildlife Service. The Secretary of the Interior has ample authority to grant rights-of-way across units of the National Wildlife Refuge System for access to non-Federal lands or for transportation systems where such use does not conflict with the management purposes of a particular area. The National Wildlife Refuge



Snowy Owl



Golden Eagle



Alaska Red Fox



Photo Credits The Alaska Coal/tin?

Alaska Brown Bear — McNeil River

Administration Act authorizes the Secretary of the Interior to permit the use of lands in the National Wildlife Refuge System for any purpose, including access. Section 4 of the Act specifically provides that rights-of-way through refuge areas may be granted for any purpose, "such as . . . powerlines, telephone lines, canals, ditches, pipelines, and roads," where such uses are determined to be compatible with the purpose for which the refuge areas are established. "Compatible" means that the requested right-of-way or use will not interfere with or detract from the purpose for which units of the refuge system are established.

Holders of rights-of-way are required to pay the fair market value of the right-of-way. Net proceeds from right-of-way grants are deposited into the Migratory Bird Conservation Fund to be used for land acquisition. Section 4 of the Refuge Administration Act largely supplants other right-of-way provisions applicable to the National Wildlife Refuge System. There are two limitations on the availability of rights-of-way across refuge units:

- Access uses of refuge system components of the National Wild and Scenic Rivers System are governed by laws applicable to the National Park System consistent with purposes of the Wild and Scenic Rivers System.
- Access uses of Refuge System Wilderness areas may be granted only as recognized in the Wilderness Act and are thus limited to those individual exceptions specifically provided by Congress and to existing private rights. The exceptions applicable to national forest and BLM wilderness areas do not apply to refuge wilderness areas. Use of refuge system wilderness areas for transportation systems and facilities must have express congressional approval.

NATIONAL FOREST SYSTEM

The national forests are managed by the Forest Service under the mandate of the Multiple-Use Sustained-Yield Act of 1960. The Secretary of Agriculture has broad dis-



Photo Credit OTA Staff

Tugboat towing logs to mill, Southeast Alaska

cretionary authority to allow the use of Forest System lands, except wilderness areas, for access to non-Federal mineral areas and for transportation systems.

Express statutory authority for rights-of-way across national forest lands for access purposes is found in Title V of the Federal Land Policy and Management Act of 1976 and in the Act of October 13, 1964, as amended, authorizing development of the National Forest Transportation System. National forest components of the National Wilderness Preservation System and the National Wild and Scenic Rivers System are managed under the laws and regulations applicable to those systems in addition to general laws governing the National Forest System. Access uses of these areas are limited. The Federal Land Policy and Management Act authorizes rights-of-way across forest lands, except designated wilderness areas, for roads, highways, railroads, and other transportation systems and facilities. The Act of October 13, **1964,** as amended, authorizes grants of temporary or permanent easements for road rights-of-way over national forest lands. Forest service regulations implementing provisions relating to the National Forest Transportation System indicate a policy of coordinated planning with consideration of the transportation and resource development needs of surrounding communities. The Secretary of Agriculture may approve rights-of-way and other access use of forest system components of the National Wild and Scenic Rivers System under laws applicable to the forest system provided that any conditions placed on grants of such easements must be related to the policies and purposes of the Wild and Scenic Rivers Act. Rights-of-way through designated wilderness areas in the National Forest System may be approved only as provided in the Wilderness Act. The Wilderness Act recognizes the following exceptions relevant to minerals access to non-Federal areas and transportation systems:

—Existing private rights;
—Preestablished use of aircraft and motorboats in areas of national forest wilderness subject to regulation by the Secretary;
—Rights necessary to provide adequate access to State or private lands completely surrounded by a national forest wilderness area (or exchange of these lands for other Federal lands);
—Ingress and egress to valid mining claims or other valid occupancies wholly within a forest wilderness area by means customarily enjoyed with respect to other areas similarity situated;
—Presidential authorization of other facilities needed in the public interest "including road construction" or use where he determines that such use "will better serve the interest of the United States and the people thereof" than will its denial; and
—Any other exception expressly provided by Congress for specific wilderness areas.

NATIONAL WILD AND SCENIC RIVERS SYSTEM

The National Wild and Scenic Rivers System was established so that certain rivers with outstandingly remarkable scenic, recreational, fish and wildlife, and other similar values would be "preserved and protected in a free-flowing condition for the benefit of present and future generations. " The system includes both federally and State designated rivers. Federal wild and scenic rivers are managed by the land management agency that had responsibility for the river before its designation. The classification of rivers as wild, scenic, or recreational is made according to certain characteristics, including their accessibility by road; wild rivers are the least accessible, scenic rivers are more accessible, and recreational rivers are the most accessible. Rivers are to be managed to preserve the values that led to their initial designation and classification. Therefore, any use that might be detrimental to these values could be denied.

The access provision of the Wild and Scenic Rivers Act distinguishes between those river components managed by the Secretary of the Interior and those managed by the Secretary of Agriculture.

Rights-of-way across all wild and scenic rivers administered by the Secretary of the Interior are issued in accordance with the laws applicable to the National Park System regardless of whether the river is part of the National Park System, the National Wildlife Refuge System, or the public lands. For these rivers, there is no statutory provision expressly authorizing rights-of-way for access to non-Federal lands.

Rights-of-way for components administered by the Secretary of Agriculture are issued under laws relating to the National Forest System. The Secretary of Agriculture has ample authority to grant rights-of-way over forest system component rivers under Title V of the Federal Land Policy and Management Act. There is additional authority to grant easements for roads and trails under laws relating to development of the National Forest Transportation System. Any conditions placed on the issuance of a right-of-way or easement must be related to the purposes of the Wild and Scenic Rivers Act. When a river is also managed as part of the Wilderness System, the more restrictive provisions apply in case of any conflict.



Photo Credit National Park Service

The Charley River meanders through a park-like setting

NATIONAL WILDERNESS PRESERVATION SYSTEM

The National Wilderness Preservation tem was created to provide the whole Nation with "the benefits of an enduring resource of wilderness. " Congressionally designated wilderness areas in national parks, forests, wildlife refuges, and public lands are managed under special rules "for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. " Provisions of the Wilderness Act of 1964, and the regulations thereunder, which control activities and uses in wilderness areas, are protective and stringent. The general policy for use of wilderness areas is:

> Except as specifically provided for in this Act, and subject to existing Private rights, there shall be no commercial enterprise-and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.



Photo Credit: The Alaska Coalition

The Brooks Range near the Arrigetch Peaks

Access uses of wilderness areas recognized in the Wilderness Act are limited to the following:

a. Preexisting private rights;
b. Access routes and facilities for wilderness recreation and management purposes;
c. Emergency purposes;
d. Established use of motorboats and aircraft where such use predates wilderness designation—subject to regulation by the management agency;
e. Presidential authorization of the use of national forest and public lands wilderness areas for projects and facilities in the national interest;
f. Adequate access rights for State and private lands completely surrounded by wilderness areas in national forests or public lands;
g. Access to valid mining claims and other valid occupancies wholly within a national forest or public lands wilderness area by means that are currently or customarily enjoyed in similarly situated areas; and
h. Special provisions applicable to specific wilderness areas.

MANAGEMENT SYSTEMS AND d-2 DESIGNATIONS

The final congressional designation of additions to national conservation systems called for in section IT(d)(Z) of ANCSA will reduce some of the uncertainties concerning access use of Federal lands in Alaska. The terms and conditions for obtaining access across some conservation units—forests, refuges, and public lands—can be anticipated based on existing laws and policies.

The public lands and the National Forest System have broad and comprehensive right-of-way provisions. Consequently, lands in those two systems, with the exception of wilderness study areas and designated wilderness areas, are the most available Federal lands for access to non-Federal mineral lands and for construction of transportation routes. Access use and rights-of-way across refuge system lands may be allowed in the discretion of the managing agency if the proposed use is compatible with the purposes of the refuge and if the applicant agrees to pay the fair market value for the use.

Access use of national park lands rests with the management discretion of the Secretary and the individual park superintendent. Such use must be in conformance with the purposes of the park system. There is no statutory provision expressly authorizing rights-of-way across park areas for access to non-Federal lands or for transportation systems.

Rights-of-way across National Wild and Scenic Rivers System components managed by the Department of the Interior are issued under laws applicable to the National Park System regardless of the managing agency. Access uses of wilderness areas is highly restricted and subject only to the exceptions recognized in the Wilderness Act. The wilderness review required by section 603 of the BLM Organic Act raises some uncertainty about the future availability of access use of d-l lands (those public lands currently withdrawn under section IT(d)(l) of ANCSA that will remain after Native conveyances, State selections, and congressional designation of conservation system additions under section 17(d)(2)).

The BLM has decided that wilderness review of public land roadless areas in the lower 48 States will have priority. The wilderness inventory of Alaska public lands will be deferred until after congressional action on

Alaska National Interest Lands and settlement of Native selections and conveyances under ANCSA. This delay will allow an opportunity for State and Native access needs to be defined. It will also permit decisions on inventory and use classification of remaining public lands to include a consideration of the impacts of such classifications on the protected values of new and existing conservation system units. As a result of BLM wilderness reviews, additional Federal lands may be placed under wilderness protection in the future. This protection will restrict access uses of those areas.

It is difficult to ascertain what effect these possible future classifications will have on the availability of public lands in Alaska for access purposes. The public land inventory and wilderness review procedures, however, provide a mechanism for the State, Native Corporations, or other parties to present any need to use the proposed wilderness areas for access. Moreover, BLM wilderness areas will be subject to all the exceptions applicable to National Forest Wilderness areas, thus even after wilderness designation, several classes of access use are preserved.

FEDERAL LAWS RELATING TO ALASKA LANDS AND MINERAL RESOURCES

Until statehood, over 99 percent of all land in Alaska was in Federal ownership. Although public land laws encouraging disposition, such as the Homestead Acts, applied to Alaska lands, they did not operate to transfer significant amounts of public land to private ownership.

Two laws—the Alaska Statehood Act and ANCSA—will transfer more than 148 million acres from Federal ownership. ANCSA also provides a framework for the reclassification of Federal lands in Alaska. Three other laws have established special rules for the use of some Federal lands in Alaska in connection with three major energy development projects.

An analysis of the Alaska Statehood Act and ANCSA indicates that development of land-based resources, including minerals, was one of the purposes behind the unprecedented grants of Federal lands to the State and to Alaska Natives. The House report accompanying the Alaska Statehood Act indicates that the grants of lands and revenues from lands were designed to remove a potential impediment to the operation of an effective State government. There was concern that Alaska. which has always been heavily dependent on federally financed construction projects and military bases, could not support the costs of self-government from resources on which revenue could be generated. Similarly, ANCSA's grant of subsurface rights to profit-making Native Regional Corporations was one of several provisions designed to ensure a viable economic future for Alaska Natives.

ALASKA STATEHOOD ACT

The Alaska Statehood Act, enacted in 1959, contains several important provisions that changed the previous patterns of landownership and control in Alaska. The State was permitted to select:

—102,550,000 acres of statehood land grants from vacant, unreserved, and unappropriated public lands;

—400,000 acres of vacant, unreserved, and unappropriated forest lands (with approval of selection by the Secretary of Agriculture) for community expansion and recreation purposes; and

—400,000 acres of vacant, unreserved and unappropriated public lands for com-

munity centers and recreation areas (with approval of selection by the Secretary of the Interior).

The Act confirmed prior Territorial grants of university, mental health, and school lands of over 1 million acres. It also transferred miscellaneous parcels of Territorial government property to the State and gave the State title to 35 million to 40 million acres of submerged lands.

The State received full mineral rights in all lands granted or confirmed under the Act. All State reconveyances of these lands must contain a reservation to the State of the mineral rights and the right-of-access to extract them. Alaska was permitted to select Federal lands that were leased or in production under the Mineral Leasing Act of 1920 and to succeed to all rights of the Federal Government. In addition, the State received the following royalty rights on lands that remained in Federal ownership:

—The right to receive 521/i percent of the leasing proceeds from the Mineral Leasing Act of 1920 in lieu of participation in the reclamation fund. (This grant was in addition to the 37½ percent of leasing revenues paid to all public land States for public road and educational purposes. Alaska thus received the right to 90 percent of all leasing profits from public lands.)

—The right to receive 90 percent of Federal revenues from the operation of Government coal mines and coal leases under the Alaska Coal Leasing Act of 1914.

In addition the State was given the right to 5 percent of the net proceeds from the sale of public lands in Alaska for education purposes, and 70 percent of the net proceeds of the Pribilof Islands fur trade.

The Alaska Native Claims Settlement Act extinguished all Native claims to lands and hunting and fishing rights based on aboriginal title or use. In exchange, the Alaska Indians, Aleuts, and Eskimos received: (1) the right to select 44 million acres of unreserved Federal lands, and (2) distributions from a Native fund of $962.5 million.

The Act authorizes the establishment of 13 profit-making Native Regional Corporations. The Regional Corporations administer distributions from the Native fund, hold title to lands not specifically apportioned to Village Corporations, and hold subsurface rights to all selected lands. Village Corporations hold title to surface rights in lands selected in and around villages and receive disbursements of funds and other revenues from the Regional Corporations.

The 44 million acres were apportioned according to a complex formula. Village Corporations were allowed to select surface rights to approximately 22 million acres of land in and around existing villages on the basis of population. Regional Corporations received proportional shares of all remaining lands. All subsurface rights (including mineral rights) are vested in the Regional Corporations.

The grant of mineral rights to the profit-making Regional Corporations indicates an intent that those resources might be developed, The Alaska Native Fund is also dependent on the development of mineral resources; payments of a 2-percent overriding royalty on all mineral-leasing revenues from State and Federal lands (other than the National Petroleum Reserve) are to provide $500 million.

Section 17 of the Act established the Federal-State Land Use Planning Commission for Alaska. It is to identify necessary easements across lands selected by Regional and Village Corporations. The Secretary of the Interior is to reserve such easements. No provisions were made for the reservation of easements across Federal lands to assure access to Native lands. The subsequent order reserving extensive easements is the subject of litigation. A tentative settlement has been reached.

Section 17(d) of the Act provided for the reclassification of all Federal lands in the

State. Under section 17(d)(2), the Secretary was authorized to withdraw 80 million acres of land for addition to or creation of national parks, forests, wildlife refuges, and wild and scenic rivers. To protect the national interest in these lands, they were withdrawn from all forms of appropriation under the public land laws and the mining and mineral-leasing laws, and from selection by the State under the Alaska Statehood Act and by Native Regional Corporations under ANCSA. The authority for these withdrawals expired in December 1978. The Secretary was also authorized to withdraw other lands to protect the public interest under the authority of section ii'(d)(l); these withdrawals did not affect the right of Village Corporations, Regional Corporations, or the State to make land selections within and around existing Native villages.

OTHER LAWS

In addition, three other laws relating to the role of Federal land management in the development of energy resources in Alaska are examined. The Trans-Alaska Pipeline Act authorized an expedited procedure for granting a right-of-way for the Alaska oil pipeline. Judicial and administrative review of licensing and environmental proceedings were limited. The Act also required a reservation for additional rights-of-way for compatible uses on or adjacent to the pipeline right-of-way. The Alaska Natural Gas Transportation Act of 1976 provided a similar expedited procedure for the consideration of several proposals to construct a natural gas pipeline. These expedited procedures provided for coordinated review of right-of-way applications covering several different management systems. The Naval Petroleum Reserve Production Act transferred jurisdiction over and management of the Naval Petroleum Reserves in Alaska to the Department of the Interior. No provision was made for any right-of-way over the Reserve. The Secretary was directed to make a study of the nonpetroleum value of the reserve within 3 years.



Photo Credit: The Alaska Coalition

Construction of the Trans-Alaska Pipeline

FEDERAL LAND PLANNING AND ENVIRONMENTAL LAWS

The report also analyzes a set of Federal land planning and environmental laws that have, or were thought to have, an influence on the availability of access for mineral resource development. The laws have varied effects. One, the Coastal Zone Management Act (CZMA), requires the establishment of comprehensive land use planning. Two of these laws, the Endangered Species Act and section 4(f) of the Department of Transportation Act, place substantive constraints on the activities of Federal land managers.

The National Environmental Policy Act of 1969 (NEPA) places procedural requirements on Federal land managers that often apply during decisionmaking on access requests. The Clean Air Act and the Clean Water Act influence access in several ways: first, the access project itself, i.e., construction and transportation, must comply with applicable standards; second, the mineral resource project for which access is granted must comply with the Acts before a Federal land manager may grant a permit; third, the Clean Air Act places stricter standards on projects in and near certain highly protected Federal conservation units (although the number of such units in Alaska is less than commonly perceived and National Interest Lands legislation cannot create any of the most highly protected areas). NEPA requires that an environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the quality of the human environment, and that Federal agencies consider the environmental effects of and possible alternatives to a proposed action, consult with other agencies, and solicit public comment. NEPA imposes no specific environmental



Photo Credit: The Alaska Coalition

North Slope tundra — late summer



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standards or direct restraints on access to non-Federal minerals. It does, however, exert substantial indirect influence since Federal land management agencies must comply with NEPA in their review of requests for rights-of-way and other permits. Applicants may be required to pay the costs of preparing an EIS if approval is determined to be a major Federal action.

Section 4(f) of the Department of Transportation Act of 1966 bars the use of Federal funds for any transportation project that uses any land of National, State, or local significance from any public park, refuge, or recreation area, or from any historic site unless the Secretary of Transportation finds that there is no prudent and feasible alternative to such use and that the proposed project includes all possible planning to minimize harm to the area involved. By restricting the expenditure of Federal funds, section 4(f) limits the availability of lands owned by Federal, State, or local governments and some privately owned historic sites, for transportation systems which, in some instances, could be necessary for mineral resource development. Lands in the National Park System, the National Wildlife Refuge System, and the National Wild and Scenic Rivers System are clearly within the protections of section 4(f). Some public lands managed by the BLM and National Forest System lands are also subject to the restrictions of section 4(f) if the lands are actually used or proposed for park, recreation, wildlife protection, or historic purposes, or are under study for wilderness or wild and scenic rivers designation.

Section 7 of the Endangered Species Act requires that all Federal agencies ensure that their actions do not jeopardize the continued existence of any endangered or threatened species or result in the destruction or modification of a critical habitat. Compliance with the Act requires that any agency consider the effects a proposed action may have on a protected species or habitat, and consult with the Secretary of the Interior to determine whether any harm may result and what steps may be taken to minimize any risk. In areas that are home to unique and endangered species, the Act may impose substantial and additional constraints on Federal land management agencies in the issuance of rights-of-way across Federal areas. In other areas where there are few or no endangered species, the compliance requirements would have a lesser effect on the actions of Federal land managers.

The Clean Air Act establishes national standards to limit the presence of five common air pollutants that present known risks to human health and safety. Direct Federal controls apply only to certain major new facilities with the potential to emit large quantities of these pollutants; all other polluters are regulated by the States under plans designed to assure that the five national standards are met.

The Act imposes strict controls on the construction of new facilities in areas where air quality is better than the national standards, in order to prevent significant deterioration of existing air quality. There are three classes of "clean air" regions: Class I areas, where minimal additional pollution is allowed; Class 11 areas, where moderate amounts of new pollution are permitted; and Class III areas, where pollution levels can be increased to the national standards. The Clean Air Act Amendments of 1977 classified most clean air regions, including both Federal and non-Federal lands, as Class 11. Some existing Federal parks and wilderness areas are designated mandatory Class I areas (including one park and three wilderness areas in Alaska); no d-2 lands are mandatory Class I areas. Other large national parks, monuments, and refuges are Class 11 areas and cannot be redesignated to Class III status. There are two such areas in Alaska. It is anticipated that most Alaska National Interest Lands will fall into this Class 11 subcategory on enactment of d-2 legislation. The authority to redesignate the classification of clean air areas, with the exceptions noted above, is vested in State governments. Federal land managers have only an advisory role in the redesignation process.

Preconstruction review of new sources and modification of existing sources are carried out at the State level. There are four types of preconstruction review: (1) to assure the maintenance of national ambient air quality standards; (2) to assure compliance with applicable Federal new source standards; (3) to prevent significant deterioration in clean air areas; and (4) to assure compliance with the special rules that apply to new sources of pollution in areas that do not meet the national standards. In the last two instances, preconstruction review may impose severe controls on allowable new construction or, perhaps, prevent it altogether.

The Clean Air Act requires that State air pollution control agencies consult with the appropriate Federal land manager on all applications for permits for major emitting facilities that may affect air quality in a Federal Class I area. Applicants for rights-of-way over Federal land management system lands must agree to comply with State and Federal air quality standards, not only in activities associated with the use of the right-of-way, but also in their operations in non-Federal areas.

The Clean Water Act imposes Federal controls on all forms of water pollution. Every "point source" of pollution, i.e., any enterprise that discharges pollutants into rivers, lakes, or streams through pipes, conduits, channels, and the like, is required to obtain a discharge permit that prescribes allowable levels of pollution. Some mines are regulated as sources. "Nonpoint sources" of pollu-

tion—including the runoff from roads and from agricultural, construction, and some mining activities, are regulated at the State and local level pursuant to local water pollution control plans.

The Act establishes a series of deadlines for progressively more stringent controls on point sources of pollution. It requires the utilization of various levels of pollution control technology, By 1979, all point sources must be using the "best practicable control technology" and between 1983 and 1987 they must begin applying the "best available technology" for various classes of pollutants. The Environmental Protection Agency develops guidelines on an industry-by-industry basis.

Effluent standards have been promulgated for some mining activities including, for example, placer mines that use gravity separation to extract precious metals.

More stringent controls may be applied where pollution discharges threaten Federal and State water quality standards for specific waterways. An antidegradation policy protects the water quality of streams and rivers that already have clean water. The antidegradation program applies to both Federal and non-Federal areas. Right-of-way applicants must agree to comply with Federal and State water quality standards and to obtain all necessary permits. This compliance requirement not only applies to activities associated with use of the right-of-way such as road-building and bridge construction, but also with the conduct of mining operations on non-Federal sites.

The Coastal Zone Management Act provides incentives for States to develop comprehensive land management programs for their coastal areas. Participating States receive Federal grants to develop and administer their programs, as well as Federal aid to offset the impact of energy development activities. All eligible States have chosen to participate. To date, only two State programs have been approved.

States participating in the CZMA program must develop a plan for managing activities in the coastal zone. The plan must include a definition of permissible land and water uses in the coastal zone, proposals for protecting areas of unique, scarce, fragile, or vulnerable natural habitat, and a process to ensure that the State adequately provides for "consideration of the national interest" in the siting of certain energy and resources development facilities, including associated transportation systems.

Once the State has adopted a plan that is approved by the National Oceanic and Atmospheric Administration, it has a major effect on Federal activities in the coastal zone. Federal activities must be "consistent to the maximum possible extent" with the State plan. This provision has a fourfold effect:

1. Direct Federal activities in the coastal zone, including land management policies, must be consistent;
2. Federal development projects in the zone must be consistent;
3. Applicants for Federal licenses and permits (such as right-of-way permits) must secure State certification; and
4. Applicants for Federal assistance must include the views of the State management agency with their proposals.

A State plan will not be approved unless the State demonstrates that it has the authority to control land and water uses in the coastal zone. The State may do this by direct land and water use regulation, through local implementation of State established standards subject to State administrative review, or by State authority to disapprove all local land and water use regulation. Transportation and mining activities in the coastal zone must comply with State coastal zone requirements.

The following chapters describe the requirements for obtaining rights-of-way through the major Federal land management

systems for purposes of mineral resource development on non-Federal lands. Several laws relating to Federal lands in Alaska are also included as background information. The major Federal land planning and environmental laws affecting right-of-way applications are also discussed. All references are current as of May 1978, and, in some instances, more recent material has been added. This report was structured as both a technical reference for Congress in its consideration of access issues in Alaska Lands legislation and as a primer on rights-of way across Federal lands for mineral resource development.

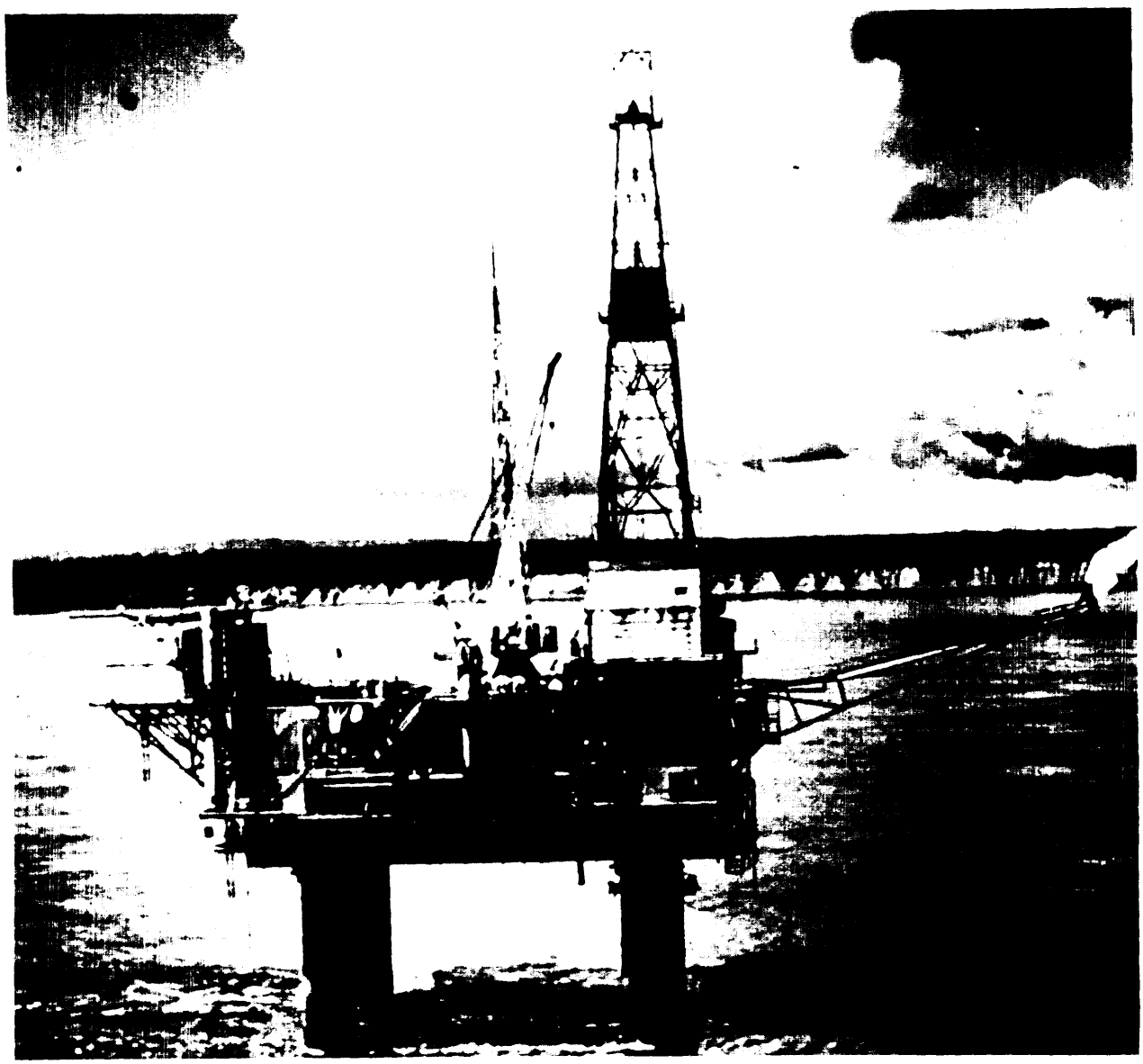

Photo Credit The Alaska Coalition

Offshore Oil Production Rig, Cook Inlet

4

Federal Land Management Systems

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4

Federal Land Management Systems

PUBLIC LANDS

The Bureau of Land Management (BLM) of the Department of the Interior administers the Nation's public lands—those federally controlled lands that have not been placed in any other specific land management system. As defined in the Federal Land Policy and Management Act of 1976:[1]

> The term "public lands" means any land and interest in land owned by the United States within the several States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except—
> 1. lands located on the Outer Continental Shelf; and
> 2. lands held for the benefit of Indians, Aleuts, and Eskimos, '

Traditionally, BLM lands have been the least restricted and regulated Federal lands, and the most open to development and use.

The BLM manages about 60 percent (470 million acres) of all federally owned lands; more than half of this area (over 295 million acres) is in the State of Alaska.[3] The BLM has interim jurisdiction over public lands in Alaska that have been selected by Alaska Natives under the Alaska Native Claims Settlement Act[4] (ANCSA) and lands selected by the State under provisions of the Alaska Statehood Act.[5] It also manages lands currently withdrawn for potential designation as part of national conservation systems under section 17(d)(2) of ANCSA. On final congressional disposition of the (d)(2) national interest lands, management of substantial acreage will be transferred to the National Park Service, the U.S. Fish and Wildlife Service, and the Forest Service.[6]

Final conveyances of Native and State selections will further reduce acreage under BLM management.[7] Nevertheless, the BLM will still have jurisdiction over millions of acres of Alaska land. At present, all public lands in Alaska that have not been selected by Natives or the State or withdrawn for d-2 consideration by Congress have been withdrawn for classification under section 17(d)(l) of ANCSA. Scattered Native and State selections have been made in mineralized areas surrounded by these so-called d-l lands.[8]

BLM policies will influence decisions associated with mineral resource development on non-Federal lands in Alaska. Until legislative disposition of d-2 lands and final conveyance of State and Native selections, the BLM will administer more than 75 percent of all lands in the State. After d-2 designations and final land conveyances, it is likely that more than 100 million acres will remain under BLM administration. In many regions, access to non-

Note: Footnotes for this section appear on pp. 64-66,

Federal lands for mineral resource development will involve transportation over and use of BLM lands.

BLM ORGANIC ACT

The Federal Land Policy and Management Act of 1976,[9] commonly referred to as the BLM Organic Act, restructured the public land laws. It gives the BLM comprehensive and explicit authority to manage public lands and resources, and repeals many archaic and overlapping statutes governing public land withdrawal, disposal, and rights-of-way. Title V of the BLM Organic Act sets forth right-of-way authorization for public lands administered by the BLM and for National Forest System lands.[10] The term "right-of-way" as used in the Act includes "an easement, lease, permit, or license to occupy, use, or traverse public lands" for the purposes listed.[11] Several sections of the BLM Organic Act bear on the issue of access; of principal importance for access are section 302, which is the general management authority for public lands;[12] sections 501-511 (Title V), the Right-of-Way authorization; [13] and section 603, BLM wilderness review.[14]

Until regulations and directives have been issued under the authority of the BLM Organic Act, the old regulations remain in effect.[15] These regulations also specify the general application procedure for rights-of-way and easements over lands administered by the Fish and Wildlife Service and the Park Service.[16]

Section 302 of the BLM Organic Act[17] authorizes the Secretary of the Interior to regulate the use, occupancy, and development of public lands by several means, including easements, permits, licenses, and leases. [18] The Secretary is directed to manage the public lands according to land use plans developed under section 202[19] and to take action necessary to prevent unnecessary or undue degradation of the land. The Secretary may permit Federal departments and agencies to occupy and develop public lands only under the right-of-way provisions of section 507[20] or under the withdrawal provisions of section 204.[21] However, if proposed Federal use and development are "similar or closely related to" programs of the Secretary for the lands involved, he may enter into cooperative agreements under section 307(b).[22]

Enforcement of regulations—a serious problem under earlier laws—is enhanced by mandatory provisions in all permits. All instruments providing for use or occupancy of public lands must contain a provision allowing revocation after notice and hearing for violation of any terms or conditions including compliance with the applicable State or Federal air or water quality standards or implementation plans .[23]

PURPOSES FOR WHICH RIGHTS-OF-WAY MAY BE GRANTED

Title V of the BLM Organic Act authorizes the Secretary of the Interior "to grant, issue, or renew rights-of-way over, upon, under, or through" public lands, except lands designated as wilderness.[24] The purposes for which a right-of-way may be issued include:

1. Reservoirs, canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other facilities and systems for the impoundment, storage, transportation, or distribution of water;
2. Pipelines and other systems for the transportation or distribution of liquids and gases, other than water and other than oil, natural gas, synthetic liquid or gaseous fuels, or any refined products produced therefrom, and for storage and terminal facilities in connection therewith;
3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation and distribution of solid materials, and facilities for the storage of such materials in connection therewith;
4. Systems for generation, transmission, and distribution of electric energy, ex-

cept that the applicant shall also comply with all applicable requirements of the Federal Power Commission under the Federal Power Act of 1935 (49 Stat. 847; 16 U.S.C. 791);

5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communication;
6. Roads, trails, highways, railroads, canals, tunnels, tramways, airways, livestock driveways, or other means of transportation except where such facilities are constructed and maintained in connection with commercial recreation facilities on lands in the National Forest System; or
7. Such other necessary transportation or other systems or facilities which are in the public interest and which require rights-of-way over, upon, under, or through such lands.[25]

INFORMATION REQUIREMENTS

An applicant for a right-of-way is required to submit and disclose plans, contracts, agreements, and other information reasonably related to the use or intended use of the right-of-way.[26] In addition to any other information necessary to the determination of whether the right-of-way should be issued and what terms and conditions it should contain, the Secretary may require a statement of the effect on competition of the grant of right-of-way .27 If the applicant is a partnership, corporation, association, or other business entity, information concerning the identity of the participants and the financial structure and control of the entity must be disclosed.[28]

ENVIRONMENTAL IMPACT ASSESSMENT

If the Secretary determines that the use of a proposed right-of-way may have a "signifi-



Photo Credit: OTA Staff

Road to former gold mine now provides recreational access, Hatcher Pass, near Palmer, Alaska

cant impact on the environment, " the applicant is required to submit a plan for construction, operation, and rehabilitation for the right-of-way.[29] If, in addition, the Secretary determines that the grant of a right-of-way is a major Federal action "significantly affecting the quality of the human environment,"[30] the agency must prepare an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA).[31] The applicant may be required to bear the costs of the EIS preparation as part of the costs of administration.[32]

EXTENT OF RIGHTS= OF= WAY

The right-of-way is limited to the grounds occupied by the facilities for which the grant was issued and that are necessary for the operation, maintenance, or safety of the project and will do no unnecessary damage to the environment.[33] The temporary use of additional land may be authorized as necessary for construction, operation, maintenance, or termination of the project, or for access purposes.[34] The right-of-way is granted for a reasonable term considering the cost of the facility, its useful life, and any public purpose it serves .[35] The right-of-way specifies whether it is renewable and the terms and conditions of renewal.[36]

The Secretary is authorized to issue regulations for rights-of-way.[37] These regulations may be applied to any existing rights-of-way renewed under the new BLM Act.[38] The holder of a right-of-way may use mineral, timber, or vegetative resources of the right-of-way lands in connection with construction or other purposes only if authorization is obtained under applicable laws.[39]

RIGHT- OF- WAY FEES

The holder must pay annually, in advance, the fair market value of the right-of-way.[40] When the value is less than $100, the Secretary may require advance payment for more than 1 year at a time.[41] The holder or applicant may be required to reimburse the agency for "all reasonable administrative and other costs incurred in processing the application for such right-of-way and in the inspection and monitoring of construction, operation, and termination of the facility pursuant to such right-of-way."[42] The requirement of rental payment and reimbursement of costs may be waived if a reciprocal right-of-way is granted to the United States by the holder in connection with a cooperative cost-share program.[43] Federal, State, or local government units; nonprofit associations; nonprofit corporations that are not owned or controlled by profitmaking corporations or business enterprises; holders who provide at no or reduced cost a benefit to the public or to the programs of the Secretary; or holders who already are compensating the United States for authorized use or occupancy of Federal land, may be granted a right-of-way at a lesser charge, or no charge, as the Secretary finds to be equitable and in the public interest.[44] Assignments of free or reduced rental rights-of-way must be approved by the Secretary .[45] When appropriate, the holder may be required to furnish a bond or other satisfactory security to secure any or all of the obligations imposed upon him by statute, regulations, rules, or the terms or conditions of a specific right-of-way.[46] The Secretary may issue or renew a right-of-way only when he is satisfied that the applicant has the necessary technical and financial capability to construct the project in accordance with the requirements of the Act.[47]

FINANCING TRANSPORTATION PROJECTS

The BLM Organic Act provides several arrangements for financing transportation and other projects on public lands. The Secretary is authorized to acquire or construct roads within or near the public lands that will permit maximum economy in timber harvesting in the area and at the same time meet requirements for the protection, development, and management of the lands for utilization

of other resources.[48] Financing for these timber roads near or on public lands may be accomplished (a) from appropriated Department of the Interior funds, (b) by requirements on purchasers of timber and other public land resources, (c) by cooperative financing agreements with Federal, State, local, or private agencies, or persons, or (d) by a combination of these three methods.[49] However, when roads are required to meet higher technical standards than necessary for timber or resource removal, the purchasers of timber and resources will not be required to bear the costs necessary to meet the higher standards unless the resource is offered under the condition that a road of that specified standard be built.[50] The Secretary may make such arrangements as necessary to this end. The Secretary may also require the users of roads, trails, lands, or other facilities administered by the Bureau to maintain the land or facilities in a satisfactory condition "commensurate with use requirements of each."[51] Costs assessed to each user must be proportionate to total use. The Secretary may require reconstruction of existing roads or facilities when necessary to accommodate a use, but if the reconstruction or maintenance cannot be provided by the user or is impractical, the Secretary may require a deposit in an amount sufficient to cover a proportionate share of costs.[52]

TERMS AND CONDITIONS

In addition to the requirements described above, each right-of-way must contain certain mandatory terms and conditions that are necessary to:

I. Carry out the purposes of the BLM Act and related rules and regulations;

II. Protect the environment and minimize damage to scenic and esthetic values, and to fish and wildlife habitats;

III. Require compliance with air and water quality standards established pursuant to Federal or State laws; and

IV. Require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance of rights-of-way for similar purposes, if those standards are more stringent than Federal standards .[53]

Each right-of-way must also contain any specific additional conditions that the Secretary deems necessary for:

1. Protection of Federal property and economic interest;
2. Efficient management of the lands subject to and adjacent to the right-of-way, and protection of other lawful users of the lands involved;
3. Protection of life and property;
4. Protection of fish, wildlife, and other biotic resources of the area for subsistence users;
5. Location of rights-of-way along routes that will cause the least damage to the environment taking into consideration feasibility and other relevant factors; and
6. Protection of the public interest in lands traversed by the right-of-way or adjacent thereto.[54]

In order to minimize adverse environmental impacts and the proliferation of rights-of-way, the BLM Act requires the utilization of rights-of-way in common to the extent practical.[55] Each right-of-way permit must contain a provision reserving to the Secretary the right to grant additional rights-of-way or permits for compatible uses on or adjacent to the original right-of-way.[56] The Secretary may designate right-of-way corridors and require that all rights-of-way be confined to that corridor. In making this designation the Secretary is required to consider National and State land use policies, environmental quality, economic efficiency, national security, safety, and good engineering and technological factors.[57] The Secretary must issue regulations containing the criteria and proce-

dures he will use in designating such corridors. Existing utility and transportation corridors may be designated for such uses under this subsection without further review.[58] This provision allows expanded multipurpose use of existing criteria.

SUSPENSION OR TERMINATION

A right-of-way may be suspended or terminated for abandonment[59] or noncompliance with statutory requirements or with the applicable conditions, rules, or regulations for rights-of-way.[60] Holders of a right-of-way must receive due notice prior to a finding of abandonment or noncompliance. Holders of an easement are entitled to an administrative proceeding under section 554 of Title 5 of the United States Code before termination or suspension.[61]

Existing rights-of-way or rights-of-use are not terminated by the BLM Act, but with consent of the holder, they may be canceled and reissued under the terms and conditions of Title V.[62] When the Secretary issues a right-of-way for railroad and communications facilities in a realinement of the railroad, he may require that the applicant relinquish any existing right-of-way if he finds that the requirement is in the public interest, and the lands involved are not within an incorporated community and are of equal values. He may, in lieu of the provisions of Title V, provide for the same terms and conditions in the new right-of-way with respect to rental, duration, and nature of interest in the lands granted, as were applied to the relinquished right-of-way. Action on such a trade is to be made within 6 months of the receipt of all information required by Title V.[63]

OTHER CONDITIONS

When an applicant is before Federal departments or agencies, other than the Department of the Interior or the Department of Agriculture, seeking a license, certificate, or other authority for a project that involves a right-of-way over, upon, or through public lands or national forests, the applicant must simultaneously apply to the appropriate Secretary for permission to use public lands and provide all information submitted to the other department or agency.[64] After enactment of the BLM Organic Act, all rights-of-way sought over public lands or national forests, for purposes listed in section **501** must be issued in accordance with the requirements of Title V. This provision is a direct limitation on any other laws not repealed by the Act that would grant a right-of-way over public lands.[65]

Federal departments and agencies may obtain use of public lands under the provisions of Title V subject to such terms and conditions as the Secretary may impose.[66] Any action to terminate or limit the use of a right-of-way reserved for use by a Federal department or agency must be done with the consent of the head of the department or agency.[67]

BLM WILDERNESS STUDY

Section **603** of the Act provides for wilderness study of certain BLM lands.[68] When the Wilderness Act was passed in 1964, the Park Service, the Fish and Wildlife Service, and the Forest Service were all required to inventory lands under their control to determine whether any meet the wilderness requirements set forth in section 2(c) of that Act.[69] BLM lands were not affected.[70] Section 603 provides the framework for a survey of almost all BLM lands to determine if any should be considered for inclusion in the National Wilderness Preservation System.

Section 201(a) of the Organic Act requires a complete inventory of public lands, including their resource and other values, with priority given to areas of "critical environmental concern."[71] Within 15 years of the effective date of the Act (October 21, 1976), the Secretary of the Interior must review all roadless areas of over 5,000 acres and all roadless islands[72] that were identified in the section 201 inventory as having wilderness

characteristics; he must then report to the President on their suitability for preservation as wilderness. All areas formally identified by the BLM as "natural" or "primitive" areas prior to November 1, **1975,** must be reviewed, and a wilderness recommendation made to the President by July 1, 1980.[73]

Before recommendations to the President can be made, the Geological Survey and the Bureau of Mines must conduct a survey to determine any mineral values of a specific area prior to its recommendation for wilderness designation.[74] Review of these areas will be conducted under provisions of section 3(d) of the Wilderness Act.[75] The President is required to advise Congress of his recommendation on the wilderness status of each area within 2 years of receipt of each report from the Secretary .7'

BLM lands that are designated by Congress as components of the National Wilderness Preservation System will be subject to provisions of the Wilderness Act applicable to national forest wilderness areas.[77] Wilderness designation will remove the authority of the Secretary of the Interior to grant rights-of-way under Title V.[78] However, BLM wilderness areas would be subject to the limited provision for presidentially granted national interest exceptions that is applicable to national forest wilderness areas.[79]

While the status of wilderness lands is clearly defined, there is some uncertainty about lands that are being reviewed for wilderness characteristics and lands that have been placed in "wilderness study" by BLM.[80] Section **603(c)** requires that areas under review for potential wilderness designation be managed "in a reamer so as not to impair the suitability of such areas for preservation as wilderness. '*[1] However, this protective management is subject to the continuation of "existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act. ' '[82] This implies that some existing activities are allowed to continue. But, immediately following that sentence is the proviso that, "in managing the public lands, the Secretary shall by regulation or otherwise, take any action required to prevent unnecessary or undue degradation of the lands and their resources or to provide environmental protection."[83] This protection does not extend to withdrawal from appropriation under the mining laws; the Secretary may make such withdrawals only "for reasons other than preservation of this wilderness character."[84]

With few exceptions, all 470 million acres of land managed by the BLM initially are subject to the provisions of section **603.** In order to avoid bringing all activities on BLM land to a halt, the Bureau has adopted a two-phase policy for identifying and protecting lands with wilderness potential. The first phase is a wilderness inventory:

> Every resource managed by the BLM has an inventory. (For purposes of wilderness review, "inventory' means the examination and display of areas on maps and in narratives that are considered to be (a) roadless, (b) have wilderness characteristics, and (c) are **5,000** acres or more, or of sufficient size to make wilderness management practical, or are public land islands.)[85]

BLM plans to complete an accelerated wilderness inventory by July 1980.[86] The inventory will emphasize roadless areas and roadless islands in the 11 Western States. According to the draft proposal, "Alaska inventory will be postponed until Native claims land tenure has been finalized."[87]

It is not clear what level of protection will be afforded lands during the wilderness review. An Organic Act directive states that all environmental assessment reports and environmental statements must include a discussion of potential wilderness resources that might be affected by a proposed action.[88] However, it gives no indication of what actions should be taken in response to threats to wilderness potential. The draft wilderness policy document states:

> During the wilderness review, multiple use activities [including access) will continue

with advanced planning to protect the existing wilderness designation potential of areas or islands. Environmental assessment records or environmental statements prepared on activities will include discussion of the wilderness resource where appropriate. The discussion will cover values per section 2(a) and (c) of the Wilderness Act of September 3, 1964 (Public Law 88-577). Environmental controls or modifications in proposed actions will be made if necessary to protect wilderness values.[89]

At the end of the wilderness inventory, those roadless areas with wilderness characteristics will be designated "wilderness study areas:"

A roadless area which has been found to have wilderness characteristics (thus having the potential of being included in the National Wilderness System), and which will be subjected to intensive analysis in the Bureau's planning system, and public review to determine wilderness suitability, and is not yet the subject of a congressional decision regarding its designation as wilderness.[90]

It is reasonable to expect that "wilderness study areas, " as opposed to areas merely under review, will receive the full scope of section 603(c) protections of their wilderness characteristics. Preliminary views about some of the permissible limitations have been spelled out in a memorandum issued by the Deputy Solicitor.[91] On the issue of access to private lands, the memorandum stated:

In general, access across public lands can only be granted under Title V of FLPMA, and the granting of this right-of-way is discretionary with the Secretary. Section 603 limits the discretionary authority of the Secretary by allowing him to grant access only when it will not impair the suitability of the area under review for wilderness designation. See also section 302, which provides, in pertinent part:

Except as provided in . . . section 603 . . . and in the last sentence of this paragraph, no provision of this section or any other section of this Act shall in any way amend the Mining Law of 1872 or impair the rights of any locators or claims under the Act, including, but not limited to, rights of ingress and egress. In managing the public lands, the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands.

Currently, the Solicitor's Office is preparing a memorandum involving the Secretary's authority to regulate access to and from mining claims. In regard to existing access across wilderness study lands to private property, it is my opinion that any legal opinion is best given after applying each separate factual situation to the criteria of section 603.[92]

The gist of the opinion is that the Secretary has full discretion to deny, and might even be forced to do so by section 603, requests for access from all persons except locators under the Mining Law, who he could regulate under the provisions of section 302. Only three existing uses are specifically protected by the section—mining, grazing, and mineral leasing—there is no mention of existing access. Of these, only mining could conceivably occur off public lands and receive protection, because patenting a mining claim would take it out of Federal lands while preserving rights to ingress and egress.

The opinion also raises the point that, in some instances, land uses might be under a more stringent system of controls during the review period than after congressional designation as wilderness.[93] Access to private lands may prove to be one of these instances. During the review period, access decisions are governed solely by Title V as affected by section 603. Section 603 requires management "so as not to impair the suitability of such areas for preservation as wilderness."[94] After designation as wilderness, section 4(d)(4) of the Wilderness Act would apply, allowing the President to grant a right-of-way:

Within wilderness areas in the national forests designated by this Act, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water conservation works, power projects, transmission

lines, and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial . . .[95]

EXISTING BLM RIGHT-OF-WAY REGULATIONS

Existing BLM right-of-way regulations, issued under the general authority of the Department of the Interior to manage the public lands,[96] provide the general institutional framework for the application and review process for rights-of-way on lands under BLM jurisdiction. The Fish and Wildlife Service and Park Service follow the BLM regulations, however, application is made directly to the managing agency.[97] These regulations cover all non-Federal applicants seeking rights-of-way, including State and local governments; Federal agencies now may obtain rights-of-way under the provisions of section 507 of the BLM Organic Act.[98]

An applicant must file an application with the BLM listing the statute authorizing the right-of-way, the primary purpose for which it is sought, and the date on which any prior unauthorized use began.[99] The applicant agrees to accept the terms and conditions set forth in the regulations[100] and deposits a nonreturnable fee based on the length of the right-of-way.[101] A map of the area indicating the extent of the right-of-way must be included with the application along with data about the planned developments projects.[102] Information concerning citizenship,[103] disclosure of control, and financial status of business entities is required.[104]

The applicant must reimburse the Government for administrative costs incurred in processing the application including preparation of reports and statements required under NEPA if the approval of the application is determined to be a major Federal action significantly affecting the environment. ’05 Upon receipt of the application, an estimate is made of anticipated administrative costs. If the costs are greater than the initial payment by an amount exceeding the cost of maintaining actual cost records for the application, periodic payments of costs may be requested.[106] If the application is rejected or withdrawn, the applicant is assessed the costs incurred to that point.[107]

In order to assist actual and potential applicants, the regulations provide that a person may request, prior to submitting an application, a nonbinding estimate of the anticipated administrative and other costs expected to be incurred.[108] On approval of the application, the holder must make payment based on the length of right-of-way and must reimburse the agency for costs of monitoring the construction, operation, maintenance, and termination of the right-of-way and for the costs of protecting and rehabilitating the lands involved.[109] A bond or other security may be required to assure payment of costs or satisfaction of the conditions of a right-of-way.[110] The charge for use and occupancy of a right-of-way is set by the regulations at the fair market value of the permit, right-of-way, or easement as determined by the appropriate officer, but not less than $25 per 5-year period.[111]

The terms and conditions set forth in the regulations generally provide for:

1. Compliance with Federal and State laws and regulations applicable to the lands or right-of-way project.[112]
2. Compliance with regulations and directives of the supervising officer of the agency with respect to clearing and restoring land, public safety, protection of property and environmental values, fire prevention, and payment for the use of timber or mineral resources of the right-of-way.[113]
3. Acceptance of any additional special conditions necessary to make the grant of a right-of-way compatible with the public interest.[114]

4. Acceptance of the condition that use of the right-of-way will not "unduly interfere with management or administration of lands affected by it, " and that the right-of-way may be modified or terminated by the Secretary if its use conflicts with other works constructed by authority of the United States. [115]

5. Agreement to pay for all damage to U.S. property and 'to indemnify the United States for any liability for damages for injury to property or person arising from use of the right-of-way. '*G

The right-of-way granted under these regulations, unless otherwise provided by statute, does not convey a property interest in the lands involved, only a right to use the public lands for a specific purpose.[117] The right-of-way may be terminated by a specific order of cancellation for noncompliance with conditions of the grant, '*8 non-use, abandonment, **g or failure to proceed with timely construction of the project for which the right-of-way was issued,[120] or when use of the right-of-way conflicts with other authorized uses,[121] or unduly interferes with the management and administration of the affected lands. *22

FOOTNOTE REFERENCES FOR PUBLIC LANDS

'Public Law 94-579, 90 Stat. 2743, 43 U.S.C. 1701 et seq. (1977 supp.).

[2]43 U. S.C. 1702(e). Public lands are divided into public domain lands which have never left Federal ownership, and acquired lands which are lands in Federal ownership which are not public domain and have been obtained by the Government through purchase, condemnation, gift, or exchange. "Lands" includes all interests in land—such as surface ownership, mineral rights, timber rights, and easements.

[3]Department of the Interior, Bureau of Land Management, *Public* Land Statistics 1976, pp. 20-21.

[4]Public Law 92-203,85 Stat. 688 (1971).

'Public Law 85-508, 72 Stat. 339 (1958), as amended **77 Stat. 223 (1963),**

[6]Exact acreages will be determined by Congress.

[7]Conveyance of Native selections is now expected to take until 1981 or beyond. See testimony of Guy Martin, Hearings Before Subcommittee on General Oversight and Alaska Lands of House Committee on Interior and insular Affairs, 95th Cong., 1st sess., July 21, 1977.

'See maps of land status and d-2 proposals in OTA working paper by John W. Whitney and Dennis Bryan, Assessment *of* Transportation *Access* Requirements for Minerals *Exploration and* Mine Development and Operation in Alaska, in Analysis *of* Laws Governing *Access Across* Federal *Lands:* Options *for Access* in Alaska, Volume 11, Working Papers (OTA-M-76).

[9]43 U.S.C. 1701 et seq.

[10]43 U.S.C. 1761-1771.

[11]43 U.S.C. 1702(f),

[12]43 U.S.C. 1732.

[13]43 U.S.C. 1761-1777.

[14]43 U.S.C. 1782.

[15]Section 310 of the Act, **43 U.S.C. 1740,** requires that the Secretary promulgate rules and regulations implementing the Act in accordance with the provisions of the Administrative Procedure Act. The last sentence of the section states:

> Prior to the promulgation of such rules and regulations, such lands shall be administered under existing rules and regulations concerning such lands to the extent practical.

The Bureau has adopted a policy of issuing Organic Act Directives (OADs), approved by its FLPMA Policy Committee, to provide guidelines for carrying out specific activities affected by the Organic Act prior to the completion of formal rulemaking. BLM, The Federal Land Management *Policy* Act: An Interim *Report—Oct. 21, 1976* to June 30, 1977, 1977, p. 7.

[16]43 CFR Part 2800, Regulations for Fish and Wildlife Refuges are also found at 50 CFR 29.

[17]43 U.S.C. 1732.

[18]43 U.S.C. 1732(b).

[19]**43 U.S. C. 1712.**

[20]**43** U.S.C. **1767.**

[21]43 U.S.C. 1714(b).

[22]43 U.S.C. 1737(b), Section 302(b) states in part: "Provided, that unless otherwise provided for by law, the Secretary may permit Federal departments and agencies to use, occupy, and develop public lands only through rights-of-way under section 507 of this Act, withdrawals under section **204** of this Act and, where the proposed use and development are similar or closely related to the programs of the Secretary for the public lands involved, cooperative agreements under subsection (b) of section 307 of this Act. "

[23]43 U.S. C. 1732(c).

[24]43 U.S.C. 1761(a).

[25]Id.

[26]43 U.S.C. 1761(b)(l).

[27]Id.
[28]43 U.S.C. 1761(b)(2).
[29]43 U.S.C. 1764(d). OAD 76-15, Dec. 14, 1976, supra, note 15, requires that applications indicate whether a right-of-way will have any impact on roadless areas of more than 5,000 acres or "areas of critical concern. " Another directive, OAD 7629, Mar. 15, 1977, requires all environmental assessment reports to discuss impacts on potential wilderness. See discussion of section 603 of the Act below.
[30]42 U.S.C. 4332(2)(C).
[31]42 U.S. C, 4321 et seq. See the discussion Of NEPA in this report.
[32]43 U.S.C. 1764(g), See also, existing BLM right-of-way regulations at 43 CFR 2800.
[33]43 U.S.C. 1764(a).
"Id.
[35]43 U.S.C. 1764(b).
"Id.
[37]43 U.S.C. 1764(e).
[38]Id.
3943 U.S. C. 1764(f).
'043 U.S.C. 1764(g).
"Id.
"Id,
"Id.
"Id,
"Id.
[48]43 U.S.C. 1764(i).
[47]43 U.S.C. 1764(j).
[48]43 U.S.C. 1762(a).
[49]Id.
[50]Id.
[51]43 U.S.C. 1762(c).
[52]Id.
[53]43 U.S. C. 1765(a).
[54]43 U.S.C. 1765(b).
[55]43 U.S. C. 1763.
[56]Id.
[57]Id.
[58]Id.
[59]A "rebuttable presumption of abandonment" arises when the holder fails to use the right-of-way for the purpose for which it was granted for a continuous 5-year period, 43 U.S.C. 1766.
'43 U.S. C. 1766.
[61]This distinction between an easement and a right-of-way is not explained in the BLM Act. See Morrison, "Rights-of-Way on Federally Owned Lands: A Journey Through the Statutes by Way of the Federal Land Policy and Management Act of 1976, " 9 Transportation Law Journal, 97,103 [1977).
[62]43 U.S.C. 1769(a).
[63]43 U.S.C. 1769(b).
"43 U.S.C. 1771$
[65]43 U.S. C, 1770(a). Section 28 of the Mineral Leasing Act, 30 U.S.C. 185, relating to oil and gas pipelines, and the Federal Power Act, 16 U.S.C. 791-825, relating to pipelines and water projects, are not of great importance here; but both provide additional authorization for rights-of-way over public lands. See Morrison, supra, note 61, at 105-109.
[66]43 U.S.C. 1767(a).
[87]43 U.S.C. 1767(b).
[68]43 U.S.C. 1782. Lands covered by the Act of August 28, 1937, 43 U.S.C. 1181(a) to 1181(j) and the Act of May 24, 1939, 50 Stat, 753, are not affected by this provision, see section 701(b). The Bureau has yet to issue any rules regarding the Wilderness Study. Current policy regarding the study is contained in the following documents: BLM, Draft Proposed Wilderness Policy and Review Procedure, Feb. 27, 1978 (Draft); Office of the Solicitor, Application of Mining and Grazing Laws to Areas Under Review for Inclusion into Wilderness System: Section 603, Federal Land Policy and Management Act of 1976, Jan. 8, 1978 (Opinion), and the following Organic Act Directives: OAD 76-15, Dec. 14, 1976; OAD 77-21, Feb. 16, 1977; and OAD 77-29, Mar. 15, 1977.
[69]Wilderness Act, Public Law 88-577, 78 Stat. 89, Sept. 3, 1974, 16 U.S.C. 1131 et seq.
[70]The Bureau established two land classification categories—primitive areas and natural areas—in which use and activity were severely restricted, 43 CFR 6221 (primitive areas) and 43 CFR 6225 (natural areas). The criteria for selection were similar to those used for wilderness. There are 11 primitive areas containing 234,000 acres and 44 natural areas containing 271,000 acres. See Draft, pp. 15-16; supra, note 68.
[71]43 U.S.C. 1711(a). "Areas of critical environmental concern' are defined as: "areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards. " 43 U.S. C. 1702(a).
[72]BLM has formulated the following definitions of the key terms "public land island" (equivalent to roadless island), "road," and "roadless area. " Draft, pp. 9, 10; supra, note 68:

> *Public* Land Island: A body of land above the ordinary high-water elevation of any meanderable body of water, except those islands formed in navigable bodies of water after the date of admission of the State into the Union.
>
> Road: For the purpose of the wilderness inventory, a road is defined as and must meet all of the following: An access route that has been improved and maintained by using hand or power machinery or tools to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.
>
> Words and phrases used in the above definition of "road" are defined as: Improved and Maintained: Where actions have been and will continue to be directed to physically keep the road open to traffic. Relatively regular and continuous use: Use by vehicles having four or more wheels that has

occurred and will continue to occur on a recurring basis, for a predetermined, planned, or intended purpose. (An example would be access for equipment to maintain a stock water tank, Casual or random use by off-road vehicles or recreationists does not qualify,)

Roadless Area: That area bounded by a road using the edge of the physical change that creates the road or the inside edge of the right-of-way as a boundary.

[73]43 U.S.C. 1782(a),

"Id.

[75]Id. Section 3(d) of the Wilderness Act is found at 16 U.S.C. 1132(d).

[76]43 U.S.C. 1782(b).

[77]43 U.S.C. 1782(c).

[78]43 U.S.C. 1761(a).

[7']16 U.S.C. 1133(d)(4).

[80]The Act discusses protective actions the Secretary may take "during the period of review of such areas and until Congress has determined otherwise. " 43 U.S.C. 1782(c). BLM policy, as reflected in the Draft, indicates a two-step process involving a wilderness inventory and wilderness study of areas selected from that inventory, see text accompanying notes 85-90, The BLM review process indicates that much importance is placed on making early "negative declarations" about areas that should not be subject to section 603 protection. Draft, p. 11; supra, note 68.

[81]43 U.S. C. 1782(c).

[82]Id.

[83]Id.

[84]Id.

[*5]Draft, p. 7,

[86]Draft, p. 17.

[87]Id.

[88]OAD 77-29, Mar, 15, 1977, supra, note 15.

[89]Draft, p. 12.

'Draft, p. 10, Primitive and natural areas, supra, note 70, have been classified as "Instant Study Areas, " meaning that they will be treated as wilderness study areas right now, without the need for a wilderness inventory. Draft, p. 7.

"Opinion, supra, note 68.

[92]Opinion, p. 11.

[93]0pinion, p. 5.

[94]43 U.S.C. 1782(c).

[95]16 U.S. C. 1133(d)(4). This provision, and all other provisions of the Wilderness Act relating to national forest wilderness areas, are applied to BLM wilderness areas by section 603.

[96]The regulations are found at 43 CFR part 2800. See supra, note 15, for a discussion of the current applicability of these regulations. OADS have been issued for "Processing of Right-of-Way and Temporary Use Applications" (OAD 76-15; Dec. 14, 1976); "Right-of-Way Cost Recovery" (OAD 76-15; Dec. 15, 1976); "Processing Pending Applications for Airport Leases" (OAD 77-8; Jan. 24, 1977); and "Valuation of Non-linear Rights-of-Way for Communication Purposes" (OAD 77-30; Mar. 15, 1977). Laws cited as underlying authority for the BLM right-of-way regulations are 5 U.S.C. 301,43 U.S.C. 2, and 43 U.S.C. 1201. See 43 CFR 2802.1 - l(a).

"Fish and Wildlife Service regulations are found at 50 CFR 29.21.

[98]43 U.S. C. 1767.

9943 CFR 2802,1-l(a),

[100]43 CFR 2801.1-5,

[101]43 CFR 2802.1-2(a)(3).

[102]43 CFR 2802.1-5(a).

1°343 CFR 2802.1-4(a).

[104]43 CFR 2802.1-3,2802. l-4(b).

[105]43 CFR 2802.1 -2(a)(1). OAD 76-15 states that except for exclusion of management overhead, the policy embodied in the regulations is consistent with FLPMA requirements for cost recovery.

[106]43 CFR 2802. l-2(a)(4).

[107]43 CFR 2802.1 -2(a)(6).

[108]43 CFR 2802.1 -2(a)(9).

[0']43 CFR 2802. 1-2(b).

[110]43 CFR 2802.1 -2(a)(n) and (12). Provisions requiring payment of costs, fair market or rental value, and bonding do not apply to State and local government applicants for rights-of-way for public purposes, pursuant to road use or reciprocal road use agreements or to Federal agencies. 43 CFR 2802.1 -2(a)(2), 2802.1-7.

[111]43 CFR 2802.1-7.

[112]43 CFR 2801.1-5(a).

[113]43 CFR 2801. l-5(b),(c), (d),(e), (g), and (i),

[114]43 CFR 2801.1-5(h).

[115]43 CFR 2801 .1.2 -5(e).

[116]43 CFR 2801 .1-5(f].

"[7]43 CFR 2801,1-1.

"[8]43 CFR 2802,3-1.

[119]43 CFR 2802.2-3.

[120]43 CFR 2802.2-2.

[121]43 CFR 2801.1-5(m).

[122]43 CFR 2801.1-5(1).

NATIONAL PARK SYSTEM

The National Park System embraces over 25 million acres (7 million acres in Alaska)' in national parks, national monuments, historic monuments, parkways, recreation areas, memorials, historic sites, and other reservations administered by the Secretary of the Interior through the National Park Service.[2] Congress established the national parks "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."[3] The National Park Service is required to promote and regulate use of park areas in conformance with the declared purposes of preservation and management "for the benefit and inspiration of all the people of the United States."[4] In conformance with these declared purposes of the National Park System, most nonrecreational uses of park areas are sharply limited or prohibited.



Photo Credit: OTA Staff

Caribou, McKinley National Park

The legal basis for use of park land for rights-of-way is found in (a) the general authority of the Secretary of the Interior to manage the national parks under his authority in conformance with their established purposes; (b) specific statutes and regulations governing individual units of the National Park System; (c) public land right-of-way statutes applicable to park lands; and (d) statutes and regulations relating to highways, navigable waters, and other modes of transportation.

Note: Footnotes for this section appear on pp. 72-73.

GENERAL AUTHORITY FOR RIGHTS-OF= WAY

There is no express and comprehensive access or right-of-way authorization for the National Park System as there is for the public lands,[5] the National Wildlife Refuge System,' and the National Forest System.[7] In general, the laws governing administration of national parks are less detailed and more discretionary than those for other land management systems. Access through a national park for mineral exploration and development is subject to the broad authority of the Secretary of the Interior to manage the national parks through the National Park Service.[8] Exercise of this authority should be in conformance with the general purposes of the park system of preservation and recreation, and with the particular purposes for which a given park unit was established.[9] The Secretary is specifically authorized to aid in the development of transportation systems which serve units of the national parks. The Secretary may construct, maintain, or, by agreement, make funds available for local airports[10] and roads designated as park approach roads.[11] The Secretary may construct roads and trails within national park areas and obtain any rights-of-way necessary for improvement or construction of roads within authorized boundaries of park areas.[12] In the administration of the parks, the Secretary is authorized to regulate boating and other activities on waters in the National Park System, including navigable waters under the jurisdiction of the United States.[13] The regulation of navigable waters in park areas by the Secretary of the Interior complements the Coast Guard's general jurisdiction over navigable waters.

For administrative purposes, the Park Service has divided components of the National Park System into three categories:

- Natural areas—all national parks and certain national monuments established as such because of their natural features.[14]
- Historical areas—all park areas designated because of their historic or archeological significance, historical sites, battlefields, monuments, and memorials.[15]
- Recreational areas—all units of the park system administered for purposes of public recreation, such as seashores, lakeshores, parkways, and wild rivers."

Permissible uses of park areas often depend upon the administrative classification.

Regulations promulgated by the Park Service limit the operation of motor vehicles, aircraft, and vessels primarily for reasons of safety and the protection of life and property. Generally, aircraft must take off and land only at designated land and water areas and comply with Federal aviation regulations.[17] Cars, offroad vehicles, and other motor vehicles are allowed only on established roads or use areas unless special permission is obtained.[18] Boats must comply with Coast Guard requirements and may be restricted in operation in wildfowl nesting areas and fish habitats for safety reasons.[19]

The use of existing park roads by commercial vehicles is subject to strict controls. Park service regulations provide that:

> The use of Government roads within park areas by commercial vehicles, when such

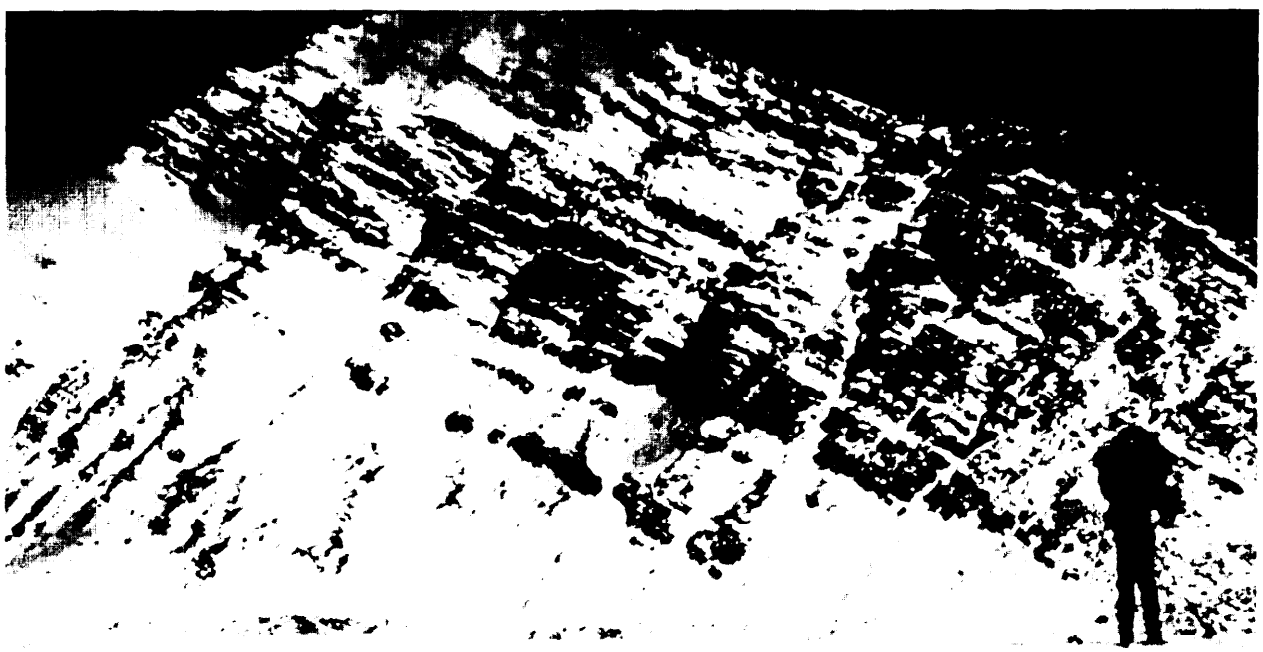

Photo Credit: The Alaska Coalition

National Parks offer many outdoor recreational opportunities. The photograph shows a skier in the Wrangell-St. Elias Region, a proposed National Park area

use is in no way connected with the operation of the park area, is prohibited, except that in emergencies the Superintendent may grant permission to use park roads.[20]

The sole exception to this rule applies when a denial of the use of park roads would totally foreclose access:

> The Superintendent shall issue permits for commercial vehicles used on park area roads when such use is necessary for access to private lands situated within or adjacent to the park area, to which access is otherwise not avail able.[21]

The "local park superintendent is vested with broad discretion in matters relating to the management of a particular park unit. In addition to laws applicable to the park system as a whole, the statutes and executive orders that established and govern individual park units often impose more or less stringent requirements on permissible uses .22

STATUTES PROVIDING FOR RIGHTS-OF-WAY THROUGH NATIONAL PARKS

The 1901 Act, Rights-of-Way for Public Utilities

The Act of February 15, 1901,[23] provides that the Secretary of the Interior may permit the use of rights-of-way, for certain specified purposes, through "the public lands, forests, and other reservations of the United States, and the Yosemite and Sequoia National Parks, Calif., and the General Grant grove section of Kings Canyon National Park, Calif."[24] Rights-of-way maybe obtained under the 1901 Act for construction and operation of facilities for the generation and distribution of electricity for telephone and telegraph systems, and for water projects for irrigation, mining, quarrying, timbering, manufacturing, or supplying water for domestic, public, or other beneficial purposes.

The right-of-way does not convey any property interest in the lands involved; it is a license revocable at the discretion of the Secretary.[25] The right-of-way is limited in extent to the grounds occupied by the project plus an additional area not to exceed 50 feet from the margins of the project. For pipes, pipelines, and electrical, telegraph, or telephone poles, the right-of-way may not exceed 50 feet from the centerline of the projects. A permit for a right-of-way across one of the named national parks or other reservations may be issued only on the approval of the "chief officer of the department" having jurisdiction over the lands after a finding that the proposed use is "not incompatible with the public interest. "[26]

The 1901 Act expressly referred to grants of rights-of-way across Yosemite and Sequoia National Parks (the General Grant grove was added by amendment in 1940).[27] It has, therefore, been suggested that the Act does not apply to any other parks, though it would apply to all monuments and recreation areas administered by the Park Service.[28] The implication is that because the 1901 Act listed some parks and did not list others and because one park was added in 1940, the unlisted parks were not to be subject to this provision and were not, under principles of statutory construction, covered by the phrase "other reservations.

Unlike the Act of March 4, 1911, the 1901 Act is not mentioned in section lc(b) of Title 16, United States Code, as one of those laws that are applicable to all units of the Park System regardless of their designation as parks, monuments, or recreation areas in legislation redefining the National Park System.[29] However, that provision is, on its face, not an exclusive compilation of laws of general applicability. It states: "the various authorities relating to the administration and protection of areas under the administration of the Secretary of the Interior through the National Park Service, including but not limited to . . . shall, to the extent such provisions are not in conflict with any such specific provision be applicable to all areas within the National Park System and a reference in such Act to national parks, monuments, recreation areas, historic monuments, or parkways shall hereinafter not be construed as limiting such

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Act to those Areas."[30] (Emphasis added). If the 1901 Act is covered by this provision then, because it applies to some elements of the System, it would apply to all. If it is not covered, then only three parks are subject to the right-of-way provision.

The 1911 Act, Rights-of-Way for Power and Communications Facilities

The Act of March 4, 1911,[31] authorizes the Secretary of the Interior to grant an "easement for right-of-way" for a period of up to 50 years from date of issuance to any person, association, or corporation of the United States for one or more of the listed purposes. This Act has been expressly extended to all areas in the National Park System.[32] An easement for right-of-way may be granted "over, under, across, and upon" national parks and other reservations of the United States for:

a. up to 200 feet from the center line of poles and lines for the transmission and distribution of electricity or for lines and poles for radio, television, and other communications purposes; and

b. sites not exceeding 400 square feet for transmitting, relay, receiving, and other communications structures and facilities.

A right-of-way is granted only after approval by the "chief of the department" upon a finding that the proposed use is not incompatible with the public interest.[33] All or part of the right-of-way may be annulled or terminated for non-use or abandonment after a period of 2 years. Communications facilities are subject to regulation by the Federal Communications Commission.[34] Electrical power projects are subject to regulation by the Federal Energy Regulatory Commission[35] and by State authorities.

The Ditches and Canals Acts

A series of public land laws, commonly referred to as the "ditches and canals acts"[36] grant rights-of-way through the public lands and reservations of the United States for drainage and irrigation projects. The right-of-way may be obtained by a canal ditch company, irrigation or drainage district,[37] individual, or association[38] upon filing with the Secretary of the Interior certain required documents such as corporate articles of incorporation, or other evidence of organization under State law, ownership information, and maps of the location of the proposed right-of-way for drainage or irrigation projects.[39]

The right-of-way includes the ground occupied by the water of any reservoir, canals, and laterals, up to 50 feet from the marginal limits of the project, and any additional area as the Secretary may deem necessary for the proper operation and maintenance of the right-of-way project.[40] The holders of ditch and canal rights-of-way also obtain the right to take any material, earth, and stone necessary for the construction of canals and ditches from the adjacent public lands.[41]

The right-of-way may not be located so that it interferes with the proper occupation by the Government of such reservations. Maps of right-of-way location are subject to the approval of the administering department.[42] The right-of-way is effective upon approval of the required maps and certificates and authorizes occupation of the right-of-way only for the purpose of construction, operation, maintenance, and care of the project, and no other purposes.[43] Existing ditch and canal rights-of-way may also be used for purposes of a public nature, for water transportation, for domestic purposes, "or for the development of power as subsidiary to the main purpose of irrigation or drainage."[44]

Public Utility Rights-of= Way and Mineral Access

The 1901 Act, the 1911 Act, and the ditches and canals acts do not address the problems of mineral access. Individuals or business entities seeking permission to use lands in the National Park System for access to adjacent non-Federal lands for the purpose of mineral exploration and development alone will find no legal basis under these laws for access. However, these laws may provide authority to approve rights-of-way over park

lands for utilities systems that may be necessary to support mineral development.[45]

Under each law, the grant of a right-of-way is conditioned on a finding by the Secretary of the Interior that a proposed use is appropriate. The 1901 Act authorizes issuance of a revocable license for use of a right-of-way for electric power, communications, and water projects subject to approval of the Secretary and a finding that the proposed use is "not incompatible with the public interest."[46] This public interest standard, though seemingly broad, should be construed in light of the declared purposes of the national parks. Any use detrimental to that purpose may be found to be not in the public interest.

The 1911 Act provides for a right-of-way for a term of up to 50 years for electric power transmission and distribution systems and communications facilities subject to approval of the Secretary, and a finding that the use of the right-of-way is "not incompatible with the public interest."[47]

The ditches and canals acts grant a right-of-way for drainage and irrigation projects upon the approval by the Secretary of the project maps and required certificates. The right-of-way continues in effect as long as it is used for its primary declared purpose, Existing canal and ditch rights-of-way may be used for certain limited public and subsidiary purposes but no other occupancy is authorized. Approval of a right-of-way may be denied if the location sought is found to interfere with the Government's proper occupation of the park or reservation.[48] Therefore, if the proposed use of the right-of-way is not consistent with the purposes of preservation and recreation, it maybe denied.

APPLICATIONS FOR RIGHTS-OF-WAY

The Department of the Interior applies the BLM regulations on the applications for and issuance of rights-of-way to applications for rights-of-way across National Park System lands.[49] Applications for rights-of-way through park areas are made to the Director of the National Park Service.[50] Applicants must file a request for a right-of-way, citing the statute(s) or other authority under which it is sought, providing maps and supporting documents, and making a deposit for administrative costs, The applicant agrees to accept all the terms and conditions of issuance set forth in the regulations.

RIGHTS-OF-WAY FOR HIGHWAYS

Federal agencies, States, and local jurisdictions seeking a right-of-way through National Park System lands for federally aided highways and other transportation projects may file a designated route with the Secretary of Transportation.[51] This begins a multitier review process. The Secretary of Transportation cooperates with the Secretaries of the Interior, Housing and Urban Development, and Agriculture and the States to develop a transportation plan and program that includes measures to maintain or enhance the natural beauty of the lands involved.[52]

Federal-local cooperative studies are authorized to determine the most feasible Federal aid for the movement of vehicular traffic through or around national parks so as "to best serve the needs of the traveling public while preserving the natural beauty of these areas."[53] If the Secretary of Transportation concludes that Federal park land is reasonably required for a highway or other transportation project and that no prudent or feasible alternative exists, a request for a right-of-way and supporting information is filed with the Secretary of the Interior.[54] If the Secretary of the Interior does not certify that the proposed right-of-way is contrary to the public interest or inconsistent with the purposes of the park reservation or if he approves the right-of-way subject to conditions deemed necessary for the adequate protection and utilization of the park within 4 months, the Secretary of Transportation may appropriate the necessary land and transfer a right-of-way to the State agency .55

FOOTNOTE REFERENCES FOR NATIONAL PARK SYSTEM

'Department of the Interior, Bureau of Land Management, *Public* Land Statistics 1976, 21.

[2]16 U.S. C, 1c(a). "Reservation" is a generic term, which refers to any public lands that have been withdrawn for certain specific purposes and thereby segregated from the operation of various other public land laws that authorize the use or disposition of the lands. Lands may be reserved or "withdrawn" by statute, by executive order pursuant to statute, or by executive action subject to an implied inherent withdrawal authority of the President (this last power, to the extent that it exists, has been limited by sections 204 and 704 of the Federal Land Policy and Management Act of 1976, commonly known as the BLM Organic Act, Public Law 94-579, Oct. 21, 1976, 90 Stat. 2743. See 43 U.S.C. 1714). Almost all national parks were created by statute. Many national monuments were originally created by reservations pursuant to the Antiquities Act of 1906, which authorizes the President to establish national monuments in areas of historic or scientific interest or value by public proclamation (16 U.S.C. 431-433). Most national recreation areas were created by cooperative agreement between the Park Service and the Bureau of Reclamation under which lands previously withdrawn for reclamation were subjected to recreation uses.

When the term reservation is used in a statute, particularly older statutes, it includes any lands under the jurisdiction of the Park Service unless specified otherwise.

[3]16 U.S.C. 1.

[4]16 U.S.C. la-l.

[5]43 U.S. C. 1761 et seq.

[6]16 U.S.C. 668dd(d).

[7]43 U.S.C. 1761 et seq.; 16 U.S.C. 532-538.

'See 16 U.S.C. 1 et seq.

'16 U.S.C. la-l, 1c(b).

[10]16 U.S.C. 7a-7e.

[11]16 U.S.C. 8, 8a-8f.

'[2]16 U.S.C. 1, 1b(7),8.

[13]16 U.S.C. la-2(h),

[14]36 CFR 1.2(g).

'[5]36 CFR 1.2(h).

[16]36 CFR 1.2(i).

"36 CFR 22.

'[8]See regulations relating to operation of motor vehicles at 36 CFR 4,19. For snowmobiles, see 36 CFR part 2.34.

[19]36 CFR part 3.

[20]36 CFR 5.6(b) Commercial vehicles are defined as any vehicles "used in transporting moveable property for a fee or profit. " 36 CFR 5,6(a).

[2']36 CFR 5.6(c).

[22]16 U.S.C. 1c(b), laws establishing individual units of the national parks are codified in Title 16 U.S.C. and in regulations, 36 CFR Pt. 7 and also 36 CFR parts 6, 12, 20, 21, 25,28,30.

[23]31 Stat. 790, 43 U.S.C. 959 (1970), also codified at 16 U.S.C. 79, 522 (1970). The BLM Organic Act, 43 U.S.C. 1701 et seq., repealed the 1901 Act to the extent it applied to public lands and national forests—leaving only application to named parks "and other reservations." Public Law 94-579, section 703(a), 90 Stat, 2743.

[24]43 U.S.C. 959. Note, however, that the codification at 43 U.S. C. 79 governing national parks was not amended to include General Grant grove section of Kings Canyon National Park, Calif., as a named park.

[25]*United States v.* Colorado Power CO., 240 F. 217 (D. Col. 1916).

[26]43 U.S.C. 959.

[27]Act of March 4, 1940, 54 Stat. 41.

[28]Lee D. Morrison, "Rights-of-Way on Federally Owned Lands: A Journey through the Statutes by Way of the Federal Land Policy and Management Act of 1976," 9 Transportation *Law Journal* 97 (1977), at 111. The 1901 Act was passed after the establishment of Yellowstone National Park, Act of March 1, 1872, c. 24 s1, 17 Stat. 32, and Mount Rainier National Park, Act of March 2, 1899, c. 377 s1, 30 Stat. 993. Neither is mentioned in the Act.

[29]Act of August 18, 1970, Public Law 91-383, 84 Stat. 825, 16 U.S.C. 1c.

[30]16 U.S.C. 1c(b).

[31]36 Stat. 1253, 43 U.S. C. 961 (1970) (also codified at 16 U.S.C. 5, 420, 523). Section 5 applies to national parks and other reservations; section 420 to national parks, military, or other reservations; section 961 to public lands, Indian, or other reservations; section 523 applies to national forests. The BLM Organic Act partially repealed the 1911 Act insofar as it applied to public lands and national forests. Public Law 94-579, 90 Stat, 2743, section 703(a).

[32]43 U.S.C. 1c(b).

[33]43 U.S.C. 961, 16 U.S.C. 5,420.

"Id.

[35]See, generally, 16 U.S. C. 797 et seq. and regulations thereunder. The Federal Energy Regulatory Commission was formerly the Federal Power Commission.

[36]The "ditches and canals acts" include: Act of March 3, 1891, c. 561, 26 Stat. 1101; Act of January 13, 1897, c. 11, 29 Stat. 484; Act of May 11, 1898, c. 292, 30 Stat. 404; Act of March 4, 1917, c. 184, 39 Stat. 1197; Act of March 3, 1923, c. 219, 42 Stat. 1437; Act of March 3, 1925, c. 462, 43 Stat. 1145; and Act of May 28, 1926, c. 409, 44 Stat, 668. The "ditches and canals acts" are codified generally at 43 U.S.C. 946 to 954. These laws were repealed in part by the BLM Organic Act as they apply to public lands and national forests. See Public Law 579, section 703(a), 90 Stat. 2743 (1976).

[37]43 U.S.C. 946.

[38]43 U.S. C. 948.

[39]43 U.S. C. 946.

'Id.

[41]Id.
[42]Id.
[43]43 U.S.C. 949.
[44]43 U.S.C. 951.
[45]The availability of rights-of-way for utilities may seem useless if there is no means of surface access for the enterprise which the facilities are intended to support. But such split access may be feasible where air or sea transport or a more circuitous surface transport route can be established. It should be taken into account that the costs of utility systems are much more sensitive to additional length than many other transportation systems.
[46]16 U.S.C. 79.
[47]16 U.S.C. 420.
[48]43 U.S.C. 946.
[49]43 CFR 2801.1-7(b). See discussion of BLM regulations in previous section on Public Lands.
[50]43 CFR 2802. l-l(a).
[51]See laws applicable to the Federal-aid highway system, 23 U.S.C. 101 et seq., and 23 U.S. C. 317.
[52]23 U.S.C. 138.
[53]23 U.S. C. 138.
[54]23 U.S.C. 1653(f), commonly known as section 4(f) of the Department of Transportation Act and also found at 23 U.S. C. 138. See discussion of section 4(f) elsewhere in this report.
[55]23 U.S.C. 317.

NATIONAL WILDLIFE REFUGE SYSTEM

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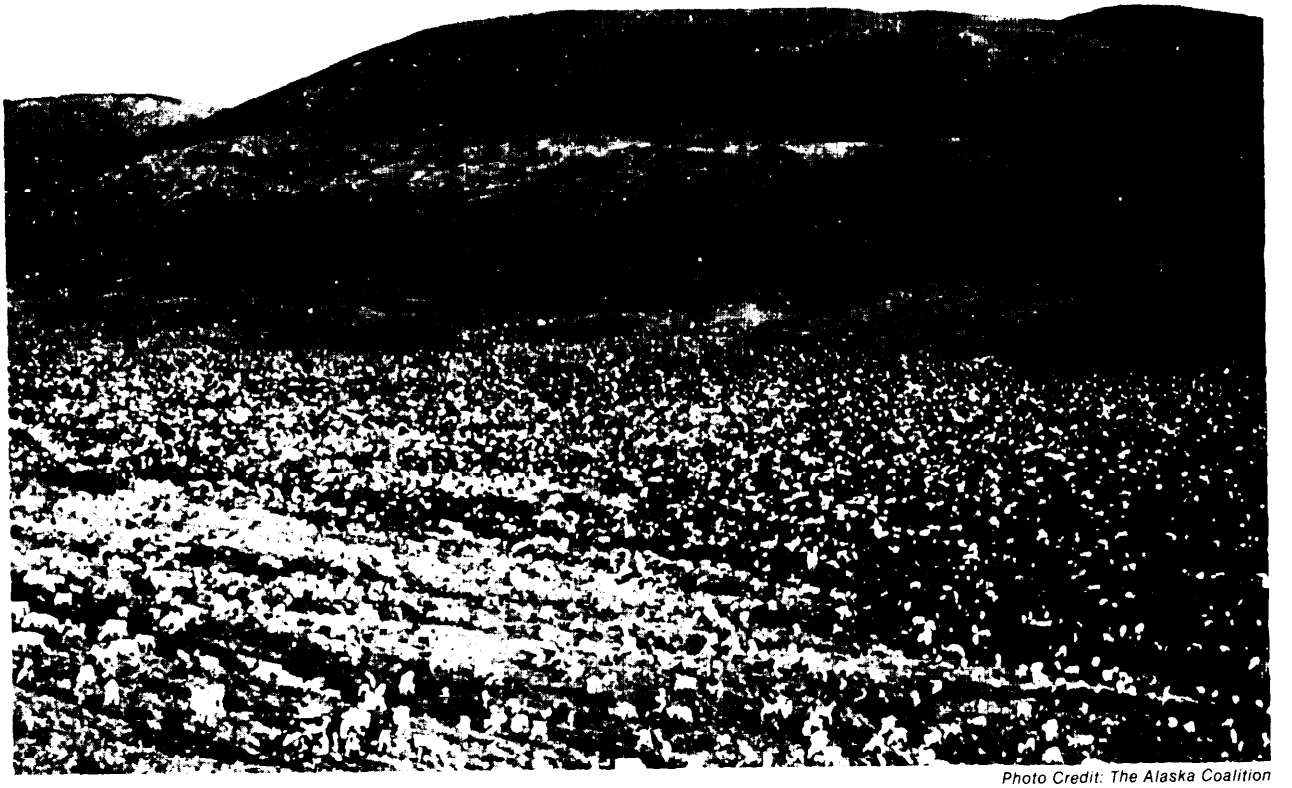

Photo Credit: The Alaska Coalition

A N W R g w g N Am gg d

wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, or waterfowl production areas.'" This system comprises over 30 million acres nationwide, with 22.2 million acres in Alaska. [z]

There are at least eight statutes that may provide authority for the management policies and purposes of the NWRS.[3] The primary authority is found in the National Wildlife Refuge System Administration Act[4] which makes specific provisions for grants of easements across NWRS lands.[5] Other statutes, which may provide authority for rights-of-way in wildlife refuges, are the Act of February 15, 1901,[6] the Act of March 4, 1991,[7] and the ditches and canals acts.[8] Rights-of-way through wildlife refuges for federally funded highways and other transportation projects may be obtained under section 4 of the Refuge Administration Act. However, federally aided transportation projects through refuge areas are subject to review under section 4(f) of the Department of Transportation Act.[9] (The Mineral Leasing Act makes provision for oil and gas pipeline rights-of-way through refuges, but requires prior findings that such use is not inconsistent with the purposes of the refuge.)[10]

RIGHTS-OF-WAY UNDER SECTION 4 OF THE REFUGE ADMINISTRATION ACT

The National Wildlife Refuge System Administration Act authorizes the Secretary of the Interior to permit the use of "any area within the system for any purpose, including but not limited to . . . access whenever he determines that such uses are compatible with the major purposes for which such areas were established."[11] The Secretary is further authorized to: "permit the use of, or grant easements in, over, across, upon, through, or under any areas in the system for the purposes such as, but not necessarily limited to, powerlines, telephone lines, canals, ditches, pipelines, and roads including the construction, operation, and maintenance thereof, wherever he determines that such uses are compatible with the purposes for which such areas were established. "1[2]

Right-of-way regulations issued by the Fish and Wildlife Service state, "No right-of-way will be approved unless it is determined by the Regional Director to be compatible."[13] That term is defined by the regulations: " 'Compatible' means that the requested right-of-way or use will not interfere with or detract from the purposes for which units of the National Wildlife Refuge System are established."[14]

The holder of any right-of-way in a wildlife refuge granted by the Secretary under provisions of the Refuge Administration Act or any other law is required to pay in advance the fair market value or yearly rental value of the right-of-way .[15] If the holder is a Federal, State, or local agency exempted by law from payment requirements, the agency is required to compensate the Secretary by other acceptable means such as the loan of other land, equipment, or personnel to the extent such arrangements are consistent with the objectives of the National Wildlife Refuge System; otherwise the Secretary may waive the compensation requirement.'" After deduction of necessary administrative expenses, any proceeds from private right-of-way easements on refuge system lands are deposited to the Migratory Bird Conservation Fund[17] to be used for land acquisition to carry out the purposes of the Migratory Bird Conservation Act[18] and the Migratory Bird Hunting Stamp Act.[19]

RIGHTS-OF-WAY UNDER OTHER STATUTES

Lands reserved for fish and wildlife purposes may be subject to the right-of-way provisions of the 1901 Act, the 1911 Act, and the ditches and canals acts, which are laws of general applicability. Although these laws were partially repealed by the Federal Land

Note: Footnotes for this section appear on pp. 77-78.

Policy and Management Act insofar as they applied to public lands and national forests, their applicability to "other reservations" remains.[20] However, the express and broad authorization for wildlife refuge rights-of-way in the Refuge Administration Act would seem to be more favorable to applicants than the trio of special right-of-way laws, especially since payment is required even if access is sought under another statute.[21] The right-of-way regulations issued by the Fish and Wildlife Service require that all applications for a right-of-way easement be made under the Refuge Administration Act provisions.[22] Access use of refuge areas that are also components of the National Wild and Scenic Rivers System or the National Wilderness Preservation System is regulated by the laws covering those systems.[23] Wild and Scenic Rivers System components administered by the Fish and Wildlife Service are subject to the access authority for national parks instead of that for wildlife refuges.[24] The Fish and Wildlife Service has declared that construction of transportation facilities in designated refuge wilderness areas will not be allowed without special authorization by Congress.[25]

RIGHTS-OF-WAY FOR TRANSPORTATION SYSTEMS

Federally funded highways, railways, or waterways may be built through wildlife refuges but they must meet certain requirements. First, the application for a right-of-way must be approved by the Fish and Wildlife Service and the Secretary of the Interior as being compatible with the purposes for which the refuge was established, and arrangements for payment or other compensation must be made.[26] Second, under section 4(f) of the Department of Transportation Act of 1966,[27] the Secretary of Transportation must review the proposed project. Approval may be granted only if (1) there are no feasible and prudent alternatives to the use of refuge lands, and (z) the program includes all possible planning to minimize environmental damage.[28]

The general position of the Fish and Wildlife Service on the use of refuge areas for transportation projects and the use of specific transportation modes within refuges is stated in the Final Environmental Statement for the Operation of the National Wildlife Refuge System:

> The use of passenger vehicles, including ORVs is restricted in time and place to protect wildlife, habitat, public safety, and Government property. Many refuges include inland, intracoastal, and in some cases up to a 3-mile strip of coastal waterways. Commercial transportation use of navigable waters is limited primarily to powered boats but significant recreational use occurs in certain areas. Navigable waters are generally not subject to refuge regulations as management must acknowledge State ownership of submerged lands, commitment for navigation purposes, and authorities of other agencies such as the U.S. Coast Guard or U.S. Army Corps of Engineers.
>
> Regulation of access on inland and intracoastal waters is generally necessary to protect wildlife but use of traditional navigation channels is generally permitted. Regulations may include control of methods, times, and routes of access.[29]

APPLICATIONS FOR RIGHTS= OF= WAY

An applicant for a right-of-way across refuge lands must submit an application and supporting information to the Regional Director of the Fish and Wildlife Service for the area in which the refuge is located.[30] The Fish and Wildlife Service has adopted right-of-way procedures and requirements similar to those followed by BLM.[31]

Applicants must pay a nonreturnable application fee[32] as well as all costs incurred in processing the application.[33] They must also agree to reimburse the United States for all costs incurred "in monitoring the construction, operation, maintenance, and termination of facilities within or adjacent to the easement or permit area."[34] All applications

must include a detailed analysis of the impact of the proposed action on the environment.[35] A map or plat accurately describing the right-of-way must accompany each application.[36]

Easements are generally granted for 50 years or so long as the right-of-way is used for the purposes granted.[37] All easements include terms requiring the following:

- Compliance with State and Federal laws and regulations applicable to the project for which the easement is granted and to the lands included in the easement.[38]
- Soil and resource conservation and protection measures.[39]
- Fire prevention.[40]
- Rebuilding or repairing roads, fences, structures, and trails destroyed or damaged by construction, and building and maintaining suitable crossings for roads and trails which intersect the right-of-way.[41]
- Payment to the United States for damages to lands or property caused by the applicant and indemnification against any liability for damages arising from occupancy or use of lands under easement.[42]
- Restoration of the land to its original condition upon revocation and termination.[43]

The applicant is required to pay the fair market value for use and occupancy of lands subject to an easement.[44]

The Regional Director may suspend or terminate an easement for failure to comply with any terms or conditions of the grant or for abandonment.[45] He must give the easement holder 60 days notice, during which time the holder may avoid suspension or termination by taking such corrective action as is specified in the notice.[46] If, at the end of the 60 days, corrective action has not been taken, a determination to that effect by the Regional Director will operate to suspend or terminate the easement, without a hearing.[47] There are provisions for administrative appeals from an adverse determination.[48]



Photo Credit: National *Park Serb'ice*

Kittiwakes, birds of the open ocean, nest on the cliffs of the Seward Peninsula and the islands of the Bering Sea

FOOTNOTE REFERENCES FOR NATIONAL WILDLIFE REFUGE SYSTEM

'16 U.S.C. 668dd(a)(1). Fish and Wildlife Service regulations provide that: "all wildlife refuge areas are maintained for the fundamental purpose of developing a national program of wildlife conservation and rehabilitation. These areas are dedicated to wildlife found thereon and for the restoration, preservation, development, and management of wildlife habitat; for the protection and preservation of endangered or rare wildlife and their associated habitat; and for the management of wildlife, in order to obtain maximum production for perpetuation, distribution, dispersal, and utilization." 50 CFR 252.

'Department of the Interior, Bureau of Land Management, *Public* Land Statistics **1976, p. 19.**

[3]The statutes cited include: 5 U.S. C. **301** which provides general authority to promulgate regulations; 16 U.S.C. **685, 725,** 690d which are portions of acts establishing specific NWRS areas; 16 U.S.C. 7-15(i) from the Migratory Bird Conservation Act; **16** U.S.C. **664** from the Fish & Wildlife Coordination Act; **43** U.S.C. 315a from the Taylor Grazing Act; and *16* U.S.C. **460** from the Act of September **28, 1962,** as amended by the Act of October 15, 1966, which provides for recreational use of NWRS lands, fish hatcheries, and other conservation areas administered for fish and wildlife purposes. Measures have been introduced in recent sessions of Congress to establish a governing agency and organic act for the NWRS. See, e.g., S. 984, 95th Cong., 1st sess., 123 Cong. Rec. S4020 (daily ed. Mar. 11, 1977): H.R. 2082, 95th Cong., 1st sess., 123 Cong. Rec. H477 (daily ed. Jan. 19, 1977). The National Wildlife Refuge System Administration Act Amendments of 1976, Public Law 94-223, 90 Stat, 199, Feb. 27, 1976, provided that all units of the NWRS would be administered by the Fish and Wildlife Service (previously there had been joint administration of some areas with BLM) and that areas may not be removed from the System without an Act of Congress. Section a(l) of the Act authorized continuance of cooperative programs for the management of resources on Alaska refuge lands. 16 U.S.C. 688dd(a)(1).

[4]16 U.S.C. 668dd.

[5]16 U.S.C. 668dd(d)(1).

'43 U.S.C. 959.

'43 U.S.C. 961.

'43 U.S.C. 946-954.

'49 U.S.C. 1653(f). 4(f) review only occurs when funds appropriated to the Department of Transportation are used.

'[0]30 U.S.C. 185(b)(1).

[11]16 U.S. C. 668dd(d)(1).

"Id,

'[3]50 CFR 29.21-l(a). Regulations for the grant of easements for rights-of-way are set out at 50 CFR 29.21. These regulations were recently extensively revised to reflect amendments to the Mineral Leasing Act and the National Wildlife System Administration Act Amendments of 1974. See 42 F.R. 43916, Aug. 31, 1977.

"50 CFR 29.21(h).

"16 U.S.C. 668dd(d)(2).

[16]Id.

"Id.

[18]16 U.S. C, 715 et seq.

[19]16 U.S.C. 718 et seq.

[20]Public Law 94-579, section 703(a), 90 Stat. 2743. All wildlife refuges are reservations. A discussion of the 1901 Act, the 1911 Act, and the ditches and canals acts is contained in the section on National Parks.

[21]16 U.S.C. 668dd(d)(2).

[22]50 CFR 19.21-l(a) as revised, 42 F.R. 43917, Aug. 31,1977. One commentator has observed that these old laws are no longer cited as right-of-way authority in the regulations issued for NWRS. See Lee D. Morrison, Rights-of-Way on Federally Owned Lands: A Journey Through the Statutes by Way of the Federal Land Policy and Management Act of 1976, 9 Transportation Law Journal 113 (1977).

[23]See discussion of these systems in other sections of this report.

[24]16 U.S.C. 1284(g).

[25]Department of the Interior, Fish and Wildlife Service, Final Environmental Statement on the Operation of the National Wildlife Refuge System, p. III-82 (1976).

[2']16 U.S.C. 668dd(d).

[27]49 U.S.C. 1653(f).

[28]Id.

[29]Final Environmental Statement, Supra, note 25, III-82.

[30]50 CFR 29.21-2.

[31]The regulations, as revised, are set forth at 50 CFR 29,21 and 42 F.R. 43916, Aug. 31, 1977, supra, note 13.

[32]50 CFR 29.21-l(a)(2)(i). This requirement does not apply to State or local governments or their agencies and instrumentalities unless a pipeline easement is sought.

[33]50 CFR 29,21 -2(a)(2)(ii)(D).

[34]50 CFR 29.21-2(a)(3)(i). See infra, note 44.

[35]50 CFR 29.21-2(a)(4). The analysis must be sufficient to allow FWS to prepare an impact statement under NEPA, if required. It must also comply with the requirements of the National Historic Preservation Act of 1966 (16 U.S.C. 47o et seq.), the Archeological and Historical Preservation Act of 1974 (16 U.S.C. 469 et seq.), E.O. 11593 "Protection and Enhancement of the Cultural Environment," May 13, 1971 (36 F.R. 8921) and "Procedures of Historic and Cultural Properties" (36 F.R. 800).

[36]50 CFR 29.21-2(b). It must be sufficiently detailed to locate accurately the right-of-way on the ground.

[37]50 CFR 29.21-3(a).

[38]50 CFR 29.21-4(b)(1).
[39]50 CFR 29.21-4(b)(4).
[40]50 CFR 29.21-4(b)(5).
[41]50 CFR 29.21-4(b)(6).
[42]50 CFR 29.21-4(b)(7).
[43]50 CFR 29,21 -4(b)(10). This requirement may be waived in writing,
[44]50 CFR 29.21-7. Payment may be made in a lump sum or through annual fair market rental payments. Federal, State, or local agencies, exempted from payment by Federal law, shall compensate by other means such as making land available or loaning equipment or personnel. A separate provision requires a nonreturnable payment within 60 days of the grant of an easement under a schedule based on the length of the easement, 50 CFR 29,21 -2(a)(3)(ii). This payment is to defer costs incurred in monitoring activities on the easement, If actual costs for monitoring are greater, additional reimbursement can be required, 50 CFR 29.21 (a)(3)(ii) (B).
[45]50 CFR 29.21-4(9). A rebuttable presumption of abandonment is raised by deliberate failure to use all or part of the easement for a continuous 2-year period.
[46]50 CFR 29.21-4(9). The Regional Director may extend the 60-day period when extenuating circumstances or other compelling reasons warrant.
[47]50 CFR 29.21-4(9). Holders of rights-of-way under the Mineral Leasing Act are entitled to a formal hearing conducted pursuant to 5 U.S.C. 554 prior to a final decision to suspend or terminate, Other easement holders do not have the right to this procedure.
[48]50 CFR 29.22. Appeals may be taken from any final disposition by the Regional Director to the Director. Decisions of the Director may be appealed to the Secretary of the Interior. The procedure for such appeals is set out at 43 CFR part 4, subpart G.

NATIONAL FOREST SYSTEM

The National Forest System consists of over 187.5 million acres[1] of forest, rangeland, and other lands and waters administered by the Forest Service of the Department of Agriculture.[2] The national forests are established and maintained "to improve and protect the forest," to secure "favorable conditions of water flow, " "to furnish a continuous supply of timber, "[3] and for other outdoor recreation, range, timber, watershed, fish, and wildlife purposes.[4] The national forests are managed on a multiple-use sustained-yield basis[5] with "due consideration" given to "the relative values of the various resources in a particular area," including wilderness values.[6] Under the Forest and Rangeland Renewable Resources Planning Act of 1974,[7] units of the National Forests System are to be administered according to land and resource management plans prepared under the Renewable Resources Program developed by the Department of Agriculture as part of a continuing responsibility to inventory and assess renewable resources uses and supplies.[8] Development of mineral resources is a generally recognized and accepted use of national forests.[9]

Clear statutory authority for the use of national forest lands for access purposes is found in Title V of the Federal Land Policy and Management Act of 1976[10] and in laws authorizing development of the National Forest Transportation System.[11] National forest components of the National Wilderness Preservation System and the National Wild and Scenic Rivers System are managed under the laws and regulations applicable to those systems in addition to the general laws governing the National Forest System. Access uses of these areas are limited and are discussed under sections of this report on those systems.

THE BLM ORGANIC ACT

The Federal Land Policy and Management Act of 1976, commonly referred to as the BLM Organic Act, established comprehensive right-of-way authorization for the Secretary of the Interior for the public lands and the Secretary of Agriculture for the national forests, except for those areas designated as wilderness. The Act repealed many older right-of-way laws including the Act of February 15, 1901,[12] the Act of March 4, 1911,[13] and the ditches and canals acts[14] to the extent that they applied to public lands and national forests.[15]

Note: Footnotes for this section appear on pp. 81-82.

Under Title V, permits for rights-of-way may be granted for:

- Systems and facilities for impoundment, storage, transportation, or distribution of water;
- Pipelines and other systems for transportation and storage of liquids and gases other than water, or petroleum or natural gas products;
- Pipelines, slurries, and other transportation systems for solid materials and related storage facilities;
- Electric power projects (subject to compliance with Federal Energy Regulatory Commission (FERC) requirements);
- Communications systems;
- Transportation purposes such as roads, highways, canals, and airways, except where they are associated with commercial recreation facilities on National Forest System lands; or
- Other necessary transportation systems or other systems or facilities in the public interest requiring rights-of-way over National Forest System lands. "

The applicant for a right-of-way must provide the Secretary with any contracts, plans, and other information reasonably related to the use of the right-of-way that are needed for a decision on the issuance or renewal of the right-of-way and on any terms or conditions required. '7 When appropriate, the Secretary may also require the applicant to provide information on the competitive effect of the right-of-way. Business entities must disclose ownership and other relevant financial information. [19] If a proposed use might have a significant impact on the environment, the applicant is required to submit a plan for the construction, operation, maintenance, and rehabilitation of the right-of-way in compliance with stipulations and regulations issued by the Secretary prior to approval of the application. [20]

Rights-of-way will be granted for a reasonable term for the area occupied by the project and necessary for its safe operation and for such additional area as needed for the construction, maintenance, or termination of the right-of-way project. [21] The use of corridors for rights-of-way in common maybe required where practical to minimize adverse environmental impacts. [22] The holder must pay the administrative costs associated with the issuance and monitoring of the right-of-way, as well as for the fair market value of the right-of-way, unless such payment is waived or other financing arrangements exist. [23] Each grant of a right-of-way must contain enforceable provisions requiring compliance with applicable Federal and State standards for health, safety, and environmental protection, compliance with conditions for protection of scenic, esthetic, and fish and wildlife values, and protection of the interests of other lawful users and the public in the lands covered by the right-of-way . [24] No right-of-way will be issued or renewed unless the Secretary determines that the applicant has "the technical and financial capability to construct the project for which the right-of-way is requested" in accordance with all terms and conditions imposed. [25]

THE NATIONAL FOREST TRANSPORTATION SYSTEM

In the Act of October 13, 1964 [26] Congress declared that "the construction and maintenance of an adequate system of roads and trails within and near national forests and other lands administered by the Forest Service is essential if increasing demands for timber, recreation, and other use of such lands are to be met." [27] The anticipated effects of the existence of such a road system would be an increase in "the value of timber and other resources tributary to such roads" and improved ability of the Secretary of Agriculture to provide for the "intensive use, protection, development, and management of these lands under principles of multiple use and sustained yield of products and services." [28]

To promote development of a forest roads and trails system, the Secretary of Agricul-

ture is authorized to grant permanent or temporary easements for road rights-of-way over national forests or other lands administered by the Forest Service or related lands in which the Department has an interest under the terms of the grant to it.[29] The easement may be terminated by consent of the owner, by condemnation, or for non-use for a period of 5 years.[30] The Secretary may, under the forest development road program, provide for the acquisition, construction, and maintenance of such roads within and near National Forest System lands.[31] These roads are to be located and built in such a manner as to permit maximum economy in timber harvesting, while meeting requirements for protection, development, and management of lands and resources in surrounding non-Federal lands. Roads may be financed by departmental appropriations, requirements on the purchasers of national forest timber and resources, cooperative financing with public or private agencies or individuals, or a combination of these methods.[32] The Secretary may also require users of Forest Service roads to maintain or reconstruct the roads in relation to their proportionate share of total use or to provide a deposit against the costs of maintenance or reconstruction.[33]

Congress has directed that the development of a transportation system to serve the national forests be carried forward in time "to meet anticipated needs on an economical and environmentally sound basis and that methods chosen to finance the construction and maintenance of the system should be such as to enhance local, regional, and national benefits. "[34] All roads constructed on National Forest System lands must meet "standards appropriate for the intended uses, considering safety, cost of transportation, and impacts on land and resources."[35] Unless a permanent road is necessary as part of the National Forest Transportation System, any road constructed in connection with a timber contract or other lease or permit must be designed so that vegetative cover will be reestablished by natural or artificial means within 10 years of termination of operation.[36]

CONFLICT BETWEEN ACCESS PROVISIONS

The two statutes discussed above differ in some material respects. Section 510(a) of the BLM Organic Act provides that, in the event of any conflict between the requirements of Title V and the Act of October 13, 1964, the latter Act will prevail.[37] When dealing with components of the National Forest Transportation System, the Secretary need not apply any provisions of Title V. Rights-of-way that are not roads built under the 1964 Act are governed by Title V. A proviso states that it shall not be mandatory for the Secretary of Agriculture to apply limitations on rights-of-way, ownership disclosure requirements, or any other condition contrary to established practices under the 1964 Act when dealing with any forest roads.[38] A clear implication of the proviso, however, is that the Secretary may apply such provisions at his discretion.

Forest Service regulations implementing the 1964 Act[39] stress a policy of coordinated planning that takes into account the transportation and resource development needs of surrounding communities.[40] Each unit of the National Forest System is to have a plan for a transportation system for the protection and utilization of the area, or the development of resources on which communities within or adjacent to the national forest are dependent.[41] Use of existing roads and trails in the National Forest System is permitted subject to certain regulations for protection and administration of lands and apportionment of costs.[42] Easements for construction or use of a road across Forest Service lands may be granted for a reciprocal benefit, or conditioned on payment of reasonable charges and acceptance of necessary and appropriate terms and conditions.[43] Applications under the 1964 Act are made to the Chief of the Forest Service. Permits may be required for commercial hauling of non-Federal forest products or other commodities and materials on designated "special service roads" conditioned on meeting proportionate costs of use or appropriate terms and conditions of opera-

tion.[44] In circumstances where transportation systems serving forest lands and intermingled and adjacent non-Federal lands are undeveloped or inadequate, the Chief of the Forest Service may join in cooperative planning, financing, construction, and maintenance of roads to the extent that it is feasible and advantageous to the United States.[45]

ROADLESS AREA REVIEW

The Forest Service is currently engaged in a major review of all potential wilderness areas in the forest system called the Roadless Area Review and Evaluation (RARE 11).[40] It has identified approximately 67 million acres of roadless areas, including 18 million acres in Alaska, which might be suitable for designation as wilderness .47

As a result of an out-of-court settlement, the Forest Service has agreed that it will prepare an environmental impact statement for any proposed actions that might affect the wilderness potential of roadless lands in the RARE II inventory.[48] To minimize disruption and uncertainty, the Forest Service hopes to conclude the evaluation of all areas in the inventory by early 1979, at which time inventoried lands will be divided into three categories—"recommended wilderness," "further evaluation, " and "no further wilderness consideration. '[49] Areas in the first two categories will be managed to protect wilderness potential and access may well be limited.[50] The size of final wilderness designation is uncertain. The Forest Service has established a program goal in its Renewable Resource Program that calls for the eventual designation of 25 million to 30 million acres of forest land in the wilderness system (as of December 1977, there were 12.5 million acres of land in the National Wilderness Preservation System) .5'

FOOTNOTE REFERENCES FOR NATIONAL FOREST SYSTEM

'Bureau of Land Managment, *Public* Land Statistics 1976. There are 20.7 million acres of National Forest System lands in Alaska.

[2]The National Forest System is defined in the Forest and Rangeland Renewable Resources Planning Act of 1974 as "all national forest lands reserved or withdrawn from the public domain of the United States, all national forest lands acquired through purchase, exchange, donation, or other means, the national grasslands and land utilization projects administered under title 111 of the Bankhead-Jones Farm Tenant Act (7 U.S.C. 1010 et seq.), and other lands, waters, or interest therein which are administered by the Forest Service or are designated for administration through the Forest Service as a part of the system. " 16 U.S.C. 1609.

[3]16 U.S.C. 475.

[4]16 U.S.C. 528.

[5]Id. As defined in the Multiple-Use Sustained-Yield Act of 1960, "multiple use" means: the management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. 16 U.S.C. 531(a).

"Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land. 16 U.S.C. 531(b).

[6]16 U.S. C. 529.

[7]16 U.S.C. 1601 et seq., as amended by the National Forest Management Act of 1976, Public Law 94-588, 90 Stat. 2949.

[8]16 U.S. C, 1604. Until a plan is developed for a given unit, management continues under existing plans, 16 U.S.C. 1604(c).

'16 U.S.C. 528. The Multiple-Use and Sustained-Yield Act of 1969.

[10]43 U.S.C. 1761 et seq.

[11]16 U.S.C. 532-538, 16 U.S.C. 1608.

[12]43 U.S.C. 959, 16 U.S.C. 522.
[13]43 U.S.C. 961, 16 U.S.C. 523.
"43 U.S.C. 946-951,
[15]For a discussion of these laws, see section on National Parks.
[16]43 U.S.C. 1761(a).
[17]43 U.S.C. 1761(b)(l).
[18]Id.
[19]43 U.S.C. 1761(b)(2).
[20]43 U.S.C. 1764(d).
[2]143 U.S.C. 1764(a).
[22]43 U.S.C. 1763.
[23]43 U.S.C. 1764(g).
[24]43 U.S.C. 1765.
[25]43 U.S.C. 1764(j).
[26]Public Law 88-657, 78 Stat. 1089, 16 U.S.C. 532-538.
[27]16 U.S.C. 532.
[28]Id.
[29]16 U.S.C. 533.
[30]16 U.S.C. 534,
[31]16 U.S. C. 535,
[32]Id. When a higher quality road is needed than that necessary for purchasers' removal of forest resources or timber, the purchasers may be required to meet the costs proportionate to their use.
[33]16 U.S.C. 537.
[34]16 U.S.C. 1608(a).
[35]16 U.S.C. 1608(C).
[36]16 U.S.C. 1608(b).
3743 U.S.C. 1770(a).
[38]Id.
[39]The regulations are at 36 CFR 212.1. It should be noted that these regulations address issues germane to the development of a transportation system by the Government. With the exception of provisions for "special service roads, " there is little that addresses fact situations involving applicants seeking a right-of-way for their own use.
[40]See 36 CFR 212.1(c), 212.2.3, 212.8(a),212.0(d).
[41]36 CFR 212.3. The regulations define a forest development transportation plan as a "plan for the system of access roads, trails, and airfields needed for the protection, administration, and utilization of the national forests and other lands administered by the Forest Service, or the development and use of resources upon which communities within or adjacent to the national forests are dependent." 36 CFR 212,1(c).
[42]36 CFR 212.7,212.12.
[43]36 CFR 212.10
[44]36 CFR 212.10.
[45]36 CFR 212.9(d).
[46]The background and history of RARE II and its predecessor, RARE I, are highly involved. A summary may be found in Senate Committee on Energy and Natural Resources, Roadless Area Review and Evaluation, Publication 95-92, February 1978, (committee print). The Forest Service has issued no rules or regulations for the management of the RARE II process. Policy directives have come from Interim Directives in the Forest Service Manual or from the "RARE II Notebook" compiled by Forest Service staff personnel working on RARE II.
[47]42 F.R. 59688, Nov. 18, 1977. An accelerated land management program is being undertaken in the Tongass National Forest which contains 1.3 million acres of roadless area. Forest Service Manual, chapter 8260, Interim Directive No. 5, p. 9.
[48]Statement of Dr. M. Rupert Cutler, Assistant Secretary for Conservation, Research, and Education, Department of Agriculture, committee print, supra, note 46, p. 5. Environmental impact statements area normal component of land management plans required by section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974. Forest Service decisions on access must be consistent with the land management plan.
[49]RARE II Notebook, Inset HI, ''RARE II Process.
'Protective management will not be accomplished through the land management planning process, supra, note 48. Most of the areas that will be included in the two categories presently are not used for access or any other activity; they are considered "de novo wilderness," Access or any other new activity can only be permitted pursuant to a land management plan or by other action of the Forest Service requiring an EIS.
S] Department of Agriculture, *Final* Environment) Statement and Renewable Resource Program, *1977 to* 2020, p. 97. (1976). See also committee print, supra, note 46, p. 36, (Statement of Dr. Cutler). In June 1978 the Forest Service issued the Draft Environmental Statement on Roadless Area Review and Evaluation (RARE 11) consisting of a national programmatic volume and 20 State and regional supplemental volumes.

NATIONAL WILD AND SCENIC RIVERS SYSTEM

The Wild and Scenic Rivers Act of 1968[1] established a national policy that selected rivers and their surrounding environments possessing "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values shall be preserved and protected in a free-flowing condition for the benefit of present and future generations."[2] The National Wild and Scenic Rivers System was created to implement this policy. It consists of all river units included by congressional designation or by State action (subject to approval by the Secretary of the Interior after review by appropriate Federal agencies).[3]

ADMINISTRATION OF THE SYSTEM

Congressionally designated components of the National Wild and Scenic Rivers System are administered by either the Secretary of Agriculture through the Forest Service or by the Secretary of the Interior through one of the Department's land management agencies, principally the National Park Service and the Fish and Wildlife Service. State-designated rivers are under State administration consistent with the purposes of the Wild and Scenic Rivers Act. There are three classifications of rivers in the system:

1. Wild river areas—Those rivers or sections of rivers, which are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.
2. Scenic river areas—Those rivers or sections of rivers, which are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
3. Recreational river areas—Those rivers or sections of rivers, which are readily accessible by road or railroad, which may have some development along their shorelines, and which may have undergone some impoundment or diversion in the past.[4]

A component of the National Wild and Scenic Rivers Systems is managed "in such manner as to protect and enhance the values which caused it to be included in the system, without insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values."[5] Management plans for each component river may allow varying degrees of protection and development based on its special attributes. Primary emphasis, however, must be given to protecting esthetic, scenic, historic, archeologic, and scientific features.'

Wild and scenic rivers under the jurisdiction of the National Park Service are part of the National Park System and are subject to laws governing the administration of the park system. Components administered by the Fish and Wildlife Service are part of the National Wildlife Refuge System and subject to all laws applicable to wildlife refuges. The Secretary of the Interior may also use any general statutory authority relating to national parks, and any other authority available to him for recreation and preservation purposes or for natural resources conservation and management, which he deems appropriate for the administration of any component of the Wild and Scenic Rivers System.[7] The Secretary of Agriculture may use any statutory authority relating to the National Forest System for purposes of the administration of components of the Wild and Scenic Rivers System.[8] Whenever there is a conflict between the provisions of the Wild and Scenic Rivers Act and such other authority, the more restrictive provisions are applied.[9] Components of the National Wild and Scenic Rivers System within designated wilderness areas are managed according to provisions of

Note: Footnotes for this section appear on p. 88.

both systems, and in case of conflict between provisions of the two Acts, the Wilderness Act provisions shall be applied.[10]

RIVER STUDIES

Any wild, scenic, or recreational river area possessing one or more scenic, recreational, archeologic, or scientific values and in a free-flowing condition, or upon restoration to such condition, may be considered for inclusion in the Wild and Scenic Rivers System. As of December 1976, 16 rivers have been designated as components of the system, and 58 rivers have been nominated by Congress for study. (See tables 2 and 3.) No Alaskan rivers have been designated or nominated for study. All Alaska National Interest Lands proposals contain some wild and scenic rivers designations. The Secretary of the Interior and the Secretary of Agriculture are responsible for conducting studies of all rivers nominated by Congress as potential wild and scenic rivers, and submitting a report on the suitability of each river to the President, who, in turn, forwards his recommendation to Congress.[11] Cooperation of appropriate State and local governments is sought, and reports may be prepared as joint Federal-State efforts. Priority is given to the study of those potential additions to the system where there is the greatest likelihood of development and there is the greatest proportion of private lands.[12] Proposals for inclusion of a river in the system must be accompanied by a report to Congress and the President showing the characteristics of the area that affect its suitability for inclusion:

- The current status of land ownership and use;
- The effect of inclusion on potential land and water uses;
- . The proposed administering agency;
- The extent to which cost and administration may be shared with State or local government; and
- The estimated costs of acquiring necessary lands and interests in land and administrative costs .13

Prior to recommendation to Congress, the report is reviewed by the Secretaries of the Interior, Agriculture, and the Army, and the Chairman of the Federal Energy Regulatory Commission (FERC, formerly the Federal Power Commission), and the heads of other affected Federal agencies; and if non-Federal

Table 2.-Component Rivers of the National Wild and Scenic Rivers System*

Original components, designated in October 1968

1. Clearwater, Middle Fork, Idaho
2. Eleven Point, Mo.
3. Feather, Calif.
4. Rio Grande, N.Mex.
5. Rogue, Oreg.
6. Saint Croix, Minn. and Wis.
7. Salmon, Middle Fork, Idaho
8. Wolf, Wis.

Later additions

9. Lower Saint Croix, Minn. (added by Congress in 1972)
10. Chattooga, N. C., S. C., and Ga. (added by Congress in 1974)
11. Rapid, Idaho (added by Congress in 1975)
12. Upper Middle Snake, Idaho and Oreg. (added by Congress in 1975)
13. Allagash Wilderness Waterway, Maine (added by State action in 1970)
14. Little Miami, Ohio (added by State action in 1973)
15. Little Beaver, Ohio (added by State action in 1975)
16. New River, N.C. (added by State action in 1976)

● Only the names of the river, forks, and States are given here; the particular segment or segments designated by Congress are specified in **16 U.S.C. 1274, as amended. Further information about the rivers added by State action may be obtained from appropriate State agencies.**

Table 3.—Rivers Designated as Potential Additions to the National Wild and Scenic Rivers System*

Designations made in October 1968

1. Allegheny, Pa.
2. Bruneau, Idaho
3. Buffalo, Term.
4. Chattooga, N. C., S. C., and Ga.
5. Clarion, Pa.
6. Delaware, Pa. and N.Y.
7. Flathead, Mont.
8. Gasconade, Mo.
9. Illinois, Oreg.
10. Little Beaver, Ohio
11. Little Miami, Ohio
12. Maumee, Ohio and Ind.
13. Missouri, Mont.
14. Moyie, Idaho
15. Obed, Term.
16. Penobscot, Maine
17. Pere Marquette, Mich.
18. Pine Creek, Pa.
19. Priest, Idaho
20. Rio Grande, Tex.
21. Saint Croix, Minn. and Wis.
22. Saint Joe, Idaho
23. Salmon, Idaho
24. Skagit, Wash.
25. Suwanee, Ga. and Fla.
26. Upper Iowa, lowa
27. Youghiogheny, Md. and Pa.

Designations made in January 1975

28. American, Cal if.
29. Au Sable, Mich.
30. Big Thompson, Col.
31. Cache la Poudre, Col.
32. Cahaba, Ala.
33. Clark's Fork, Wyo.
34. Colorado, Col. and Utah
35. Conejos, Cot.
36. Elk, Col.
37. Encampment, Col.
38. Green, Col.
39. Gunnison, Col.
40. Illinois, Okla.
41. John Day, Oreg.
42. Kettle, Minn.
43. Los Pines, Col.
44. Manistee, Mich.
45. Nolichuckey, Term. and N.C.
46. Owyhee, South Fork, Oreg.
47. Piedra, Col.
48. Shepaug, Corm.
49. Sipsey Fork, West Fork, Ala.
50. Snake, Wyo.
51. Sweetwater, Wyo.
52. Tuolumne, Cal if.
53. Upper Mississippi, Minn.
54. Wisconsin, Wise.
55. Yampa, Col.
56. Dolores, Col.

Designation made in December 1975

57. Lower Middle Snake, Idaho, Oreg., and Wash.

Designation made in October 1976

58. Housatonic, Corm.

● Only the names of the rivers, forks, and States are given here; the particular segment or segments designated for study are specified in 16 U.S.C. 1276, as amended.

lands are involved, the Governor(s) of the affected State(s). The comments received are included in the submission to the President and Congress.[14] The final determination is made by Congress. Historically, however, some rivers have been included directly in the system without prior nomination and study. '5

PROTECTIONS AFFORDED WILD AND SCENIC RIVERS

Restrictions on Private Development

Once designated as components of the system, river areas receive several types of pro-

tection. Some activities of private landowners, which might jeopardize the character of the river, can be restricted by the purchase of land or the acquisition of scenic easements" within the boundaries of the administrative unit. The Act authorizes the appropriation of funds for the acquisition of land and scenic easements,[17] but it places some stringent limits on the scope of this approach.

The first limit is found in the boundaries of the administrative unit. Boundaries may include no more than an average of 320 acres per mile on both sides of the river,[18] i.e., an average of one-quarter of a mile on a side. Within these boundaries, the Secretaries of the Interior and Agriculture cannot purchase title to an average of more than 100 acres per mile.[19] Furthermore, they may not condemn property if more than 50 percent of the total area is owned by Federal, State, and local governments,[20] nor may they condemn any property within an incorporated city, village, or borough that has in force "satisfactory zoning ordinances" designed to protect the river area.[21] In areas of extensive private landownership, regulation by purchase must, of necessity, depend on the purchase or condemnation of scenic easements within the river area boundaries.[22]

Restrictions on Water Resource Projects

The plenary Federal power over navigable waters forms the basis for a second type of protection. The Act restricts water resources projects and other activities which directly affect river areas of the system. FERC may not license water resources or other projects "on or directly affecting a river in the system. "2[3] Other Federal agencies may not assist projects which would have a "direct and adverse effect on the values for which such river was established."[24] However, the Act does not prohibit projects above or below the designated river area that do not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on October 2, 1968, the date the Act was passed.[25] No Federal agency may recommend authorization of, or appropriations for, a water resources project having a direct and adverse effect on protected values of a component river area without notifying the Secretary of the administering department and Congress of its intention and the possible effects on the protected values.[26]

Rivers nominated for potential inclusion in the system are also subject to restrictions on water resources projects until 1978 or for 3 years after nomination, whichever is later, and during any additional time necessary to complete study and congressional actions.[27] In addition, the Secretaries of the Interior and Agriculture and the heads of other Federal agencies must review their management policies and activities affecting lands under their jurisdiction that include, border, or abut river areas nominated as potential components and determine the actions necessary to protect the river area during the period of review with particular attention given to "scheduled timber harvesting, road construction, and similar activities" which might be contrary to the purposes of the Act.[28]

Restrictions on Federal Land Management Agencies

The Act also restricts the ability of Federal land management agencies administering units of the system to take or permit actions that would detrimentally affect wild and scenic rivers.

Each river is administered for the protection and enhancement of the values that justified its inclusion in the system.[29] Each component is also managed according to the general statutory authority of the administering agency with the most restrictive provisions of law applying in case of any conflict.[30] River areas may thus become doubly or triply protected as wild, scenic, or recreational rivers, as units of national conservation systems, i.e., national parks, wildlife refuges, or forests, and as part of the National Wilderness Preservation System. The administering agency must cooperate with the Secretary of the Interior and the appropriate water pollution control agencies for the purpose of elimi-

nating or diminishing the pollution of waters in the component river area.[31]

RIGHTS-OF-WAY

The Wild and Scenic Rivers Act authorizes "easements and rights-of-way upon, over, under, across, or through any component of the National Wild and Scenic Rivers System."[32] Rights-of-way across any component river areas administered by the Secretary of the Interior are issued in accordance with laws applicable to the National Park System.[33] Rights-of-way for components administered by the Secretary of Agriculture are issued under laws relating to the National Forest System.[34] Any conditions placed on the issuance of a right-of-way or easement must be related to the purposes of the Wild and Scenic Rivers Act.

The principal legal bases for the grant of easements or rights-of-way in National Park System lands are found in (a) the general authority to manage the national parks in conformance with the purposes of preservation and recreation;[35] (b) the Act of February 15, 1901, granting revocable rights-of-way for electric powerlines, water, and communications projects on a finding that the use is "not incompatible with the public interest; "[36] (c) the Act of March 4, 1911, which grants a right-of-way for a period of up to 50 years for communications and electric power systems subject also to a finding that the project is "not incompatible with the public interest;"[37] and (d) the ditches and canals acts,[38] which confer a right-of-way for drainage and irrigation projects subject to the filing of necessary maps and documents and approval of the location as one not interfering with proper occupancy by the Government.

Easements through wild and scenic rivers units administered by the Fish and Wildlife Service are to be granted under park system laws[39] instead of the specific right-of-way provisions for wildlife refuge system lands.[40]

Rights-of-way across any wild and scenic rivers managed by the BLM would also be issued under Park Service standards, rather than provisions applicable solely to public lands.

The Secretary of Agriculture has general right-of-way authority for forest system lands under Title V of the Federal Land Policy and Management Act,[41] and has additional authority to grant easements for roads and trails under laws relating to development of the National Forest Transportation System.[42]

Other provisions of the Wild and Scenic Rivers Act that are relevant to access to minerals on non-Federal land are: (a) the review process for potential rivers, which includes an assessment of the effects of the designation on the existing and potential uses of the lands and waters involved;[43] (b) the scenic and recreational river classifications, which allow roads and some development;[44] and (c) the provision assuring the existing rights of any State, including the right of access, to the bed of navigable waters located in a component river area.[45]

FOOTNOTE REFERENCES FOR NATIONAL WILD AND SCENIC RIVERS SYSTEM

[1]16 U.S.C. 1271 et seq.

[2]16 U.S. C. 1Z71. As defined in the Wild and Scenic Rivers Act: " 'Free-flowing, ' as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: Provided, that this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the National Wild and Scenic Rivers System. " 16 U.S.C. 1286(b).

3A listing of component rivers and potential additions to the National Wild and Scenic Rivers System is included in tables 2 and 3. A river may be included by State action if: (1) it is designated as a wild, scenic, or recreational river pursuant to State law; (2) it is permanently administered by an agency or political subdivision of the State without expense to the United States; and (3) the Secretary of the Interior, upon application by the Governor of the State, finds that it meets the criteria in the Act and approves it for inclusion in the System. 16 U.S.C. 1274.

[4]16 U.S.C. 1273(b).

516 U.S.C. 1281(a).

'Id.

[7]16 U.S.C. 1281(c).

[8]16 U.S. C. 1281(d),

'16 U.S. C. 1281(c).

[10]16 U.S. C. 1281(b).

[11]16 U.S.C. 1275(a).

"Id.

"Id.

[14]16 U.S.C. 1275(b) and(c).

[15]For example, eight original component rivers and the Rapid River, Idaho and Upper Middle Snake River, Idaho and Oregon were included by direct congressional action. Act of December 31, 1975, Public Law 94-199, section 3(a), 89 Stat. 1117.

[16]A scenic easement for purposes of the Wild and Scenic Rivers Act, "means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic, or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement. " 16 U.S.C. 1286(c),

[17]16 U.S.C. 1277(a).

[18]16 U.S. C. 1274(b).

[19]16 U.S.C. 1277(a).

[20]16 U.S.C. 1277(b).

[21]16 U.S.C. 1277(c).

[22]Condemnation of easements is specifically exempted from the acreage limitations of 16 U.S.C. 1277(a).

[23]16 U.S. C. 1278(a).

Z.' Id.

[25]Id.

[26]16 U.S. C. 1278(c).

[27]16 U.S. C. 1281,

[28]16 U.S.C. 1283(a).

[29]16 U.S. C. 1281.

[30]16 U.S.C. 1281(c).

[31]16 U.S.C. 1283(c).

[32]16 U.S.C. 1284(g).

[33]Id.

[34]Id.

[35]16 U.S. C, 1 et seq. See discussion in section on National Parks.

[36]Act of February 15, 1901, c. 372, 31 Stat. 790, 43 U.S.C. 959, 16 U.S.C. 79,522,

[37]Act of March 4, 1911, c.238, 36 Stat, 1253,43 U.S.C. 961, 16 U.S.C. 5,420,523.

[38]43 U.S.C. 946-954.

[39]16 U.S. C, 1284(g).

[40]16 U.S.C. 668dd(d)(1).

[41]43 U.S.C. 1761 et seq. See discussion in section on National Forest System.

[42]16 U.S.C. 532-538.

[43]16 U.S.C. 1275(a).

[44]16 U.S.C. 1273(b).

[45]16 U.S.C. 1284(f).

NATIONAL WILDERNESS PRESERVATION SYSTEM

The Wilderness Act of 1964[1] created the National Wilderness Preservation System to provide "the benefits of an enduring resource of wilderness"[2] for the whole Nation. Congressionally designated wilderness areas in national parks, forests, wildlife refuges, and public lands are managed under special rules "for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness."[3] In keeping with the purpose of wilderness preservation, the use of wilderness areas is highly restricted. Statutory provisions for access through wilderness areas are limited, since such use, generally, is viewed as inconsistent with the maintenance of the primeval character of wilderness.

Section 2(c) of the Wilderness Act[4] describes the special character of wilderness that the Act seeks to preserve:

> A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor and does not remain.[5]

For the purposes of the Wilderness Act, a "wilderness area" is further defined as:

> . . , an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.[6]

Most of Alaska's land unquestionably fits this characterization.[7] In the current debate over national interest lands in Alaska one of the most controversial issues is how much of the land proposed for inclusion in the national conservation systems should be legislatively classified as wilderness.

Note: Footnotes for this section appear on pp. 97-99.

Table 4.— Wilderness Areas in Alaska

	Date of Designation
Bering Sea Wilderness— Bering Sea National Wildlife Refuge, Alaska	Oct. 23, 1970
Bogoslof Wilderness— Bogoslof National Wildlife Refuge, Alaska	Oct. 23,1970
Chamisso Wilderness— Chamisso National Wildlife Refuge, Alaska	Jan. 3, 1975
Forrester Island Wilderness— Forrester Island National Wildlife Refuge, Alaska	Sept. 28, 1969
Hazy Islands Wilderness— Hazy Islands National Wildlife Refuge, Alaska	Oct. 23, 1970
Saint Lazaria Wilderness— Saint Lazaria National Wildlife Refuge, Alaska	Oct. 23, 1970
Simeonof Wilderness— Simeonof National Wildlife Refuge, Alaska	Oct. 19,1976
Tuxedni Wilderness— Tuxedni National Wildlife Refuge, Alaska	Oct. 23, 1970

DESIGNATION OF WILDERNESS AREAS

Lands may be added to the National Wilderness Preservation System only by an act of Congress.[8] The Wilderness Act itself does not establish any single process to be used before Congress acts on potential wilderness designations. Several approaches have been used in adding to the wilderness system.

Instant Wilderness

The first approach has been called "instant wilderness"—certain areas are included in the system by direct congressional action without prior congressional nomination or executive review. More than half of all wilderness designations have been made this way. The 1964 Wilderness Act designated 54 national forest areas containing some 9.1 million acres,[9] which had been administratively classified as "wilderness," "wild," or "canoe" areas, as the original components of the system. The Eastern Wilderness Act of 1974,[10] which applied to lands in national forests east of the 100 meridian, added 16 areas totaling some 207,000 acres in 13 Eastern States to the system. None of these areas had been subject to any wilderness study process. The Omnibus Wilderness Act of 1976,[11] creating wilderness areas in the National Wildlife Refuge System and the National Forest System, also included wilderness designations for some areas which had never been part of any wilderness study. Finally, the Endangered American Wilderness Act[12] of 1978 designated 17 wilderness areas, only 1 of which had ever been subject to wilderness study.

Wilderness Study

The second approach, often called "wilderness study, " was first expressed in sections 3(b) and 3(c) of the Wilderness Act. Those provisions directed Federal land managers to survey certain lands within their jurisdiction over a 10-year period and make recommendations to the President on the suitability of such lands for designation as wilderness. Section 3(b) required the Forest Service to survey the 34 areas classified as "primitive"[13] on the date of enactment; section 3(c) required the Secretary of the Interior to review all roadless areas of 5,000 acres or more in any unit of the Park System and roadless areas and roadless islands in wildlife refuges and game refuges .[14]

Under these provisions, the Secretaries of the Interior and Agriculture were required to make reports to the President within 10 years.[15] The Act mandated public notice of any potential designations,[16] hearings in the affected areas,[17] and consultation with State and local officials prior to making any report.[18] The Wilderness Act required that the President make recommendations to Congress on the basis of the departmental reports. Recommendations on at least one-third of all areas were to be made within 3 years of enactment, recommendations on at least two-thirds within 7 years, and all areas were to be completed within 10 years.[19]

The study provisions in the original Act did not establish any policies or procedures for interim management for areas under study. None of the areas covered by sections 3(b) and 3(c) was subject to multiple-use management. Primitive areas were under protective Forest Service management[20] and the Act stated that, "Nothing contained herein shall, by implication or otherwise, be construed to lessen the present statutory authority of the Secretary of the Interior with respect to the maintenance of roadless areas within units of the National Park System."[21]

These studies required by the Wilderness Act were completed by 1974. The Forest Service is continuing a wilderness study effort, the Roadless Area Review and Evaluation (RARE II), which grew out of difficulties encountered in meeting the mandate of section 3(b).[22] However, RARE II covers all roadless areas under the jurisdiction of the Forest Service, not just areas classified as primitive, and is not subject to any timetable, nor is there any requirement that the President make reports on the recommendations of the Forest Service.

Section 603 of the Federal Land Policy and Management Act established a new wilderness study program for public lands administered by the Bureau of Land Management (BLM), which, in many ways, is similar to the section 3(b) and 3(c) study .[23] The entire program must be completed by October 21, 1991, but the Secretary of the Interior must make recommendations to the President by July 1, 1980, on all BLM "primitive" or "natural" areas .[24]

Section 603 contains two provisions not found in the Wilderness Act. Mineral surveys must be conducted by the Geological Survey and the Bureau of Mines before any recommendation is made to the President.[25] In addition, an interim management policy is established.

> During the period of review of such areas and until Congress has determined otherwise, the Secretary shall continue to manage such lands according to his authority under this Act and other applicable laws in a manner so as not to impair the suitability of such areas for preservation as wilderness subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act. [26]

Congressional Nominations

Finally, Congress has often acted to require wilderness study of specific areas of land.[27] Generally, when this is done the law specifying the study area also requires that the study be conducted pursuant to section 3(d) of the Wilderness Act and sets a time limit on the period for study. Most specific study designations also contain provisions concerning interim management practices during the study period.

Wilderness areas are, unless otherwise provided by Congress, managed by the agency which had jurisdiction over the area immediately prior to its inclusion in the National Wilderness Preservation System.[28] In the Department of the Interior, the agencies that may administer components of the wilderness system are the National Park Service, the Fish and Wildlife Service, and the BLM. The Secretary of Agriculture administers wilderness areas of the National Forest System through the Forest Service. Wilderness areas are subject to all general laws governing the department and agency administering them, but management must be consistent with the provisions of the Wilderness Act. Each managing agency is responsible for preserving the wilderness character of areas under its jurisdiction. The area must be managed for the purposes for which it was established (i.e., park, forest, refuge, wild and scenic rivers) in a manner that will preserve its wilderness character.[29] Wilderness areas are to be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.[30]

ACTIVITIES IN WILDERNESS AREAS

The provisions of the Wilderness Act and the regulations thereunder, which control activities and uses in wilderness areas, are protective and stringent. The general policy for the use of wilderness areas as provided in the Act is:

> Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area .[31]

This general rule is subject to certain exceptions, specifically provided in the Act. The use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such restrictions as the Secretary of Agriculture



Photo Credit: George Wallerstein

High camp in the Wrangell Mountains

deems desirable.[32] The Secretary may also provide for the use of such measures for "control of fire, insects, and diseases" as he deems desirable.[33] Activities for the purpose of gathering information about mineral or other resources may be conducted in national forest wilderness areas in a reamer compatible with preservation of the wilderness environment.[34] National Forest and BLM wilderness areas are to be "surveyed on a planned, recurring basis consistent with the concept of wilderness preservation" by the Geological Survey and the Bureau of Mines under a program developed by the Secretary of the Interior in consultation with the Secretary of Agriculture. Reports on the mineral values, if any, of such wilderness areas are to be made available to the public and submitted to the President and Congress.[35] Mining and mineral leasing activities are permitted to continue on national forest wilderness areas subject to regulation by the Secretary of Agriculture.[36] After 1983 the minerals in wilderness areas are withdrawn from appropriation or disposition under the mining and mineral leasing laws.

The most important exception to the general prohibitions on access in the Wilderness Act is found in section 4(d)(4)[37] which provides:

> Within wilderness areas in the national forests designated by this Act, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water conservation works, power projects, transmission lines, and other facilities needed in the public interest, including the road construction

> and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial;[38]

This provision also applies to wilderness areas managed by the BLM.[39] This limited exception provides an institutional mechanism for access through wilderness areas in unusual and critical situations where such access is demonstrably in the national interest.

Livestock grazing that is established on national forest and public lands wilderness areas prior to wilderness designation may be continued subject to reasonable regulation by the appropriate Secretary.[40] Commercial activities that are proper for realizing the recreational and other wilderness purposes of the areas are permitted.[41]

The Act provides for adequate access to private or State owned land that is "completely surrounded" by a national forest or public lands wilderness area, either by the grant of such rights as are necessary or by an exchange of the surrounded land for other federally owned land in the State of approximately equal value.[42]

Ingress and egress to valid mining claims and other valid occupancies "wholly within" a national forest or public lands wilderness area is permitted subject to regulation consistent with the preservation of wilderness. Access to these surrounded areas is limited to means that have been or are being customarily enjoyed with respect to other such areas similarly situated .43

The concept of wilderness management described in the Act is intended to preclude the use of wilderness areas for all inconsistent purposes. No permanent or temporary road or other manmade structures or facilities are to be allowed except as specifically provided for in the Act. A wilderness area is to be preserved in its primitive, unaltered state. Most means of access, even footpaths, are to some extent inconsistent with preservation of wilderness as an area "untrammeled by man;" however, necessary access for purposes of wilderness recreation and management is clearly intended.[44] New access routes or intensive use of existing routes for any purpose could be detrimental and destructive of wilderness character. Accordingly, access in wilderness areas may be strictly limited when necessary.

Access uses of wilderness areas recognized in the Wilderness Act are limited to the following:

a. Preexisting private rights (It *is as*sumed that "private" includes State and local governments);
b. Wilderness recreation and management access routes and facilities;
c. Emergency purposes;
d. Established use of motorboats and aircraft where use. predates wilderness designation—subject to regulation by the management agency;
e. Presidential authorization of the use of national forest and public lands wilderness areas for projects and facilities in the national interest;
f. Adequate access rights for State and private lands completely surrounded by a national forest or public lands wilderness area;
g. Access to valid mining claims and other valid occupancies by means that are currently or customarily enjoyed in similarly situated areas; and
h. Special provisions applicable to specific wilderness areas by congressional action.

Additional authorization for access uses of wilderness areas may be found in "the other purposes for which an area was established;"[45] that is, use as a national park, a wildlife refuge, a forest, public lands, wild and scenic rivers, or associated uses of those land classification systems. However, any such use must be consonant with wilderness character.[46] Even if access use of wilderness areas within each of the land management

systems is found to be compatible with provisions of the Wilderness Act, it must also comply with the laws and regulations of the land management agency and land classification system.

PARK WILDERNESS

The National Park Service recognizes the established use of aircraft and motorboats that predates the creation of wilderness areas, and includes provisions relating to such access in its recommended wilderness legislation. However, all preestablished motorized modes of access to wilderness areas are not necessarily recognized.[47] Motorized vehicles are banned in designated wilderness areas in the park system, except for minimum access and management purposes and emergencies. As discussed in the section on the National Park System, rights-of-way and access permits for park areas are based on the general authority to manage and regulate the park system, the 1901 Act, the 1911 Act, and the ditches and canals acts.[48] These Acts require that the proposed use be compatible with the public interest or not interfere with Government use of the reservation. Plainly, most access uses would be contrary to the explicit provisions of the Wilderness Act and would probably be denied on that basis. Any grant of access through a wilderness area that is not consistent with wilderness preservation and is not based on the Wilderness Act exceptions might be found to be unlawful on judicial review.

Access is assured to private lands completely surrounded by national park wilderness.[49] Such access rights are, however, subject to regulation by the Park Service. Where access proves to be incompatible with wilderness preservation or where the private owner so desires, the surrounded lands may be exchanged under laws applicable to the wilderness system and the park system. Mining inholdings and other valid occupancies wholly within a park wilderness area are also assured access as consistent with the Wilderness Act and by means customarily enjoyed in similarly situated areas.[50] The Mining in the Parks Act of 1976 allows the Secretary of the Interior to regulate mining activities within the parks, including wilderness areas.[51] Any other access through a national park wilderness area, as through a national park, would require congressional authorization. The limited Presidential exception of the Wilderness Act does not apply to national parks.

WILDLIFE REFUGE WILDERNESS

The National Wildlife Refuge System wilderness areas are administered by the Fish and Wildlife Service. Refuge system wilderness regulations follow provisions of the Wilderness Act and do not allow temporary or permanent roads, manmade structures, or the use of motorized transport within wilderness areas.[52] Subject to such restrictions as the Director may impose, the established use of aircraft and motorboats may be continued in refuge wilderness areas.[53] Access to private property and valid occupancies within refuge wilderness areas is recognized. Adequate access is defined as the combination of modes and routes of travel that will best preserve the wilderness character of the landscape. The designated mode of travel must be reasonable and consistent with accepted, conventional, and contemporary modes of travel in that vicinity. Access use must be consistent with the reasonable purposes for which the land is held. The Director will issue access permits designating the means and route of travel that will preserve the area's wilderness character.[54]

Wildlife refuge wilderness areas are also subject to general refuge regulations as well as special regulations and orders issued for particular refuges. These regulations restrict the operation of aircraft, motorized vehicles, and boats to designated areas and routes within a refuge, and provide that such access may be restricted and limited as necessary.[55] Right-of-way authorization for wildlife refuge areas[56] requires that the access use be compatible with the purpose for which the indi-

vidual refuge was established. Other right-of-way provisions in the 1901 Act, the 1911 Act, and the ditches and canals acts, which are applicable to wildlife refuges, also must meet the compatibility standard. However, section 668dd(d) and the regulations on refuge rights-of-way appear to be controlling.[57] Since a wilderness area is established to preserve wilderness characteristics, access uses that are deleterious to these values are not consistent, and, therefore, do not meet the standards required for issuance.[58] There is no provision in the Wilderness Act for Presidential national interest authorizations of access use of refuge areas. Any access use of refuge wilderness would, if incompatible with wilderness status, require congressional approval.[59]

BLM WILDERNESS

Wilderness areas on public lands administered by the BLM are subject to the provisions of the Wilderness Act applicable to national forest wilderness areas.[60] The Federal Land Policy and Management Act of **1976**[61]**--** the BLM Organic Act— specifically excludes wilderness areas from the right-of-way authority granted to the Secretary of the Interior for public lands.[62] Any access use must therefore be consistent with the purposes of wilderness preservation and recreation or be included in one or more of the specific exceptions to the Wilderness Act. These exceptions recognize existing private rights, preestablished use of aircraft and motorboats within a given area, and access use in emergency situations. The President may authorize use of BLM wilderness areas for projects in the national interest.[63] Any other access use requires congressional authorization.

FOREST WILDERNESS

National forest wilderness areas are administered by the Forest Service of the Department of Agriculture. Regulations issued by the Forest Service for administration of wilderness areas[64] provide that "except as provided in the Wilderness Act, or subsequent legislation establishing a particular wilderness unit . . . there shall be in the National Forest Wilderness . . . no temporary or permanent roads; no aircraft; no dropping of materials, supplies, or persons from aircraft; no structures or installations; and no cutting of trees for nonwilderness purposes."[65] The Chief of the Forest Service may permit the landing of aircraft and use of motorboats within any wilderness where these uses were established prior to wilderness designation.[66] Maintenance of landing strips, heliports, and helispots, which preexist wilderness designation, may also be allowed.[67]

Adequate access to surrounded State and private lands is defined in the regulations as the combination of routes and modes of travel that will, as determined by the Forest Service, cause the least lasting impact on the primitive character of the land, and which, at the same time, will serve the reasonable purposes for which the surrounded land is held or used. Access by routes or modes of travel not available to the general public must be authorized in writing by the Forest Service. The authorization prescribes the means and the routes of travel to and from the lands and sets forth the conditions necessary to preserve the wilderness characteristics while allowing adequate access.[68]

Persons with mining claims or other valid occupancies wholly within forest wilderness areas are permitted access by means consistent with the preservation of wilderness that are or have been customarily used for other such occupancies surrounded by national forest Wilderness.[69] When appropriate, the Forest Service will issue an access permit specifying the mode and route and any protective conditions.[70]

The Wilderness Act provides that the President may allow the use of a national forest wilderness area for projects in the national interest." Wilderness areas are specifically excluded from the right-of-way authorization granted to the Secretary of Agricul-

ture in Title V of the Federal Land Policy and Management Act of 1976 which is the comprehensive right-of-way authority for national forests.[72] Easements for roads under the provisions for the development of the National Forest Transportation System[73] would appear to be precluded by the prohibition of the Wilderness Act that there be no road in any wilderness area.[74] Congressional authorization is needed for any proposed access use that does not come under one or more exceptions to the Wilderness Act.

WILD AND SCENIC RIVERS WILDERNESS

The National Wild and Scenic Rivers System[75] is a land classification system, which, like the National Wilderness Preservation System, does not have a separate management agency. Instead, wild and scenic rivers are managed by the Forest Service, the National Park Service, the Fish and Wildlife Service, or the BLM. Wild and scenic rivers within wilderness areas are managed according to provisions applicable to both systems, and, in the event of conflict, the Wilderness Act provisions prevail.[76] Access through or over wild and scenic rivers areas that are also components of the wilderness system is granted under the authority of the managing agency as interpreted in light of both the Wild and Scenic Rivers Act and the Wilderness Act.[77] Access over river areas managed by the Department of the Interior may be granted according to the rules applicable to the National Park System. Access permits for components administered by the Secretary of Agriculture are issued under laws applicable to the National Forest System.[78]

MANAGEMENT OF WILDERNESS STUDY AREAS

The entire National Wilderness Preservation System now comprises approximately 16 million acres, which is a small fraction of all roadless areas in the United States. The Forest Service, in its RARE II program, is evaluating over 66 million acres of land to determine its suitability for designation as wilderness.[79] It is estimated that the BLM wilderness review mandated by section 603 of the Federal Land Policy and Management Act of 1976 will evaluate over 120 million roadless acres and 13,000 roadless islands.[80] This land will be studied for wilderness potential, but none of it has as yet been formally designated as a wilderness study area.

During the period of initial evaluation and up to final disposition of the wilderness recommendation by the Congress, these lands will be in some form of restrictive management. While it is clear that multiple use management will not be practiced, it is difficult to ascertain exactly what standards will be used in managing wilderness study areas.

There is some statutory guidance on the management of BLM lands under wilderness study. Section 603(c) of the BLM Organic Act provides:

> The Secretary shall continue to manage such lands according to his authority under this Act and other applicable law in a manner so as not to impair the suitability of such areas for preservation as wilderness, subject, however, to the continuation of existing mining and grazing uses and mineral leasing in the manner and degree in which the same was being conducted on the date of approval of this Act. Provided, that in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources or to afford environmental protection.[81]

Preliminary indications are that BLM intends to apply a strict interpretation of this provision to all proposals for new activity.[82]

There is less statutory guidance with respect to Forest Service lands. In the Eastern Wilderness Act, Congress designated 17 wilderness study areas in national forests. The Act stated:

> Nothing in this Act shall be construed as limiting the authority of the Secretary of

> Agriculture to carry out management programs development, and activities in accordance with the Multiple-Use Sustained-Yield Act of 1960 within areas not designated for review in accordance with the provisions of this Act.[83]

Presumably, this means that almost all land in the RARE II inventory of potential wilderness areas is subject to management under the principles of the Multiple-Use Sustained-Yield Act (although one of the uses specified in that Act is the preservation of wilderness).[84]

The Forest Service has indicated that it would not approve any use inconsistent with wilderness on an existing roadless area without filing an environmental impact statement, either with the permit or license approving the use or as a required part of a land management plan.[85]

The question of authorizing nonwilderness uses is closely related to the problem of removing lands from potential wilderness status without a negative determination by Congress. Both the Forest Service and the BLM have indicated a desire quickly to identify roadless areas that should not be recommended for wilderness status, and to return them to multiple use management. The mechanics of this process have not been completely worked out. BLM officials have indicated that they do not presently intend to prepare environmental impact statements on the decision not to recommend an area for further study.[86] Forest Service policy appears to be similar.[87] The prospect of litigation over particular areas seems inevitable.[88]

These decisions concerning positive evaluation and negative evaluation of potential study areas are enmeshed in the new land management planning procedures that both agencies are now being required to take for the first time. Plans must be filed for every management unit in both systems.[89] The Forest Service allows land to drop out of the RARE 11 inventory if a management plan is filed that provides for nonwilderness use.[90] This meets the requirement of the out-of-court settlement that led to RARE II; such plans are always accompanied by environmental impact statements. BLM—which was required to prepare such plans in more recent legislation[91]—has not yet indicated if it intends to use the plans as a mechanism to remove areas from potential wilderness protections.

FOOTNOTE REFERENCES FOR NATIONAL WILDERNESS PRESERVATION SYSTEM

[1]16 U.S.C. 1131-1136,
[2]16 U.S.C. 1131(a).
[3]1d.
[4]16 U.S.C.1131(c).
[5]1d.
[6]Id.
[7]The Joint Federal-State Land Use Planning Commission for Alaska estimates that about zoo million acres of Federal lands are of "primitive" character and there are about 75,000 acres in existing wildlife refuges classified as wilderness. See the D-2 book inventory of Alaska land values in Federal-State Land Use Planning Commission for Alaska, "The D-2 *Book" Lands of National Interest in Alaska* (May *1977)* at p. 8. Alaska wilderness areas are listed in table 4.
[8]16 U.S. C. 1132(e). As of February 1978, there were 177 congressionally designated wilderness areas encompassing approximately 16 million acres. Ninety-two wilderness areas had never been the subject of wilderness reviews, H.Rept. 95-1045 pt. I., pp. 134-35 (1978).
[9]16 U.S. C. 1132(a).
[10]Public Law 93-622, 88 Stat, 2096, Jan. 3, 1975.
[11]Public Law 94-557,90 Stat. 2633, Oct. 19, 1976.
[12]Public Law 95-327,92 Stat. 40, Feb. 14, 1978.
[13]16 U.S.C.1132(b). A national forest "primitive area" is subject to protective management similar to that for wilderness areas. See 36 CFR 293.17.
[14]16 U.S.C. 1132(c). A roadless area is defined by Interior Department regulations as "a reasonably compact area of undeveloped Federal land which possesses the general characteristics of a wilderness and within which there is no improved road that is suitable for public travel by means of four-wheeled, motorized vehicles intended primarily for highway use. " 43 CFR

19.2(e). Roadless island means a roadless area that is surrounded by permanent waters or that is markedly distinguished from surrounding lands by topographical or ecological features such as precipices, canyons, thickets, or swamps. 43 CFR 19.2(f).

[15]16 U.S.C. 1132(b) and 16 U.S.C. 1132(c).

[16]16 U.S.C. 1132(d)(1)(A).

[17]16 U.S.C. 1132(d)(1)(B).

[18]16 U.S.C. 1132(d)(l)(C).

[19]16 U.S.C. 1132(b) and 16 U.S.C. 1132(c).

[20]36 CFR 293.17.

[21]16 U.S.C. 1132(c).

[22]See *Sierra Club* v. *Butz*, 349 F. Supp. 934 (N.D. Cal. 1972), Wyoming Outdoor Coordinating Council v. *Butz*, 484 F. 2d 1244 (10th Cir. 1973), and Senate Comm. on Energy and Natural Resources, Roadless Area Review and Evaluation (RARE II), Serial No. 95-92, (Committee Print 1978), p. 5.

[23]43 U.S.C. 1782(a).

[24]Id.

[25]Id.

[26]43 U.S.C. 1782(c).

[27]See, for example, Act of October 19, 1976, Public Law 94-557, section 3,90 Stat. 2635; Act of October 20, 1976, Public Law 94-567, section 5, 90 Stat. 2665. See note following 16 U. S.C.A. 1132 (1977 supp.), p. 32.

[28]16 U.S.C. 1131(b).

[29]16 U.S.C. 1133(b).

[30]Id.

[31]16 U.S.C. 1133(c).

[32]16 U.S. C. 1133(d)(1). The Secretary of the Interior establishes the conditions for the use of planes and motorboats in wilderness areas under his jurisdiction. See, infra, note 47.

[33]Id.

[34]16 U.S.C. 1133(d)(2).

[35]Id.

[36]16 U.S.C. 1133(d)(3).

[37]16 U.S.C. 1133(d)(4).

[38]Id.

[39]43 U.S.C. 1782(c).

[40]16 U.S.C. 1133(d)(4).

[41]16 U.S. C. 1133(d)(6).

[42]16 U.S.C. 1134(a). Adequate access is defined in Fish and Wildlife Regulations to mean the combination of modes and routes of travel that will best preserve the wilderness character of the landscape. 50 CFR 35,13.

[43]16 U.S.C. 1134(b).

[44]See 16 U.S.C. 1133(c), 1133(d)(1)(6).

[45]16 U.S.C. 1133(b).

[46]Id.

[47]Department of the Interior, National Park Service, Management Policies, 1975, p. VI-6, cited in Krutilla and Rice, "Management Systems, Land Classifications, and Use Restrictions" reprinted in House Comm. on Interior and Insular Affairs, Subcomm. on General Oversight and Alaska Lands. Background *Information for Alaska* Lands Designations, (Committee Print No. 4) 95th Cong., 1st sess., p. 174 (1977).

[48]See section on National Parks.

[49]16 U.S.C. 1134(a).

[50]16 U.S.C. 1134(b).

[51]16 U.S. C. 1901 et seq.

[52]50 CFR 35.5.

[53]50 CFR 35.5(b).

5450 CFR 35.13.

[55]50 CFR pts. 25-29.

[56]16 U.S.C. 668dd(d).

[57]50 CFR 19.21-1(a).

[58]See Department of the Interior, Fish and Wildlife Service, Final Environmental Statement on the Operation of the National Wildlife Refuge System (1976).

[59]43 U.S. C, 1782(c).

[60]43 U.S.C. 1701 et seq.

[61]43 U.S.C. 1761(a).

[62]16 U.S.C. 1133(a) and(d).

[63]16 U.S.C. 1133(d)(4).

[64]36 CFR pt. 293.

[65]36 CFR 2936.

[66]36 CFR 293.6(d).

[67]Id.

[68]36 CFR 293.12.

[69]36 CFR 293.13.

[70]Id.

[71]16 U.S.C. 1133(d)(4).

[72]43 U.S. C, 1761(a).

[73]16 U.S.C. 532-538, 16 U.S.C. 1608.

[74]16 U.S.C. 1133(C).

[75]16 U.S. C. 1271 et seq.

[76]16 U.S.C. 1281(b).

[77]16 U.S.C. 1284(g) and 16 U.S.C. 1281(b).

[78]16 U.S.C. 1284(g).

[79]42 F.R. 59688, Nov. 18, 1977.

'Hearings on the Federal Land Policy and Management Act and Grazing Fee Moratorium of 1977 Before the Subcomm. on Indian Affairs and Public Lands of the House Comm. on Interior and Insular Affairs, 95th Cong., lst. sess., Serial No. 95-25 (1978) at p. 103. ("Hearings").

[81]43 U.S.C. 1782(c).

[82]See Jan, 9, 1978, Memorandum of the Deputy Solicitor, "Application of Mining and Grazing Laws to Areas under Review for Inclusion into Wilderness System: Section 603 Federal Land Policy Management Act of 1976" reprinted in Hearings, supra, note 80, pp. 131-44. BLM has indicated that areas which meet the minimum criteria for wilderness will be subject to stringent interim protection. A recent letter to a permit applicant reflects this policy: "Those activities which are of a permanent nature or not easily rehabilitated . . . cannot be allowed until a formal wilderness review of the areas has been completed. " Letter from Department of the Interior, Bureau of Land Management, Fairbanks District Office to W. G. M., Inc., dated Apr. 14, 1978 provided by Dr. E. Beistline, Dean of the College of Mineral Industries, University of Alaska, a member of the assessment advisory panel.

[83]Public Law 93-622, section 4(d), 88 Stat. 2098.

[84]16 U.S.C. 1604(e)(l), added by the National Forest Management Act of 1976, Public Law 94-588, 90 Stat,

2949, Oct. 22, 1976, implicitly amends the Multiple-Use Sustained-Yield Act of 1960 to include the preservation of wilderness:

> "In developing, maintaining, and revising plans for units of the National Forest System pursuant to this section, the Secretary shall assure that such plans: (1) provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use Sustained-Yield Act of 1960 and, in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness."

[85]See Forest Service, RARE 11 Notebook, p. III-A, Forest Service, Forest Service Manual, Chapter 8260, Interim Directive No. 5 (July 21, 1977), p. 3, section (8260)(b)(l)(f).

[86]Department of the Interior, Bureau of Land Management, Draft Wilderness Review Procedures, Feb. 27, 1978, p. 13. "Since legislation will be required for an area to be included in the National Wilderness Preservation System, the report for each study area being recommended as suitable will be accompanied by an environmental assessment record or environmental impact statement. An environmental assessment record or environmental impact statement will not be required for areas recommended as nonsuitable."

[87]Forest Service, RARE II Notebook, "RARE II Evaluation," figure 1. However, some areas will drop out of the RARE II inventory after filing of a land management plan that contains an environmental impact statement.

[88]The cases listed, supra, note 22 seem to indicate that an agency decision to allow development or other activity in a previously pristine area would require an environmental impact statement.

[89]16 U.S.C. 1604.

[90]Supra, note 85.

9'43 U.S. c. 1712.

5

Federal Laws Affecting Alaska Lands and Resources

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5. Approximate Boundaries of Native Regional Corporations Established Under ANCSA and Estimated Combined Regional and Village Corporation Entitlements 118

5

Federal Laws Affecting Alaska Lands and Resources

ALASKA STATEHOOD ACT

On January 3, 1959, Alaska became the 49th and largest State of the Union,[1] some 90 years after the District of Alaska was purchased for $7 million from Russia[2] and some 47 years after it became an organized territory,[3] The Alaska Statehood Act[4] was approved on July 7, 1958 following more than a decade of active congressional consideration. This approval came only after the major objections to statehood had been overcome—the lack of contiguity with the rest of the States, a small population, and economic dependency on Federal Government expenditures for construction projects and military bases.[5] Congressional concern over the last of these objections resulted in provisions endowing the State with unprecedented grants of public lands and a generous share of Federal revenues from mineral leases and the Pribilof Island fur trade.[6] The House report on the Statehood Act indicates that the intent of these provisions was:

> To enable Alaska to achieve full equality with existing States, not only in the technical juridical sense, but in practical economic terms as well. It does this by making the new State master in fact of most of the natural resources within its boundaries, and making provisions for appropriate Federal assistance during the transition period. '

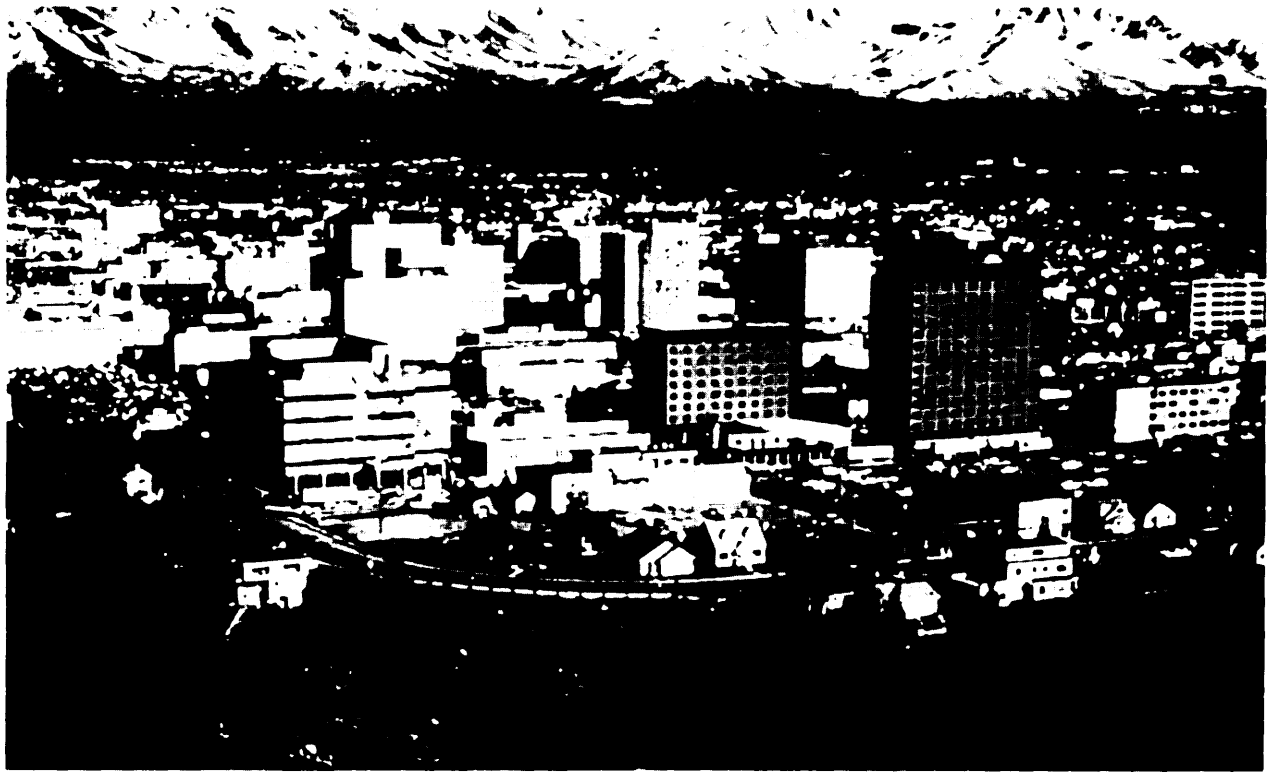
Note: Footnotes for this section appear on pp. 112-114.

This section examines the major provisions of the Alaska Statehood Act, its legislative intent, and the history of the implementation of its promises.

The Alaska Statehood Act set forth the procedural requirements necessary for admission.[8] Upon satisfaction of these requirements, Alaska was admitted into the Union on "an equal footing with all other States in all respects whatever. " The new State included all of the lands and territorial waters of the Territory of Alaska.[9] Alaska was admitted to the Union on January 3, 1959, when President Eisenhower issued a Presidential proclamation that all the procedural requirements for statehood had been satisfied .[10]

NATIVE CLAIMS

As a compact with the United States, section 4 of the Statehood Act requires that the State and the people of Alaska disclaim any rights to any land, the right or title to which is held by the United States, except for those lands granted or confirmed by the Statehood Act.[11] Alaska also disclaims any rights to any lands or other property (including fishing rights) that are held by Alaska Natives or by the United States in trust for them.[12] The



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United States retains absolute jurisdiction over these Native lands. These Native lands are not subject to State taxation except as provided by Congress.[13] Lands that are conveyed to an Alaska Native without restraint on alienation under the Alaska Native Allotment Act are not subject to this absolute Federal jurisdiction and may be treated substantially the same as other private lands.[14]

The settlement of Native claims was expressly deferred. The Statehood Act specifically provides that it does not affect or address the validity of any Native claims. "Any such claim shall be governed by the laws of the United States applicable thereto."[15] The House report states that this provision relates to the issue of Native claims:

> Congress does not concern itself with the legal merits of indigenous rights but leaves the matter in status quo for either further legislative action or judicial determination.[16]

Conflicts over Native land claims eventually led to a virtual freeze on State selection during the sixties and threatened to impede construction of the Trans-Alaska Oil Pipeline.[17] These claims were extinguished by direct congressional action in 1971 by the Alaska Native Claims Settlement Act[18] (ANCSA). Alaska Natives received, in exchange, the right to select 44 million acres of public land and a Native fund of $962.5 million to be paid over a period of years.[19] Native selection rights were given priority over State selection rights. However, State selections that were tentatively patented, tentatively approved, or identified by the State prior to January 17, 1969 are recognized and protected by ANCSA.[20]

LAND AND REVENUE GRANTS

Section 6 of the Alaska Statehood Act grants to the State of Alaska the right to

select a total of 103,550,000 acres of Federal lands .2' It also confirms previous grants to the territory of Alaska and transfers certain Federal lands and buildings to the State. Extension of the Submerged Lands Act of 1953 gave Alaska title to from 35 million to 40 million acres of submerged lands under the Territorial seas and inland navigable waters.[22] The Statehood Act also conferred on Alaska the right to receive a generous portion of Federal revenues from mineral leasing on Federal lands[23] as well as a share of the revenues of the Pribilof Island fur trade.[24] All land selections are to be made within 25 years of admission, that is, by 1984.[25] The Statehood Act does not affect:

> Any valid existing claim, location, or entry under the laws of the United States, whether for homestead, mineral, right-of-way, or other purpose whatsoever, or shall affect the rights of any such owner, claimant, locator, or entryman to the full use and enjoyment of the land so occupied.[26]

Any lands subject to such valid existing rights are not available for State selection.

Section 6(a) granted the right to select up to "400,000 acres from lands within national forests in Alaska which are vacant and unappropriated at the time of their selection."[27] Alaska was also given the right to select an additional 400,000 acres from "public lands which are vacant, unappropriated, and unreserved at the time of their selection."[28] All the lands selected under these grants must be "adjacent to established communities or suitable for prospective community center and recreation areas."[29] All selections must be approved by the Secretary of the Interior, and national forest lands must be approved by the Secretary of Agriculture.[30]

The existing national forests in Alaska are the Tongass National Forest and the Chugach National Forest. The Alaska Statehood Act does not restrict State selection rights to those national forests existing on the date of admission. Any national forest lands in Alaska could be selected by the State under the community expansion and recreation grants of section 6(a)—subject to the approval of the Secretary of Agriculture.

Alaska was also given the right to select 102,550,000 acres of public lands that were "vacant, unappropriated, and unreserved at the time of their selection."[31] These selections must also be completed within 25 years of admission. All lands available for selection are subject to valid existing rights, including Native claims based on aboriginal use or occupancy, mining claims, homesteads, or equitable claims.[32]

The Act did not restrict the power of the U.S. Government to dispose of Federal lands in order to accommodate the State selection rights. The United States is free to make additional reservations or withdrawals of Federal lands for various purposes, or to sell or dispose of Federal lands under the public land laws, the mineral leasing laws, and other authorities. Thus, until the State actually selects lands or communicates its intent to select particular tracts, the lands are open to other disposition.

The availability of public lands for State selection is further limited by the restrictions on State selections in an area in northern and western Alaska where the President is authorized to make national defense withdrawals.[33] No State selections may be made in this region without the approval of the President or his designate. In practice, no State selections north or west of this national defense line known as the Porcupine-Yukon-Kuskokwim line or PYK line have been rejected.[34]

To date, the State of Alaska has selected approximately 72 million acres of public lands. The Federal-State Land Use Planning Commission has observed that, based on the emerging pattern, the State selection policy has three principal objectives:

- provision of lands to meet existing and future settlement needs;
- control of lands along major highway corridors; and
- selection of lands with high potential for natural resource development.[35]

MINERAL RIGHTS

The Alaska Statehood Act provides that all lands granted or confirmed under the Act include the full mineral rights.[36] The Act further stipulates that these land grants are made on the condition that, in all subsequent conveyances of selected lands, the State must reserve all mineral rights and the right to enter and to remove the minerals.[37] The State may never sell nor convey the mineral rights. The Act authorizes the Federal Government to initiate forfeiture proceedings against State lands conveyed without such reservation.[38]

The State of Alaska has a system of locatable and leasable minerals similar in many respects to the Federal mining and mineral leasing laws.[39] Locators on State lands receive the right to develop certain minerals found there. All statehood lands are conveyed without the mineral rights subject to the right of the State to enter and extract the minerals. Alaska has closed certain areas to mineral location and leasing where mineral extraction might conflict with surface uses of the lands.[40]

As a further "incentive" to the development of Alaska's land and resources, section 6(g) permits the State to execute conditional leases on mineral lands after a selection has received the tentative approval of the Secretary of the Interior.[41]



Photo Credit: OTA Staff

The Kennicott Copper Mine near McCarthy, Wrangell-St. Elias region, produced high-grade copper concentrate from 1911 to 1938

Under section 6(h), Alaska received the right to select public lands that were subject to outstanding leases under the Mineral Leasing Act of February 25, 1920, or the Alaska Coal Leasing Act of October 20, 1914.[42] This selection right must be exercised within 10 years of admission. If the State selects all lands under such lease, permit, or contract, it then receives all the interests of the United States in the leased areas including the right to all leasing proceeds.[43] If, however, the State selects only some of such mineral lands, the mineral rights are reserved by the United States and do not pass to the State until termination of the lease, permit, or contract.[44] The continued validity of any outstanding lease, permit, or contract on the lands selected by the State is protected.

SUBMERGED LANDS

Section 6(m) of the Statehood Act extends the Submerged Lands Act of 1953 to the State of Alaska.[45] Under this provision, title to "lands beneath the navigable waters" within the boundaries of Alaska and their natural resources vested automatically in the State on admission to the Union.[46]

The Submerged Lands Act provides that "lands beneath navigable waters" means:[47]

- All lands within the boundaries of each of the respective States which are covered by non-tidal waters that were navigable under the laws of the United States at the time such State became a member of the Union . . . up to the ordinary high water mark . . .;
- All lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line . . .

However, this definition is limited by a further provision:

> The term "lands beneath navigable waters" does not include the beds of streams in lands now or heretofore constituting a part of the public lands of the United States, if such streams were not meandered in connection with the public survey of such lands under the laws of the United States and if the title to beds of such streams was lawfully patented or conveyed by the United States or any State to any person.[48]

The definition of "lands beneath navigable waters" in Alaska has been the subject of numerous disputes between the State, the Federal Government, and, in some instances, Alaska Natives. Title to submerged lands includes the natural resources."[49] The Submerged Lands Act provides that: "The term "natural resources" includes, without limiting the generality thereof, oil, gas, and all other minerals, and fish, shrimp, oysters, clams, crabs, lobsters, sponges, kelp, and other marine animal and plant life, but does not include water power, or the use of water for the production of power."[50]

At stake in the dispute over the definition of lands beneath navigable waters is the title and ownership of the submerged lands and the potential wealth to be derived from the oil, gas, and other mineral resources.

OTHER LAND GRANTS

The Alaska Statehood Act also provided for the transfer of certain federally owned lands and facilities to the State. These included the Federal buildings' and the Federal jail in Juneau,[52] certain Federal properties used for conservation and protection of fish and wildlife,[53] and all other lands or buildings to which the Territory of Alaska held title.[54]

The Act confirmed previous land grants to the territory of Alaska of mental health, university, and school lands.[55] These land grants include an estimated 1.1 million acres of public lands in the State.

STATE SELECTION PROCESS

All State land selections are to be made in accordance with regulations issued by the Secretary of the Interior specifying the pro-

cedures for identification and approval of selections.[56] Except for the community expansion and recreation grants made under section 6 of the Act, all selections are to be made in reasonably compact tracts of 5,760 acres. This size requirement may be waived where a selected tract is isolated from other lands open to selection.[57] Tracts are not considered compact when they exclude other lands open to selection within their exterior boundaries.[58]

The State may only select lands that are vacant, unappropriated and, except for certain national forest lands, unreserved at the time of selection.[59] The term "lands" includes retained interests in lands.'" The State may thus select the mineral rights in any lands that have been disposed of by the United States with a reservation of all or any of the mineral rights.

State selections must be submitted to the Bureau of Land Management (BLM) accompanied by a small filing fee, a description of the lands selected, and statements supporting the availability of the land for selection." If the selection includes national forest lands, the application must have the approval of the Secretary of Agriculture.[62] The BLM reviews the State application and issues a tentative approval if it is determined that there is no bar to passing legal title in the lands to the State other than the need to survey the lands or to issue a patent.[63] After the BLM has issued a tentative approval, the State of Alaska may make conditional sales or leases of the lands and resources selected.[64]

REVENUE GRANTS

The land grants of over 104 million acres provide Alaska with sources of revenue from State-owned lands and land-based resources. The Alaska Statehood Act also gave the State a substantial share of the proceeds derived from Federal lands and resources.

The Alaska Statehood Act repealed the school land grants under which the territory received two sections of each surveyed township.[65] All school land grants preciously made to the territory (about 106,000 acres) were confirmed.[66] In lieu of these land grants, section 6(f) of the Act provides that Alaska is entitled to receive 5 percent of the proceeds from the sale of public lands in the State.[67] These revenues are to be used for the support of public education. None of the proceeds may be used for the support of any sectarian institution.[68]

Section 28 of the Alaska Statehood Act amended the Mineral Leasing Act of 1920 to provide that 52½ percent of the annual net proceeds from sales, bonuses, royalties, and rentals of the public lands in Alaska, except the naval petroleum reserve, are to be paid to the State for disposition by the legislature.[69] This grant of revenues was in lieu of participation in the Reclamation Fund.[70] Under the Mineral Leasing Act, Alaska as a State (and previously as a territory), also has the right to receive 37½ percent of the mineral leasing profits for public roads and educational purposes.[71] This statehood grant raised Alaska's share of Federal leasing revenues generated from public lands in the State to 90 percent. The Reclamation Act of 1902 provides that 52½ percent of the Federal mineral leasing revenues from 17 Western States are to be deposited in the Reclamation Fund to be used for reclamation and water projects.[72] The remaining 10 percent of the proceeds is retained by the Federal Government.

Section 28 of the Alaska Statehood Act also amends the Alaska Coal Leasing Act of 1914 by providing that 90 percent of the net profits from Government coal mines and all bonuses, royalties, and other payments under the Act are paid to Alaska for disposition by the State legislature.[73] Section 20 of the Act repealed those sections of the 1914 Coal Leasing Act that withdraw certain Federal coal lands in Alaska, and made these lands available for State selection. This special Alaska Coal Leasing Act was eventually repealed so that coal deposits on Federal lands now fall under provisions of the Mineral Leasing Act of 1920.[74]

Alaska was also given a 70-percent share of the net profits derived from the sale of fur seals and sea otter skins from the Pribilof Islands in the Bering Sea.[75] This fur trade is governed by several international treaties. At the time of the Alaska Statehood Act, the proceeds of the fur trade, after payment of all operating costs and administrative expenses, ranged from $1 million to $2 million per year.[76] This grant was intended to "be of material help to Alaska in meeting the anticipated greater costs of statehood."[77]

The Statehood Act gave Alaska a stake in mineral development both on non-Federal and on Federal lands. Alaska received the full mineral rights to lands conveyed under the Statehood Act and a full 90-percent share of net proceeds from Federal mineral leases in the State. This right applies to profits from deposits for coal, phosphates, sodium, potassium, oil, oil shale, native asphalt, bitumen, bituminous rock, and gas.[78] As a practical matter, only oil, gas, and coal deposits are presently important as revenue sources in Alaska. The Mineral Leasing Act does not apply to metallic or industrial minerals that are acquired by the location of mining claims. 'g

CONGRESSIONAL INTENT

The House report accompanying the Alaska Statehood Act indicates that these grants of lands and revenues were intended to overcome two major objections to statehood: that Alaska did not have a viable economy apart from the Federal expenditures for construction projects and military bases, and that Alaska could not support the costs of self-government from the resources from which revenue could be generated.[80]

At the time of statehood, approximately 99 percent of Alaska was in Federal ownership. Only about 600,000 acres were privately owned. The public land laws, although applicable to Alaska, for all practical purposes had not operated to transfer lands to non-Federal ownership prior to statehood as they had in other States.

> A grant of this size to a new State, whether considered in terms of total acreage or of a percentage of the area of the State, is unprecedented. On the occasion of the admission of the existing States, land grants have usually amounted to but 2 to 4 sections per township, or a maximum of 6 to 11 percent of the land area. In many instances, however, much of the acreage had already passed into private taxpaying ownership, or was in the process of so passing at Federal title and there seems to be little chance of any marked change in this situation under existing Federal policies .[81]

The land and revenue grants were to provide the new State with a stable economic base and were made in lieu of grants to new States for internal improvements,[82] swampland grants,[83] and grants provided by the Merrill Act of 1862.[84] The House report notes that these grants were necessary to address "Alaska's peculiar problems."[85]

> Over 99 percent of the land area of Alaska is owned by the Federal Government. The committee believes that such a condition is unprecedented at the time of the admission of any of the existing States.
>
> The public land laws of the United States, including those providing for the disposal of the public domain to private individuals, theoretically are generally applicable to Alaska. The committee, however, found that the beneficial effects of these laws have been and are vitiated to a large degree by the Federal policies of the last half century, of withdrawing from public use many of the more valuable resources of the territory through the creation of tremendous Federal reservations for the furtherance of the programs of the various Federal agencies. Thus, approximately 95 million acres—more than one-fourth of the total area of Alaska—is today enclosed within various types of Federal withdrawals or reservations. Much of the remaining area of Alaska is covered by glaciers, mountains, and worthless tundra. Thus, it appeared to the committee that this tremendous acreage of withdrawals might well embrace a preponderance of the more valuable resources needed by the new State to develop flourishing industries with which to support itself and its people.[86]

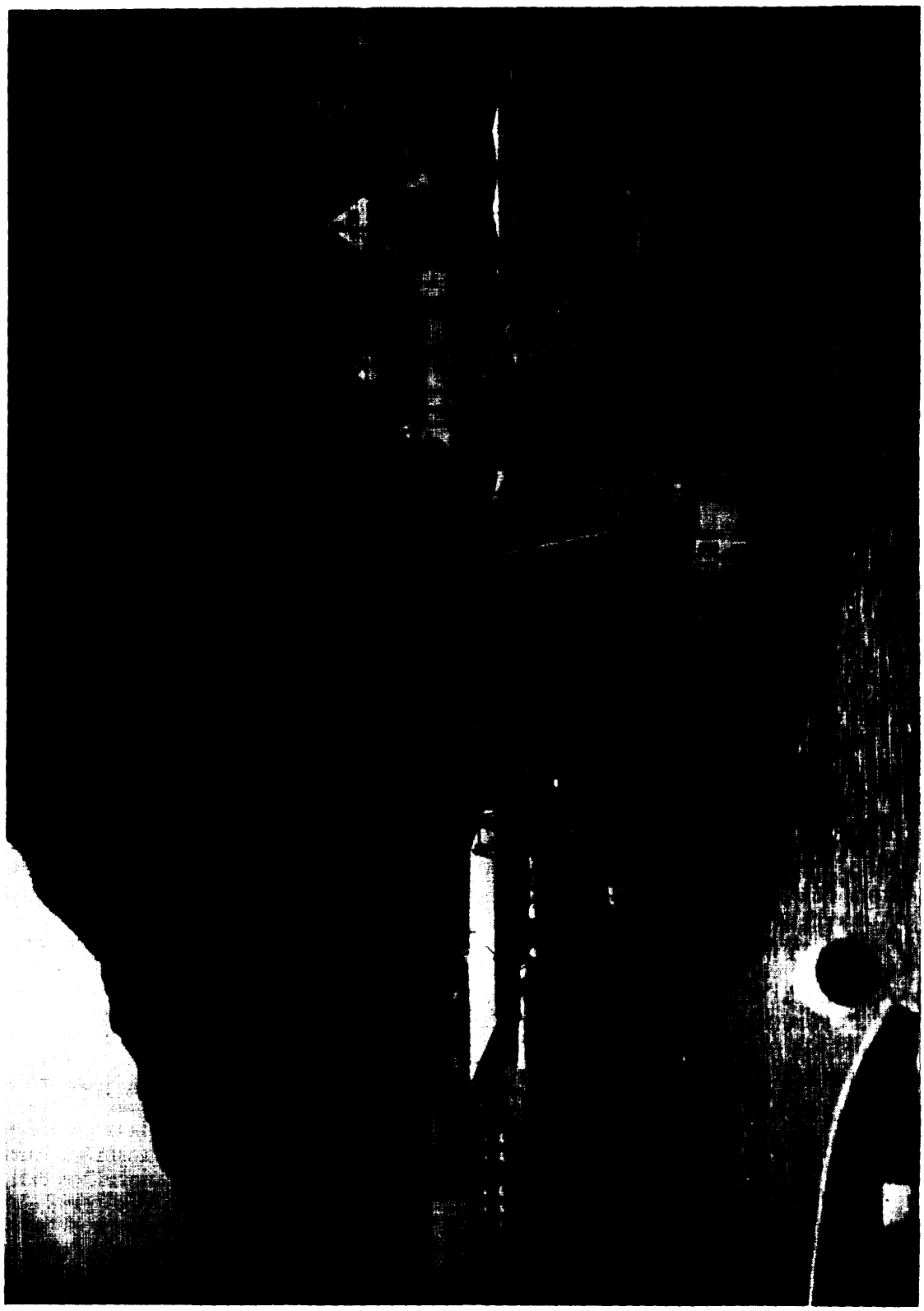

Photo Credit: OTA Staff

The village of Kodiak, Kodiak Island, Alaska, has been a center for fishing activities since the days of Russian colonization

To remedy what the committee report terms "unhealthy" and "distorted" landownership patterns in Alaska, the House committee proposed land grants of 182,800,000 acres.[87] In the Alaska Statehood Act, this figure was reduced to 102,550,000 acres of general grants and 800,000 acres of community expansion grants.[88] The committee also proposed that these selection rights be enhanced by several additional provisions.

> If the resources of value are withheld from the State's right of selection, such selection rights would be of limited value to the new State. The committee members have, therefore, broadened the right of selection so as to give the State at least an opportunity to select lands containing real values instead of millions of acres of barren tundra.[89]

Consequently, the State was given the right to select lands "known or believed to be mineral in character,"[90] lands "under lease for oil and gas or coal development or which may even be under production for those products, "[91] and a "preference right of selection over lands returned to the public domain from withdrawal status."[92] Withdrawals of coal lands under the Alaska Coal Leasing Act of 1914 were also terminated to permit the State to select these lands.[93]

The committee report also observes that a serious problem facing the new State—"and in some respects the most serious of all''—is that of financing the basic functions of State government.[94] "Of these functions, road maintenance and road construction assume a key importance both because of the heavy cost and because of the crying need in Alaska for additional roads to facilitate economic development. '[95] The report notes with approval provisions of the Federal Aid to Highways Act of 1956 that allows Alaska to participate in the apportionment of funds for primary and secondary highway systems. These provisions specify that only one-third of Alaska's area will be used as the area factor in the formula used for apportionment of highway funds.[96]

The report states that the high percentage of Federal ownership had "hampered the development of (such) resources for the benefit of mankind."[97] A long list of "potential basic industries in the territory, including the forest industries, hydroelectric power, oil and gas, coal, various other minerals, and the tourist industry" could only exist in Alaska "as tenants of the Federal Government, and on the sufferance of the various Federal agencies. ' '[98] The failure of these industries to grow under territorial government was attributed to Federal ownership of land and resources.[99] The Alaska Statehood Act provisions were seen as necessary changes in Federal policy to assure the success of statehood.

> Concretely, the grant of statehood will mean some saving to the Federal Government as the people of Alaska take over part of the burden of supporting certain Government functions now borne by the United States Treasury.
>
> From the standpoint of economic development, the committee believes that statehood will permit and encourage a much more rapid growth in the economy of the territory than would be possible under Territorial status. Many witnesses have testified to the committee regarding the wealth of untapped resources in Alaska.
>
> It is apparent from the history of the last 88 years that the extreme degree of Federal domination of Alaskan affairs has not resulted in the maximum development of the territory . . . the committee has included in this bill provisions which it believes will open up many of the resources of Alaska for the use of mankind.[100]

The result of these provisions was to transfer to the State ownership of approximately 104 million acres of onshore lands and resources, and 35 to 40 million acres of submerged lands and resources. Not only was Alaska given a stake in the development of its lands and resources, but revenue grants gave the State an interest in the development of resources on Federal lands as well.

FOOTNOTE REFERENCES FOR ALASKA STATEHOOD ACT

[1]Proc. No. 3269, Jan, 3, 1969, 24 F.R. 81, 73 Stat. c16 (1959).

*Treaty of Mar. 30, 1867, 15 Stat. 539.

[3]Act of August 24, 1912, Ch. 387, 37 Stat. 512, Most Alaskans date Alaska's territorial status from the Organic Act of 1884, Act of May 17, 1884, 23 Stat. 24, which established Alaska as a public land district and provided that the laws of the United States relating to mining claims were to have full force and effect. The Act of August 24, 1912 extended the laws and Constitution of the United States to Alaska and created a territorial legislature. Acts of the legislature were subject to review by the U.S. Congress.

[4]Act of July 7, 1958, Public Law 85-508, 72 Stat. 339, 48 U.S.C. Prec. § 21 (1970). For an anecdotal history of the campaign for Alaska Statehood, see Clause-M. Naske, An Interpretative History *of Alaskan* Statehood **(1973),** Ernest Gruening, The Battle *for* Alaska Statehood **(1967).**

[5]**See** H. Rept. 624, 85th Cong., 2d sess. (1957), reprinted in 1958 U.S. Code Cong. & Ad. News. 2933 at 2944. (No Senate report was submitted with this legislation,) In 1954, nearly one-half of Alaska's labor force was employed by the military. In 1960, over one-half of State labor force was federally employed (including military), University of Wisconsin School of Natural Resources, Center for Resource Policy Studies and Programs, Federal Land Laws and Policies in Alaska, *Vol. IV:* A Summary *of Issues* and Alternatives, pp. **4-5 (1970).** (This multivolume study was prepared for the Public Land Law Review Commission.)

[6]**H. Rept. 624, 1958** U.S. Code Cong. & Ad News **2933-35.**

[7]**Id., at 2933-34,**

'public Law **85-508** requires a republican form of State government, the acceptance and ratification of the State Constitution by the U.S. Congress, the approval of Statehood and the new constitution by Alaska citizens by referendum, a presidential proclamation that the foregoing steps have been completed, and the election of two senators and one at-large representative to Congress.

'Public Law **85-508, section 2, 72** Stat. 339 (1958).

[10]Proc. 3269,24 F.R. 81, 73 Stat, c16 (1959).

[11]Public Law 85-508, section 4, 72 Stat. 339, as amended by the Act of June 25, 1959 (The Alaska Omnibus Act), Public Law 86-70, section 2(a), 73 Stat. 141, codified at 48 U.S.C. Prec. § 21 (1970).

[12]Id.

[13]Id.

[14]Act of May 17, 1906, **34 Stat. 197, as amended by** the Act of August 2, 1956, 70 Stat. 954, previously codified at 43 U.S.C. 270-1 to 270-3, repealed by Public Law 92-203, section 18(a), 85 Stat. 710 (1971).

[15]Public Law 85-508, section 4, 72 Stat. 339.

[16]**H. Rept. 624, 1958 U.S. Code Cong. & Ad. News at 2934.**

[17]See Public Land Order 4582, 34 F.R. 1025, Jan. 17, 1969. See also Mary Clay Berry, The *Alaska* Pipeline: The Politics *of Oil* and Native Land *Claims* [1975).

[18]Act of December 18, 1971, Public Law 92-203, 85 Stat, 688,43 U.S.C. 1601, (supplement IV, 1974).

[19]See 43 U.S.C. 1605, 1608, 1611, **1613,1615,** and 1618.

[20]Section 3(e) of ANCSA, 43 U.S. C, 1602(e) defines "public lands" as "all Federal lands and interests therein located in Alaska except: . . . land selections of the State of Alaska which have been patented or tentatively approved under section 6(g) of the Alaska Statehood Act, as amended (72 Stat. 341, 77 Stat. 223), or identified for selection by the State prior to Jan, 17, 1969. " By definition, State selections are generally unavailable for Native selection under ANCSA; however, certain unpatented State selections, in or near Native villages are made available for Native selection by sections n(a)(2) and 12 of ANCSA, 43 U.S.C. 1610(a)(2) and 1611.

[21]Public Law 85-508, section 6,72 Stat. 340 (1958).

[22]Id.

[23]Public Law 85-508, section 28, 72 Stat, 351 (1958).

[24]Public Law 85-508, section 6(c), 72 Stat. 340 (1958).

[25]Public Law 85-508, section 6, 72 Stat. 340 (1958).

[26]Public Law 85-508, section 6(a), 72 Stat. 340 (1958). In *Alaska* v. *Udall,* 420 F, 2d 938 (9th Cir. 1969), the State of Alaska challenged the Udall land freeze. The Court of Appeals for the Ninth Circuit ruled that lands claimed by Alaska Natives were not, as a matter of Law, "vacant, unappropriated, and unreserved, " and thus open to statehood selection. An identical provision is contained in section 6(b), 72 Stat. 340 (1958).

[27]Public Law 85-508, section 6(a), 72 Stat. 340.

[28]Id.

[29]Id.

[30]Id.

[31]1 Public Law 85-508, section 6(b), 72 Stat. 340 (1958).

[32]Public Law 85-508, sections 4, 6(b), and 6(g), 72 Stat. 339 to 342 (1958).

[33]Public Law 85-508, section IO(a), 72 Stat. 345 (1958).

[34]University of Wisconsin, School of Natural Resources, Center for Resource Policy Studies and Programs, A Study *of* Federal Land Law and Policies in Alaska, *Vol.I,* at 141 to 143 (1970).

[35]Federal State Land Use Planning Commission for Alaska, "The D-2 Book": Lands *of* National Interest in Alaska, 9 to 11 (1977).

[36]Public Law 85-508, section 6(i), 72 Stat. 342 (1958).

[37]Id.

[38]Id.

[39]Alas.Stat. 38.05.185 to 38,05.280. See Herbert, Alaska Mining Law Manual, (1970], published by the Mineral Industry Research Laboratory of the University of Alaska. The leasable minerals under Alaska law are oil, gas, ccal, sulfur, oil shale, bitumen, phosphate,

sodium, and potassium. Locatable minerals include metals, ores of metals, as well as nonmetallic minerals which have special values such as asbestos, limestone, building stone, magnesite, silica, and the like. Herbert, at 1.

'See, for example, 11 Alaska Administrative Code 86.135(b).

[41]Public Law 85-508, section 6(g), 72 Stat. 341 (1958).

[42]Public Law 85-508, section 6(h), 72 Stat. 342 (1958), as amended by Public Law 88-289, 78 Stat, 168 (1964). The Mineral Leasing Act of 1920 is codified at 30 U.S.C. 181 et seq. The Alaska Coal Lands Leasing Act of 1914, c.330, 38 Stat, 741, formerly codified at 48 U.S.C. 432 et seq., was repealed by the Act of September 9, 1959, Public Law 86-252, 73 Stat. 490.

[43]Public Law 85-508, section 6(h), 72 Stat. 342 (1958), as amended by Public Law 88-289, 78 Stat. 168 (1964).

[44]Id. See also, 43 CFR 2627.3(b)(4).

[45]Public Law 85-508, section 6(m), 72 Stat. 343 (1958). The Submerged Lands Act of May 22, 1953, ch. 65, title 1, section 2, 67 Stat. 29, is codified at 43 U.S.C. 1301 et seq. (1970).

[46]43U.S.C. 1311(a) (1970).

4743 U.S.C. 1301(a) [1970).

[47]43 U.S.C. 1301(f) (1970).

[48]43 U.S.C. 1311(a) (1970).

[50]43 U.S.C. 1301(e) (1970).

[51]Public Law 85-508, section 6(c), 72 Stat. 340 (1958).

[52]Public Law 85-508, section 6(d), 72 Stat. 340 (1958).

[53]Public Law 85-508, section 6(e), 72 Stat. 340 (1958).

[54]Public Law 85-508, section 5,72 Stat. 340 (1958).

[55]Public Law 85-508, section 6(k), 72 Stat. 343 (1958).

[56]Public Law 85-508, section 6(g), 72 Stat. 341 (1958). These regulations are found at 43 CFR 2627.

[57]Id.

[58]43 CFR 2627.3(c)(3),

[59]Public Law 85-508, section 6, 72 Stat. 340 (1958).

'Public Law 85-508, sections 6(a) and 6(b), 72 Stat. 340 (1958), as amended by the Act of September 14, 1960, Public Law 86-786, 74 Stat. 1024. See also 43 CFR 2627.3(a)(l).

[61]43CFR 2627.3(c).

[62]43CFR 2627, 1(b).

[83]43 CFR 2627.3(b).

[64]Public Law 85-508, section 6(g), 72 Stat. 341, (1958) and 43 CFR 2627.

[65]Public Law 85-508, section 6(k), 72 Stat. 343 (1958). The school land grants were authorized under section 1 of the Act of March 4, 1915, 38 Stat. 1214, 48 U.S.C. 353, as amended.

[66]Public Law 85-508, section 6(k), 72 Stat. 343 (1958).

[67]Public Law 85-508, section 6(f), 72 Stat. 341 (1958).

[68]Public Law 85-508, section 6(j), 72 Stat. 342 (1.958).

[69]Public Law 85-508, section 28(b), 72 Stat. 351 (1958). The revenue provisions of the Mineral Leasing Act of 1920 are codified at 30 U.S.C. 191.

[70]H. Rept. 624, 1958 U.S. Code Cong. & Ad. News, at 2940, 2956.

[71]30 U.S. C, 191. Prior to its amendment in 1976, section 28 provided that: "all monies received from sales, bonuses, royalties, and rentals of public lands under the provisions of this chapter shall be paid into the Treasury of the United States; 37½ per centum thereof shall be paid by the Secretary of the Treasury as soon as practicable after December 31 and June 30 of each year to the State within the boundaries of which the leased lands or deposits are or were located; . . ."

In 1976, section 28 was amended by Public Law 94-273, section 6(2), 90 Stat. 377 (Apr. 21, 1976); Public Law 94-377, section 9, 90 Stat. 1090 (Aug. 4, 1976); Public Law 94-422, Title III, section 301, 90 Stat. 1323 (Sept. 28, 1976); and Public Law 94-579, Title HI, section 317(a), 90 Stat. 2770 (Oct. 21, 1976).

As amended, section 28 now provides, simply, that 90 per centum of leasing revenues be paid to the State of Alaska. 30 U. S.C.A. 191 (1978 supp.).

[72]43 U.S.C. 391, Act of June 17, 1902, c. 1093, section 1, 32 Stat. 388, codified at 43 U.S.C. 391, as amended. Monies deposited to the Reclamation Fund are to be used for the reclamation of arid and semiarid lands and for certain other specified purposes. Public Law 94-377 reduced the amount of leasing revenues to be paid into the Reclamation Fund from 52 to 40 percent. Public Law 94-377, section 9, 90 Stat. 1090 (Aug. 4, 1976), 43 U. S.C.A. 191 (1978 supp).

[73]Public Law 85-508, section 28(a), 72 Stat. 351 (1958).

[74]The Alaska Coal Leasing Act, formerly 48 U.S.C. 432, was repealed by the Act of September 9, 1959, Public Law 86-252, section 1,73 Stat. 490.

Leasing of Federal coal deposits in Alaska is now governed by the Mineral Leasing Act of 1920, codified at 30 U.S. C. 201 et seq.

[75]Public Law 85-508, section 6(e), 72 Stat. 340 (1958) as amended by the Fur Seal Act of 1966, Public Law 89-702, Title IV, section 408(b), 80 Stat. 1098. The Administration of the Pribilof Island fur trade by the U.S. Government was a scandal for many years. As late as 1950, Natives were paid only in food commodities and received a yearly bonus never higher than $500 for the best hunters. The Native families lived in isolation in a restricted area. No one could visit the islands without a permit from the Government. It was not until 1966, that the last vestiges of what had been called "virtual slavery" were lifted. See Cooper, Alaska—The Last Frontier, 191 (1973]. See also 16 U.S.C. 1151 et seq., especially 46 U.S. C. 1168 which provides civil service retirement benefits for Natives engaged in the fur trade and their survivors.

[76]H. Rept. 624, 1958 U.S. Code Cong. & Ad. News 2940.

"Id.

[78]See the Mineral Leasing Act of 1920, as amended, 30 U.S.C. 181 et. seq.

[79]See the Genera] Mining Law of 1872, as amended, codified at 30 U.S. C, 21-54, 161, 162, 541-541 ii, and 621-625 (1970).

[80]H. Rept. 624, 1958 U.S. Code Cong. & Ad. News at 2944 to 2947.

[81]Id. at 2931,

[82]Public Law 85-508, section 6(l), 72 Stat. 343 (1958). See Act of September 4, 1841, section 8, 5 Stat. 455, Revised Stat, sections 2378,2379,43 U.S.C. 857.

[83]See Act of September 25, 1850, 9 Stat.520, Revised Stat. 2479,43 U.S.C. 857.

[84]The Act of July 2, 1862, 12 Stat. 503, 7 U.S.C.301 to 308, grants new States 30,000 acres of public lands for each Senator and Representative.

[85]H. Rept. 624, 1958 U.S. Code Cong. & Ad. News 2937.

[86]Id. at 2937 to 2938.

[87]Id. at 2938.

[88]Public Law 85-508, section 6, 76 Stat. 340 (1958).

[89]H. Rept. 624, 1958 U.S. Code Cong. 1$ Ad. News at 2939.

'See Public Law 85-508, section 6 (i), 72 Stat. 342 (1958).

[91]Id. See also, section 6(b), 72 Stat. 340 (1958).

[92]Public Law 85-508, section 6(g), 72 Stat. 341 (1958).

[93]Public Law 85-508, section 20, 72 Stat. 351 (1958).

[94]H. Rept. 624, 1958 U.S. Code Cong. & Ad. News at 2938.

[95]Id.

[96]Id. See 23 U.S.C. 101 et seq.

[97]H. Rept. 624, 1958 U.S. Code Cong. & Ad, News at 2939.

[98]Id.

[99]Id.

[100]Id. at 2941.

ALASKA NATIVE CLAIMS SETTLEMENT ACT

The Alaska Native Claims Settlement Act (ANCSA)[1] extinguished all Native claims to lands and hunting and fishing rights based upon aboriginal title or use.[2] In compensation, ANCSA gave Alaskan Indians, Aleuts, and Eskimos $962.5 million and the right to select 44 million acres of Federal lands in the State.[3] Native Regional and Village Corporations were established to administer land selections and fund distributions.[4] Conflicts over the Native land claims had slowed State land selections under the Alaska Statehood Act and threatened to impede construction of the Trans-Alaska Oil Pipeline. ANCSA removed a major obstacle to the pipeline and paved the way for conveyances to the State and Native groups that will shift approximately 40 percent of Alaska's land to non-Federal ownership.

ANCSA also addressed the future management of the remaining Federal lands in the State. Section 17(d)(2) directed the Secretary of the Interior to withdraw up to 80 million acres of land that he deemed suitable for potential inclusion in the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems.[5] The Secretary was to study these lands and make recommendations to Congress. To protect the national interest in these lands, commonly called "d-2" lands, prior to congressional action, they were withdrawn from all forms of appropriation under the public land laws, the mining and mineral leasing laws, and from selection by the State or Native Regional Corporations.[6] Statutory authority for these withdrawals expired in December 1978.[7]

Many proposals for Alaska National Interest Lands have been introduced in Congress in addition to the original "d-2" recommendations made by Secretary Morton in December 1973.[8] During the 95th Congress, extensive hearings on Alaska Lands were held before House and Senate Committees in Washington, D. C., Alaska, and other locations across the country. On May 19, 1978, after 3 days of debate, the House of Representatives passed H.R. 39 which would designate over 100 million acres as national parks, forests, wildlife refuges, wild and scenic rivers, and wilderness areas.[9] In October 1978, the Senate adjourned without acting on Alaska Lands. Alaska National Interest Lands legislation will be reintroduced in the 96th Congress.

Note: Footnotes for this section appear on pp. 125-128.

HISTORICAL OVERVIEW

Once, Alaska Indians, Aleuts, and Eskimos had dominion over all of Alaska's 375 million acres. Alaska's harsh climate and isolation combined with Government policies to protect the Natives in the use and enjoyment of Alaska's lands, waters, and wildlife. When the United States purchased Alaska from Russia in 1867, the treaty provided: "The uncivilized tribes in Alaska will be subject to such laws and regulations as the United States may from time to time adopt in regard to the aboriginal tribes of that country."[10] However, from 1867 to 1900, the United States paid scant attention to the Natives in Alaska. The Organic Act of 1884, which established Alaska as a public land district, acknowledged the existence of aboriginal claims but reserved any settlement of these claims for a future time:

> . . . the Indians or other persons in said district shall not be disturbed in the possession of any lands actually in their use or occupation or now claimed by them, but the terms under which such persons may acquire the title to such lands is reserved for future legislation by Congress."

By 1900 the United States began to take notice of Alaska and its Natives. By this time, the era of negotiating Indian treaties had ended. The circumstances that dictated the establishment of Indian reservations in the lower 48 had not existed in Alaska. Alaska Native groups were never officially recog-

nized as tribes. The issue of indigenous rights was consistently sidestepped by the Federal Government. As a 1968 report of the Federal Field Committee for Development Planning in Alaska observed, the Alaska Natives were left in an "anomolous position:"

> They were omitted from the General Allotment Act, which was a method of attaining citizenship for American aborigines. They were omitted from the Homestead Act as being neither citizen nor alien capable of attaining citizenship. They were forbidden by Congress to enter into treaties with the United States for the cession of some lands and the retention of others. Physically they comprised the major part of Alaska's population. Officially they were invisible. The mood of the land was to procrastinate about Alaska which was far away and would never be a State or have a white resident population to contest national decisions.[12]

It was not until passage of the Alaska Statehood Act in 1958 that Alaska Natives began to be threatened in their use of the lands and subsistence resources.[13] The Statehood Act did not settle the issue of aboriginal land claims, but left it for future legislative or judicial action.[14] The Federal Field Committee report summed up the position of Alaska Natives at statehood:

> The time for filing claims before the Indian Claims Commission had passed. Claims must have arisen prior to August 13, 1946, and have been filed within 5 years to be heard. The aboriginal title of the Natives of Alaska had received no formal recognition, except that granted in the jurisdictional act for the Tlingit-Haidas in 1935. Again the need in Alaska was arising when there were no laws on the books to provide a remedy. Now many areas of Alaska were feeling the encroachment of the white man. The grants were no longer a string of townsites, a scattering of homesteads, a few hundred mining claims—they were in the millions of acres, and, more importantly, over all of the resources upon which the Native peoples depended for their livelihood. Anglo-Saxon land ownership was foreign to Alaska Natives. They might claim and use the land on which their homes, fish camps, and landing sites were situated, with the same protectiveness of any other landowner; but the fruit of the land was more important than the land itself. Important were the fish, fur-bearing animals, caribou, and moose—and, even more important than land animals for Coastal Eskimos—the fruits of the sea.[15]

By 1959, when the State was given its selection rights to about 104 million acres of public lands, over 92 million of the 375 million acres in Alaska had been withdrawn for public purposes. These Federal withdrawals included: the Tongass and Chugach National Forests; Mt. McKinley National Park and Glacier Bay, Katmai, and Sitka National Monuments; the Kenai National Moose Range and a number of small wildlife refuges; Naval Petroleum Reserve No. 4; and several major defense installations. Eighty percent of the Federal lands in Alaska were under the jurisdiction of the Bureau of Land Management (BLM). These lands were, and are, the major part of the Nation's public domain. Since statehood, the unreserved public domain in Alaska has been further reduced by the creation, in 1960, of the 9-million-acre Arctic National Wildlife Range.

As Alaska began to make land selections, Native groups began to protest. Beginning in late 1961, the Bureau of Indian Affairs filed protests on behalf of some Native villages, totaling approximately 5,860,000 acres and conflicting with 1,750,000 acres of State selections. The filing of individual or village protests continued through 1966. By fall of 1966 the rate of filings accelerated. By April 1, 1968, there were 40 recorded protests covering 296,600,000 acres.[16]

In 1966 because of these conflicting land claims, Secretary of the Interior Stewart Udall imposed an informal freeze on all Alaska public lands. This freeze halted any further Federal withdrawals, State selections, and appropriations under the public land laws. In January 1969, this freeze was formalized by Public Land Order 4582, which withdrew all unreserved Federal lands in Alaska pending congressional consideration of legislation on Alaska Native land claims.[17] With discovery of oil at Prudhoe Bay, pres-

sure for resolution of the Native claims increased. Because of the land freeze, the Secretary could not grant a permit for construction of a pipeline to transport oil from the North Slope. Finally, on December 18, 1971, the Alaska Native Claims Settlement Act was signed into law.

SETTLEMENT OF NATIVE CLAIMS

ANCSA was passed in congressional recognition of "an immediate need for a fair and just settlement of all claims by Natives and Native groups of Alaska, based upon aboriginal land claims."[18] ANCSA is more than a public land law. In section 2(b) of ANCSA, Congress declares, in part, that "the settlement should be accomplished rapidly, with certainty, in conformity with the real economic and social needs of Natives, without litigation, (and) with maximum participation by Natives in decisions affecting their rights and property."[19] ANCSA extinguished all Native claims of aboriginal title to lands in Alaska and, in exchange gave Alaska Indians, Aleuts, and Eskimos an Alaska Native Fund of $962.5 million and the right to select 44 million acres of Federal lands.

Section 4 of ANCSA provides that any and all aboriginal titles and claims of aboriginal title to lands in Alaska are extinguished.[20] All conveyances of public lands and waters including tentative approvals of land selections under the Alaska Statehood Act are to be regarded as extinguishing any aboriginal title to the lands involved.[21] All Native claims of aboriginal title in Alaska based on indigenous use or occupancy of lands, including submerged lands, and any aboriginal hunting and fishing rights were extinguished.[22] All claims against the United States, the State of Alaska, and any persons that were based on aboriginal title or use or on the laws of the United States or other Nations were also extinguished.[23]

Native Enrollment

Section 5 of the Act requires that all Alaska Natives must enroll in 1 of 13 Native regions established by section 7 in order to be eligible for participation in the settlement.[24] (See figure 5.) The original period of enrollment ended on March 30, 1973; however, ANCSA was amended in 1976 to allow additional Native enrollments.[25] About 70,000 eligible Natives were registered during the first enrollment period.[26] An Alaska Native, as defined in section 3(b) of ANCSA, is:

> A citizen of the United States who is a person of one-fourth degree or more Alaska Indian (including Tsimshian Indians not enrolled in the Metlakatla Indian Community), Eskimo, or Aleut blood, or combination thereof. The term includes any Native as so defined either or both of whose adoptive parents are not Natives. It also includes, in the absence of proof of a minimum blood quantum, any citizen of the United States who is regarded as an Alaska Native by the Native village or Native group of which he claims to be a member and whose father or mother is (or, if deceased, was) regarded as Native by any village or group, Any decision of the Secretary regarding eligibility for enrollment shall be final.[27]

Natives residing in Alaska are also enrolled in a Native village.[28] Natives who live outside of Alaska and who choose not to enroll in their ancestral regions may join a 13th region.[29] The 13th region cent-ains no villages.

Native Corporations

ANCSA requires the organization under Alaska corporation law of a profit-making Native Regional Corporation for each region.[30] The Act further requires the organization of a Village Corporation for each village.[31] These corporations administer land selections and cash distributions from the Alaska Native Fund.[32] As profit-making business entities, Native Regional Corporations manage other business enterprises and investments.[33] Individual Natives are shareholders in the Native Regional and Village Corporations of their enrollment.

The stock in Native Corporations may not be transferred by a living shareholder before

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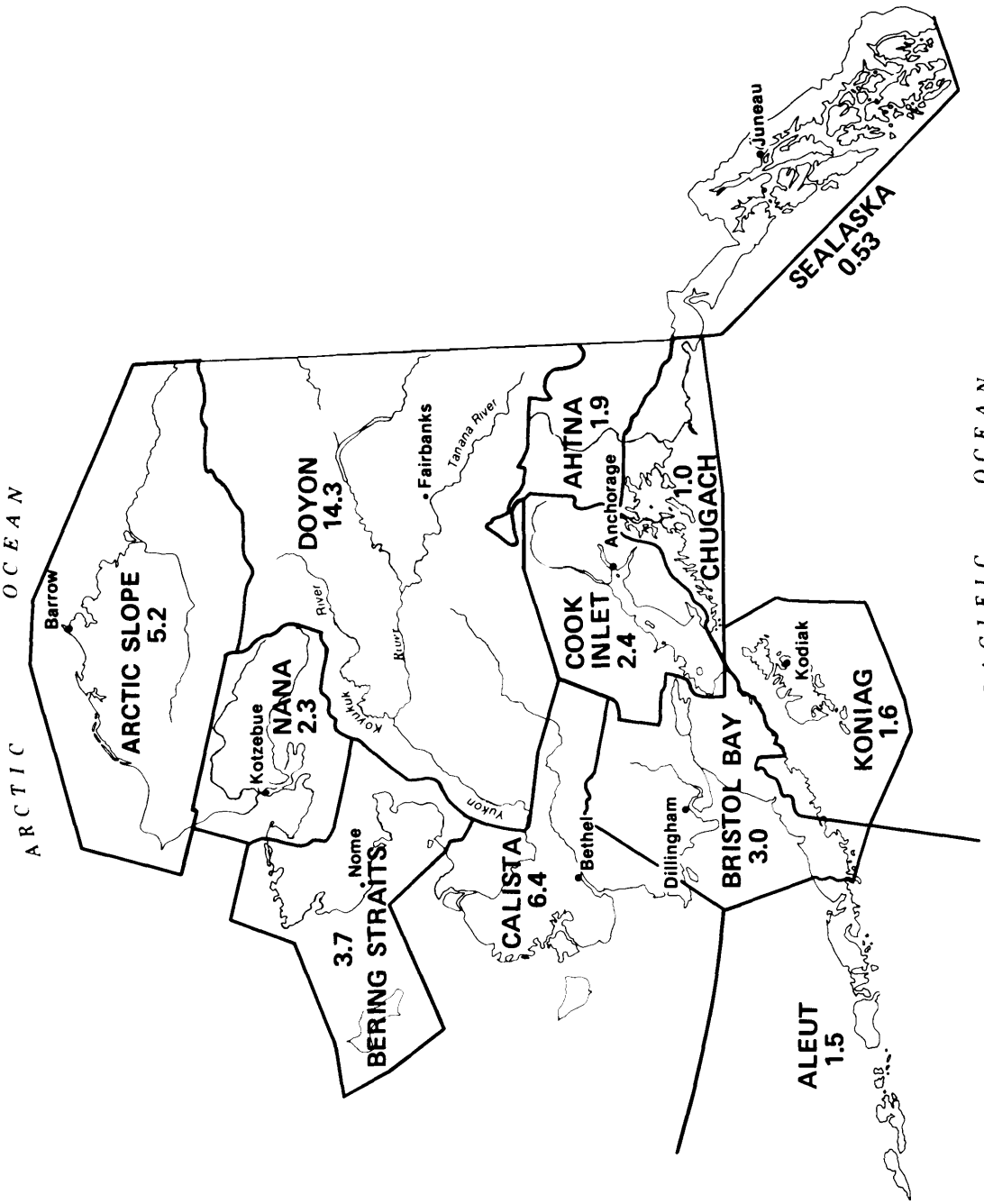

Figure 5.—Approximate Boundaries of Native Regional Corporations Established Under ANCSA and Estimated Combined Regional and Village Corporation Entitlements (in million of acres)

SOURCE: Federal-State Land Use Planning Commission for Alaska, 1977.

December 18, 1991, except under a court decree of separation, divorce, or child support.[34] When a Native shareholder dies, however, the stock passes as other personal property and may be inherited by a non-Native.[35]

Alaska Native Fund

The Settlement Act provides that Alaska Natives are to receive $962,500,000. Of this amount, $462,500,000 is to be appropriated by the Congress over a period of 11 years.[36] The remaining $500 million will be derived from a 2-percent royalty on Mineral Leasing Act revenues produced from State and Federal lands.[37] The Native royalty is subtracted from Federal lease revenues before deducting Alaska's statehood share of 90 percent of the profits.[38] Royalty payments will cease when $500 million have been paid.[39] These monies are to be deposited to the Alaska Native Fund in the U.S. Treasury .[40]

The monetary settlement provided by the Act is to be distributed quarterly to the Regional Corporations in proportion to the numbers of their shareholders.[41] Each Regional Corporation, in. turn, is required to redistribute one-half of its receipts from the Native Fund to each Village Corporation for its members and pro rata to Native shareholders who are not members of Village Corporations.[42]

The 12 Regional Corporations that are eligible to receive lands under the Act are required to share the revenues derived from the timber and mineral resources on selected lands.[43] Each of the 12 landholding Regional Corporations must divide 70 percent of the revenues from its timber and mineral resources with the other 11 Regional Corporations, This division of revenues is proportional to the number of shareholders. As in the case of the monetary compensation provided by the Act, each Regional Corporation is required to redistribute one-half of the revenues it so receives among its shareholders and Village Corporations.[44] The 13th Regional Corporation, which is composed of nonresident Natives, is ineligible to receive land and thus does not share in the interregional revenue sharing.[45]

Land Selections

Under various provisions of ANCSA, Alaska Natives will receive title to approximately 44.8 million acres of public lands in Alaska.[46] Of these lands, the surface estate to about 22 million acres is to be conveyed to about 200 Native Village Corporations organized under the Act.[47] The subsurface estate to these 22 million acres and fee simple title to some 18 million acres is to be divided among the 12 resident Native Regional Corporations.[48] [The term "subsurface estate" is roughly equivalent to "mineral rights.") Although Regional Corporations hold the subsurface rights, mineral exploration can occur within the boundaries of any Native village only with the consent of the Village Corporation.[49]

The Village Corporation selections were to be chosen by December 18, 1974, from lands in and around existing Villages.[50] The village land entitlements outside of southeast Alaska are made on the basis of population.[51] The 11 Regional Corporations outside southeast Alaska were to select the lands to which they are entitled by December 18, 1975.[52] Regional Corporation entitlements are made under a complex formula.[53]

The Secretary of the Interior was directed to issue patents "immediately" after the Native Corporations have made their selections.[54] Conveyances of Native selections have been delayed by administrative problems, by disagreement between Native Corporations and the Department of the interior, and by litigation.[55]

Withdrawals for Native Selections

Subsection Ii(a) of ANCSA withdrew the 25 townships surrounding any Native village outside southeastern Alaska from all forms of appropriation under the public land laws, including the mining and mineral leasing laws, and from selection by the State.[56] Similarly, subsection 16(a) of ANCSA withdrew the nine

townships surrounding certain Native villages in southeastern Alaska.[57] These withdrawals were made to form a pool of land from which Native selections could be made.[58] The withdrawals included some lands already selected by or tentatively approved to, but not yet patented to, the State under the Alaska Statehood Act.[59] National parks, national monuments, and land withdrawn for military purposes (other than Naval Petroleum Reserve No. 4) were excluded from these withdrawals. The Secretary of the Interior was directed to withdraw additional "deficiency" land from the nearest unreserved, vacant, and unappropriated public lands if the statutory withdrawals were not sufficient to satisfy Native selection rights.[60]

Approximately 108 million acres were withdrawn for Native selection purposes by subsections Ii(a) and 16(a).[61] Section 16 authorizes Native village selections of 230,400 acres in southeastern Alaska from lands withdrawn under that section.[62] Section 12 authorizes selection by Native Village Corporations outside southeastern Alaska of 22 million acres from the land withdrawn by subsection 11(a).[63] Section 12 further authorizes selection by Native Regional Corporations of an additional 16 million acres, less the amount of land selected by the Native Village Corporations in southeastern Alaska, from the land withdrawn by subsection n(a), excepting land selected by the State prior to ANCSA's enactment.[64]

A limited amount of the 26 million acres selected by the State prior to ANCSA's enactment was made available for Native selection under sections n(a)(2) and 12(a)(l) of ANCSA.[65] It is estimated that 2.6 million of these acres will pass into Native ownership.

Subsection 14(h) authorizes the Secretary to withdraw an additional 2 million acres of unreserved and unappropriated public land located outside the areas withdrawn by subsections 1 l(a) and 16(a) and to convey such land for certain specified purposes with the balance remaining to be shared by all 12 resident Native Corporations on the basis of population.[66]

Approximately 4.8 million additional acres will pass to the Natives as a result of two open-ended provisions in ANCSA. Section 18 provides for approval of Native allotment applications under prior statutes pending at the time ANCSA was adopted.[67] All allotments so approved count against the 2 million acres to be conveyed to the Natives under subsection 14(h), but only if approved prior to December 18, 1975.[68] Of an initial 1.2 million acres encompassed by pending allotment claims, it is estimated that 200,000 acres are covered by invalid claims. Another 200,000 acres represent claims approved prior to December 18, 1975. This leaves 800,000 acres to be conveyed that will not count against the 2 million allowed under subsection 14(h).[69]

Section 19(b) provides an option to those Village Corporations located on former "Indian Reserves" to take fee title to the "Reserve" and forego other benefits of ANCSA or to take the benefits of ANCSA.[70] Six such corporations elected to take title to four former reserves. These reserves are: St. Lawrence Island (1.2 million acres); Elim (0.3 million acres); Venetie (1.4 to 1.7 million acres); and Tetlin (0.75 million acres). This acreage, about 4 million, is in addition to the 40 million acres covered by sections 12, 14, and 16.[71]

All together, these provisions authorize selection of approximately 44.8 million acres by various Native groups in Alaska from around 110 million acres of withdrawals.

As permitted by the Department of the Interior's regulations, the Natives greatly overselected in order to protect themselves from loss of expected acreage due to preexisting rights or subsequent land surveys.[72] Around 80 million acres were so selected. Pursuant to subsection 22(h) of ANCSA, all withdrawals made for Native selection purposes terminated on December 18, 1975, except for land actually selected by, but not yet conveyed to, the Natives.[73] Approximately 30 million acres of unselected public lands remained. These lands are covered by the withdrawals authorized by section 17(d)(l) of ANCSA.[74]

The Regional Corporations have emphasized mineral potential in making their land

selections. In fact, several of them have obtained extensive mineral surveys of land available to them for selection. These surveys were usually performed in return for certain development rights in the land eventually selected .75

Generally, the 44.8 million acres of Native land will be available for mineral exploration and development. The Regional Corporations will control the minerals on 40 million acres. Some of the Regional Corporations will likely favor development. Other Native groups will control the minerals in the 4.8 million acres conveyed under sections 18 and 19, and, since these acres will probably encompass culturally significant areas, these groups may be somewhat less favorable to mineral activit y.

ALASKA NATIONAL INTEREST LANDS

Section 17(d)(2) of ANCSA authorized the Secretary to withdraw up to 80 million acres of unreserved public lands to be studied for possible addition to the National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems." The Act required the lands to be withdrawn from all forms of appropriation under the public land laws, including the mining and mineral leasing laws, from State selection under the Alaska Statehood Act, and from selection by Native Regional Corporations under ANCSA.[77] Native Regional and Village Corporation selections, however, were allowed where the "d-2" withdrawals overlapped the statutory subsection 11(a) withdrawals for Native selection purposes.[78] The Secretary withdrew the full 80 million acres." Section 17(d)(2) also required that the Secretary submit his recommendations concerning those lands to Congress by December 18, 1973.[80]

On December 17, 1973, Secretary Morton recommended that 83.5 million acres be added to the four conservation systems in Alaska.[81] Approximately 65 million of these 83.5 million acres were lands previously withdrawn pursuant to section 17(d)(2). These section 17(d)(2) withdrawals remain in effect until Congress acts on the recommendations or until December 18, 1978, whichever is earlier.[82] The section 17(d)(2) withdrawal terminated on December 18, 1973, for the 15 million acres not recommended. The other 18.5 million acres recommended for inclusion are lands that were withdrawn pursuant to subsection 17(d)(l).[83]

The 80-million-acre limitation in withdrawal authority of section 17(d)(2) does not impose any limitation either on the total number of acres that may eventually be included in Alaskan conservation systems or on the number of acres that the Secretary may withdraw under other authority for congressional consideration or classification. Similarly, the 80-million-acre limitation on the withdrawal authority of section 17(d)(2) does not impose any restriction on congressional designations of Alaska National Interest Lands.

ALASKA PUBLIC INTEREST LANDS

Section 17(d)(l) of ANCSA directs the Secretary of the Interior to "review the public lands of Alaska and determine whether any portion of these lands should be withdrawn under authority provided for in existing law to insure that the public interest in these lands is properly protected."[84] The section authorizes him "to classify or reclassify any lands so withdrawn and to open such lands to appropriation under the public land laws in accord with his classifications."[85] Withdrawals pursuant to subsection 17(d)(l) do not affect State and Native selection rights in those areas withdrawn for Native selection pursuant to section 11.[86] The section 11 withdrawals, however, precluded State selection in such areas, at least until the section 11 withdrawals terminated in December 1975.[87]

During 1972, the Secretary withdrew almost all public lands in Alaska that were not already reserved from State and Native selections.[88] Most of these so-called "d-l" withdrawals simply backed up other with-

drawals, such as the statutory withdrawal for Native selection purposes. Thus, any areas not selected by the Natives or recommended for inclusion in the four conservation systems remain withdrawn under subsection 17(d)(l) despite the termination of the more specific withdrawals. There is no time limit on the section 17(d)(1) withdrawals, which will probably be maintained until the land is classified or disposed of.

Certain areas were left open to State selection only.[89] Others were left open to location for metalliferous minerals as well as State selection. Fifteen million acres were made available for entry under the public land laws, with a 90-day preference to the State to select areas it desired. However, the available acreage was generally in areas not suited for habitation or productive development, and attempted settlement led to hardship, death, and abandoned entries. In 1974 the 12.4 million acres of remaining unselected and unentered public lands were closed until they could be classified.[90]

The State will eventually seek to complete its statehood selections from these d-l lands. Public lands withdrawn for possible Native selection under ANCSA and lands withdrawn under section 17(d)(2) as national interest lands that are not included in national conservation systems will revert to a public land d-l status because of overlapping d-l withdrawals.

Section 603 of the Federal Land Policy and Management Act of 1976 requires that all public lands managed by the BLM must be inventoried and studied for their wilderness potential by 1991.[91] Under this provision, some of the remaining public lands in Alaska may be added to the National Wilderness Preservation System. Wilderness review of Alaska's public lands will be deferred until after completion of Native land conveyances and congressional consideration of national interest land proposals called for in section 17(d)(2).[92]

JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

Section 17(a) of ANCSA established the Joint Federal-State Land Use Planning Commission for Alaska.[93] This Planning Commission is composed of 10 members—5 members representing the State of Alaska and 5 members representing the United States. The Alaska members include the Governor or his designate and four other persons appointed by the Governor.[94] At least one of these State appointees must be a Native as defined in the Act.[95] The five members representing the Federal Government include one member appointed by the President with the advice and consent of the Senate and four members appointed by the Secretary of the Interior.[96] The Governor (or his designate] and the Presidential appointee serve as cochairmen of the Commission.[97] All decisions of the Commission require concurrence by the cochairmen.[98] All members serve at the pleasure of the appointing authority.[99]

The Planning Commission has no regulatory or enforcement responsibilities, but has important advisory functions. *W The Commission was to expire on December 31, 1976. However, Public Law 94-204, approved January 2, 1977, provides that the Commission will continue in existence until May 30, 1979.[101]

ANCSA provides that the Planning Commission shall:

> (A) undertake a process of land use planning, including identification of and the making of recommendations concerning areas planned and best suited for permanent reservation in Federal ownership as parks, game refuges, and other public uses, areas of Federal and State lands to be made available for disposal, and uses to be made of lands remaining in Federal and State ownership;
>
> (B) make recommendations with respect to proposed land selections by the State under the Alaska Statehood Act and by Village and Regional Corporations under this Act;

(C) be available to advise upon and assist in the development and review of land use plans for lands selected by the Native Village and Regional Corporations under this Act and by the State under the Alaska Statehood Act;

[D) review existing withdrawals of Federal public lands and recommend to the President of the United States such additions to or modifications of withdrawals as are deemed desirable;

(E) establish procedures, including public hearings, for obtaining public views on the land use planning programs of the State and Federal Governments for lands under their administration;

(F) establish a committee of land use advisers to the Commission, made up of representatives of commercial and industrial land users in Alaska, recreational land users, wilderness users, environmental groups, Alaska Natives, and other citizens;

(G) make recommendations to the President of the United States and the Governor of Alaska as to programs and budgets of the Federal and State agencies responsible for the administration of Federal and State lands;

(H) make recommendations from time to time to the President of the United States, Congress, and the Governor and legislature of the State as to changes in laws, policies, and programs that the Planning Commission determines are necessary or desirable;

(I) make recommendations to insure that economic growth and development is orderly, planned and compatible with State and national environmental objectives, the public interest in the public lands, parks, forests, and wildlife refuges in Alaska, and the economic and social well-being of the Native people and other residents of Alaska;

(J) make recommendations to improve coordination and consultation between the State and Federal Governments in making resource allocation and land use decisions: and

(K) make recommendations on ways to avoid conflict between the State and the Native people in the selection of public lands. *02

EASEMENTS ACROSS NATIVE LANDS

Section 17(b) provides that "the Planning Commission shall identify public easements across lands selected by Village Corporations and the Regional Corporations and at periodic points along the courses of major waterways which are reasonably necessary to guarantee international treaty obligations, a full right of public use and access, and access for recreation, hunting, transportation, utilities, docks, and such other public uses as the Planning Commission determines to be important.''[103] In identifying these public easements, the Commission is to consult with State and Federal agencies, review proposed transportation plans, and receive and review statements from interested groups and individuals on the need for and the proposed location of public easements.[104] The Secretary of the Interior must consult with the Planning Commission and reserve "such easements as he determines are necessary" in any patent conveying lands to a Native Village or Regional Corporation under the provisions of ANCSA.[105]

Section 17(c) provides that "in the event that the Secretary withdraws a utility and transportation corridor across public lands in Alaska pursuant to his existing authority, " the State and Native Village and Regional Corporations will be precluded from selections in the areas withdrawn. [106] This provision refers to right-of-way corridor withdrawals for a construction haul road and an oil pipeline to transport oil from the North Slope.

In February and March 1976, the Secretary of the Interior issued orders establishing the departmental policies and guidelines on the reservation of extensive easements across lands conveyed to Native Corporations.[107] These easements provoked strong reactions from several Native Corporations and have been the subject of litigation.

Order No. 2982 deals with local easements, that is, all public easements other

than those used in interregional or interstate commerce, in the transportation of natural resources, or in interstate communications systems. [108] The order specifies the policy, guidelines, and procedures for reserving easements. This order includes easements to provide: access to public lands and resources; a continuous 25-foot easement along the marine coastline; access and recreational use easements along "highly significant" recreational streams and rivers; and easements for utility, communications and weather purposes, for landing and docking sites, and for "overnight" camp and rest areas, etc.[109] Guidelines include standards, widths, uses, and purposes. These easements are to be reserved to protect the public interest in land conveyed to Natives under ANCSA and to meet the requirements of public law.[110] Several of the easements specified in this order were challenged by Natives and overturned by a Federal District Court decision.[111]

Order No. 2987 establishes guidelines for reserving easements for the transportation of energy, fuel, and natural resources.[112] This order establishes the so-called "floating" easements, that is, easements which are not specifically located but rather are reserved "in behalf of the United States to cross all the land conveyed pursuant to the ANCSA . . "[113] The specific location of easements reserved by this order is to be determined after consultation with and consent of the non-Federal owner. [114] The order provides that the United States may exercise the right of eminent domain if consent is not given.[115]

This order subjects all lands conveyed to Alaska Natives to a "floating" or "blanket" easement for federally owned energy transmission systems or for the transportation of federally produced or purchased energy, fuel, or natural resources.[116] Native lands in the Aleutian Islands and the southeastern panhandle were excluded from the easement provision because prior studies of potential transportation routes disclosed that few areas in these regions would be used for energy and natural resource transportation systems. [117]

Order No. 2987 specifically provides that such easements will not be available for access across Native lands for development of resources on non-Federal lands:

> Privately owned energy, fuel, and natural resources that are being developed for a profit should not be afforded extraordinary privileges across private property. Therefore, easements should not be reserved by the United States in conveyances to Alaska Natives for the benefit of such privately owned energy, fuel, and natural resources. [118]

Subsequently, the Alaskan Natives filed suit, contesting the validity of sections of both orders.[119] On July 7, 1977, the Federal District Court in Alaska ruled that several aspects of Order 2982 were invalid.[120] In particular, the court found that the "continuous 25-foot marine coastline easement" and a major portion of the linear easements on "highly significant recreational rivers and streams were illegal.''[121] The court also ruled that Order 2987, the "floating" easement for transportation corridors, was void in toto.[122]

Because the court viewed ANCSA as a settlement act and not a public land law, certain specific statutory easements reserved on all lands conveyed out of Federal ownership were also overturned. These easement reservations for railroads, communications lines, and ditches and canals were held to be preempted by section 26 of ANCSA.[123] The Justice Department filed a protective notice of appeal, and several of the plaintiffs also appealed.[124] A tentative settlement of the easement litigation was announced in early 1978. Order 2987 was revoked in May 1978.[125]

FOOTNOTE REFERENCES FOR ALASKA NATIVE CLAIMS SETTLEMENT ACT

[1]Act of December 18, 1971, Public Law 92-203, 85 Stat. 688, codified at 43 U.S.C. 1601 (Supp. IV 1974).

[2]43 U.S.C. 1603.

[3]See 43 U.S.C. 1605, 1608, 1611, 1613, 1616, and 1618.

[4]43 U.S. C. 1606, 1607.

[5]43 U.S.C. 1616(d)(2)(A).

[6]Id.

[7]43 U.S.C. 1616(d)(2)(D).

[8]The major Alaska Lands Bills introduced in the 95th Congress are:

H.R. 39, The Alaska National Interest Lands Conservation Act, introduced by Representative Udall and supported by the Alaska Coalition, an alliance of environmental, conservation, and recreation organizations (comparable measures include H.R. 1974 and H.R. 2976);

S. 1500, Senate version of H.R. 39 introduced by Senator Metcalf (comparable measure, S. 500);

S. 1787, Alaska National Interest Lands Act, introduced by Senator Stevens of Alaska and supported by Representative Young of Alaska and by Governor Hammond of Alaska;

S. 499, H.R. 6564, the original Morton proposal first introduced in the 93d Congress, Dec. 17, 1973; and

S. 2944, Alaska Lands Conservation and Management Act, introduced by Senator Gravel of Alaska.

The Carter Administration did not offer a separate D-2 proposal, but, instead recommended a series of technical amendments to H.R. 39 in hearings before the House and Senate Committees.

For a description and comparison of Alaska Lands legislation introduced in the 94th Congress, see Federal State Land Use Planning Commission for Alaska, "The *D-2* Book" Volume *II:* Lands *of* National Interest *in* Alaska-" A Comparative Analysis, " November *1977.*

[9]H.R. *39,* 95th Cong., 2d sess., 124 Cong. Rec. H4329 (daily ed. May 19, 1978). See also House Rept. 95-1045, pts. I and II (Alaska National Interest Lands Conservation Act of 1978). On Oct. 15, 1978, the Senate adjourned without acting on its version of Alaska Lands legislation. S.Rept. 95-1300, reported Oct. 9, 1978. See also 124 Cong., Rec. S19135 to S19141 (daily ed. Oct. 14, 1978, pt. IV).

[10]Treaty of March 30, 1867, 15 Stat. 539.

[11]Act of May 17, 1884, section 8,23 Stat. 24.

[12]Federal Field Committee for Development Planning in Alaska, *Alaska* Natives and the Land, 434 (1968).

[13]Act of July 7, 1958, Public Law 85-508, 72 Stat. 339, 48 U.S.C. Prec. § 21 (1970).

[14]Id., section 4.

[15]*Alaska Natives* and the Land, supra. note 12, at 439. Without Federal recognition of their rights, Alaska Natives faced the threat that their aboriginal lands might be disposed of by the Federal Government without payment of just compensation. See Tee-Hit-Ton Indians v. United States, *348* U.S. 272 (1955).

[16]*Alaska* Natives and the Land, at *440.* By **1968, these** protests covered 80 percent of the lands in the State. See Statement of Asst. Secretary of the Interior, Guy Martin, before the Subcommittee on General Oversight and Alaska Lands of the House Comm. on Interior and Insular Affairs, page 2, July 21, 1977. (Hereinafter Statement of Asst. Secretary Martin).

[17]34 F.R. 1025, Jan. 17, *1969.* At his confirmation hearings, Interior Secretary-Designate Walter Hickel, the former Governor of Alaska, agreed to honor the Udall land freeze for 2 years.

[18]43 U.S.C. 1601(a).

"43 U.S.C. 1601(b).

[20]43 U.S.C. 1603.

[21]43 U.S.C. 1603(a).

[22]43 U.S.C. 1603(b).

[23]43 U.S.C. 1603(c).

[24]43 U.S.C. 1604. The 12 regions, recognized in section 5(a), roughly correspond to the geographic areas represented by the Native associations existing at passage of ANCSA. 43 U.S.C. 1606(a). The 13th region includes all nonresident Natives who chose not to enroll in the 12 geographic regions. 43 U.S.C. 1606(c).

[25]43 U.S.C. 1604, as amended by the Act of January 2, 1976, Public Law 94-204, section 1,89 Stat. 1145.

[26]Morgan, "From Ketchikan to Barrow, " Alaska Magazine, May *1977,* at 9.

[27]43 U.S.C. 1602(b)

[28]43 U.S.C. 1605(b).

[29]43 U.S. C, 1606(c). originally, the Secretary ruled that a majority of nonresident Natives had elected not to form an optional 13th region under section 7(c) of ANCSA. This decision was challenged and reversed. *Alaska* Native Ass'n *of* Oregon v. Morton, Civil Action No. *2133-73; Alaska Fed'n of* Natives *Int'l* v. Morton, Civil No. *2141-73* (D. D. C., filed Dec. *30, 1974). See* also Public Law 94-204, section 8,89 Stat. 1149.

3043 U.S.C. 1606(d), Section 7(e), 43 U.S.C. 1606(e), requires that the original articles of incorporation and bylaws of the corporation must be approved by the Secretary of Interior within 18 months of the enactment of ANCSA. The articles of incorporation may not be amended within 5 years of establishment of the Regional Corporation without the approval of the Secretary.

Thirteen Native Regional Corporations were formed under section 7 of ANCSA, 43 U.S.C. 1606. These corporations and their enrolled membership as of March 23, 1978 are:

Region	Enrolled membership
Ahtna, Inc.	1,057
Aleut Corporation	3,124
Arctic Slope Regional Corporation	3,710

Region	Enrolled membership
Bering Straits Native Corporation	6,271
Bristol Bay Native Corporation	5,315
Calista Corporation	13,193
Chugach Natives, Inc.	1,881
Cook Inlet Region, Inc.	6,052
Doyon, Ltd.	8,905
Koniag, Inc.	3,267
NANA Regional Corporation, Inc.	4,761
Sealaska Corporation	15,388
The 13th Regional Corporation	3,997

SOURCE: Alaska Natives Regional Profiles, U.S. Dept. of the Interior, Bureau of Indian Affairs, Report No. 269, October 1978.

[31] 43 U.S.C. 1607.

[32] See 43 U.S.C. 1606, 1611, and 1613.

[33] For a description of the business ventures of the Alaska Native Corporations, see Morgan, "From Ketchikan to Barrow," *Alaska* Magazine, May 1977 at 9 and *Alaska Native* Regional *Profiles*, supra, note 30.

[34] 43 U.S. C, 1606(h)(l). On Jan. 1, 1992, all Native corporation stock issued will be canceled and each shareholder will receive new stock without any restrictions on transfer on a share for share basis. 43 U.S.C. 1606(h)(3).

[35] 43 U.S. C. 1606(h)(2).

[36] 43 U.S. C. 1605(a)(1).

[37] 43 U.S.C. 1605(a)(2) and 1608. See also 30 U.S.C. 191.

[38] 43 U.S.C. 1608(d), section 6(g) of ANCSA as amended by Public Law 93-153, the Trans-Alaska Pipeline Act, section 407, 87 Stat. (1973), provides for advance payments to the Alaska Native Fund chargeable against mineral leasing revenues to be paid under section 9 of ANCSA, 43 U.S.C. 1608(g). These advance payments were authorized because of the delays in the construction of the Trans-Alaska Pipeline. Advance payments stopped once the pipeline commenced delivery of oil from the North Slope in the late summer of 1977.

[39] 43 U.S.C. 1608(g).

[40] 43 U.S.C. 1605(a).

[41] 43 U.S.C. 1605(c).

[42] 43 U.S.C. 1606(d).

[43] 43 U.S.C. 1606(i).

[44] 43 U.S.C. 1606(j).

[45] See 43 U.S.C. 1606(i) and 1611. In the 95th Congress, hearings were held before the Indian Affairs Subcommittee of the House Committee on interior and Insular Affairs on H.R. 12529, a bill providing for an equitable distribution of land to the 13th Regional Corporation.

[46] 43 U.S.C. 1611 (22 million acres to Native villages, 16 million acres to Regional Corporations); 43 U.S.C. 1613 (2 million acres): 43 U.S.C. 1615 (230,400 acres to Southeast Natives); 43 U.S.C. 1618 (4 million acres of former Native Reserves]. In addition, some 800,000 acres will pass to individual Natives under applications made under various Native allotment acts and approved after Dec. 18, 1975. See 43 U.S.C. 1617.

[47] Eligibility qualifications for Native village selections are set forth in section n(b)(2) (43 U.S.C. 1610(b)(2)), section 12 (43 U.S.C. 1611), section 14 (43 U.S.C. 16) and section 16 [43 U.S.C. 1615) of ANCSA.

Of over 200 Native villages, 195 were determined to be eligible for village selections (however, the eligibility of one of these villages has been challenged in litigation brought by some Alaskan residents). Ten more villages are involved in litigation with the Department of the Interior over eligibility. Three more villages which had filed selections under section 12(a) were found ineligible by the Department. Statement of Asst. Secretary Martin, supra, note 16 at page 16.

[48] See 43 U.S.C. 161 l(a) and (b); 43 U.S.C. 1613(h); 43 U.S.C. 1615,

[49] 43 U.S.C. 161 3(f).

[50] 43 U.S.C. 1611(a)(l); 43 U.S.C. 1615(b).

[51] 43 U.S.C. 1613(a), section 14(a), 43 U.S.C. 1613(a) provides for village land entitlements for first round selections under section 12(a) on the basis of population:

Native population in 1970 census between	Entitlement
25 and 99	69,120 acres
100 and 199	92,160 acres
200 and 399	115,200 acres
400 and 599	138,240 acres
600 or more	161,280 acres

Native villages in southeast Alaska receive 23,040 acres regardless of population; 43 U.S.C. 1615. Second-round village selections are to be allocated among villages by the Regional Corporations "on an equitable basis after considering historic use, subsistence needs, and population;" 43 U.S.C. 1611(b).

[52] 43 U.S.C. 161 1(c)(3).

5343 U.S. C. 1611(c), The 11 resident Regional Corporations outside southeast Alaska will share in approximately 16 million acres distributed according to a "land lost" formula based on the geographic area of each region set forth in section 12(c), 43 U.S.C. 1611(c). Land selections under section 14(h)(8), 43 U.S.C. 1613(h)(8), will be allocated among all 12 resident Regional Corporations on the basis of population.

[54] 43 U.S.C. 1614.

[55] By 1977, less than 5 million acres of Native selections had been conveyed by the United States. See discussion of these delays in Statement of Asst. Secretary Martin, supra, note 16. See also, Hearings on Alaska Natural Resource Issues Before the Senate Comm. on Energy and Natural Resources, 95th Cong., 1st sess. (1977) and Lazarus and West, "The Alaska Native Claims Settlement Act: A Flawed Victory," 40 Law & *Contemp.* Prob. 132 (1976].

[56] 43 U.S. C. 1610(a).

[57] 43 U.S.C. 1615(a).

[58] 43 U.S. C. 1611.

[59] 43 U.S.C. 1610(a)(2). The purpose of these withdrawals is explained in the ANCSA Conference Committee Report:

> Section 11 of the conference report withdraws lands around villages, including villages located on lands selected by or tentatively approved to the

State. This section also provides for the withdrawal of in lieu lands adjacent to the 25 township area to insure that the land selection rights of Native Villages and Regional Corporation will be fully protected and will not be frustrated by competing State selections or the creation of new interests in lands under the public land laws.

S. Rept. 92-581, 92d Cong., 1st sess., reprinted in Subcomm. on General Oversight and Alaska Lands of the House Comm. on Interior and Insular Affairs, 95th Cong., 1st sess., Background Information for Alaska Lands Designations (Comm. Print No. 4, 1977) at 72.

[60] 43 U.S.C. 1610(a)(3).

[61] 43 U.S. C. 1610(a], 43 U.S. C. 1615(a]. These lands and others were withdrawn under Public Land Orders 5169 to 5188, 37 F.R. 5572-5591, Mar. 16, 1972.

[62] 43 U.S.C. 1615, section 16(b), 43 U.S.C. 1615(b), authorizes selection of 23,040 acres by each of nine Native villages listed in section 16(a), 43 U.S.C. 1615(a). The Native village of Klukwan is entitled to select 23,040 acres by section 16(d), 43 U.S.C. 1615(d), as amended by Public Law 94-456, section 1(b), 90 Stat. 1934, Oct. 4, 1976. The villages in southeast Alaska had already participated in a monetary judgment against the United States and therefore were given a smaller land settlement than other Native regions under ANCSA. See 43 U.S.C. 1615(c).

[63] 43 U.S.C. 1611(a) and (b).

[64] 43 U.S.C. 161 1(c).

[65] See 43 U.S.C. 1610(a)(2) and 43 U.S.C. 1o11. See Background Memorandum on section 17(d)(2) of the Alaska Native Claims Settlement Act to Members, Senate Comm. on Interior and Insular Affairs from Steven P. Quarles, Counsel, Nov. 12, 1975 at 7 (hereinafter "Memorandum"). Other State selections are protected by the definition of "public lands" in section 3(e) of ANCSA, 43 U.S.C. 1602(e):

> "Public lands" means all Federal lands and interests therein located in Alaska except: (1) the smallest practicable tract, as determined by the Secretary, enclosing land actually used in connection with the administration of any Federal installations, and (2) land sections of the State of Alaska which have been patented or tentatively approved under Sec. 6(g) of the Alaska Statehood Act, as amended (72 Stat. 341, 77 Stat. 223), or identified for selection by the State prior to Jan. 17, 1969.

[66] 43 U.S.C. 1613(h). When the land selections regulations were developed in 1973, an allocation formula for this 2 million acres was agreed upon between the Department and Native representatives. This allocation (43 CFR 2653.1(a)) provides the following:

> 500,000 acres—25,000 acres to each region; 200,000 acres to regions on population percentile, cemetary and historical sites, groups, and individual Native residents;
>
> 92,160 acres—23,040 acres to each of the four urban corporations;
>
> 400,000 acres—for Native allotments approved by December 1975 (195,000 acres actually approved);
>
> Balance—to regions on population basis.

See Statement of Asst. Secy. Martin, supra note 16, at 22.

[67] 43 U.S.C. 1617(a). These Native allotments were authorized by the Alaska Native Land Allotment Act, Act of May 7, 1906, c.2469, 34 Stat, 197, as amended by the Act of August 2, 1956, c.891, 70 Stat. 954 (repealed by section 18(a) of ANCSA, 85 Stat. 710) and by the general allotment provisions of 25 U.S.C. 334 and 337. The Alaska Native Land Allotment Act provided for an allotment of 160 acres of nonmineral land to Alaska Natives meeting certain residency requirements. From passage of the Act to 1960, only 80 allotment patents—most of them in southeastern Alaska—were issued. Allotment applications covering approximately 1.2 million acres were pending on passage of ANCSA.

[68] 43 U.S.C. 1617(b).

[69] Based on acreage figures supplied by the Department of the Interior to Richard W. Wright of the OTA Materials Program staff in July 1977.

[70] 43 U.S.C. 1618(b),

[71] 43 U.S.C. 1618(b). See Statement of Asst. Secy. Martin, supra, note 16 at 22.

[72] See 43 CFR 2651.4(f) (village selections); 43 CFR 2652.3(f) (Regional Corporation selections); and 43 CFR 2653.9(b) (section 14(h) selections).

Approximate Entitlements & Overselections
(in millions of acres)

Type	set. entitlement	Est. selection
Village first round (12(a) & 16(b), (includes southeast))	18-20	30
Village second round [12(b))	4-2	*30*
Regional (12(c))	16	35
Miscellaneous (14(h))	2	**10**
Former reserves (19(b))	4	4
Total	**44**	1 10*

*Overlaps between types of selections occurred. The total of 110 million acres is the estimated net area selected,
SOURCE: Statement of Asst. Secy. Martin, supra, note 16 at 5.

[73] 43 U.S.C. 1621(h).

[74] 43 U.S.C. 1616(d)(l), See Public Land Orders 5169 to 5188, 37 F.R. 5572-5591, Mar. 16, 1972 and subsequent amendments.

[75] See, for example, the arrangements by Bristol Bay Native Corporation, Arctic Slope Regional Corporation and Chugach Natives, Inc. described in Morgan, supra, note 26. Doyon Ltd. is planning to exploit asbestos deposits in the Yukon-Charley region. H.R. 39 as passed by the House on May 19, 1978 included a special provision authorizing rights-of-way through the proposed Forty Mile Wild and Scenic River area to accommodate Doyon's mineral enterprise. See H.R. 39, section 501, 95th Cong., 2d sess. (1978).

[76] 43 U.S.C. 1616(d)(2).

[77] Id.

[78] Id.

[79] Public Land Order 5179, 37 F.R. 5579, Mar. 16, 1972, modified because of a consent agreement be-

tween Dept. of Interior and the State of Alaska. See Public Land Orders 5250 through 5257, 37 F.R. 18730, Sept. 15, 1972, 37 F.R. 18911 to 18916, Sept. 16, 1972 and 37 F.R. 19370, Sept. 20, 1972. The text of the settlement of State of Alaska et al. v. Morton is reprinted in the House Report on H.R. 39, H. Rept. 95-1045, pt. I, 95th Cong., 2d sess., 403 (1978).

[80]43 U.S.C. 1616(d)(2).

[81]The Morton proposal was originally introduced in the 93d Congress as H.R. 12336 and S. 2917. It was reintroduced in the 94th Congress as H.R. 6089 and S. 1617, In the 95th Congress, the Morton proposal was introduced as H.R. 6564 and S. 499.

[82]43 U.S.C. 1616(d)(2).

[83]See Public Land order 5179 as modified, supra, note 79.

[84]43 U.S.C. 1616(d)(l).

"Id.

[86]Id.

[87]43 U.S.C. 1610(a)(1).

[88]See Public Land Orders, supra, note 79.

[89]See, for example, Public Land Orders 5185 and 5186, 37 F.R. 5588 to 5589, Mar. 16, 1972.

'At the request of the State of Alaska, Public Land Order 5418, 39 F.R. 11547, Mar. 25, 1975 closed to further entry public lands that had been made available to selection under Public Land Order 5185, 37 F.R. 5588, Mar, 16, 1972.

[91]Public Law 94-579, 90 Stat. 2785, 43 U.S.C.1782.

[92]BLM Draft Proposed Wilderness Policy and Review Procedure, Feb. 27, 1978, at p. 17. See also Office of the Solicitor, Application of Mining and Grazing Laws to Areas Under Review for Inclusion into Wilderness System: Section 603, Federal Land Policy and Management Act of 1976, Jan. 8, 1978 (Opinion), and the following Organic Act Directives: OAD 76-15, Dec. 14, 1976; OAD 77-21, Feb. 16, 1977; and OAD 77-29, Mar. 15, 1977.

[93]43 U.S.C. 1616(a)(l).

[94]43 U.S.C. 1616(a)(1)(A).

"Id.

[96]43 U.S.C. 1616(a)(1)(B).

[97]43 U.S.C. 1616(a)(2).

[98]Id.

[99]43 U.S.C. 1616(a)(3).

[100]S. Rept. 92-581, 92d Cong., 1st sess., reprinted in Subcomm. on General Oversight and Alaska Lands of the House Comm. on Interior and Insular Affairs, 95th Cong., 1st sess., Background Information for Alaska Lands Designations (Comm. Print No. 4, 1977) at 5.

[101]Public Law 94-204, section 7,89 Stat. 1149.

[102]43 U.S.C. 1616(a)(7).

[103]43 U.S.C. 1616(b)(l).

[104]43 U.S.C. 1616(b)(2).

[105]43 U.S.C. 1616(b)(3).

[106]43 U.S.C. 1616(c). The Secretary withdrew the pipeline right-of-way on Dec. 28, 1971, Public Land Order No. 5150,36 F.R. 25410.

'"' Order No. 2982, Reservation of Local Easements, 41 F.R. 6295, Feb. 12, 1976; Order No. 2987, Reservation of Easements for the Transportation of Energy, Fuel, and Nonfuel Resources, 41 F.R. 11331, Mar, 18, 1976,

[108]41 F.R. 6295, Feb. 12, 1976.

[109]Id.

'l"Order No. 2982, Sec. 4,41 F.R. 6295, Feb. 12, 1976.

[111]*Alaska Public* Easement Defense Fund v, Andrus, 435 F. Supp. 664 (D. Alas. 1977) reprinted in Hearings on Inclusion of Alaska Lands in National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems before the Subcomm. on General Oversight and Alaska Lands of the House Comm. on Interior and Insular Affairs, 95th Cong., 1st sess., pt. XV, at 354 (Ser. No. 95-16, 1978),

[112]41 F.R. 11331, Mar. 18, 1976.

[113]Order No. 2987, Sec. 4,41 F.R. 11332 (1976).

[114]Order No. 2987, Sec. 2,41 F.R. 11331 (1976).

[115]Id.

[116]Id.

[117]Order No. 2987, Sec. 4,41 F.R. 11332 (1976).

[118]Id.

[119]Lawsuits were filed by the Alaska Federation of Natives and six Native Regional Corporations and separately by Sealaska Corp. in the Federal District Court in Washington, D.C. These cases were consolidated and transferred to Federal Court in Alaska and there joined with another case brought by the Alaska Public Easement Defense Fund which alleged that the Secretary had failed to reserve sufficient public easements across Native lands. See 435 F. Supp 667, n. 1.

[120]*Alaska Public* Easement Defense Fund v. *Andrus*, 435 F. Supp 664, (D. Alas. 1977).

[121]435 F. Supp. *677* to *679,*

[122]*435* F. Supp. 679 to *680.*

[123]*435* F. Supp. 680 to 681,

[124]See hearings on Inclusion of Alaska Lands in National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems Before the Subcomm. on General Oversight and Alaska Lands of the House Comm. on Interior and Insular Affairs, 95th Cong., 1st sess., pt. XV, at 128 (Ser. 95-16, 1978). See also, the Secretarial Issue Papers on ANCSA Easement Policy and Procedures, Id. at 504 to 540.

[125]Secretarial Order 2987 was revoked by Secretarial Order No. 3020,43 F.R. 19726, May 8, 1978.

OTHER LAWS

In recent years, Congress has passed three laws that establish special rules for the access use of some Federal land involved in energy-related projects.[1] One of these laws, which changed the management of the Naval Petroleum Reserve No. 4 in Alaska, transferred authority for making decisions on right-of-way requests from the Secretary of the Navy to the Secretary of the Interior.[2] It did not, however, effect any other change in the laws and regulations which control access policies for that particular Federal installation. The other two laws, which established procedures for construction of the Alaskan oil and natural gas pipelines, made wholesale changes in the procedures that were used in granting rights-of-way for such projects.

NAVAL PETROLEUM RESERVES PRODUCTION ACT OF 1976

Four naval petroleum reserves on the public lands were created by Presidential order between 1912 and 1923.[3] One of these, Naval Petroleum Reserve Numbered 4 (NPR-4), was located in Alaska. Title I of the Naval Petroleum Reserves Production Act of 1976 transferred administration of the area in NPR-4 to the Secretary of the Interior and redesignated it as the National Petroleum Reserve in Alaska (NPRA).[4] A small tract on which the Naval Arctic Research Laboratory in Point Barrow is located and surface lands to be transferred to Native villages under ANCSA are excluded from the reserve although they are located within its exterior boundaries.[5]

Subject to existing rights, lands within the boundaries of the reserve were withdrawn from all forms of entry and appropriation under the public land laws, including the Mining Law of 1872 and the Mineral Leasing Act of 1920.[6] Areas around the Utukok River and the Teshekpuk Lake regions were placed in a special protected category.[7] Exploration in these areas must be conducted in a manner to preserve significant subsistence, recreational, fish and wildlife, and historic or scenic values.[8]

Immediate responsibility for activities related to the protection of the environment, fish and wildlife, and historic or scenic values of the lands involved was vested in the Secretary of the Interior effective on enactment of the legislation.[9] Other functions were transferred 1 year later so that Navy and Interior personnel could work together during a winter season to provide experience in management and ensure a smooth transfer.[10]

The Act provides that only exploration activities will be allowed on the reserve, and that no production or development leading to production is authorized without congressional review and authorization.[11] Continued operation of South Barrow field for local use is permitted. The Act directs that three studies of the area be conducted.[12] These include the study called for by section 164 of the Energy Policy and Conservation Act[13] and a Presidential study of the petroleum resource value of the area to determine the best overall plan for development, production, and transportation of petroleum resources in the reserve.[14] The latter report is to be made to Congress by January 1, 1980.

The third study is to be conducted by the Secretary of the Interior in consultation with representatives of Federal agencies, the State of Alaska, and Native groups, to determine the values of and the best uses for lands within the reserve. *5 The study is specifically required to examine (1) the needs of the Natives who live or depend on lands in the reserve, (2) scenic, historic, recreational, fish and wildlife, and wilderness values, (3) mineral potential, and (4) other values. ’b The Secretary is to submit a report, including recommendations for appropriate designations of land, by April 1979.

Note: Footnotes for this section appear on pp. 134-136.

Section 102 authorizes the Secretary to "grant such rights-of-way, licenses, and permits as may be necessary to carry out his responsibilities under this Act."[17] The same section also provides that, "All other provisions of law heretofore enacted and actions heretofore taken reserving such lands as a Naval Petroleum Reserve shall remain in full force and effect to the extent not inconsistent with this Act."[18] These two provisions taken together have the following effect: Right-of-way applications for access within the reserve must comply with the procedures established under the general authority of the Secretary of the Interior;[19] the substantive law that governs Secretarial decisionmaking will include any standards controlling the general authority as construed in light of the Reserves Act and other laws that previously applied to NPR-4.[20] Until such time as Congress acts on recommendations of the Secretary of the Interior for redesignation, access to non-Federal mineral resources will be a less favored use for lands in NPRA.

TRANS-ALASKA PIPELINE ACT

In the winter of 1967-68, a wildcat rig drilling Prudhoe Bay State Well No. 1 struck a formation that proved to be the largest oil reserve on the North American continent.[21] The discovery was announced on July 18, 1968.[22] Fourteen months later, the State of Alaska auctioned off leases on 450,000 acres of Prudhoe Bay for $900 million.[23]

Even before the lease sales, the three oil companies already holding producing leases at Prudhoe Bay had organized the Trans-Alaska Pipeline System (TAPS) and filed an application with the Department of the Interior to build an 800-mile hot-oil pipeline to Valdez.[24] TAPS sought a waiver from the Federal land freeze imposed because of the Native claim controversy for the pipeline and a 360-mile North Slope haul road.[25] A waiver from the land freeze was approved in December 1969, and in early 1970 the Department of the Interior prepared to issue a permit for

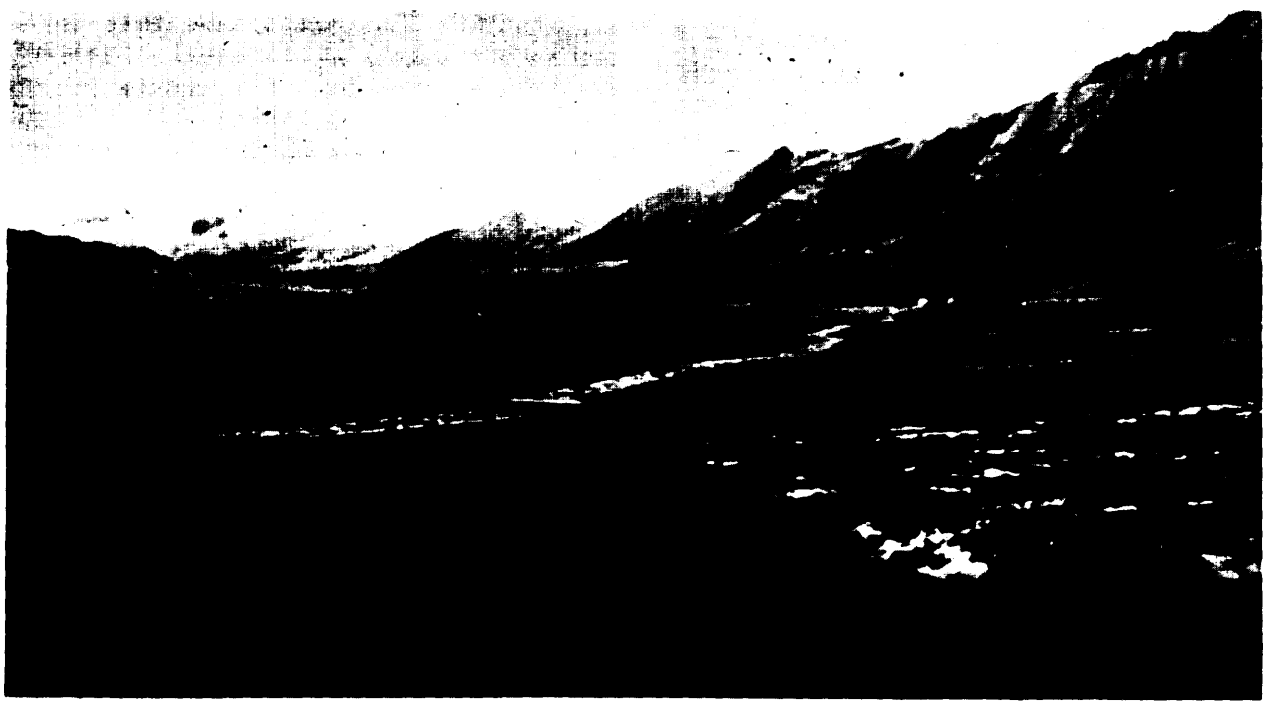

Photo Credit: The Alaska Coalition

The North Slope Haul Road, authorized by the Trans-Alaska Pipeline Act, provides the first surface access north of the Yukon River. Extending from Fairbanks to Prudhoe Bay, the road was transferred to State ownership in the fall of 1978

the haul road when a series of lawsuits brought the project to a halt.[26]

In March 1970, five Native villages along the proposed route filed suit claiming ownership of the affected land by virtue of their aboriginal land rights.[27] Shortly thereafter, three conservation groups filed suit contending that the pipeline violated the 1920 Mineral Leasing Act—under which rights-of-way were being sought—and the newly passed National Environmental Policy Act (NEPA).[28] On April 13, 1970, a temporary injunction was granted in the latter case, blocking the pipeline project and prohibiting the Secretary of the Interior from issuing a permit.[29]

In 1971, several actions were taken by Congress and the executive branch to seek to break the impasse. Passage of the Alaska Native Claims Settlement Act (ANCSA) ended the controversy over Native landownership.[30] The Department of the Interior held lengthy hearings during 1971 on the environmental impact of the pipeline proposals and released an environmental impact statement (EIS) on March 20, 1972. On August 15, 1972, the temporary injunction was dissolved after an opinion by the District Court that the requirements of NEPA had been met and that the Department of the Interior could issue a special use permit to allow the pipeline builders more than the 50-foot right-of-way permitted by the Mineral Leasing Act.[31]

On February 9, 1973, the Court of Appeals reversed this ruling and again enjoined the Secretary from issuing a right-of-way .32 It found that the Department of the Interior had exceeded its statutory authority in proposing to grant the special right-of-way and land use permits. Two months later, the Supreme Court refused to review this decision.[33]

This chain of events provided the impetus for the passage, on November 16, 1973, of Public Law 93-153 generally known as the Trans-Alaska Pipeline Act,[34] Title 1 of Public Law 93-153 amended section 28 of the Mineral Leasing Act, which provides rights-of-way across Federal lands for oil pipelines.[35] The most important amendment allows the Department of the Interior to grant rights-of-way in excess of 50 feet where a wider right-of-way is found to be "necessary for operation and maintenance after construction, or to protect the environment or public safety."[36]

Other provisions of the amended section 28 also have a bearing on the use of Federal lands for pipeline rights-of-way. Section 28 authorizes pipeline rights-of-way over all Federal lands except national parks, lands held in trust for Indian tribes or an Indian, and land on the Outer Continental Shelf.[37] A pipeline right-of-way may not be granted through any reserved Federal lands if the Secretary or the appropriate agency head managing the land determines that it would be inconsistent with the purpose of the reservation.[38] The agency head may impose appropriate regulations, terms, and conditions on the right-of-way, including provisions for environmental protection and restoration, public safety, protection of fish, wildlife, and habitat values, and subsistence resources.[39]

Title I also requires that the applicant demonstrate the technical and financial capability to construct, operate, maintain, and terminate the project in accordance with the statutory conditions.[40] Each right-of-way reserves to the Secretary or agency head the right to grant additional rights-of-way for compatible uses on or adjacent to the pipeline.[41] The Secretary was directed to prepare a report on the need for a national system of transportation and utility corridors across Federal lands in order to minimize adverse environmental impacts and to prevent the proliferation of rights-of-way across Federal lands.[42] This report was presented to the President and Congress.

Title II of Public Law 93-153 is the Trans-Alaska Pipeline Authorization Act.[43] It mandated expedited administrative action on the TAPS project. The Act provided that no further NEPA review was to be undertaken and contained a legislative finding of sufficiency of the final EIS issued by the Department of the Interior on March **20, 1972.**[44]

Furthermore, it limited administrative and judicial review of any certificates, rights-of-way, permits, and licenses related to or necessary to the construction, operation, and maintenance of TAPS including roads and airstrips.[45] Executive agencies and departments were ordered to issue necessary permits. Judicial review was limited in scope and the time for filing claims was limited to 60 days from any contested action; this meant that opportunities for redress, review, or relief in Federal or State courts were cut off. In exchange for this limitation on judicial and administrative remedies, strict liability was imposed for incidents harming wildlife and subsistence resources and for spillage incidents.[46] Strict liability for harm to wildlife and subsistence was limited to $50 million per incident and liability for oilspills was limited to $100 million.[47] Damages from construction, operation, and maintenance, etc., greater than $50 million are to be decided according to the laws of negligence. Claims greater than $100 million for spillage are to be decided in judicial proceedings or by arbitration. A TAPS liability fund was established to pay damages from oilspills. This was to be funded by $0.05 per barrel paid by the owner of the oil transported.[48]

The Act further provided that the roads and airstrips constructed for the project could be public roads or airstrips.[49] The contractor has arranged to turn over the pipeline haul road to the State of Alaska. It is anticipated that it will eventually be open to the public. If the State fails to operate the haul road as a public road, it may be required to pay back Federal funds received for bridge and road construction in anticipation of eventual public highway designation.[50]

Section 407 of the Act authorized advance payments of royalties due Alaska Natives under the terms of ANCSA.[51] These advance payments were provided in recognition of the delays in construction of the oil pipeline to transport North Slope crude oil. Advance payments will continue until such time as delivery of North Slope oil to a pipeline is commenced. TAPS began operation in the summer of 1977.

ALASKA NATURAL GAS TRANSPORTATION ACT OF 1976

The Prudhoe Bay oilfield contains over 20 trillion cubic feet of natural gas, approximately 10 percent of the known gas reserves in the United States. It is also in close proximity to similar large gas deposits in the Mackenzie Delta region of Canada. In March 1974, the Arctic Gas consortium filed applications with the Federal Power Commission (FPC) and the Canadian National Energy Board to construct a pipeline to move Alaskan and Canadian gas to the United States and Canada by an overland route.[52] In September 1974, El Paso Alaska Company filed an application with the FPC to transport Prudhoe Bay gas by a pipeline adjacent to TAPS to the Gulf of Alaska, liquefy it, and ship it to California by LNG tanker.[53] A hearing began on the competing applications before the FPC on April 7, 1975. In July 1976, a third application was filed by Alcan Pipeline Company for an Alaska-Canada overland route.[54]

Faced with the prospect of long administrative and judicial proceedings (the FPC hearings consisted of 45,000 pages and over 1,000 exhibits), and a protracted process of accumulating lands for the right-of-way of the approved pipeline, Congress acted in 1976. The Alaska Natural Gas Transportation Act of 1976 (ANGTA) established an expedited procedure for selecting a transportation system and facilitating its construction and initial operation.[55]

The steps called for by the Act in selecting a pipeline applicant have been completed. The Act suspended the proceedings before the FPC and took the authority to make a decision away from that agency.[56] Instead, the FPC was directed to review the applications and make a recommendation to the President by May 1, 1977.[57] This the Commission did, and recommended the Canadian overland

route, although it divided 2-2 on the choice between Alcan and Arctic Gas.[58] The Commission also prepared an EIS to accompany the recommendation.

The President was required to review the FPC recommendation and issue a decision and report to Congress prior to September 1, 1977 or within 90 calendar days if additional time was needed.[59] Before that decision was issued, the Council on Environmental Quality was directed to hold hearings on the EIS prepared by the FPC and transmit a report to the President on the legal and factual sufficiency of the statement.[6O] The Presidential decision could recommend waivers of provisions of existing laws to permit expeditious construction and operation of the system.[61]

The President issued a decision on September 22, 1977, selecting the Alcan proposal.[62] The Presidential decision could only take effect if approved by a joint resolution of both Houses of Congress passed within 60 days of receipt of the decision.[63] In addition to affirming the Presidential decision including any waivers of law, the joint resolution prescribed in the Act contains a congressional declaration of the sufficiency of the EIS submitted by the President.[64] The joint resolution was approved on November 8, 1977.[65]

The Act contains limitations on judicial and administrative review similar to those found in the Trans-Alaska Pipeline Authorization Act. Claims alleging the invalidity of the Act must be filed within 60 days of the enactment of the joint resolution.[66] Judicial review of the actions of Federal officers and agencies may be had only under the provisions of section 10 of the Act.[67] Claims alleging that an action taken pursuant to authority granted in the Act violated constitutional rights or were in excess of statutory jurisdiction, authority, or limitations, or did not satisfy statutory rights must be brought within 60 days of the challenged action or no later than 60 days after the complaining party has actual or constructive knowledge of the action.[68] All claims brought under the Act must be filed in the U.S. Court of Appeals for the District of Columbia, which is directed to expedite review of any claims.[69] No court has jurisdiction to consider questions relating to the environmental impact statements.[70]

The Act directs Federal officers and agencies to grant or issue certificates, rights-of-way, leases, and permits necessary to or related to the construction or initial operation of the system at the earliest possible date and to the fullest extent permitted by the laws administered by the agency[71] (without regard to any provisions of law that were waived) .[72] All actions to which this directive applies are to be expedited and shall take precedence over similar applications and requests.[73]

The Act places some limitations on the conditions that may be included in certificates, rights-of-way, leases, and permits.[74] Officers and agencies granting such rights shall include terms and conditions required by the laws they administer (to the extent that such laws have not been waived), and shall also include provisions identified in the President's decision as appropriate for inclusion.[75] With respect to conditions or terms that are permitted by law, but not required, they may be included unless they "would compel a change in the basic nature and general route of the approved transportation system, or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation" of the system.[76]

Finally, the Act provides that any pipeline system right-of-way over Federal lands is to be issued under the authority of the Mineral Leasing Act of 1920 as amended. Thus all Federal rights-of-way will include a provision that the managing agency may allow use of the right-of-way by additional compatible users.[77]

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FOOTNOTE REFERENCES FOR OTHER LAWS

[1]Naval Petroleum Reserves Production Act of 1976, Public Law 94-258,90 Stat. 303, Apr. 5, 1976,42 U.S.C. 6501 et seq.; The Trans-Alaska Pipeline Act, Public Law 93-153, 87 Stat. 584, Nov. 16, 1973; The Alaska Natural Gas Transportation Act of 1976, Public Law 94-586, 90 Stat. 2903, Oct. 22, 1976, 15 U.S.C. 719 et seq.

'Naval Petroleum Reserves Production Act of 1976, Public Law 94-258,90 Stat. 303, Apr. 5, 1976,42 U.S.C. 6501 et seq.

[3]The reserves are: Naval Petroleum Reserve No. 1 (Elk Hills) located in Kern County, Calif., established by Executive Order, Sept. 2, 1912; Naval Petroleum Reserve No, 2 (Buena Vista) located in Kern County, Calif., established by Executive Order, Apr. 30, 1915; Naval Reserve No, 3 (Teapot Dome) located in Wyoming, established by Executive Order, Apr. 30, 1915; and Naval Petroleum Reserve No, 4, located in Alaska, established by Executive Order, Jan. 27, 1923.

[4]42 U.S.C. 6502 (redesignation); 42 U.S. C. 6503 (transfer of jurisdiction).

[5]42 U.S.C. 6502. The tract on which the Naval Arctic Research Laboratory is located is tract No. 1 as described in Public Land Order 2344, Apr. 24, 1961, 26 F.R. 3701.

"42 U.S.C. 6502.

[7]42 U.S.C. 6504(b).

[8]42 U.S.C. 6504(b). "Any exploration within the Utokok River, the Teshekpuk Lake areas, and other areas designated by the Secretary of the Interior containing any significant subsistence, recreational, fish and wildlife, or historical or scenic value shall be conducted in a manner which will assure the maximum protection of such surface values to the extent consistent with the requirements of this Act for the exploration of the reserve. "

'42 U.S. C. 6503(b).

[10]S. Rept. 94-708 (Conference Report) at p. 15. The Secretary of the Interior has assigned interim management responsibility for NPRA to the Assistant Secretary for Land and Water Resources. Statement of Hon. James Joseph, Undersecretary of the Interior in Hearings on Alaska Natural Resource Issues Before the Senate Comm. on Energy and Natural Resources, 95th Cong., 1st sess. (Pub. No. 95-64, 1977) at 102 (hereinafter, Alaska Natural Resource Issues), Regulations governing NPRA are found at 43 C.F.R. 2360 (1977) and 42 F.R. 28721, June 3, 1977,

[11]42 U.S. C. 6504(a). Provision for the continued operation of the South Barrow gasfield is at 42 U.S.C. 6504(e).

'[z]Public Law 94-258, section 105, 90 Stat. 305, 42 U.S.C. 6505.

'[3]42 U.S.C. 6244.

[14]42 U.S.C. 6505.

[15]Id.

[16]Public Law 94-258, section 105(c), 90 Stat. 306, 42 U.S.C. 6505: "(l) The Secretary of the Interior shall establish a task force to conduct a study to determine the values of, and best uses for, the lands contained in the reserve, taking into consideration (A) the natives who live or depend upon such lands, (B) the scenic, historical, recreational, fish and wildlife, and wilderness values, (C) mineral potential, and (D) other values of such lands. (z) Such task force shall be composed of representatives from the government of Alaska, the Arctic Slope Native community, and such offices and bureaus of the Department of the Interior as the Secretary of the Interior deems appropriate, including, but not limited to, the Bureau of Land Management, the United States Fish and Wildlife Service, the United States Geological Survey, and the Bureau of Mines. (3) The Secretary of the Interior shall submit a report, together with the concurring or dissenting views, if any, of any non-Federal representatives of the task force, of the results of such study to the Committees on Interior and Insular Affairs of the Senate and House of Representatives within 3 years after the date of enactment of this title and shall include in such report his recommendations with respect to the value, best use, and appropriate designation of the lands referred to in paragraph (l), "

[17]42 U.S.C. 6502.

[18]Id.

[19]See 43 CFR 2361.2 (1977), See also 43 CFR 2800.

[20]43 U.S.C. 1601,

'lExecutive Office of the President, Energy Policy and Planning, Decision and Report to the Congress on the Alaska Natural Gas Transportation System, Sept. 22, 1977 (hereinafter "Decision"), pi.

[22]Hanrahan and Gruenstein, Lost *Frontier: the Marketing* of *Alaska*, 125 (1977).

[23]Id.

[24]The three companies were the Atlantic Richfield Company, Humble Oil and Refining Company (now EXXON Corporation), and British Petroleum Ltd. They filed an application with the Department of the Interior on June 6, 1969. After the lease sale, the following companies became partners in TAPS: Standard Oil of Ohio, Phillips Petroleum, Union Oil and Amerada Hess. TAPS formally incorporated as the Alyeska Pipeline Service Company, Inc.

[25]See generally, Mary Clay Berry, The *Alaska Pipeline*; The Politics *of Oil* and Native Land Claims, 102 to 123 (1975). The land freeze was imposed in 1966 by Secretary of the Interior Stewart Udall and formalized by Public Land Order 4582, 34 F.R. 1025, Jan, 17, 1969, The new Secretary of the Interior, Walter Hickel, agreed to honor the freeze for 2 years in order to allow congressional action on the Native claims issue. However, under pressure from the oil companies and the State of Alaska, Secretary Hickel set up a task force

to expedite planning and approval of the TAPS request and successfully negotiated with House and Senate Committees to obtain their consent to the TAPS waiver.

[26]See Public Land Order 4760, 35 F.R. 424, Jan, 7, 1970. See also Berry, supra, note 25 at 116 to 118.

[27]These villages are Stevens, Rampart, Bettles, Minto, and Huslia-Hughes. The village chiefs had earlier negotiated with the pipeline consortium for a waiver of Native objections to the pipeline route based on land claims in exchange for an understanding by TAPS to contract with Native-owned firms and firms willing to employ Natives. When TAPS announced some of its contract awards in January 1970 that did not include Native firms, the Natives sued. See Bryan Cooper, Alaska-The Last Frontier, at 203 to 205 (1973). See also Berry, supra note 25 at 116-120. The five villages brought suit in Federal District Court in Washington, D. C., to enjoin the Department of the Interior from approving the pipeline right-of-way. Four of the five actions were dismissed. But in March 1970, a restraining order was issued on behalf of Stevens Village temporarily barring the issuance of a right-of-way for 20 miles covered by village claims located near the planned Yukon River pipeline crossing. In Native *Village of Allakaket* v. *Hickel,* Civ. No. 706-70 (D. D. C., Oct. 18, 1972), the District Court enjoined construction of the pipeline across Native lands.

[28]Wilderness Society v. *Hickel,* Civ. A. No. 928-70; The plaintiffs were the Wilderness Society, the Environmental Defense Fund, and Friends of the Earth.

[29]*Wilderness* Society v. *Hickel,* 325 F. Supp. 422 (D.D.C. 1970).

[30]ANSCA extinguished all Native land claims based upon aboriginal title or use, 43 U.S. C. 1703, and provided that there could be no State or Native land selections along any utility and transportation corridor withdrawn for the pipeline, 43 U.S.C. 1716(c).

[31]*Wilderness Society* v, Morton, 3 ELR 20583, 4 ERC 1101. In order to expedite appeals, there was never a reported decision accompanying the order lifting the injunction.

[32]Wilderness Society v. Morton, 479 F. 2d 842 (D.C. Cir. 1973).

[33]411 Us. 917 (1973).

[34]An Act t. Amend Sec. 28 of the Mineral Leasing Act of 1920 and to Authorize a Trans-Alaska Oil Pipeline and for other purposes, Public Law 93-153, 87 Stat. 576, Nov. 16, 1973.

[35]Public Law 93-153, section 101, 87 Stat. 576, 30 U.S.C. 185. Section 28(d) of the Mineral Leasing Act of 1920, 30 U.S.C. 185(d), as amended by Public Law 93-153, section 101,87 Stat. 576.

[36]Section 28(d) of the Mineral Leasing Act of 1920, 30 U.S.C. 185(d), as amended by Public Law 93-153, section 101,87 Stat. 577 (1973].

[37]30 U.S.C. 185(a), as amended by Public Law 93-153, section 101, 87 Stat. 576 (1973). See also 30 U.S.C. 185(b)(l), as amended, 87 Stat. 577 (1973).

[38]30 U.S.C. 185(b)(l), as amended, 87 Stat. 577 (1973).

[39]30 U.S.C. 185(h)(2), as amended, 87 Stat. 578 (1973).

[40]30 U.S.C. 185(j), as amended, 87 Stat. 579 (1973).

[41]30 U.S.C. 185(P), as amended, 87 Stat. 580 (1973).

[42]30 U.S.C. 185(s), as amended, 87 Stat. 582 (1973). The report called for by this section was submitted to the Congress on July 1,1975. Department of the Interior, Bureau of Land Management, *The Need for a National System of* Transportation and Utility Corridors.

[43]Section 201, Public Law 93-153.87 Stat. 584 (1973).

[44]43 U.S. C, 1652(d).

[45]Id.

[46]43 U.S.C. 1653(a)(l) establishes strict liability for incidents involving the pipeline. 43 U.S.C. 1653(c)(1) establishes strict liability for oilspills from vessels loaded with oil transported through the pipeline. 43 U.S.C. 1653(c)(2) imposes strict liability for oil pipeline incidents.

[47]See 43 U.S.C. 1653(a)(2) and 43 U.S.C. 1653(c)(2).

[48]43 U.S. C. 1653(c)(4) establishes the fund; 43 U.S. C. 1653(c)(5) levies the 5 cents per barrel tax.

[49]43 U.S.C. 1655.

[50]The State of Alaska received Federal aid for the construction of the haul road with the understanding that the road would become part of the State highway system. If the haul road is not opened to public use, Alaska might have to repay some $24 million for construction of the Yukon River bridge, $1.5 million for construction surveillance, and $2.8 million worth of gravel from Federal lands. Gov. Jay S. Hammond, North *Slope Haul* Road Policy Statement and Background, September 1976.

[51]Section 407, Public Law 93-153, 87 Stat. 591, 43 U.S.C. 1608.

[52]FPC Docket No. CP 74-239.

[53]FPC Docket No. CP 75-96.

[54]The Alcan application was filed after FPC administrative proceedings had commenced on the other two applications in FPC Docket No. 75-96 et al. The decision by Administrative Law Judge Nahum Litt was issued on Feb. 1, 1977.

[55]Public Law 94-586, 90 Stat. 2903, Oct. 22, 1976,15 U.S.C. 719 et seq.

[56]15 U.S. C, 719c(a)(1).

[57]15 U.S.C. 719c(b)(1).

[58]Federal Power Commission, Recommendation to the President: *Alaska* Natural Gas Transportation System, May 2, 1977.

[59]15 U.S.C. 719e(a).

[60]15 U.S.C. 719d(d). Council on Environmental Quality, Report, July 1, 1977. Another report was prepared by an Interagency Task Force under the lead of the Department of the Interior.

[61]15 U.S.C. 719e(a)(4)(D).

'executive Office of the President, Energy Policy and Planning. Decision and Report to *Congress on the Alaska* Natural Gas Transportation System, Sept. 22, *1977.*

[63]15 U.S.C. 719 f(a).

[64]15 U.S.C. 719 f(d)(2).

[65]Public Law 95-158, Nov. 8, 1977. For background on the Alaska National Gas Pipeline decision, see S. Rept.

95-567, 95th Cong., 1st sess. (1977). Many of the reports called for in Public Law 94-586 are reprinted in Senate Comm. on Energy and Natural Resources, Decision and Report to Congress on the Alaska Natural Gas Transportation System, 95th Cong., 1st sess. (Comm. Print 95-56, 1977).

[66]15 U.S.C. 719h(b)(1).

[67]15 U.S. C. 719h(a).

[68]15 U.S.C. 719h(b)(2).

[69]15 U.S.C. 719h(c)(1).

[70]15 U.S.C. 719h(c)(3).

[71]15 U.S.C. 719g(a)(1).

[72]15 U.S.C. 719g(a)(2).

[73]15 U.S.C. 719g(b).

[74]15 U.S.C. 719g(c).

[75]15 U.S.C. 719g(c), 15 U.S. C. 719g(e).

[76]15 U.S.C. 719g(c), 15 U.S.C. 719g(d).

[77]30 U.S.C. 185(p).

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6

Federal Land Planning and Environmental Laws

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The passage of the National Environmental Policy Act of 1969[1] (NEPA) marked the beginning of a new era of increased Federal concern for environmental quality. The Act set forth general Federal environmental policy goals, made environmental quality the concern of all Federal agencies, and by instituting certain "action-forcing mechanisms," fundamentally altered the Federal decision-making process. The most important action-forcing mechanism is the requirement that an environmental impact statement (EIS) be prepared for "major Federal actions significantly affecting the quality of the human environment.

Unlike environmental laws such as the Clean Air Act, NEPA does not establish any specific Federal environmental standards.[3] It does require Federal departments and agencies in implementing their policies and programs to use all practical means to improve and coordinate agency plans, functions, programs, and resources in order to protect and preserve the environment. While NEPA imposes no direct specific restraints on access to non-Federal minerals, it nevertheless has a substantial indirect influence, since Federal land management agencies must comply with NEPA in the administration of all program responsibilities. The agencies have developed administrative procedures for the consideration of applications for rights-of-way and other permits for the use of Federal lands that involve a thorough environmental impact review process. Land management agency regulations provide that applicants for rights-of-way and other permits may be required to pay the costs of preparing an EIS.[4]

There are three major components to the Act: the declaration of broad national policy goals; the enumeration of specific actions to be implemented by Federal agencies; and the establishment of the Council on Environmental Quality (CEQ) in the Executive Office of the President, to coordinate agency implementations and to formulate and recommend national environmental policy.

BROAD POLICY GOALS OF NEPA

Section 101(a) of NEPA provides "that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations . . . to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Amer-

Note: Footnotes for this section appear on pp. 150-152.

icans."[5] This broad policy is to be carried out as "the continuing responsibility of the Federal Government" through means "consistent with other essential consideration of national policy."[6] This policy was further modified by the express statement that the "goals and policies" set forth in NEPA "are supplementary to those set forth in existing authorizations of Federal agencies."[7] Within these constraints, agencies are to use all practicable means so that the Nation can:[8]

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

MANDATORY AGENCY ACTION

To further the broad environmental policy established in NEPA, Congress directed that, "to the fullest extent possible the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act."[9] Congress also mandated that all Federal agencies utilize a review process that assures consideration of environmental values in their policy planning and decisionmaking.[10] The EIS was established as part of the basic decisionmaking apparatus of the Federal departments and agencies. While accomplishment of the broad environmental policies and goals proclaimed in NEPA is secondary to other agency program authorities and responsibilities, the requirements of the EIS process are direct and mandatory.

All Federal agencies in the conduct of their functions, programs, planning, and policies are required by NEPA to:

a. Utilize a "systematic interdisciplinary approach" integrating natural and social sciences and environmental design arts in planning and decisionmaking.[11]
b. Develop means of ensuring that presently unquantified environmental amenities and values will be given appropriate consideration in decisionmaking along with economic and technical considerations.[12]
c. Include a detailed EIS in "every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment. " When preparing an EIS, the responsible agency must consult with other Federal agencies and solicit and include views of those agencies as well as State and local agencies, The statement must be made available to the President, to CEQ, and to the public and it must accompany the proposal through the existing agency review process .[13]
d. Study and describe "appropriate alternatives to recommended courses of action" for any proposal that involves unresolved conflicts concerning alternative uses of available resources.[14]
e. Lend support to programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankinds' world en-

vironment, where consistent with U.S. foreign policy .[15]

f. Make available to State and local governments and the public, information and advice useful in restoring, maintaining, and enhancing environmental quality .[16]

g. Initiate and utilize ecological information in planning and developing resource-oriented projects .[17]

h. Assist CEQ.[18]

NEPA requires Federal agencies to consider environmental factors, along with traditional technical and economic factors, in the planning process. Case-by-case analysis of proposed agency actions ensures that environmental consequences are considered before action is taken.

The action-forcing mechanisms impose operational duties that compel agencies to consider and implement the general purposes of the Act. By requiring that agencies prepare a detailed environmental statement, conduct systematic and interdisciplinary review, and consult with other agencies and seek public comment on proposed actions, these action-forcing mechanisms have changed the charnels and processes of administrative planning, decision, and review. They open the decisionmaking process to the full spectrum of agencies and individuals that might be affected by the proposed actions. Public participation ensures that all issues and competing considerations are aired and balanced.

THE COUNCIL ON ENVIRONMENTAL QUALITY

The Council on Environmental Quality was established within the Executive Office of the President by Title II of NEPA.[19] The CEQ is composed of three members appointed by the President with Senate approval. It serves as a resource, research, and advisory body to the President on environmental matters. The Office of Environmental Quality in the Executive Office of the President was established by the Environmental Quality Act of 1970[20] to provide professional and administrative support for the CEQ.

Under an executive order,[21] the President has assigned CEQ the responsibility to issue guidelines for the preparation of environmental statements required by section 102(2)(c) of NEPA.[22]

These CEQ guidelines are implemented by the specific guidelines and regulations pertaining to compliance with NEPA that have been adopted by individual Federal agencies. The courts have held that "because CEQ does not have the statutory authority to prescribe regulations governing compliance with NEPA, CEQ guidelines are merely advisory."[23] The standard for judicial review of whether agency actions satisfy NEPA requirements is whether the actions comply with the agency's own regulations and the requirements of section 102(2)(c).

WHEN AN EIS IS REQUIRED

The preparation of an EIS is only required for a Federal action that the agency determines is "a major Federal action significantly affecting the human environment."[24] The identification of major actions that significantly affect the quality of the human environment is the responsibility of each Federal agency and is to be carried out against the background of its own particular operations.

NEPA requires a case-by-case determination of whether a given agency action requires preparation of an EIS. The initial inquiry must ascertain whether the proposed action is a "major Federal action significantly affecting the human environment. " If so, the impact assessment process is begun. This involves consideration of the environmental consequences of the proposed action. The words "major" and "significantly" are intended to imply a degree of importance and impact that must be met before a statement is required .25

"Major Federal actions" include not only actions directly undertaken by Federal agencies, but also Federal decisions to approve, fund, or license activities that will be carried out by others. CEQ guidelines provide that Federal "actions" include but are not limited to:

1. Recommendations or reports relating to or leading to legislation and appropriations;
2. Projects and continuing activities
   —Directly undertaken by Federal agencies; or
   —Supported in whole or in part through Federal contracts, grants, subsidies, loans, or other forms of funding assistance; or
   —Involving a Federal lease, permit, license, certificate, or other entitlement for use; and
3. The making, modification, or establishment of regulations, rules, procedure, and policy .[26]

There must be sufficient Federal control and responsibility over the action that causes the impact for it to constitute a Federal action. Such Federal control and responsibility are not present in cases such as the distribution of general revenue-sharing funds to States and localities.[27] In determining whether or not an EIS is required, CEQ guidelines direct agencies to view the cumulative impacts of the proposed action and of further actions contemplated. The guidelines advise that an EIS be prepared in all instances where a "cumulatively significant" impact on the environment may reasonably be expected from the Federal action, or where the proposed action is expected to generate "highly controversial" environmental impacts.[28]

Finally, the action must be one that significantly affects the quality of the human environment either by directly affecting human beings or by indirectly affecting them through adverse effects on the environment. Such adverse significant effects include those that degrade the quality of the environment, curtail the range of its beneficial uses, and serve short-term environmental goals to the disadvantage of long-term ones.[29]

There has been extensive litigation on the question of whether particular actions are major actions that significantly affect the human environment. It is difficult to specify which actions will invoke the application of NEPA. The courts have generally interpreted the term "major action," liberally .30

As originally written, NEPA applied to all Federal agencies. However, Congress and the courts have established a number of exceptions to this mandate. Congress has exempted the Environmental Protection Agency (EPA) from the requirements of NEPA when it is taking action under the Clean Air Act,[31] and when it is issuing pollution discharge permits (except those for new sources) under the Federal Water Pollution Control Act Amendments of 1972.[32] The courts have ruled that EPA was not required to prepare a NEPA statement for an action under the Federal Insecticide, Fungicide, and Rodenticide Act[33] where the procedures the agency followed were the functional equivalent of the NEPA process.[34] EPA has generally contended that it is exempt from NEPA on the grounds that the Act is aimed at development agencies and not at environmental protection agencies .35

WHEN AN EIS MUST BE PREPARED

The courts have frequently addressed the question of when, during the decisionmaking process, an EIS must be prepared. The decisions have generally held that the EIS must be prepared at the earliest practical point in time.[36] One court stated that, ideally, an EIS should be prepared late enough in the development process to contain meaningful information, but early enough so that this information can practically serve as an input in the decisionmaking process.[37] Early preparation is deemed essential to assure that the comprehensive review and objective analysis intended by the Act will be responsibly carried out. If preparation of the EIS were al-

lowed to take place after planning was well underway, desirable alternatives might already be foreclosed, a fully objective analysis would not be possible, and opportunities to make alterations that minimize environmental costs would be lost.

The draft EIS is the vehicle by which the requirement for early public notice is met. The CEQ guidelines state the necessity for the earliest possible preparation:

> Agencies should keep in mind that such statements are to serve as the means of assessing the environmental impact of proposed agency action, rather than as a justification for decisions already made. This means that draft statements on administrative actions should be prepared and circulated for comment prior to the first significant point of decision in the agency review process.[38]

But preparation of the draft is not the first step in the environmental review process. Under the present system, an agency first makes an assessment of a proposed action to determine whether or not an EIS is required. If an agency decides that an EIS is required, it often publishes a notice of its intent to prepare one in the Federal Register. If more than one agency is directly involved in the proposed action, the agencies may select a "lead agency" to assume supervisory responsibility in the preparation of the EIS. If an agency decides that a proposed action is not a major action that will have sufficient significant impact on the quality of the human environment to require the processing of an EIS, it would issue a "negative declaration."[39] Negative declarations are generally not issued as formal documents or published in the Federal Register.

The agency then prepares a draft EIS on the proposed action. The draft statement must fulfill and satisfy, to the fullest extent possible, the requirements of a final EIS as set out in section 102(2)(c), as well as the agency's own regulations on the preparation of an EIS. CEQ guidelines provide that a draft EIS should contain a "detailed" description of:[40]

1. The proposed action, its purposes, and a description of the affected environment;
2. The probable environmental impacts of the proposed action including positive and negative, primary and secondary, and direct and indirect consequences of the action;
3. Any probable unavoidable adverse environmental effects from the implementation of the proposal;
4. Possible alternatives to the proposed action, including the abandonment or postponement of the proposal, as well as any possible alternatives that may be within the jurisdiction of another agency; and an evaluation of the benefits and environmental impacts of each alternative;
5. The relationship between local short-term uses of the environment and enhancement of long-term productivity including an analysis of any tradeoffs and losses associated with the proposed action, and also the extent to which further alternative uses may be foreclosed. (Both short- and long-term uses must be considered in assessing the environmentally significant consequences of a proposed action.);
6. Any irreversible and irretrievable commitments of resources that would be involved in implementation, and the extent to which the proposal curtails the range of potential uses of the environment;
7. The relationship of the proposed action to Federal, State, or local land use plans, policies, and controls for the affected area (such as those prepared under the Clean Air Act, Clean Water Act, or Federal land management laws), and a statement of how the agency has reconciled any conflict with such plans, or the reasons for proceeding with the proposed action despite the conflict; and
8. Other Federal policy interests and considerations that offset or mitigate the adverse environmental consequences of the proposed action.

Each EIS should be prepared in accordance with the statutory directive that agencies "utilize a systematic, interdisciplinary approach which will insure the integrated use of natural and social sciences and environmental design arts in planning any decision which may have an impact on man's environment."[41]

PUBLIC PARTICIPATION

The EIS is a public disclosure document. As such, it is intended to provide a full and candid presentation of the environmental factors along with other pertinent information on proposed Federal actions. The EIS is a tool to aid in the decision process. It acts to ensure that the environmental consequences and all possible alternative approaches to a particular project, including its abandonment, are considered before action is taken. An EIS must be presented clearly enough to be understood by an informed layman, yet it must contain sufficiently detailed data to provide technical information for interpretation by specialists.

By compelling a formal, detailed statement of the anticipated environmental impacts and a description of alternatives, NEPA provides evidence that the mandated decisionmaking process has, in fact, taken place; and, most importantly, allows those removed from the initial process to evaluate and balance the factors on their own.[42]

Federal agencies must take full responsibility for the preparation of an EIS. They cannot simply accept documentation from an applicant for a permit, license, grant, or other Federal aid. Statements and environmental information submitted by applicants must be independently evaluated. The responsibility for the impact evaluation, scope, and content of the draft and final statements rests with the agency. Public Law 94-83[43] amended NEPA to provide that if certain conditions are satisfied, an agency may delegate EIS preparation to a State agency or to an official for a major Federal action funded under a program of grants to States (primarily Federal-aid highways). There must be a specified level of Federal participation and guidance in the impact assessment process, an independent evaluation of the EIS prior to approval and adoption by the agency, notification of any other States or Federal land management entities that could be affected by the proposed action or alternative, and a written statement of any disagreements about the impacts described in the EIS. The chief effects of the amendment are to validate the policy of the Federal Highway Administration that requires States to prepare EISs for Federal-aid highway projects, and to overturn Federal court decisions that State-prepared EISs were legally insufficient under NEPA.

Once a draft statement is prepared, it is circulated for review and comment from the public and from those Federal, State, and local agencies that have expertise or jurisdiction relevant to the action under consideration.[44] A period of 90 days is usually allowed for comment. Notice of the availability of the draft EIS is published in the Federal Register and may also appear in local newspapers. A public hearing may be held on a draft EIS, but this usually occurs only when a hearing on the proposed action is required under other statutes or existing agency procedures.

By requiring an agency to seek out the views of appropriate Federal, State, and local officials and of the public, NEPA opens the decisionmaking process to those who may be affected by the action. This ensures that issues, competing considerations, and environmental consequences, which might otherwise be overlooked or ignored by agency officials, will be aired and given due consideration. Public comment on a draft EIS not only must be sought out but also must be weighed by the agency in preparing the final version of the EIS. The final EIS must be responsive to the issues and questions raised by Government agencies and the public.

One case interpreting this requirement held that:

> . . . officials must give more than cursory consideration to the suggestions and comments of the public in the preparation of the final impact statement. The proper response to comments which are both relevant and reasonable is to either conduct the research necessary to provide satisfactory answers, or to refer to those places in the impact statement which provide them. If the final impact statement fails substantially to do so, it will not meet the statutory requirements.[45]

After a complete consideration of all comments and any additional information received, the agency then prepares a final EIS. This accompanies the proposal for action through the decisionmaking process, which varies enormously from agency to agency. The final EIS contains, in addition to the required sections described in the discussion of the draft EIS, a description of coordination with other agencies, responses to issues and questions raised in the draft review process, and identification of any unresolved issues .[46]

NEPA AND JUDICIAL REVIEW

Agency compliance with the requirements established by NEPA is subject to judicial scrutiny. Although the Act does not contain a provision specifically authorizing judicial review or enumerating judicial remedies, the courts have uniformly held that injunctive relief will be granted to plaintiffs who demonstrate that the requirements of the Act have not been met. A leading case states:[47]

> Injunction is the vehicle through which the congressional policy behind this chapter can be effectuated, and a violation of this section in itself may constitute a sufficient demonstration of irreparable harm to entitle a plaintiff to blanket injunctive relief.

In addition, defects in the environmental impact process may be used as the basis for a challenge to agency action—implementation of the proposal discussed in the EIS—under the Administrative Procedure Act.[48] That Act provides authority to set aside any agency action that is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.

The Scope of Review

The mere preparation of a document discussing environmental impacts is not sufficient to render agency action immune to judicial review. The courts will look both at the contents of the document and at the use to which it is put. In Calvert Cliffs' Coordinating Committee, Inc. v. AEC, the court of appeals rejected the notion that the preparation of a document which accompanied agency files through the decisionmaking process, but which was in no way used in that process, would be sufficient .[49]

In the Gillham Dam case,[50] it was held that "at the very least, NEPA is an environmental full-disclosure law. " On appeal, the Eighth Circuit found it "clear that the Act is more than an environmental full-disclosure law," and that it was "intended to effect substantive changes in decisionmaking."[51]

There has been considerable litigation concerning the compliance with the procedural requirements that section 102 places on agencies. Almost without exception, the courts have held that agencies are required to make the fullest effort possible to comply with section 102 in every detail. The definition of "major Federal action" is expansive.[52] Agencies have been required to begin preparation of the statement early in the decisionmaking process.[53] Responsibility for preparation and review is placed squarely on the Federal agency, not on other interested parties.[54] Extensive discussion of the environmental costs,[55] the environmental impacts,[56] and the possible alternatives has been required.[57]

The development of case law relating to the substantive review of statements, or agency actions based on statements, has been less complete. The term substantive review has two differing, but closely related, meanings in NEPA cases. It can refer to the action of a court in assessing, on its own, the validity of an EIS and the conclusions contained therein. It can also refer to judicial review based on

the premise that NEPA, particularly section 101, imposes substantive requirements on an agency that go beyond the procedural requirements of section 102. In practice the two have gone together.

In Calvert Cliffs', the court indicated a willingness to reverse an agency decision involving a procedurally correct EIS if it could be shown that "the actual balance of costs and benefits struck was arbitrary or clearly gave insufficient weight to environmental factors."[58] In another early NEPA case, the impact statement was held inadequate because it consisted "almost entirely of unsupported conclusions."[59] However, diametrically opposite views have also been indicated by some courts:[60]

> Judicial review of the final environmental statement was limited to whether all five procedural requirements of this section [section **102]** were met, whether it constituted obvious good faith compliance with the demands of this section, and whether it contained a reasonable discussion of the subject matter involved in the five required areas.

While there has been no final disposition of this conflict by the Supreme Court, five circuit courts of appeals[61] have adopted a midway position. They found that section 101 of NEPA does impose substantive requirements on an agency and allows judicial review of whether those substantive requirements have been met. However, that review is limited to the traditional standards of determining whether the administrative action was "arbitrary, capricious, or an abuse of discretion." This position has been expressed as follows:

> In determining whether the substantive requirement of this section has been met, the reviewing court must first determine whether the agency acted within the scope of its authority, and next whether the decision reached was arbitrary, capricious, or otherwise not in accordance with law; in making the latter determination, the court must decide if the agency failed to consider all relevant factors in reaching its decision or if the decision itself represented a clear error of judgment.[62]

Another court described the judicial function in these words:

> The court's role under this section is not only to see that agencies have complied with all procedural requirements but also to engage in substantial inquiry to determine whether there has been a clear error of judgment; courts may delve into a decisionmaking process to determine if the decision was arbitrary and capricious when viewed in terms of the data and information supplied and set forth in the environmental impact statement.[63]

These decisions indicate that NEPA is to be more than an exercise in collecting information. Final agency decisions cannot be made in disregard of the information that is contained or should be contained in the impact statement.

Judicial Review and Delay

The EIS process and judicial review of agency compliance with NEPA have been cited as causing substantial delays in the Federal approval of mining-related applications, such as securing a right-of-way over Federal lands. It is claimed that the time spent in complying with NEPA adds to the cost of mining operations.

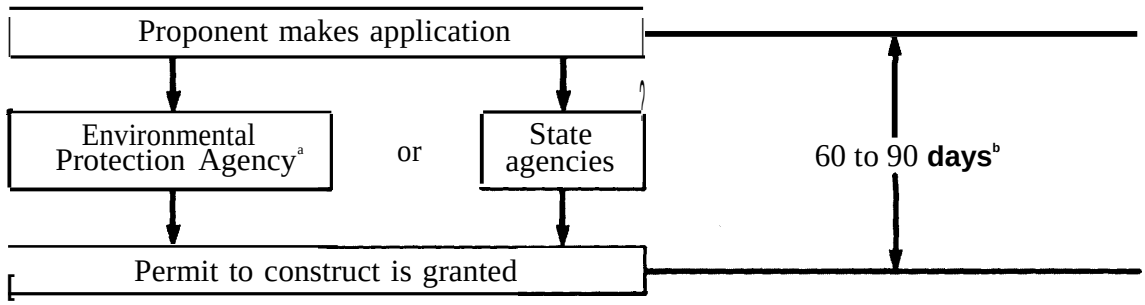
One industry spokesman[64] has estimated that the time involved in obtaining all environmental permits, where no Federal right-of-way is sought, is 60 to 90 days, at a minimum (figure 6). If a right-of-way across Federal lands is involved, he estimated that 36 to 44 months are required (figure 7).[65] These figures do not include any estimate of the time involved if the matter is subject to judicial review.

In 1976, CEQ published an analysis of Federal agency experience under NEPA.[66] CEQ surveyed 70 Federal agencies to determine the amount of time they took to prepare an EIS and the extent of NEPA litigation. (For Federal land management agencies, the results are shown in tables 5 and 6.)

The CEQ report observed:[67]

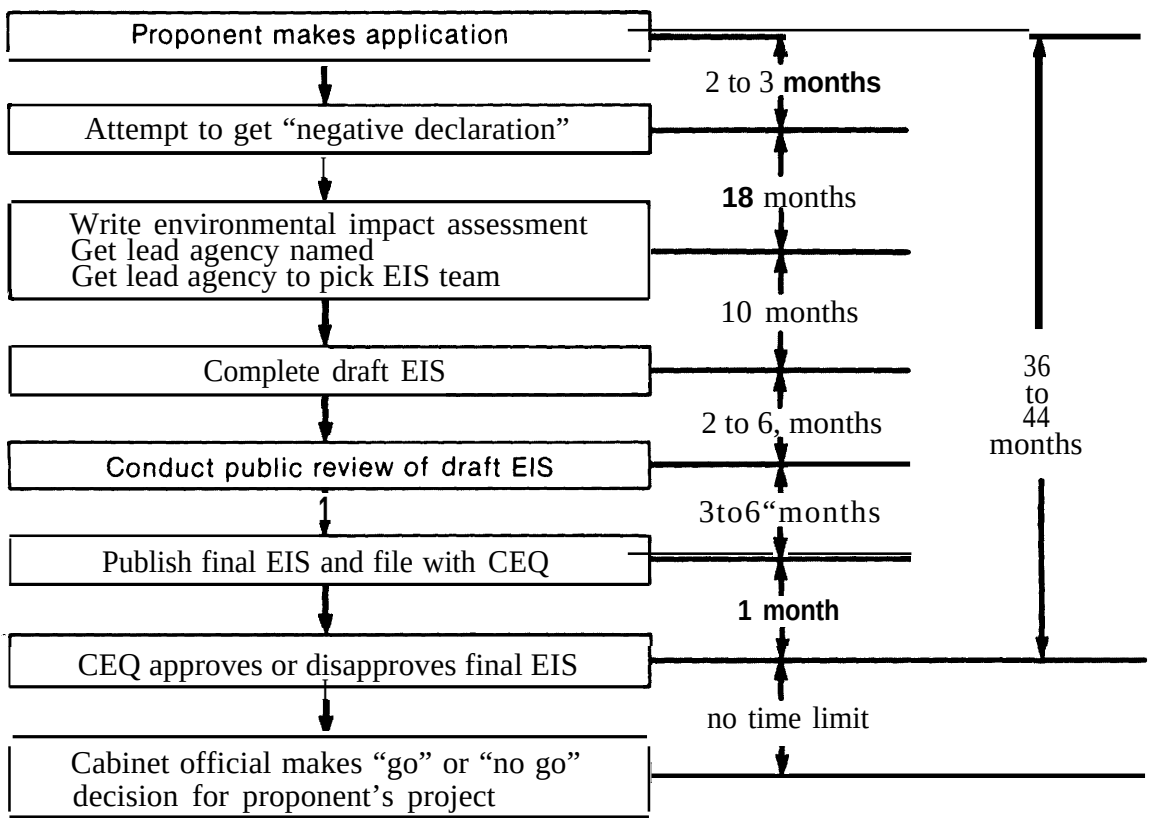
> There are three points in the EIS process when delays can occur—in preparing the

Figure 6.—Time Required to Get Environmental Permits if Proponent Owns the Site and No Federal Rights-of-Way Are Involved



[a]The Environmental Protection Agency may decide to write an environmental impact statement.
[b]Time span maybe longer if proponent's application is incomplete.
SOURCE: William R. Tipton, "Environmental Considerations in Project Management," Figure 1, *Journal of Metals,* May 1977, p. 18.

Figure 7.—Time Required to Get Environmental Permits if Federal Lands Are Involved



SOURCE: William R. Tipton, "Environmental Considerations in Project Management," Figure 2, Journal of Metals, May 1977, p. 19.

draft, in preparing the final after comments are in, and after issuance of the final. The time required to prepare a draft EIS differs from agency to agency and from project to project. The scope of a project, the experience of the people preparing the statement, the relationship of the EIS process to the decisionmaking process, and the priority accorded by the agency management to the statement and the project itself are all critical.

CEQ concluded in its annual report that, "There were substantial problems of delay in the early years of NEPA, but that they are diminishing as agencies improve their environmental expertise and begin impact statement preparation earlier in their planning and decisionmaking process."[68] It was recognized that there is a trend toward shorter times for preparation of draft and final EISs.

CEQ's most recent survey of agency experience with NEPA litigation puts some

Table 5.—Time Required for Draft EIS Preparation, Fiscal Year 1975 (in months)

		Minimum	Maximum	Average
Agriculture				
Forest Service	1	24		13
Interior	1	18		10
Bureau of Land Management	2	38		20
Fish and Wildlife Service	3	12		8
National Park Service	12	24		14

Average Time Between Filing of Draft and Final EISs, Calendar Year 1974 (in months)

Agriculture	
Forest Service	9.1
Interior	
Bureau of Land Management	5.7
Fish and Wildlife Service	19.8
National Park Service	13.0

SOURCE: CEQ, Environmental Impact Statements: An Analysis of Six Years Experience by Seventy Federal Agencies, 1976, at 29-30.

Table 6.—National Environmental Policy Act Litigation

Agency	Cases	Cases alleging EIS[a] needed	Cases dismissed	Cases dismissed no EIS needed	Cases dismissed alleging inadequate EIS	Injunction issued no EIS prepared	Injunction inadequate EIS	permanent injunction
Cases (as of June 30, 1976) completed								
Agriculture								
Forest Service	31	24	11	9	2	5	1	0
Interior								
Bureau of Land Management	11	5	1	3	1	0	0	0
Fish and Wildlife Service	4	3	0	0	0	0	0	0[b]
National Park Service	7	6	0	0	0	2	1	0
All Federal agencies (total)	527[c]	350	155	96	55	60	45	0
Cases (as of June 30, 1976) pending								
Agriculture								
Forest Service	23	13	0	0	0	3	3	0
Interior								
Bureau of Land Management	19	13	0	4	0	0	2	0
Fish and Wildlife Service	2	2	0	0	0	0	0	0
National Park Service	8	5	0	0	0	2	0	0
All Federal agencies (total)	399[d]	229	13	14	13	45	40	0

[a] Environmental impact statements
[b] Injunctions Which permanently halted the project
[c] Represents 444 actual cases The difference of 83 represents cases brought against more than one agency
[d] This figure represents 339 actual cases The difference of 60 represents cases brought against more than one agency
SOURCE CEO, *Environmental Quality 1977 Eighth Annual Report*, pp 125.128

perspective on problems stemming from delay associated with NEPA.[69] Since the enactment of NEPA,[70] CEQ found that 7,334 EISs had been filed and that there had been a total of 783 suits filed against Federal agencies alleging a violation of NEPA. In 479 cases, plaintiffs sought preparation of an EIS; in 288 cases, the adequacy of an EIS was challenged.

In the 6½ years covered, injunctions had been granted in 177 cases. In 547 cases that reached the courts, no injunctions were ordered. Of the 177 injunctions, 75 have lasted longer than 1 year (see table 7). CEQ characterizes delays caused by NEPA-related injunctions as follows:[71]

> This figure is less than 3 percent of the 7,334 actions for which impact statements were prepared and a much smaller proportion of the unknown-but very large—number of assessments made. . . . In no cases were actions stopped permanently solely because of a NEPA injunction. Although in a particular case, an injunction might cause considerable delay, the delays caused by NEPA injunctions are small when viewed against the whole spectrum of Federal activity.

Table 7.—Injunctive Delays of Federal Actions Under the National Environmental Policy Act (NEPA)

Injunctive action	Projects involved
Delayed by NEPA-related injunctions	
Up to 3 months	32
3 to 6 months	18
6 to 12 months	22
Over 12 months	75
Length of delay not indicated	30
TOTAL	177
Permanently halted by NEPA-related injunctions	0
Delayed by non-N EPA-related injunctions	20
No injunctions	547
Injunction status not indicated	39
TOTAL	783

CEQ identified 42 projects that were stopped after a NEPA challenge was brought (see table 8).[72]

Table 8.—Projects Canceled as a Result of National Environmental Policy Act (NEPA) Injunctions

Reason	Projects canceled
Local/State decision to halt a project involving Federal funds	12
Federal decision to halt a project	9
Part of a settlement agreement	6
Applicant withdrew	4
Injunction granted under another law	2
Congressional action	2
Local/State decision to proceed without Federal funds'	2
Judicial interpretation of another law	1
Deference to congressional desires	1
Presidential decision to halt a project	1
Local land use conflicts	1
Not indicated	1
TOTAL	42

'These two projects were continued on the local or State level, only the Federal funding was canceled

SOURCE CEO, *Environmental Quality—1977, Eighth Annual Report*, p 29

The CEQ survey does show that NEPA litigation delays are not as widespread as may sometimes be alleged. However, the small number of injunctions could be misleading. In some cases, settlements or agreements by a defendant agency may have the same delaying effect as an injunction (even though it is a delay that is justified under terms of the statute). Also, the small number of injunctions may not accurately reflect the number of individuals affected. NEPA actions involving broad agency programs such as the Federal coal leasing program, the Outer Continental Shelf leasing program, nuclear fuel reprocessing, and western grazing practices have affected hundreds, perhaps thousands, of applicants and potential applicants for Federal licenses and permits.[73]

What the CEQ data indicate clearly is that most NEPA challenges are and can be resolved in a reasonable period of time.

FOOTNOTE REFERENCES FOR NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

[1]Public Law 91-190, 83 Stat. 852, Jan. 1, 1970, as amended by Public Law 94-83, 89 Stat. 424, Aug. 9, 1975,42 U.S.C. 4321-4347.

[2]42 U.S.C. 4332(2)(C). See *Calvert* Cliffs' Coordinating Committee, Inc. v. U.S. Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971), cert. denied, 404 U.S. 942, for a discussion of the legislative history and intended effect of the requirement for an environmental impact statement. See also, Richard N. L. Andrews, "Impact Statements and Impact Assessment," in *Environmental Impact* Assessment (Marian Blisset, cd,), Engineering Foundation, 1975, at pp. 16-18.

[3]However, five circuit courts of appeals have explicitly adopted the position that NEPA imposes some substantive requirements on Federal agencies: *EDF* v. Corps *of* Engineers, 492 F.2d 1123 (5th Cir. 1974); *Conservation* Council v. *Froehlke*, 473 F.2d 664 (4th Cir. 1973); *Sierra* Club v. *Froehlke*, 486 F.2d 946 (7th Cir. 1973); *EDF* v. Corps *of* Engineers, 470 F.2d 289 (8th Cir. 1972); and *Calvert Cliffs' Coordinating Committee, Inc.* v. *AEC*, 449 F.2d I109 (D.C. Cir. 1971).

In *Calvert Cliffs*, the court stated its role in reviewing both procedural and substantive aspects of an agency decision:

> The reviewing courts probably cannot reverse a substantive provision on its merits, under section 101, unless it be shown that the actual balance of costs and benefits that was struck was arbitrary or clearly gave insufficient weight to environmental values. But if the decision was reached procedurally without individualized consideration and balancing of environmental factors—conducted fully and in good faith—it is the responsibility of the courts to reverse.

[4]See section 304(b) of the Federal Land Policy and Management Act of 1976, Public Law 94-579, 90 Stat. 2765, 43 U.S.C. 1734(b), which applies to the public lands and the national forests, See also, the regulations for the National Park Service and the Bureau of Land Management at 43 CFR 2802.1-2(a) (l); and for the Fish and Wildlife Service at 50 CFR 29. 21-22(a).

[5]42 U.S.C. 4331(a).

[6]Id.

[7]Section 105,42 U.S.C. 4335.

[8]Section 101(b), 42 U.S.C. 4331(b).

[9]Section 102(1), 42 U.S.C. 4332(l),

[10]Section 102(2)(A), 42 U.S.C. 4332(2)(A).

[11]Id.

[12]Section 102(2)(B), 42 U.S.C. 4332(2)(B).

[13]Section 102(2)(C), 42 U.S.C. 4332(2)(C).

[14]Section 102(2)(E), 42 U.S.C. 4332(E). This section was originally section 102(2)(D) and is so referred to in many court cases on NEPA; however, Public Law 94-83 added a new subparagraph (2)(D) and redesignated subparagraphs (D) to (H) as (E) to (1) respectively.

[15]Section 102(2)(F), 42 U.S.C. 4332(2)(F).

[16]Section 102(2)(G), 42 U.S.C. 4332(2)(G).

[17]Section 102(2)(H), 42 U.S.C. 4332(2)(H).

[18]Section 102(2)(I), 42 U.S.C. 4332(2)(I).

[19]Public Law 91-190, Title H, section 202, 83 Stat, 854, 43 U.S.C. 4342.

[20]Public Law 91-224, 84 Stat, 114, Apr. 3, 1970, 42 U.S.C. 4372-4374.

[21]E.O. 11514,35 F.R. 4247, Mar. 5, 1970.

[22]CEQ guidelines are at 40 CFR 1500.

[23]*Greene* Countyv.FPC,455F.2412 (2d Cir. 1972).

[24]42 U.S.C. 4332(2)(C).

[25]40 CFR 1500.6(c).

[26]40 CFR 1500.5,

[27]40 CFR 1500.6(c).

[28]40 CFR 1500.6(a].

[29]40 CFR 1500. 6(b).

[30]Courts have found some of the following to be "major actions:" a Federal loan guarantee for a 16-story building, Goose *Hollow* Foothills League v. *Romney*, 334 F. Supp. *877* (D.Ore. 1971); approval of a branch bank location, *Billings* v. Camp, 4 E.R.C. 1744 (D.D.C. 1972);

[31]15 U.S.C. 793(c)(l).

[32]33 U.S.C. 1371(c)(1).

[33]7 U.S.C. 135 et seq.

[34]EDF v. EPA, 489 F.2d 1247 (D.C. Cir. 1973).

[35]The original CEQ guidelines for EIS preparation also adopted this interpretation: "Because of (NEPA's) legislative history, environmentally protective regulatory actions concurred in or taken by the EPA are not deemed actions which require preparation of an EIS under section 102(2](c) of the Act. " Section 5(d), 36 F.R. 7724, Apr. 23, 1971.

[36]See *Calvert Cliffs'* coordinating *Committee, Inc.* v. *AEC*, 449 F.2d 1109 (D.C. Cir. 1971); National Resources *Defense* Council v. *Morton, 458* F.2d 827 (D.C. Cir. 1972); Scientists' Institute *for Public Information* v. *AEC*, 4811 F.2d 1079 (D.C. Cir. 1973).

[37]Scientists *Institute for Public Information* v. *AEC*, 481 F.2d 1079 (D.C. Cir. 1973),

[38]40 CFR 1500. 7(d)(2).

[39]The CEQ guidelines say little about negative declarations, concentrating rather on the requirements for finding the existence of a major action. Agencies are required to notify CEQ when they have made a negative declaration for a proposed action (i) which is of the sort that the agency has previously identified as generally requiring an EIS, (ii] which is similar to actions for which it has prepared a significant number of statements, or (iii) which the agency has previously announced would be the subject of an EIS, or concerning which the agency had received a request from CEQ to prepare a statement. The agency is also required to prepare a publicly available record briefly setting forth the determination and explaining it. CEQ will periodically publish in the *Federal* Register a list of such declarations. 40 CFR 1500.6(e),

[40]The requirement that a draft EIS "fulfill and satisfy to the fullest extent possible at the time the draft is prepared the requirements established for final statements by section 102(2)(c)" is found at 40 CFR 1500.7(a). Specific requirements for the contents of any EIS are found at 40 CFR 1500.8.

[41]Section 102(2)(A), 42 U.S.C. 4332(2)(A).

[42]*Calvert Cliffs' Coordinating* Committee, *Inc.* v. *AEC,* 449 F.2d 1109 at (D.C.Cir. 1971).

[43]Public Law 94-83,89 Stat. 424, Aug. 9, 1975.

[44]CEQ provides a list of "Areas of environmental impact and Federal agencies and Federal-State agencies with jurisdiction by law or special expertise to comment thereon" in appendix I to 40 CFR part 1500. Procedures for soliciting comments from State and local agencies are governed by OMB Circular No. A-95, see appendix IV to 40 CFR part 1500.

[45]*Lathan* v. *Volpe,* 350 F. Supp. 262, at 265 (W.D. Wash. 1972).

[46]40 CFR 1500. IO(a).

[47]EDF v. *Froehlke,* 477 F.2d. 1033 (8th Cir. 1973). However, while courts have held that injunctive relief is appropriate under NEPA, they have applied the traditional tests that apply in all civil cases to applications for injunctions. Plaintiffs seeking injunctive relief must show (1] that they are likely to prevail on the merits; (2) that they will suffer irreparable damage if the injunction is not issued; and (3) that the public interest supports granting the injunction. See Conservation Council *of* North Carolina v. *Costanzo,* 528 F.2d. 250 (4th Cir. 1974); EDF v. Armstrong, 352 F. Supp. 50 (D. Col. 1972), supplemented, 356 F. Supp. 131, aff'd, 487 F.2d. 814, cert. denied, 416 U.S. 974, rehearing denied, 419 U.S. 1041.

"Codified at 5 U.S.C. 551-59, 701-06, 13o5, 31o5, 3344,6362, 7562.

[49]*Calvert Cliffs'* Coordinating Committee, Inc. v. *AEC,* 449 F.2d 1109 (D.C. Cir. 1971).

[50]Environmental Defense Fund v. Corps *of* Engineers, 325 F. Supp. 749 (E.D. Ark. 1971).

[51]1 Environmental *Defense* Fund v. Corps *of* Engineers, 470 F.2d 289, (8th Cir. 1972).

[52]"This section was designed to cover almost every form of Federal activity." *Chelsea* Neighborhood Associations v. U.S. *Postal* Service, 516 F.2d 378 (2d Cir. 1975). See also, Union *Mechling* v. U. S., 390 F. Supp. 391 (D. Pa. 1971) and Hardy v. *Mitchell,* 460 F.2d 640 (2d Cir. 1972).

[53]" Federal officials are entitled to "dream out loud" without filing an impact statement; however, a statement is required when a proposal moves beyond the "dream" stage into some form of tangible response." Sierra *Club* v. Morton, 514 F.2d 856 (D.C. Cir. 1975), rev'd on other grounds, 427 U.S. 390. "Environmental impact statement should be prepared at the earliest time prior to implementation of proposed major Federal action, so that alternative courses of action with less severe environmental consequences can be considered." Friends *of* the Earth v. Coleman, 518 F.2d. 323 (9th Cir. 1975).

[54]"This section does not permit the responsible Federal agency to abdicate its statutory duties by reflexively rubberstamping an environmental impact statement prepared by others; the agency must independently perform its reviewing, analytical and judicial functions and participate actively and significantly in the preparation and drafting process." Sierra *Club* v. *Lynn,* 502 F.2d. 43 (6th Cir. 1974). See also, City *of* Davis v. Coleman, 521 F.2d. 661 (9th Cir. 1975).

[55]" Detailed environmental impact statement must cover environmental costs which may be avoided." Montgomery v. *Ellis,* 364 F. Supp. 517 (D. Ala. 1973).

[56]" "To carry out the statutory mandate of this section, every relevant environmental effect of a project must be given consideration in the environmental impact statement." Sierra *Club* v. Morton, 510 F.2d. 813 (5th Cir. 1975). "Environmental impact statement should discuss all significant primary environmental effects and all substantial secondary environmental effects." *Life of* the Land v. *Volpe,* 363 F, Supp. 1171 (D. Hawaii 1972), aff'd, 485 F.2d 460.

[57]" It is absolutely essential to the process under this section that the decisionmaker be provided with a detailed and careful analysis of the relative environmental merits and demerits of the proposed action and possible alternatives." National Resources *Defense* Council v. *Calloway, 524* F.2d 79 (2d Cir. 1975).

[58]*Calvert Cliffs',* supra, note 2.

[59]*Environmental Defense* Fund v. *TVA,* 339 F.Supp. 806 (E.D. Tern. 1972).

'National Helium Corp. v. Morton, 486 F.2d 995 (10th Cir. 1973).

[61]See, supra, note 2.

[62]*Environmental* Defense Fund v. *Corps of* Engineers *470* F.2d 289 (8th Cir. 1972).

[63]*Cape Henry* Bird *Club* v. *Laird, 359* F. Supp. 404 (D. Va. 1973), aff'd, 484 F.2d 453.

[64]William R. Tipton, "Environmental Considerations in Project Management," *Journal* of Metals, May 1977.

[65]Tipton'sestimatesdo not include any provision for environmental impact reviews where the applicant owns the site and no Federal rights-of-way are involved, Tipton posits that there is no Federal role in this transaction at all, hence no NEPA application, It should be noted, however, that 15 States have enacted comprehensive statutes similar in many respects to NEPA, 4 States have administrative or executive orders requiring environmental reviews, and 7 States have special or limited EIS requirements. See Environmental *Quality—1977,* The Eighth *Annual Report* of the Council on Environmental Quality, 1977, pp. 130-35, (hereafter "Environment—1977"). Therefore, in some States, the permit review process might come to resemble more closely the Federal process even if no Federal rights-of-way are involved.

[66]Environmental Impact Statements: An Analysis *of* 6 Years Experience by 70 Federal Agencies, Council on Environmental Quality, March 1976.

[67]Id. at 28.

[68] *Environmental Quality—1976,* The Seventh *Annual* Report *of* the Council on Environmental Quality, 1976, p. 123.

[69] *Environment—1*977, pp. 122-129.

70 Figures in this survey were for the period ending June 30,1976.

[71] *Environment—1977,* pp. 123, 129,

[72] 1d. at 129.

[73] **The** purpose of this paragraph is not to argue the merits of the cases mentioned or to imply that the delays indicated were environmental, but merely to point out that 177 injunctions do not translate into only 177 individual projects. Challenges to generic programs can have widespread effects.

SECTION 4(f) OF THE DEPARTMENT OF TRANSPORTATION ACT OF 1966

The Department of Transportation (DOT) Act of 1966[1] consolidated various Federal transportation agencies and programs into a single new department. One of the stated purposes of the reorganization was the adoption of the national land preservation policy that a "special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."[2] To implement this policy, section 4(f) of the DOT Act, as amended,[3] imposes specific limitations on the authority of the Secretary of Transportation to approve Federal expenditures for projects that would use such lands. Section 4(f) provides:

> It is hereby declared to be the national policy that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. After August **23, 1968,** the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of National, State, or local significance as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of National, State, or local significance as so determined by such officials unless (1] there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.[4]

Section 4(f) has three components: it affirms the national policy to preserve public park, refuge, and recreation lands and historic sites; it directs the Secretary to develop transportation plans in cooperation with the States and the Departments of Housing and Urban Development, the Interior, and Agriculture to enhance and maintain the lands traversed by transportation projects; and, most importantly, it imposes direct and explicit restrictions on the authority of the Secretary to approve federally funded programs or projects that would use any of these lands of National, State, or local significance unless there is no prudent and feasible alternative and all possible planning has been included to minimize harm.

Section 4(f) has far-reaching implications for the availability of Federal funds for transportation projects that might be needed to develop mineral resources, not only because it may restrict the approval of projects on certain Federal lands for transportation purposes, but also because it limits the use of State, local, and some private lands. Section 4(f) and a virtually identical provision, section 138 of Title 23, U. S. C., the Federal-Aid Highway Act, as amended,[5] were passed in response to the recognized tendency on the part of some Federal, State, and local officials to appropriate public park, recreation, and refuge lands and historic sites for highway construction and other transportation projects in order to avoid the disruption and difficulties associated with use of built-up areas. A 1976 amendment to section 138 added the following provision expanding the Secretary's transportation planning responsibilities for Federal-aid highways:

> . . . In carrying out the national policy declared in this section the Secretary in cooperation with the Secretary of the Interior and appropriate State and local officials, is authorized to conduct studies as to the most feasible Federal-aid routes for the movement of motor vehicular traffic through or around national parks so as to best serve the needs

Note: Footnotes for this section appear on p. 159.



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of the traveling public while preserving the natural beauty of these areas.[6]

TRANSPORTATION PROJECTS COVERED BY SECTION 4(f)

The provisions of section 4(f) are applicable to federally funded transportation programs and projects under the jurisdiction of the Secretary of Transportation. Section 138 applies only to Federal-aid highway projects.[7] The Federal-aid highway program, which is administered by the Federal Highway Administration (FHWA) of DOT, provides Federal funds for a percentage of the costs of the planning, design, and construction of highways in the interstate, primary, secondary, and urban systems.[8] Ninety percent of the costs of interstate highways and seventy percent of the costs of other roads are reimbursed to States from Federal funds, primarily the Highway Trust Fund.

Other federally aided transportation programs may be subject to 4(f) review as well, if use of protected lands is involved. These include, for example, programs for construction, expansion, and maintenance of railroads, airports, and aviation and navigation aids. Extension of the Alaska Railroad, which is operated by the Federal Railroad Administration, may be subject to 4(f) restrictions if a proposed route made use of protected lands. Because of the magnitude of Federal funding of State highway programs, the primary impact of section 4(f) has been on highway and road construction projects.

For section 4(f) to apply, the project must be federally funded. Transportation projects that are entirely financed by State, local, or private funds are not subject to 4(f) restric-

tions.[9] These restrictions do not apply to the Federal funding of State and local planning processes and agencies, which may result in a proposal to use park land, since planning is not a program or project requiring use of such lands within the meaning of section 4(f). '0 Section 4(f) is a limitation on the authority of the Secretary of Transportation and thus would not generally apply to approval and construction of roads and other transportation projects on rights-of-way on Federal lands (national parks, refuges, forests, and public land), which are within the jurisdiction of the Secretaries of the Interior and Agriculture, if no DOT funds are involved.

PROTECTED LANDS

The purpose of section 4(f) is to protect "public park and recreation lands, wildlife and waterfowl refuges, and historic sites" from the environmentally destructive effects of transportation projects, by directing the Secretary of Transportation to deny the use of Federal funds for projects requiring the use of these lands, in all but the most unusual circumstances. Lands that are protected by section 4(f), must meet certain statutory requirements. First, except for historic sites,[11] the lands must be owned by the Federal, State, or local government. Second, the lands must be designated or used as a park, recreation area, refuge, or historic site. Third, the lands must have National, State, or local significance as determined by the appropriate Federal, State, or local officials. If these requirements are satisfied, then the Secretary may not approve any program or project requiring their use unless he finds (1) that there is no feasible and prudent alternative route, and (z) that the program includes all possible planning to minimize harm to the protected lands. Prior to any such approval, the Secretary must conduct a review of possible alternative routes and plans based on the best available information; this process is known as 4(f) review.

The provisions of section 4(f) clearly apply to components of the National Park System and the National Wildlife Refuge System. Section 4(f) would also seem to apply to components of the National Wilderness Preservation System and the National Wild and Scenic Rivers System that are not managed as part of the park or refuge systems because of the designated purposes of these systems—recreation and preservation. In the case of other Federal lands that are subject to multiple-use classification, such as the National Forest System and public lands managed by the Bureau of Land Management (BLM) and the Bureau of Reclamation, section 4(f) would not apply if the portion of lands to be taken for a transportation project is not actually being used for park, recreation, wildlife, waterfowl, or historic purposes, and there is no definite formulated plan for such use.[12] As an additional assurance of protection, the managing agency's land use determination is subject to review by the Secretary for its reasonableness.[13] Thus, it cannot be assumed that BLM-public lands and forest system lands are automatically not subject to 4(f) review. Public land or forest areas used for recreation, wildlife protection, and historic sites as well as areas that may be under study for potential designation as wilderness areas or Wild and Scenic Rivers System components may require 4(f) review, but for the most part, many of these lands will not require 4(f) review. Moreover, even protected national park, refuge, wilderness, and wild and scenic rivers areas may not require 4(f) review, if the appropriate land manager determines that they do not have National, State, or local significance. This determination of nonsignificance must be independently reviewed by the Secretary of Transportation or his designate.[14]

Lands owned by State and local governments are subject to section 4(f) if they are designated as public parks, recreation areas, wildlife or waterfowl refuges, or historic sites.[15] If the lands are managed for multiple uses and have not been officially designated to these protected categories, they will fall within the ambit of section 4(f) if, in the judgment of the official having jurisdiction over the lands,[16] they are actually used for such

purposes. This land use determination is subject to independent review by the Secretary for its reasonableness. Publicly owned lands, which are neither designated nor used for park, refuge, recreation, or historic purposes, are not subject to 4(f) review and approval.

Historic sites that are listed or eligible for inclusion in the National Register of Historic Places are protected by section 4(f) whether or not they are publicly owned. An historic site that is not listed or eligible for the register, is nevertheless protected if the appropriate Federal, State, or local official determines that it has National, State, or local significance.[17] FHWA regulations for treatment of historic sites require that FHWA and State officials apply National Register Criteria to all possible historic sites within the area of potential environmental impact at the earliest possible stage of planning or consideration.[18] Historic sites that are not listed or eligible for the National Register and that are not determined to possess National, State, or local significance are not subject to 4(f) review and approval. The Secretary or his designate must review the nonsignificance determination for its reasonableness.

In order to invoke 4(f) review and protection, Federal, State, and locally owned park, refuge, recreation lands, and historic sites must be found to have National, State, or local significance. The determination of significance is to be made by the officials that have jurisdiction over the lands concerned. Any determination of nonsignificance is subject to review for its reasonableness.[19] If no determination is made by the appropriate official, then the lands are presumed significant for administrative proceedings and any subsequent judicial review. This presumption is based on the national policy of giving the protection of these areas paramount importance.[20]

OVERTON PARK

In 1971, the U.S. Supreme Court interpreted section 4(f) in Citizens to Preserve Overton Park, Inc. v. Volpe.[21] That case was a citizens' suit to enjoin expenditure of Federal funds for the construction of an interstate highway through a city park in Memphis, Tern., on the grounds that the Secretary of Transportation, in his approval of the project, had failed to satisfy the requirements of section 4(f). The district court had granted summary judgment denying the citizens' claim. The denial was based on an interpretation that 4(f) was merely advisory and the Secretary's action was, therefore, discretionary and subject only to narrow judicial review.

The Supreme Court never ruled on the merits of the decision by the Secretary. The case record, reflecting the summary judgment granted by the district court, did not disclose sufficient information on which to base a decision on the merits. The Court did, however, interpret the statute in some detail and clearly set forth the standards for judicial review.

The Court found that the Secretary's decision was subject to judicial review through suits by citizens groups or other aggrieved individuals, under section 701 of the Administrative Procedure Act,[22] since it held that there was no statutory provision restricting review of such decisions and the matter was not a subject committed to agency discretion, thus rejecting the district court's interpretation of the statute. The limitation on judicial review of matters committed by law to agency discretion under the Administrative Procedure Act, applies only in those rare instances where "statutes are drawn in such broad terms that there is no law to apply."[23] In implementing section 4(f), the Court found that the Secretary of Transportation clearly had law to apply .[24]

The Court held that section 4(f) and section 138 are "clear and specific directives" that provide that the Secretary shall not approve expenditures of Federal funds for any program or project requiring the use of any public parklands unless (1) there is no feasible and prudent alternative to the proposed use and (2) the project includes all possible

planning to minimize harm from such use. The Court stated, "This language is a plain and explicit bar to the use of Federal funds for construction of highways and other transportation projects through parks; only the most unusual situations are exempt."[25] The Court further noted that the passage of sections 4(f) and 138 marked congressional rejection of the contention that factors of cost, directness of route, community disruption, and other competing uses should be weighed on an equal basis with the preservation of park land.

> But the very existence of these statutes indicates that protection of park land was to be given paramount importance. The few green havens that are public parks were not to be lost unless there were truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reached extraordinary magnitudes. If the statutes are to have any meaning, the Secretary cannot approve the destruction of park land unless he finds that alternative routes present unique problems .26

Because section 4(f) strictly limited the Secretary's actions and imposed specific preconditions on the approval of transportation projects that use park land, the Court found that the Secretary's decision was subject to full judicial scrutiny. Affidavits issued in support of the administrative decision for litigation purposes were found not to be a sufficient record of the factors weighed in the 4(f) decision. The Court did not hold that the Secretary is required to make formal findings of fact in a 4(f) review, but it stated that the record must disclose the factual basis to support his actions and demonstrate administrative compliance with the requirements of 4(f).[27] In response to the Court's ruling on the inadequacy of the administrative record, DOT-FHWA regulations now require the preparation of a special 4(f) statement whenever 4(f) lands are to be used in a highway project.[28]

The Court also defined the term "feasible and prudent alternative" and the factors that may properly be considered under each. A feasible alternative route is a route that is based on sound engineering practices.[29] Considerations of cost, delay, and community dislocation are not appropriate factors in the determination of feasible alternative routes, but climate, topography, geology, and technological restraints do relate to feasibility. To find that there is no feasible alternative route, the Secretary must find that, as a matter of sound engineering, the highway or other project could not be constructed along any other route.[30]

A prudent alternative route is one that presents no unique problems.[31] For an alternative route to be imprudent it must have truly unusual features so that the costs or community disruption would reach "extraordinary magnitudes."[32] High costs, delay, dislocation of homes and businesses, and other factors commonly associated with highway and other transportation construction are not so unusual or extraordinary as to render an alternative, which resulted in such effects, an imprudent route.

In addition to a finding that there is no feasible or prudent alternative route, section 4(f) requires, as a precondition to approval of a route using park land or other protected areas, that the project include "all possible planning to minimize harm from such use. " Thus protective measures, which may add to costs of the project or impose delay, may not be rejected because of difficulties involved, since such problems do not render the measures impossible, and the protection of parks, refuges, recreation areas, and historic sites is to be given predominance over other factors. Considerations of cost, delay, and disruption are factors relating to the prudence of a particular alternative route and not to the issue of the adequacy of planning for a route using 4(f) land.

THE 4(f) STATEMENT

To provide a basis for 4(f) review and a record of the various factors and alternatives considered, DOT-FHWA regulations require

that a 4(f) statement be prepared for projects or programs that would require use of protected lands within the scope of section 4(f) or section 138. The purpose of the 4(f) statement is to document the consideration, consultations, and alternative studies carried out in determining that there are no feasible and prudent alternatives to the use of protected lands, and to support a determination that the proposed action includes all possible planning to minimize harm.[33] The statement is to be coordinated with the Federal, State, or local agency having jurisdiction over the land, with the Departments of the Interior and Housing and Urban Development, and where appropriate, with the Department of Agriculture.[34]

DOT-FHWA regulations on preparation of EISs under the National Environmental Policy Act (NEPA) require that an EIS be prepared whenever a 4(f) statement is required. An EIS is required for any major Federal action significantly affecting the environment. The regulations list, among major actions, "a project that warrants a major action classification because it has been given national recognition by Congress. . . . Such a project would be one that falls under section 4(f) of the DOT Act . . "[35] The regulations also provide that "an action that has more than a minimal effect on properties protected under section 4(f) of the DOT Act" is to be considered as an action "significantly affecting the human environment."[36] Both the EIS and the 4(f) statement are to be prepared during the location stage of highway development, prior to the selection of a particular location.[37] The 4(f) statement may be prepared in coordination with the EIS and may be either a structurally independent section of the EIS or a separate document.[38] The 4(f) statement normally will accompany the final EIS through the decision process.[39]

The 4(f) statement should list the factors used to judge that each alternative is not feasible and prudent along with the special measures planned to minimize harm to the protected land.[40] Each statement should present a full and complete description of the proposed project, the 4(f) lands to be used, and the the recreational, historic, wildlife, and environmental characteristics of the surrounding community, plus the potential effects on existing facilities and land users.[41]

Accurate and detailed information must be included to support the determination that there is no feasible or prudent alternative. "Supporting information should demonstrate that there are unique problems, truly unusual factors present, and evidence that the cost or community disruption resulting from such routes reaches extraordinary magnitudes."[42]

The statement must also include the "best available information" on measures to minimize harm to section 4(f) land from highway construction. Examples of such measures include replacement of or compensation for lands taken, improvement of remaining lands and facilities, design features to reduce the effects of such use, construction of substitute facilities prior to destruction or taking of 4(f) lands, and conducting scheduled demolition, moving, and construction activities during the off-season.[43] Finally the statement should include a summary of the coordination with other Government agencies, and copies of comments received during agency review and their disposition.[44]

In order for the Secretary to approve use of lands protected by section 4(f) and section 138, he must find that there is no feasible and prudent alternative to their use and that all possible planning has been done to minimize harm. There must be consideration of alternative routes and plans, all of which must be found to be neither prudent nor feasible. Considerations of cost, disruption, and delay bear on the determination of prudence but they are not to be given equal status with the national policy on preservation of park and other lands. Only the most unusual circumstances will justify approval of a route through park land. Any statement proposing use of 4(f) land must include all possible planning to avoid environmental harm before it may be approved. Cost, delay, and disruption are all factors relating to the prudence of the

route and not to the issue of planning. The review of alternative routes and plans, coordination with other agencies, and factors leading to the approval of use of protected lands must be documented in a 4(f) statement.[45] Only after the substantive and procedural requirements of 4(f) have been satisfied may the Secretary approve Federal expenditures for construction of the project.

FOOTNOTE REFERENCES FOR SECTION 4(f)

'Public Law 89-670, 80 Stat, 931, Oct. 15, 1976, 49 U.S.C. section 1651 et seq.

[2]49 U.S.C. section 1651(b)(2).

[3]49 U.S.C. section 1653(f).

'Id.

'Through several amendments, section 138 is now substantially identical to section 4(f): Public Law 89-574, section 15, 80 Stat. 771, Sept. 13, 1966, as amended by Public Law 90-495, section 18(a), 82 Stat. 823, Aug. 23, 1968, and Public Law 94-280, Title 1, section 124,90 Stat, 440, May 5, 1976,

'Public Law 94-280, Title 1, section 124, 90 Stat, 440, May 5, 1976,23 U. S. C., 138.

[7]See note, "Protecting Public Parkland from Indirect Federal Highway Intrusion, " 62 Iowa Law Review 960 [1977) at 963, n. 31.

'The routes for Federal-aid highways are designated by State or local officials subject to approval by the Secretary of Transportation, 23 U.S.C. 103, 23 U.S.C. 317, 23 U.S.C. 103(f). The State of Alaska is heavily dependent on Federal funds for the construction of surface transportation facilities as are other States. In FY 1976, the Department of Transportation provided over $113 million for the construction or repair of surface transportation facilities in Alaska. It is doubtful that the State of Alaska would make any large expenditures for surface transportation facilities without Federal support. H. D. Scougal, Alaskan Commissioner of Highways, "Highway Status for 1976, Plans for 1977," *Alaska* Construction and Oil, January 1977, p. 51.

'See Citizens *for Food* and Progress, *Inc.* v. *Musgrove,* 397 F. Supp. 397 (D. Ga. 1975), and Named *Indiv.* Members *of* the San Antonio Conservation Society v. Texas Highway Dept., 496 F.2d 1017, at 1022-23 (5th Cir. 1974], cert. denied, 420 U.S. 296 (1975).

[10]*Hill* v. *Coleman,* 399 F. Supp. 194 (D. Del. 1975).

[11]23 CFR section 771.19(b). See also, Thompson v. Fugate, 347 F. Supp. 120 (E.D. Va. 1972), *Daly v. Volpe,* 350 F. Supp. 252, 256 (W.D. Wash, 1972), aff'd mem., 514 F.2d 1106 (9th Cir. 1975).

[12]23 CFR 771.19(d).

"Id.

[14]23 CFR 771.19(c).

I[5]Citizens Environmental **Counsel v.** *Volpe,* 365 F. Supp. 286 (D. Kan. 1973), aff'd, 484 F.2d, 870, cert. denied, 416 U.S. 936.

[16]23 CFR 771,19(d),

[17]23 CFR 771.19(b).

[18]23 CFR 771.20.

"23 CFR 771. 19(c).

[20]*Arlington Coalition* on Transportation v. *Volpe,* **458** F.2d 1323 (4th Cir. 1972), cert. denied, 409 U.S. 1000,

[2']401 U.S. 402 (1970).

[22]5 U.S.C. 701.

[23]401 U.S. 410, citing, S. Rept. 752, 79th Cong. 1st sess. 16 (1945).

[24]401 Us. 4110

"Id.

[26]Id. at 412,413,

[27]Id. at 408.

[28]23 CFR 771.19.

[29]401 U.S. 411, In Brooks v. Coleman, 518 F.2d 17, 19 (9th Cir. 1975), the Ninth Circuit interpreted feasibility to require a tested engineering method and held infeasible a proposed method that had never been tried in the United States. See also, Monroe County Conservation *Council* v. *Volpe,* 472 F.2d 693 (2d Cir. 1972).

[30]401 Us. 411.

[3']401 U.S. 413,

[32]Id.

[33]23 CFR 771,19(a).

[34]23 CFR 771.19(g).

[35]23 CFR 771.9(d)(7),

[36]23 CFR 771. IO(e)(i).

[37]23 CFR 771.5(b). FHWA regulations divided highway development into four stages: (1) System Planning Stage—regional analysis of transportation needs and the identification of transportation corridors; (2) Location Stage—from the end of system planning through the selection of a particular location; (3) Design Stage—from the selection of a particular location to the start of construction; and (4) Construction. 23 CFR 795.2(e).

[38]23 CFR 771. 19(f). See also, Stop H-3 Ass 'n. v. Coleman, 533 F.2d 434 (9th Cir. 1976).

[39]23 CFR 771.19(n).

[40]23 CFR 771. 19(f).

[41]23 CFR 771.19(i).

[42]23 CFR 771.19(]).

[43]23 CFR 771.19(k).

[44]23 CFR 771.19(n).

[45]*D. C. Federation of Civic* Associations v. *Volpe,* 459 F.2d 1231 (D.C. Cir. 1972), cert. denied, 405 U.S. 1030.

ENDANGERED SPECIES ACT OF 1973

The Endangered Species Act[1] provides for Federal identification of endangered and threatened species of fish, wildlife, and plants; prohibits private activity that imperils such species; and requires Federal agencies to avoid any activities that would jeopardize such species or result in the destruction of critical habitats. In its restriction on Federal activities, particularly land use decisions relating to critical habitats, the Act could have an effect on access to mineral resources.

ENDANGERED SPECIES

The Act sets forth the following purposes:

> . . . to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.[2]

The Secretary of the Interior, in consultation with the Secretary of Commerce, is directed to promulgate regulations identifying endangered species and threatened species.[3] An endangered species is defined in the Act as:

> . . . any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this chapter would present an overwhelming risk to man.[4]

A threatened species is defined as:

> . . . any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.[5]

The determination of whether a particular species of fish, wildlife, or plant is endangered may be based on any of the following factors:

1. The present or threatened destruction, modification, or curtailment of its habitat or range;
2. Overutilization for commercial, sporting, scientific, or educational purposes;
3. Disease or predation;
4. The inadequacy of existing regulatory mechanisms; and
5. Other natural or manmade factors affecting its continued existence.[6]

The determination must be on the basis of "the best scientific and commercial data available" to the Secretary after appropriate consultation with affected States, interested persons and organizations, interested Federal agencies and, for foreign species, consultation with affected nations. Summaries of comments received on the proposal to add or remove a species from the endangered species list are published in the Federal Register.

PROHIBITED ACTS

The Secretary of the Interior is authorized to issue "such regulations as he deems necessary and advisable to provide for the conservation" of listed species. With respect to any listed endangered species it is unlawful to ". . . take any such species within the United States" or "upon the high seas," or to ". . . violate any regulation pertaining to such species or to any (listed) threatened species."[7] As used in the Act, "the term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."[8] Regulations issued or proposed pursuant to the Act are to be published in the Federal Register with a statement by the Secretary of the facts supporting the regulation and the relationship of such facts to the regulation.[9]

Note: Footnotes for this section appear on pp. 163-164.

Federal Actions

Section 7 of the Endangered Species Act requires that all Federal agencies take steps to ensure that their actions do not jeopardize the existence of endangered and threatened species.

> All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 1533 of this title and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical. '"

Thus, a Federal land management agency evaluating a proposed action (such as granting a right-of-way over Federal lands) must consider whether the action may harm an endangered or threatened species or detrimentally affect a critical habitat. The agency must consult with the Secretary of the Interior (primarily through the Fish and Wildlife Service) to determine whether any harm may result and what steps can be taken to avoid or lessen any risk to an endangered or threatened species or a critical habitat.

In areas that are home to unique and endangered species, a consideration of the potential effects a proposed action might have and of the conditions necessary to safeguard the protected species in compliance with the Act could impose substantial and additional constraints on a Federal land management agency's issuance of rights-of-way across Federal areas. In other areas where there are few or no endangered species, the compliance requirements would have a lesser, if any, effect on the actions of Federal land management agencies.

Section 7 of the Endangered Species Act of 1973 has been interpreted by the courts as imposing a duty on all Federal agencies to ensure that their actions would not jeopardize the continued existence of any endangered or threatened species. Compliance with the section requires that all agencies must consider the effects, if any, a proposed action may have on an endangered or threatened species and must consult with the Secretary of the Interior in devising programs for the conservation of listed species. These duties are enforceable in court by a citizen's suit authorized by section Ii(g) of the Endangered Species Act.

Any agency that fails to satisfy the requirements of the Act in its consideration or approval of any action maybe enjoined from implementing the proposed action until the agency is in compliance.

Judicial review of the Endangered Species Act has centered on two questions: (1) Can the Secretary of the Interior, by disapproving of agency action with respect to an endangered or threatened species, veto such a project? and (z) Can a court permanently enjoin a project on the grounds that it violates the Act?

The first question has, apparently, been answered in the negative. In *National Wildlife Federation v. Coleman,* the fifth circuit held:

> However, once an agency has had meaningful consultation with the Secretary of the Interior concerning actions which may affect an endangered species the final decision of whether or not to proceed with the action lies with the agency itself, Section 7 does not give the Department of the Interior a veto over the actions of other agencies, provided that the required consultation has occurred. It follows that after consulting with the Secretary the Federal agency involved must determine whether it has taken all necessary action to insure that its actions will not jeopardize the continued existence of an endangered species or destroy or modify habitat critical to the existence of the species. "

In another case involving section 7, it was held:

> Consultation under section 7 does not require acquiescence. Should a difference of opinion arise as to a given project the responsibility for decision after consultation is not vested in the Secretary but in the agency involved.[12]

But having reached the decision that section 7 does not provide for a veto of projects by the Secretary of the Interior, both courts ruled that the decision of an agency to go ahead with a project that might present a risk to an endangered species was a proper subject for judicial review under the standards of the Administrative Procedure Act. That standard provides that an agency action may be reversed if it is found that an agency decision was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law."[13] It is the application of the last part of this test to agency actions which admittedly harm an endangered species, but are justified on other grounds, that remains a subject of controversy and judicial uncertainty.

In *Hill v. Tennessee Valley Authority* (TVA),[14] the celebrated case involving the halting of the $100 million Tellico Dam because its construction threatened the existence of the snail darter, the sixth circuit found that a decision to continue the project would be a "prima facie" violation of section 7 and, hence, unlawful.[15] The opinion seems to vigorously reject the notion that violation of the Act may properly be balanced against other benefits associated with the project:

> TVA concedes the existence of a predictable causal nexus between the impoundment of the Little Tennessee and the ultimate depletion of the snail darter population. This admission alone suffices to bring the affirmative action requirement of section 7 into play.[16]
>
> TVA claims to have done everything possible to save the snail darter, short of abandoning work on the dam. That alternative is deemed by TVA to be innately unreasonable. We do not agree. It is conceivable that the welfare of an endangered species may weigh more heavily upon the public conscience as expressed by the final will of Congress, than the writeoff of those millions of dollars already expended for Tellico in excess of its present salvageable value.[17]

The court accepted the opinion of the Department of the Interior that the Act was violated by an action which:

> . . . might be expected to result in a reduction in the number or distribution of the species of sufficient magnitude to place the species in further jeopardy, or restrict the potential and reasonable expansion or recovery of the species.[18]

It also indicated that, despite the lack of a veto power, the views of the Secretary of the Interior on the effect of an agency action were to be given great weight. After noting the lack of veto authority, the court stated, "However, his compliance standards may properly influence final judicial review of such actions, particularly as to technical matters committed by statute to his special expertise."[19]

On June 15, 1978, the Supreme Court affirmed the ruling of the sixth circuit in the Tellico Dam case.[20] In upholding the circuit court decision, the Supreme Court rejected TVA's arguments that the dam should be exempted from section 7. The Court dismissed the argument that Congress had exempted the dam from section 7 by implication because it had continued to appropriate funds after the snail darter was designated as an endangered species.[21] In response to TVA's argument that section 7 should be interpreted to allow the monetary value of the substantially completed project to be weighed against the "value" of the snail darter, the Court said:

> The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the Cost.[22]

The Court found that there was an "irreconcilable conflict" between the operation of the Tellico Dam and the explicit provisions of

section 7 and that in such circumstances the plain and unambiguous meaning of section 7 must prevail.

> Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as 'institutionalized caution. '[23]

The case of the notorious snail darter resulted in legislative action to amend section 7, even before the final decision in Hill was issued by the Supreme Court. In the final days of the 95th Congress, the Endangered Species Act was reauthorized under a compromise bill that set up a process for exempting some Federal projects that might harm a protected species or habitat.[24]

FOOTNOTE REFERENCES FOR ENDANGERED SPECIES ACT OF 1973

'Public Law 93-205, 87 Stat. 885, Dec. 28, 1973, as amended by Public Law 94-359, 90 Stat. 911 July 12, 1976, 16 U.S.C. 1531 et seq.

[2]16 U.S.C. 1531(b) These treaties include the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere,

[3]16 U.S.C. 1532(4).

[4]16 U.S.C. 1532(15).

[5]16 U.S. C. 1533(a)(l).

'16 U.S.C. 1533(b)(l).

[7]16 U.S.C. 1538(a).

[8]16 U.S.C. 1532(14).

'16 U.S.C. 1533(f)(3).

[10]16 U.S.C. 1537.

[11]*National Wildlife* Federation v. Coleman, 529 F. 2d 369 (5th Cir. 1976) cert. denied, 97 S. Ct. 489 (1976). *Hill* v. TVA, 549 F.2d 1064, 1071 (6th Cir. 1978) abstracts National *Wildlife* Federation v. Coleman as follows:

> The welfare of the Mississippi Sandhill Crane was threatened by the future construction of a 5.7-mile segment of Interstate Highway 1-10 scheduled to traverse the Crane's designated critical habitat. Only 40 Sandhill Cranes are known to exist. Based on the weight of the evidence, the Fifth Circuit reversed the district court's denial of injunctive relief and remanded the case with instructions that an injunction issue halting activities which might jeopardize the continued existence of the Mississippi Sandhill Crane or destroy or modify critical habitat. The injunction is to remain in effect until the Secretary of the Interior determines that modifications to the project will bring it into compliance with the Act.

In National *Wildlife* Federation v. Coleman, as in I-IiII, the Department of the Interior had objected to the agency decision to continue with a project.

[12]Sierra Club v. *Froehlke*, 534 F. 2d. 1289 (5th Cir. 1976). This case involved the alleged impact of construction of the Meramec Park reservoir by the Corps of Engineers on the Indiana bat. A request for injunctive relief was denied on the grounds that the Sierra Club had failed to meet its "burden of showing that the action of the Corps had jeopardized or would jeopardize the continued existence of the Indiana bat. " Id. at 1305.

[13]See Sierra *Club* v. *Froehlke*, 534 F.2d 1289, 1304.

[14]*Hill* v. Tennessee *Valley* Authority, 549 F.2d.1064 (6th Cir. 1977), The Tellico Dam—a concrete and earthfill dam near the mouth of the Little Tennessee River—was originally approved by Congress in 1966. It had been the subject of two previously unsuccessful court challenges under the National Environmental Policy Act alleging defects in the environmental impact statement. In August 1973, a University of Tennessee ichthyologist discovered a hitherto unknown species of fish, the snail darter (*Percina Imostoma tanasai)* thriving in the Little Tennesse River. It is a 3-inch, tannish, bottom-dwelling member of the perch family that feeds on freshwater snails. The river not only provides a full supply of food, but also, because it is free-flowing, maintains, through the aerating action of its rapidly moving currents, the high oxygen levels required to sustain this species. The snail darter's range appears to be wholly confined to a 17-mile stretch of the Little Tennessee. TVA searched approximately 70 rivers in Alabama and Tennessee without finding any more specimens of this species. The agency also attempted, unsuccessfully to transplant some specimens to a similar river.

On Nov. 10, 1975, the Secretary of the Interior designated the snail darter an endangered species, 50 CFR 17.11(i), 40 F.R. 4705 (Nov. 10, 1975). In April of 1976, the U.S. Fish and Wildlife Service designated river miles 0.5 to 17 as the critical habitat of the snail darter. 50 CFR 17.61, 41 F.R. 13926. The Tellico Dam, over 80 percent complete, was scheduled to have been completed in January 1977.

[15]*Hill* v. TVA, 549 F.2d. at 1069,1070.

[16]Id. at 107o.

[17]Id. at 1074.

[18]Id. at 1070. The Department of the Interior definition was set forth at 40 F.R. 17764 (1976).
[19]Id. at 1070.
[20]TVA v. Hill,—U.S.—, 98 S. Ct. 2279, 57 L. Ed 2117, 46 U. S.L.W. 4673.
[21]98 S. Ct. 2279, 2299.
[22]98 S. Ct. 2297.
[23]98 S. Ct. 2302.
[24]See Environmental Study Conference, Weekly Bulletin Wrapup Addendum, Oct. 16, 1978, at 3-4.

CLEAN AIR ACT

The Clean Air Act, as amended,' establishes a national program for the regulation of air pollution. The program is directed by the Environmental Protection Agency (EPA). State and local governments have primary responsibility for the prevention and control of air pollution at the source, subject to EPA review. Federal land management agencies and Indian tribes also play an important role in determining air quality control standards on Federal and Indian lands.

The Act applies to all areas, not just those suffering from extreme air pollution. Its effects are most strongly felt in areas at opposite ends of the clean air spectrum: those areas having the cleanest air and those where air pollution presents a danger to the public health. The latter areas—known as nonattainment regions—are under strict regulatory controls designed to reduce levels of air pollution. The former—generally called nondegradation regions—are affected by a statutory program for the prevention of significant deterioration (PSD) aimed at preserving the existing high air quality.

Mining activities, particularly those in the Western United States and Alaska, are likely to be affected by the PSD program because air quality in that part of the country is generally quite good. However, occasionally because of mining operations, some western areas are in nonattainment status. In addition, some mining operations and activities associated with mining, such as smelting and refining and fossil fuel electric generation, are major sources of air pollution and subject to regulation wherever located.

Regulation under the Clean Air Act is focused on the prevention and reduction of air pollution involving five so-called "criteria pollutants:" particulate, sulfur oxides, carbon monoxide, nitrogen dioxide, and photochemical oxidants.[2] These substances, which are known to adversely affect public health and safety, are common products of industrial, commercial, and transportation activities. Based on medical information, EPA has established national standards for the maximum allowable concentrations of these pollutants in air. "Primary standards" are set at levels necessary to protect the public health from the known adverse effects of these pollutants. More stringent "secondary standards" have been established for some of these pollutants to protect the public welfare from the known and anticipated adverse effects of a pollutant. The Clean Air Act sets forth an exact timetable by which all areas of the Nation are to meet primary standards for each pollutant; secondary standards are to be met on a more flexible schedule.

To achieve the statutory goal of reducing the presence of the criteria pollutants below the primary and secondary standards, the Clean Air Act authorizes a broad array of plans, programs, and regulatory actions. The major elements of the program are:[3]

- Establishment of national ambient air quality standards (NAAQS) for air pollutants known to pose a risk to the public health or welfare;
- Submission by the States of implementation plans to achieve and maintain Federal air quality standards;
- Review and approval of State implementation plans by the Administrator of EPA and issuance of regulations at the Federal level to remedy any deficiencies in State plans;
- Federal emission standards for major new industrial, commercial, and electric-generating facilities;
- State programs to monitor air quality, inspect facilities, and issue permits to limit emissions from major sources of pollution: and

Note: Footnotes for this section appear on pp. 177-181.

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- A program to prevent significant deterioration of air quality in areas that exceed Federal air quality standards for the criteria pollutants.

The regulations generated through these programs govern all sources of air pollution, including mining. Mining activities can be directly and indirectly affected by several different aspects of clean air regulation. A State Implementation Plan (SIP) may set emissions standards for new facilities or require existing facilities to abate present air pollution levels. Federal "standards of performance" have been promulgated for certain large industrial facilities, setting minimum requirements for the use of pollution control technology. Preconstruction review of new sources of pollution is required in both nonattainment and nondegradation areas; in nonattainment areas, new sources of pollution must use the most advanced pollution control technology available, in nondegradation areas, new sources, which would increase pollution beyond specifically stated limits, are flatly prohibited. New, as yet undefined requirements, will be placed on sources of pollution that affect visibility in national parks and wilderness areas.

It is difficult to predict the exact effect the Clean Air Act will have on mining activities or mineral access. Not only are the major impacts of air quality regulation highly site-specific, but the recently enacted Clean Air Act Amendments of 1977 made major changes in several areas that most directly affect the mining industry. In some instances, Federal regulations implementing those changes have not yet been put in final form. Changes in State regulatory programs, which flow from the amendments, will also take time to develop.

To understand the existing status of regulation under the Clean Air Act and the intent and likely impact of the 1977 amendments, it is necessary to have some background on the implementation of the Clean Air Act Amendments of 1970 and the problems which arose under that law.

IMPLEMENTATION OF THE CLEAN AIR ACT AND THE 1977 AMENDMENTS

The 1970 amendments to the Clean Air Act launched an ambitious program for the abatement of air pollution by 1977. Problems encountered in meeting this objective led to its major revision by the amendments of 1977.

The 1970 amendments to the Act expressed the intent of Congress that air quality standards should be adequate to protect the public health, that they should be inviolable and not subject to compromise, and that they should be met according to a timetable set forth in the Act. Compliance extensions granted to the automobile industry by EPA, and the 1973 energy crisis, which resulted in shortages of low-polluting fuels, contributed to delays in meeting the timetable. These problems were addressed in the Energy Supply and Environmental Coordination Act of 1974 (ESECA),[4] which further extended auto emission control deadlines, and mandated the increased use of coal and other domestic fuels by temporarily lowering the standards for certain industries and by extending implementation schedules.

Although, by 1975, some pollutant emissions had been reduced and some progress made nationwide in controlling air pollution, industrial growth and the proliferation of automobiles more than offset whatever improvements had been made. Moreover, new data indicated that pollutants from heavily contaminated areas were spreading to remote rural regions, and that air pollutants such as sulfates and sulfuric acid, for which there were no air quality standards, were beginning to present new health hazards. EPA reported that by 1977 only 91 of the Nation's 247 air quality control regions had achieved national primary air quality standards for all of the major regulated air pollutants.[5] The Council on Environmental Quality (CEQ) found that emissions from automobiles were increasing at a rate of 4.6 to 4.9 percent per year, and that emissions from stationary

sources were contributing progressively increasing proportions to the pollutant load in the ambient air. For example, the total nitrogen dioxide emissions from powerplants were increasing at an annual rate of 6.9 to 7.4 percent.' A study conducted for Congress by the National Academy of Sciences concluded that safety margins associated with ambient air quality standards were only marginally adequate; that about 40 million persons could be classified as susceptible to unhealthy air; and that an estimated 15,000 excess deaths were caused by air pollution annually, 4,000 of them directly attributable to automobile emissions.' Additional field tests conducted by individual States showed that damage linked directly to industrial pollution, which extended hundreds of miles beyond the sources of emissions, was reducing yields in forests and other crops in some regions by as much as 75 percent.

This last finding was particularly significant because the courts had interpreted the Clean Air Act as requiring the protection of air quality in areas that were cleaner than the national standards.' In response to the courts, the EPA promulgated regulations late in 1974, which developed a system for classifying areas with respect to allowable incremental pollution:[9] Class I areas, in which almost no increment was allowed; Class 11 areas, in which moderate increments were allowed; and Class III areas, in which increments to the national standard were allowed. Initially, all areas were classified as Class II.

The 1977 amendments to the Clean Air Act contained detailed provisions for the prevention of significant deterioration. Specified permissible increments of sulfur oxides and particulate were established. Certain Federal areas were immediately designated as Class I areas, where air quality was to remain virtually unchanged. All other clean air areas were designated Class II, thus allowing moderate industrial growth. The States may redesignate Class II areas as they deem appropriate, subject to procedures, such as hearings and consultation with Federal land managers, required in the Act.

Classification under the Clean Air Act is of particular concern to the mineral industry in Alaska and in the West, where there are vast areas where air quality meets or exceeds the national secondary standards, and where some large conservation units have been designated as mandatory Class I areas. There are certain other Federal land management units that may not be redesignated as Class III areas.

The 1977 amendments to the Clean Air Act also contain a new section dealing with pollution controls to achieve visibility goals for certain Federal areas where visibility has been identified as an important value. These areas are to be studied and any necessary measures taken to achieve the established visibility standards. In addition, the 1977 amendments extended the deadlines for meeting the EPA NAAQS from mid-1977 to December 31, 1982, for sulfur oxides, nitrogen dioxide, and particulate matter, and to December 31, 1987, for carbon monoxide and photochemical oxidants.

REGULATION UNDER THE CLEAN AIR ACT

Mining activities are governed by Title I of the Clean Air Act, which covers air pollution from stationary sources. Unlike Title 11 of the Act, which established Federal controls on automobile emissions, Title I operates through a series of regulatory strategies, some developed and enforced at the State level, some at the Federal level, and some within specialized local units of government with responsibility for air pollution control. Furthermore, under Title I, the type of regulation applied to nonvehicular sources of pollution lacks the exact and all-encompassing character of auto pollution regulation. Each automobile has a federally assigned exact emission limit it must meet, these limits are set forth years in advance and they are the

only air pollution requirements placed on autos.

Stationary sources[10] rarely have exact and foreseeable limits placed on them (new source standards of performance are an exception). Pollution restrictions are determined by the location of a source, by what other sources of pollution already exist in an area, by whether a source is new or old, by which criteria pollutant, if any, it emits and by whether an area is in either a nonattainment or a nondegradation region. Depending on the type of facility and its location, pollution regulations may be imposed by a State or local unit of government, by EPA, or by all three. On occasion, the emissions of one pollutant will be subject to a certain level of control, e.g., a requirement that emissions limitation technology be at least as good as that used anywhere in the country; and the emissions of another pollutant will be controlled under a totally different regimen or effectively uncontrolled.

Mineral access is affected by several important elements of the clean air regulatory program. These include: the establishment of NAAQS of performance; prevention of significant deterioration; restrictions on nonattainment areas; and the visibility program. Each of these will be discussed below. Where appropriate there will be discussion of the roles of Federal land managers in pollution control and in analysis of State and local regulation in Alaska. All section references are to the Clean Air Act.

NATIONAL AIR QUALITY STANDARDS

Section 109 provides for the development of national air quality standards for major pollutants. Two types of ambient air quality standards are designated:

1. Primary standards, which establish the level of air quality necessary with an adequate margin of safety to protect human health.
z. Secondary standards, which establish levels necessary to safeguard values pertaining to public welfare including plant and animal life, visibility, buildings, and materials.

National ambient air quality standards have been established for the following pollutants: carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, hydrocarbons, and photochemical oxidants.[11] (A standard is being developed for lead.) In each case, the standard gives the maximum concentration allowed during a given time period, and frequently places a limit on the number of times that the concentration can be exceeded within a given time period.

Classification of an area with respect to the ambient air quality for each pollutant has important consequences. The Nation is divided into 247 air quality control regions (AQCR) for the purpose of managing pollution control programs at the local level. Compliance with an NAAQS is generally measured on an ACQR basis, although smaller area designations are permitted by EPA for some pollutants where they form an appropriate basis for control of the pollutant. These designations are extremely significant. Areas that are found by EPA to be in nonattainment status are subject to a particular set of requirements under part D of the Act. Areas that meet or exceed standards are subject to the PSD regulations set forth in part C of the Act. Classification of a large area on the basis of a highly localized condition could have the effect of placing inappropriate and demanding requirements on areas that did not need or deserve them.

Alaska is divided into four AQCRs.[12] All four regions exceed the national standards for particulate, oxidants, nitrogen oxides, and sulfur oxides. The cities of Fairbanks and Anchorage (but not the rest of the two AQCRs in which they are located) are nonattainment areas for carbon monoxide while the rest of the State exceeds the national standards.[13] Thus Fairbanks and Anchorage will be both nonattainment and nondegradation areas,

while the rest of the State will be a nondegradation area for all pollutants. Similarly much of Arizona has nonattainment status for particulates and oxidants, while the whole State exceeds national standards for nitrogen dioxide and all but two counties exceed the standard for carbon monoxide. [14]

While an attainment or nonattainment status for an area has an extremely important regulatory impact on existing sources of pollution, it has substantially less importance in the regulation of new sources. With the passage of the 1977 amendments, almost every new source of pollution will undergo a stringent preconstruction review regardless of whether it is located in an attainment area or a nonattainment area. The preamble to the final rule setting forth attainment status designations indicates three reasons why this will happen:[15]

> First, new sources, wherever they propose to locate, must be reviewed for their impact on all nearby areas as well as that in which they would locate. If an area on which a new source would impact is designated differently than the one in which it is located, the designation of the latter would not necessarily determine the rules to which the source would be subject, Second, PSD rules apply in any area in which at least one NAAQS is attained, and since virtually every area in the country shows attainment for at least one pollutant, the PSD review will be a requisite virtually everywhere. Finally, case-by-case new source review is necessitated to account for the possibility that an area with a particular designation may encompass "pockets" which do not fit the designation,

STATE IMPLEMENTATION PLANS

Section 110 requires each State to submit an implementation plan that sets forth the steps it will take to meet both the primary and the secondary standards" for each pollutant that is subject to an NAAQS. The plan must show that it will meet the primary standards within the statutory time limit and the secondary standards within a reasonable time thereafter.

A State Implementation Plan (SIP) cannot be approved unless the State has the legal authority to:[17]

1. Adopt emission standards and limitations;
2. Enforce laws and regulations and seek injunctive relief;
3. Reduce pollution emissions on an emergency basis;
4. Prohibit the construction or operation of any source that will prevent either the attainment or the maintenance of any air quality standard or that will interfere with resources to prevent significant deterioration;
5. Obtain all necessary information; and
6. Require owners and operators of stationary sources to install emission monitoring devices.

Every implementation plan must indicate how these legal authorities will be used in executing a control strategy for each pollutant, Compliance schedules for the gradual abatement of major existing sources of pollution are central to these control strategies. State and local officials are primarily responsible for making decisions about the amount that pollution must be reduced by existing facilities. The EPA has the authority to disapprove compliance schedules that, owing to the timing of extensions, prevent attainment or maintenance of air quality standards. For the most part, however, it is up to the State to decide the mix of sources to be abated, to what extent, and in what period of time. Within the framework of NAAQS and the statutory time period, the State has a choice of options. (When there is, for example, a single large emitter that causes the standards to be violated, these options obviously become limited.) A State can also decide how much to reduce pollution below the existing levels in order to improve the air quality sufficiently to allow for new industry and development.

The timetable for meeting NAAQS in the Clean Air Act of 1970 called for attainment in

most regions by 1975, with no extensions beyond 1977. Not only were these deadlines generally unmet, but EPA had little effective authority to enforce them. By 1977, only about 40 percent of all AQCRs were meeting the requirements for particulate and photochemical oxidants, and about 20 to 25 percent did not achieve the standards for sulfur dioxide and carbon monoxide.[18]

Congress responded by extending the statutory compliance dates for particulate, nitrogen dioxide, and sulfur oxides until December 31, 1982, and for carbon monoxide and photochemical oxidants, until December 31, 1987. In addition, stricter limits were placed on such activities as the construction of new stationary sources. One provision of the 1977 amendments[19] makes it mandatory for State plans to include an enforceable permit program for regulating the construction, modification, or operation of any major stationary source in areas that are not in an attainment status or that have pollution levels above the national standard.[2o]

The States are responsible for formulating implementation plans, but if a plan is deemed inadequate, the Administrator of the EPA has the authority to promulgate a plan.[21] In practice, he will normally approve a plan "with exceptions, and only issue whatever provisions are needed to meet specific deficiencies.[22] His right to promulgate plans is limited to those regulatory aspects where he can rely on authorities granted by the Act; and while he can disapprove any nonregulatory aspect of a plan, he cannot issue substitute provisions.[23] In other words, if the Administrator disapproves of such elements of the plan as numbers, dates, procedures, and sampling methods he can change them. But if, for example, he finds that a State agency lacks a particular needed authority, or even that there is no proper State agency, he cannot invest the existing agency with the missing power or create a new agency. He can, however, assume the regulatory function, e.g., require that permits be filed with EPA.

The siting of mining operations and associated primary-processing and electric-generating facilities could be constrained in some areas by SIP provisions for attaining and maintaining NAAQS. For example, in areas where the standards for particulate matter are frequently exceeded owing to natural phenomena such as duststorms (these occur in Alaska and in parts of the West), additional sources of high dust generation from activities such as surface mining or mine road construction and use may be restricted.[24] The development of mine-associated primary-processing plants and electric-generating facilities must satisfy emission standards set forth in the SIP. Those portions of the SIP that deal with preconstruction review of new sources most directly affect the mining industry.

PRECONSTRUCTION REVIEW OF MAJOR NEW STATIONARY SOURCES

New facilities, buildings, structures, or installations are indicative of industrial development and commercial growth. However, they are also potential emitters of air pollution. The Clean Air Act is intended to encourage, and if need be compel, the builders of major sources of pollution[25] to use the most advanced technology for pollution control. If successful, this will replace existing high-pollution installations with a generation of low-pollution facilities and provide some leeway for future industrial expansion, without imperiling air quality.

The control of new sources is accomplished by preconstruction review. This is generally undertaken by the State or other local government unit that is responsible for the implementation of air quality plans. There are four different types of preconstruction review:

a. Review of new sources to determine their effect on attainment and maintenance of NAAQS;

b. Review of new sources for which new source standards of performance have been established;

c. Review of new sources in a nonattainment area, where the air does not satisfy the NAAQS; and

d. Review of new sources in a nondegradation area, where the air is cleaner than the NAAQS.

All four types of review take place in Alaska. The first three are discussed in this section.

Preconstruction Review for Effects on Attainment and Maintenance

EPA regulations require preconstruction review of all new sources that might jeopardize the maintenance of primary and secondary standards.[26] As noted earlier, the Act requires that any SIP exhibit adequate State authority to prevent the construction of a source that would interfere with the attainment or maintenance of an air quality standard.

In Alaska, preconstruction review is accomplished by means of a permit system.[27] A permit is required for any facility that is capable of emitting 25 tons per year of sulfur oxides or particulate, or 100 tons per year of nitrogen dioxide, carbon monoxide, or hydrocarbons; or any mercury retort; or any fuel-burning electric-generating facility of more than 250 kilowatts capacity.

Before either building or modifying any such facility, a permit applicant must submit plans and specifications with the following information:[28]

1. Two sets of blueprints;
2. Maps of the immediate vicinity;
3. An engineering report outlining methods of operation, quantity and source of material processed, use and distribution of processed materials; and a process flow diagram indicating points of emission, including estimated quantities and types of contaminants emitted;
4. A description of any air quality control device;
5. An evaluation of the effect on surrounding ambient air; and
6. Plans for emission reduction during a pollution alert.

A permit will not be granted unless it is shown that the source will not interfere with the maintenance of any ambient air quality standard or violate any State air quality regulation.

A second type of new source review relates to so-called indirect sources of pollution. These are sources—like stadia, garages, airports, and highways—which attract mobile sources of pollution, mainly automobiles. Alaska has never adopted regulations for the review of indirect sources.[29] The 1977 amendments severely restricted the authority of the Administrator to require such review.[30] While a State may choose to undertake indirect source review, the Administrator cannot require any such plan or promulgate plans or regulations including such a program. The only exception is that the Administrator may promulgate regulations for an indirect source review of federally funded airports and highways and federally owned and operated indirect sources.

Preconstruction Review of Sources for Which New Source Standards of Performance Have Been Established

A State must perform a different preconstruction review for that class of stationary sources for which standards of performance have been established pursuant to section 111 of the Act.[31] Before these sources can be built or modified, it must be shown that, in addition to not interfering with the attainment or maintenance of any standard, they also make use of the best available control technology for reducing pollution.

To prevent States from attracting new industry by offering "pollution havens, " Congress excluded control of these major air pollution sources from State implementation and directed EPA to set national standards. These EPA standards cover such mining-related sources as coal preparation plants, smelters, and electric-generating plants.[32] Controversy related to mineral development

has centered on smelter and utility regulations, particularly because of the high cost of installing pollution control equipment.

The 1977 amendments established a process by which the Administrator must, within 4 years, promulgate standards for all other major stationary sources emitting pollution that may contribute significantly to air pollution.[33] It is possible that these new standards could include many other processes associated with mineral extraction, refining, and use.

Preconstruction Review in Nonattainment Areas

There are many AQCRs in nonattainment status with respect to one or more criteria pollutants (including two such instances in Alaska). For this reason, it would be impractical to forbid all new development in nonattainment areas. On the other hand, it would be both anomalous and economically discriminatory if complying areas were more restricted than nonattainment areas with respect to new source construction—a condition that may well have occurred in the recent past. The 1977 amendments added a new section to Title I of the Act that deals specifically with the problem of development in nonattainment areas.[34]

This section extends the deadlines for meeting NAAQS to 1982 and 1987. Nonattainment areas are granted this extension only if they develop SIPS that are somewhat more detailed and constrained than those provided for in section 110. The main features of such a plan are:

1. A comprehensive, accurate current inventory of actual emissions from all sources;
2. A vehicle emission control inspection and maintenance program (only if seeking 1987 extension);
3. An analysis of alternative sites, sizes, production processes, and environmental control techniques for any proposed new source which demonstrates that benefits significantly outweigh environmental and social costs (only if seeking 1987 extension);
4. Planning procedures involving State, regional, and local officials; and
5. A special permit provision.

The permit provision allows new source construction only where:[35]

a. By the time the facility commences operations, total emissions from it, existing sources, and new minor sources will be less than the total emissions from existing sources allowed under the plan required by the section;

b. The source complies with the more stringent of the following:
   i. The most stringent emission limitation required by any State for such a source, or
   ii. The most stringent emission limitation achieved in practice by such a source; and

c. The owner or operator of the source demonstrates that all other major stationary sources owned or operated by him in the State are subject to emission limitations and are in compliance.

The purpose of this provision is to combine technology-forcing requirements with adherence to a meaningful compliance schedule and to assure that the beneficiary of such a permit is not contributing to pollution elsewhere in the State. Failure to observe the stringent conditions of the implementation plan will result in the loss of both air pollution grants and Federal highway funds.[36]

Citizen Suits on Preconstruction Review

State permits for construction of new stationary sources are subject to judicial review through citizens suits authorized by section 304 of the Clean Air Act.[37] Any citizen may challenge, in Federal court, the issuance of a State permit for the construction of a new source that will violate ambient air quality

standards. In order to prevail in the action, the plaintiff must show: (1) that the State review did not satisfy procedural requirements, e.g., conducting a review before construction started; (2) that the preconstruction review indicated that air quality violations would occur, but the permit was granted anyway; or (3) that the technical data (calculations and dispersion models), on which the State relied in determining that no violations would occur were incorrect.[38] A citizen may not sue for damages, but to enjoin an illegal act or to enforce an administrative authority to carry out a statutorily mandated action (in legal terms, a nondiscretionary duty).[39]

PREVENTION OF SIGNIFICANT DETERIORATION

The development of measures to prevent the significant deterioration of air quality in existing clean air or nondegradation regions has been a controversial chapter in the Federal implementation of the Clean Air Act. In December 1974, the EPA issued final regulations to prevent the significant deterioration of air quality in areas cleaner than the NAAQS. These regulations were issued as a result of a 1973 Supreme Court decision[40] affirming lower court decisions that the Act intended not only that polluted air be up graded to human health-related national standards, but also that air in regions cleaner than those standards should be protected. Under these regulations, the States were required to classify areas that met or exceeded national primary or secondary standards as: Class I where only a very small annual increment of degradation was allowed; Class II where a moderate annual increment was allowed; or Class III where degradation to national standards was permitted.

Opponents of the Court decision and the significant deterioration regulations argued that it was not the intent of Congress under the Clean Air Act to address any areas where national primary and secondary standards are being maintained. Advocates of industrial development, mining interests, and electrical utilities charged that significant deterioration regulations will unduly restrict the Nation's continuing economic development. They argued that air pollution levels in existing "clean" areas should be permitted to increase to the national ambient air standards.

The Clean Air Act Amendments of 1977 expanded the nondegradation program and generally tightened the standards for prevention of significant deterioration. The goals of the nondegradation amendments are:[41]

1. To protect public health and welfare from any actual or potential adverse effect, which in the Administrator's judgment, may reasonably be anticipated to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air, not withstanding attainment and maintenance of all national ambient air quality standards;
2. To preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;
3. To ensure that economic growth will occur in a manner consistent with the preservation of existing clean air resources;
4. To assure that emissions from any source in any State will not interfere with any portion of the applicable implementation plan to prevent significant deterioration of air quality for any other State; and
5. To assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

The amendments further provide that all SIPS must contain emissions limitations and other measures necessary to prevent the significant deterioration of air quality in each region which, on the basis of available information, cannot be classified for ambient air

quality levels of particulate or sulfur oxides; or which has ambient air quality levels above any national primary or secondary air quality standards (other than for sulfur oxides or particulate matter); or for which there is insufficient information to be classified as not meeting such national primary standards.[42] All existing international parks, national wilderness areas of over 5,000 acres, national memorial parks of over 5,000 acres, and national parks of over 6,000 acres were immediately designated as Class I areas, and their status cannot be changed. There are 158 mandatory Class I areas,[43] four of which are in Alaska: Mount McKinley National Park, 1,939,493 acres; Bering Sea Wilderness, 41,113 acres; Simeonoff Wilderness, 25,141 acres; and Tuxedni Wilderness, 6,402 acres. Other areas previously designated as Class I under the EPA regulations promulgated before the 1977 amendments were also immediately designated as Class 1.[44] These areas, however, may be redesignated by the States under procedures set forth in the Act. All other areas, (identified under sections 107(d)(1)(D) or (E)) will be Class II and maybe redesignated as provided.

The amendments specify the maximum allowable increase in concentration for sulfur oxides and particulate matter (in micrograms per cubic meter) for each class. A ceiling was established[45] for other air pollutants. The maximum allowable concentration in any nondegradation area must not exceed a concentration for each pollutant for each period of exposure, equal either to the concentration permitted under the national secondary ambient air quality standard or to the concentration permitted under the national primary air quality standard, whichever is lower.

The Governor of each State with an EPA approved implementation plan may, after holding public hearings, issue orders excluding certain pollutants from being counted in determining compliance with nondegradation standards. These excluded pollutant concentrations include: stationary source emissions resulting from converting from the use of natural gas or petroleum products under orders issued under provisions of the Energy Supply and Environmental Coordination Act of 1974[46] or from a natural gas curtailment plan; particulate matter attributable to construction or other temporary emissions activities; and emissions from new sources outside the United States. Such orders by State Governors become effective after submission to and approval by the EPA Administrator.

The amendments also provide that, except for lands within the boundaries of Indian reservations, a State may redesignate any areas as Class I that it deems appropriate. Other Federal areas may be redesignated only as Class I or Class 11. These include:

a. Any national monument, national primitive area, national preserve, national recreation area, national wild and scenic river, national wildlife refuge, or national lakeshore exceeding 10,000 acres in size;[47] and

b. Any national park or wilderness area exceeding 10,000 acres, and established after the enactment of the Clean Air Act Amendments of 1977.[48]

Most of the large blocks of Alaska Lands that would be transferred into conservation units by pending legislation could be redesignated by the State. They are not mandatory Class I areas. They are now and will on transfer be Class II lands and they may not be designated as Class III under any conditions. They are not required to be designated Class I.

Any other clean air areas may be redesignated as Class III if:[49]

1. The Governor specifically approves the redesignation after consultation with appropriate legislative representatives and with final approval of local government units representing a majority of the residents of the area to be redesignated;

2. The redesignation will not raise or contribute to any pollutant level to exceed the maximum allowable increment or

ceiling concentration permitted under classification of any other area; and

3. Other procedural and substantive requirements for redesignation under State and Federal law are satisfied.

The Clean Air Act amendments set forth requirements for State redesignation procedures. Prior to redesignation of any area as Class I, II, or III, the State must:[50]

(i) Have an approved SIP;

(ii) Prepare a satisfactory description and analysis of economic, social, health, environmental, and energy effects of the proposed redesignation, and make such analysis available to the public;

(iii) Require redesignation authorities to review and examine the effects document;

(iv) Provide public notice and public hearings in areas to be redesignated and areas affected by redesignation;

(v) Provide that the plans of any new or modified major emitting facility that may be permitted to be constructed or operate under Class III designation only, must be made available to the public prior to the hearing and redesignation pursuant to regulations issued by the EPA; and

(vi) Before public notice and hearing, notify the appropriate Federal land manager if a proposed redesignation includes any Federal lands, and allow adequate opportunity for comment and recommendations (not more than 60 days). The State must publish any inconsistency between the redesignation and the recommendations of the Federal land manager with the reasons for such inconsistency.

The EPA Administrator may disapprove any redesignation only if he finds, after public notice and hearing, that the procedural requirements were not satisfied.[51]

Preconstruction Permitting of Major Emitting Facilities

Section 165 of the Clean Air Act,[52] as amended, requires that any major emitting facility in a nondegradation area on which construction is started after the passage of the 1977 amendments must obtain a permit. The applicant must demonstrate that emissions from the new facility will not exceed or contribute to air pollution in excess of the maximum allowable concentrations for any pollutant in any clean air area, more than once per year, nor exceed NAAQS or other applicable emission control standards issued under the Clean Air Act in any AQCR.[53]

The applicant for the proposed new facility must utilize the best available control technology for each regulated pollutant either emitted or resulting from the facility. Appropriate monitoring procedures must be carried out to measure the impacts of emissions in affected areas. The air quality impacts arising from any growth associated with such a facility must also be analyzed. Permit applications are to be granted or denied within 1 year after the completed application has been filed. A review must include the required analysis, consultation with appropriate Federal officials, and public notice and hearing.

For Class I areas, the permit must have the approval of the appropriate Federal land manager. A permit will be issued if it has been shown that the proposed emissions will not adversely affect the air quality and related values of the Federal Class I area. A permit may also be issued for an emitting facility that would exceed the maximum allowable increments if the Federal land manager certifies that the emissions would have no adverse impact on the values of the Class I area.

The permit applicant may request a variance from the State Governor if a Federal land manager refuses a certification that the emissions from a proposed facility will have no adverse impact on the air quality and related values of a Federal Class I area even

though the emissions would cause or contribute to concentrations that exceed Class I maximum allowable increments. The applicant must demonstrate, and the Governor must find, that the proposed facility cannot be built without the variance, and that in Federal Class I mandatory areas, the variance will not adversely affect the air quality in the region. Before granting a variance, the Governor must consider the Federal land manager's recommendations and obtain his concurrence. If the Governor recommends a variance for a Federal mandatory Class I area contrary to the recommendation of a Federal land manager, both the Governor's recommendation and that of the Federal land manager are to be transmitted promptly to the President. The President may approve the variance if he finds that it is in the national interest. He must act in 90 days to either affirm or deny the variance, and his decision is final and nonreviewable.[54]

Any facility operating under a variance may exceed the maximum allowable increment for sulfur oxides on not more than 18 days per year, but those emissions may not exceed statutorily specified numerical limits.[55] The 1977 amendments set specific numerical maximum allowable increases for sulfur oxides and particulate matter. Procedures for establishing regulations for other pollutants are set forth in section 166(a) of the amended Clean Air Act.[56]

Within 2 years of enactment of the 1977 amendments, EPA is to propose regulations for preventing significant deterioration resulting from nitrogen oxides, hydrocarbons, carbon monoxide, and photochemical oxidants. These regulations would not go into effect for 1 year. At the end of that year, a revision of SIPS would begin unless there is congressional action to the contrary.

The Administrator is required to report to Congress if he finds that establishing and implementing regulations to prevent significant deterioration caused by the criteria pollutants would present special difficulties or be impractical. This report does not delay the Administrator's duty to proceed with the regulations. The States may adopt strategies other than increments if they accomplish the purpose of maintaining air quality. The proposed EPA regulations will provide:

a. Specific numerical measures against which permits may be tested;

b. A framework for stimulating improved control technology;

c. Protection of air quality and related values; and

d. Fulfillment of the goals set forth in the purposes provision of the Act.

Regulations for new air quality standards are to be followed within 2 years by measures to prevent significant deterioration.[57] The States and the EPA Administrator are authorized to take enforcement action to prevent the construction of any major emitting facility that does not meet the permitting requirements and that is proposed to be constructed in a "clean air" area not subject to an approved implementation plan.[58]

DUTIES OF THE FEDERAL LAND MANAGER

Federal land managers[59] and the Federal official directly managing Federal lands have an "affirmative responsibility" to protect air quality and related values, such as visibility, for any Federal land in a Class I area.[60] Under the 1977 amendments to the Clean Air Act, Federal land managers are afforded an opportunity to comment and make recommendations on proposed State redesignations.[61] Federal land mangers and Federal officials with direct responsibility for managing Federal lands are notified by the EPA of any permit application for a major emitting facility that may affect Federal lands within a Class I area.[62] The Federal land manager or official must notify the EPA Administrator if the emissions from the proposed facility would cause or contribute to a change in the air quality in the area and identify the potential adverse impacts of such a change.[63]

A permit for a major emitting facility may be denied if emissions would exceed the maximum allowable increment for a Class I area, or would have an adverse impact on air quality in the Federal Class I area even though the maximum allowable increase is not exceeded.[64] If, however, the Federal land manager certifies that the facility would not adversely affect the air quality and related values of the Federal Class I area, a permit may be issued despite the fact that the emissions may exceed the maximum allowable increases for sulfur oxides and particulates.[65] In such circumstances, the Clean Air Act Amendments specify alternative maximum allowable increases for these pollutants, which cannot be exceeded.[66]

The Federal land manager must review all national monuments, primitive areas, and national preserves and recommend appropriate areas for redesignation as Class I where air quality and related values are important attributes of the area.[67] The Federal land manager shall report to Congress and the State in 1 year, and shall consult with the State before making such recommendation.

Under section 169A, the Department of the Interior must prepare an inventory of all mandatory Class I areas where visibility is an important value.[68] The Secretary of the Interior has found that visibility is an important value in 156 of the 158 mandatory Class I areas (the two exceptions are Bradwell Bay, Fla., and Rainbow Lake, Wis., both wilderness areas).[69] The inventory has been forwarded to the EPA administrator who will use it in developing a report and recommendation to Congress.[70] It will also be used for promulgating regulations to meet the statutory goal of "prevention of any future and remedying of any existing, impairment of visibility in mandatory Federal Class I areas"[71] resulting from manmade pollution.

By February 1980, the EPA Administrator is required to promulgate regulations to prevent future, and to remedy existing, impairments of visibility in mandatory Class I areas. The regulations shall provide guidelines to the States and require revision of implementation plans to include requirements for installation of the best available retrofit technology on existing sources that are less than 15 years old.[72] Any exemption from the requirement for retrofit technology requires the approval of the appropriate Federal land manager.[73]

FOOTNOTE REFERENCES FOR CLEAN AIR ACT

[1]The Clean Air Act, 42 U.S.C. 7401 et seq. (redesignated from 42 U.S.C. 1857 et seq.) includes the Clean Air Act of 1963, Public Law 88-206 (Dec. 17, 1963], and amendments made by the Motor Vehicle Air Pollution Control Act, Public Law 89-272 (Oct. 20, 1965), the Clean Air Act Amendments of 1966, Public Law 89-675 (Nov. 21, 1967), the Clean Air Act Amendments of 1970, Public Law 91-604 (Dec. 31, 1970), the Comprehensive Health Manpower Training Act of 1971, Public Law 92-157 (Nov. 18, 1971), the Energy Supply and Environmental Coordination Act of 1974, Public Law 93-319 (June 22, 1974), and the Clean Air Act Amendments of 1977, Public Law 95-95 (Aug. 7, 1977). The major components of the Clean Air Act are the Clean Air Act Amendments of 1970 and the Clean Air Act Amendments of 1977.

[2]Section 108 of the Clean Air Act, as added by Public Law 91-604, section 48(a), 84 Stat. 1678, Dec. 31, 1970, directed the Administrator of EPA to publish a list of pollutants which had an adverse effect on the public health and welfare and whose presence in the ambient air resulted from numerous or diverse mobile or stationary sources. Criteria documents were prepared reflecting the latest scientific knowledge on the effect of five pollutants on the public health and welfare. National ambient air quality standards were developed for six pollutants associated with the criteria pollutants. Sulfur oxides are measured by sulfur dioxide, and photochemical oxidants are measured by ozone and hydrocarbons.

[3]This discussion is limited to Title I, "Air Pollution Control and Prevention, " and Title III, "Administration," of the Clean Air Act. The description of programs under the Act does not include any authorized by Title H," Emissions Standards for Moving Sources. "

[4]Public Law 93-319, 88 Stat. 246, June 22, 1974, 15 U.S.C. 791-798.

[5]*Environmental Quality-1976,* Report of the Council on Environmental Quality, p. 2.

[6]U.S. Congress, House Subcommittee on Energy and Power, Middle- and Long-Term Energy Policies and Alternatives, Appendix, 94th Cong., 2d sess., March 1976, at 4.

[7]Air *Quality* and Stationary Source Emission Control, A Report by the Commission on Natural Resources, National Academy of Sciences, prepared for the Committee on Public Works, Serial No. 94-4, (March 1975), at 5-195.

[8]*Sierra* Club v. *Ruckelshaus,* 344 F. Supp. 253 (1972), aff'd per curiam, 4 ERC 1915 (D.C. Cir. 1972), aff'd sub nom., *Fri* v. Sierra *Club,* 412 U.S. 541 (1973).

[9]EPA's PSD policy is set forth at 40 CFR 52.21 (1977). Some aspects of that policy have already been revised to reflect the 1977 amendments, 43 F.R. 57459, Nov. 3, 1977, and EPA has published proposed rules to reflect other changes made by the amendments, 42 F.R. 57471, 57479, Nov. 3, 1977.

[10]"Stationary source is defined as "any building, structure, facility or installation which emits or may emit any air pollutant, " section 11 l(a)(3), 42 U.S.C. 7411 (a)(3).

[11]The standards are set forth at 40 CFR 50.4-50,11.

[12]The boundaries of Alaska's four air quality control regions are set out at 40 CFR 81.54 (Cook Inlet" Intrastate AQCR); 40 CFR 81,246 (Northern Alaska Intrastate AQCR); 40 CFR 81,247 (South Central Alaska Intrastate AQCR); and 40 CFR 81.248 (Southeastern Alaska Intrastate AQCR).

[13]Alaska Attainment Status, 40 CFR 81.302.

[14]Arizona Attainment Status, 40 CFR 81.303; attainment status for all areas may be found at 40 CFR Part 81, Subpart C—Section 107 Attainment Status Designations, 43 F.R. 8963, Mar, 3, 1978.

[15]43 F.R. 8963, Mar. 3, 1978.

[16]42 U.S.C. 7410.

[17]40 CFR 51,11,

[18]*Progress* in the Prevention and Control *of Air Pollu*tion in 1976, Annual Report of the U.S. Environmental Protection Agency, (1977), p. 31.

[19]Public Law 95-95, sections 108(a)(3) and (a)(4), amending sections 110(a)(2)(D) and 110(a)(2)(E), 42 U.S.C. 7410(a)(2)(D) and 7410(a)(2)(E).

[20]Compliance with this provision will require a change in the existing permit provision of Alaska Law, 18 A.A.C. 50.120.

[21]Section 11O(C)(1), 42 U.S.C. 741 O(C)(1).

[22]Such promulgations with respect to the Alaskan Implementation Plan can be found at 40 CFR 52.70.

[23]40 CFR 52.02, 52.06.

[24]EPA, however, has decided to exempt surface mining operations, including haul roads, from mandatory PSD review, 43 F.R. 26397, June 19, 1978. This decision was based on an EPA finding that particulate loadings associated with these sources consisted predominantly of nonrespirable particles, EPA is in the process of gathering information to determine whether or not to revise its overall Total Suspended Particulate (TSP) standard to emphasize the risks to human health associated with smaller, respirable particulate. See EPA, Fugitive Dust Policy; SIP's and New Source Review, Aug. 1, 1977. The EPA decision to exempt fugitive dust from suface mining operations and haul roads from mandatory PSD review has been challenged in court,

[25]The 1977 amendments define, for the first time in the statute, major sources, as follows:

> (j) Except as otherwise expressly provided, the terms 'major stationary source' and 'major emitting facility' mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). Public Law 95-95, section 301(a), adding a new section 302(j) to the Act, 91 Stat, 770.

Throughout the Clean Air Act, requirements placed on new major sources also apply to modifications and additional construction of existing facilities which are major sources.

[26]40 CFR 51.18.

[27]18 A.A.C. 50.120. The permit provisions also apply to the operation of existing facilities.

[28]18 A.A.C. 50.120(f).

[29]40 CFR 52.78.

[30]Public Law 95-95, section 108(e) adding a new section 110(a)(5) to the Act, 91 Stat. 695, 42 U.S.C. 7410 (a)(5).

[31]Standards of performance may be found at 40 CFR 60.

[32]Section 111; 42 U.S.C. 1711.

[33]Public Law 95-95, section 109(a) adding a new section 11 l(f)(l) to the Act establishes this timetable, 91 Stat, 697,42 U.S.C. 741 l(f)(l).

[34]Public Law 95-95, section 129,91 Stat, 745.

[35]Section 173,42 U.S.C. 7503.

[36]Section 176, 42 U.S.C. 7506.

[37]National Resources Defense Council, Land *Use* Controls in *the* United States, A Citizens Handbook, 1976, pp. 44-45.

[38]Id. at 45.

[39]Id. at 64.

[40]Sierra Club v. *Ruckelshaus, 344* F. Supp. 253, (D.D.C. 1972), aff'd per curiam, 4ERC 1915 (D.C. Cir. 1972), aff'd by an equally divided court sub nom. *Fri* v. Sierra Club, 412 U.S. 541, (1973).

[41]The amendments on PSD are continued in section *127* of Public Law 95-95 which adds chapter C to Title I of the Clean Air Act containing new sections 160 to 169, 43 U.S.C. 7470-7479. The quoted language is in section 160,43 U.S.C. 7470,

[42]Public Law 95-95, section 127(a) adding a new section 161 to the Act, 91 Stat, 731,42 U.S.C. 7471.

[43]Mandatory Federal Class I areas are listed at 42 F.R. 54760, Nov. 3, 1977.

The following list identifies those Federal lands which are mandatory Class I areas established by the

1977 Clean Air Act Amendments. These lands may not be redesignated. Total acreage is shown for each area. States in parentheses indicate interstate park or wilderness areas; total acreage is listed for only one of the States involved.

NATIONAL PARKS OVER 6,000 ACRES

Alaska—Mount McKinley 1,939,493,
Arizona—Grand Canyon 1,176,913; Petrified Forest 93,493.
California—Kings Canyon 459,994; Lassen Volcanic 105,800; Redwood 27,792; Sequoia 286,643; Yosemite 759,172,
Colorado—Mesa Verde 51,488; Rocky Mountain 263,138.
Florida—Everglades 1,397,429.
Hawaii—Haleakala 27,208; Hawaii Volcanoes 217,029.
Idaho—Yellowstone (Wyoming).
Kentucky—Mammoth Cave 51,303.
Maine—Acadia 37,503.
Michigan—Isle Royale 542,428,
Minnesota—Voyageurs 114,964,
Montana—Glacier 1,012,599; Yellowstone (Wyoming).
New Mexico—Carlsbad Caverns 46,435.
North Carolina—Great Smoky Mountains (Tennessee).
Oregon—Crater Lake 160,290.
South Dakota—Wind Cave 28,060.
Tennessee-Great Smoky Mountains 514,757.
Texas—Big Bend 708,1 18; Guadalupe Mountains 76,292.
Utah—Arches 65,098; Bryce Canyon 35,832: Canyonlands 337,570: Capitol Reef 221,896; Zion 142,462.
Virgin Islands—Virgin Islands 12,295.
Virginia—Shenandoah 190,535.
Washington—Mount Rainier 235,239; North Cascades 503,277; Olympic 892,578.
Wyoming—Grand Teton 305,504; Yellowstone 2,219,737.

NATIONAL WILDERNESS AREAS OVER 5,000 ACRES

Alabama—Sipsey 12,646,
Alaska—Bering Sea 41,113; Simeonof 25,141: Tuxedni 6,402.
Arizona—Chiricahua National Monument 9,440; Chiricahua 18,000; Galiuro 52,717; Mazatzal 205,137; Mt. Baldy 6,975; Pine Mountain 20,061; Saguaro 71,400; Sierra Ancha 20,850; Superstition 124,1 17; Sycamore Canyon 47,757.
Arkansas—Caney Creek 14,344; Upper Buffalo 9,912.
California—Agua Tibia 15,934; Caribou 19,080; Cucamonga 9,022; Desolation 63,469; Dome Land 62,206; Emigrant 104,311; Hoover 47,916; Joshua Tree 492,690; John Muir 484,673; Kaiser 22,500; Lava Beds 28,640; Marble Mountain 2 13,743; Minarets 109,484; Monkelumne 50,400; Pinnacles 12,952; Point Reyes 25,370; San Gabriel 36,137; San Gorgonio 34,644; San Jacinto 20,564; San Rafael 142,722; South Warner 68,507; Thousand Lakes 15,695; Ventana 95,152; Yolla-Belly-Middle Eel 109,091.
Colorado—Black Canyon of the Gunnison 11,180; Eagles Nest 133,910; Flat Tops 235,230; Great Sand Dunes 33,450; La Garita 48,486; Maroon Bells-Snowmass 71,060; Mt. Zirkel 72,472; Rawah 26,674; Weminuche 400,907; West Elk 61,412.
Florida—Bradwell Bay 23,432; Chassahowitzka 23,360; Saint Marks 17,746.
Georgia—Cohutta 33,776; Okefenokee 343,850; Wolf Island 5,126.
Idaho—Craters of the Moon 43,243; Hells Canyon (Oregon) 193,840; Sawtooth 216,383; Selway-Bitterroot (Montana) 1,240,618.
Louisiana—Breton 5,000.
Maine—Moosehorn 7,501.
Michigan—Seney 25,150.
Minnesota—Boundary Waters Canoe Area 747,840.
Missouri—Hercules-Glades 12,315; Mingo 8,000.
Montana—Anaconda-Pintlar 157,803; Bob Marshall 950,000; Cabinet Mountains 94,272; Gates of the Mountain 28,562; Medicine Lake 11,366; Mission Mountains 73,877; Red Rock Lakes 32,350; Scapegoat 239,295; Selway-Bitterroot-U.L, Bend 20,890.
Nevada—Jarbridge 64,667.
New Hampshire—Great Gulf 5,552; Presidential Range-Dry River 20,000.
New Jersey—Brigantine 6,603.
New Mexico-Bandelier 23,267; Bosque del Apache 30,850; Gila 433,690; Pecos 167,416; Salt Creek 8,500; San Pedro Parks 41,132; Wheeler Peak 6,027; White Mountain 31,171.
North Carolina—Joyce Kilmer-Slickrock 14,033; Linville Gorge 7,575; Shining Rock 13,350; Swanquarter 9,000.
North Dakota—Lostwood 5,577.
Oklahoma—Wichita Mountain 8,900.
Oregon—Diamond Peak 36,637; Eagle Cap 293,476; Gearhart Mountain 18,709; Kalmiopsis 76,900; Mountain Lakes 23,071; Mount Hood 14,160; Mount Jefferson 100,208; Mount Washington 46,116; Strawberry Mountain 33,003; Three Sisters 199,902.
South Carolina—Cape Remain 28,000.
South Dakota—Badlands 64,250.
Tennessee-Joyce Kilmer-Slickrock (North Carolina),
Vermont—Lye Brook 12,430.
Virginia—James River Face 8,703.
Washington—Alpine Lakes 303,508; Glacier Peak 464,258; Goat Rocks 82,680; Mount Adams 32,356; Pasayten 505,524.
West Virginia—Dolly Sods 10,215; Otter Creek 20,000.

Wisconsin—Rainbow Lake 6,338.
Wyoming—Bridger 392,160; Fitzpatrick 191,103; North Absaroka 35 I,104; Teton 557,311; Washakie 686,584.

INTERNATIONAL PARKS
New Brunswick, Canada—Roosevelt-Campobello 2,721.

NATIONAL MEMORIAL PARKS
North Dakota—Theodore Roosevelt National Memorial Park 69,675.

[44]Public Law 95-95, section 127(a) adding a new section 162(a) to the Act, 91 Stat. 731,42 U.S.C. 7472 (a).

[45]Public Law 95-95, section 127(a) adding a new section 163 to the Act, 91 Stat. 732,42 U.S.C. 7473.

[46]15 U.S. C. 792.

[47]Public Law 95-95, section 127(a) adding a new section 164(a)(l) to the Act, 91 Stat. 733, 42 U.S.C. 7474 (a)(l).

[48]Public Law 95-95, section 127(a) adding a new section 164(a)(2) to the Act, 91 Stat. 734, 42 U.S.C. 7474 (a)(2).

[49]Public Law 95-95, section 127(a) adding new Sections 164(a)(2)(A), 164(a)(2)(B) and 164(a)(2)(C), 91 Stat. 734, 42 U.S.C. 7474(a)(2)(A), 7474(a)(2)(B), and 7474(a)(2)(C).

[50]Public Law 95-95, **section 127(a) adding a new section 164(b)(l) to the Act, 91 Stat. 734, 42** U.S.C. **7474 (b)(l).**

[51]Public Law 95-95, **section 127(a) adding a new section** 164(b)(2) **to the Act, 91 Stat. 735, 42** U.S.C. **7474 (b)(2),**

[52]Public **Law 95-95, section 127(a) adding a new section 165 to the Act, 91 Stat. 735,42** U.S.C. **7475.**

[53]**Section 169 defines a major emitting facility for the purposes of provisions relating to the prevention of significant deterioration:**

> **The term "major emitting facility" means any of the following: stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more of any air pollutant from the following types of stationary sources: fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units per hour heat input, coal-cleaning plants (thermal dryers), kraft pulp mills, Portland Cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than two hundred and fifty tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, coke oven batteries, sulfur recovery plants, petroleum refineries lime plants, phosphate rock processing plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production facilities, chemical process plants, fossil-fuel boilers of more than two hundred and fifty million British thermal units per hour heat input, petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels, taconite ore-processing facilities, glass-fiber processing plants, charcoal production facilities. Such term also includes any other source with the potential to emit two hundred and fifty tons per year or more of any air pollutant. This term shall not include new or modified facilities which are nonprofit health or education institutions which have been exempted by the State.**

Public Law 95-95, section 127(a), 91 Stat. 740,42 U.S.C. **7479(l),**

[54]Public **Law 95-95, section 127(a) adding a new section** 165(d)(2)(D)(ii) **to the Act, 91 Stat, 737, 42** U.S.C. **7475(d)(2)(D)(ii).**

[55]Public **Law** 95-95, **section 127(a) adding a new section** 165(d)(2)(C)(iv) **to the Act, 91 Stat. 737, 42** U.S.C. **7475(d)(2)(c)(iv).**

[56]Public **Law 95-95, section 127(a) adding a new section 166(a) to the Act, 91 Stat. 739,42** U.S.C. **7476.**

[57]Public **Law** 95-95, **section 127(a) adding a new section 166(d) to the Act, 91 Stat, 739,42** U.S.C. **7476(d).**

[58]Public **Law** 95-95, **section 127(a) adding a new section 167 to the Act, 91 Stat. 740,42** U.S.C. **7477.**

[59]Public **Law 95-95, section 301(a), adding a new section 302(i) to the Act which reads: The term 'Federal land manager' means, with respect to any lands in the United States, the Secretary of the Department with authority over such** lands. 91 **Stat.** 770.42 U.S.C. **7602(i).**

'public Law 95-95, section 127(a) **adding a new section 165(d)(2)(B) to the Act, 91 Stat. 736, 42** U.S.C. **7475 (d)(2)(B).**

[61]Public **Law 95-95, section 127(a) adding a new section 164(b)(l)(B) to the Act, 91 Stat. 735, 42** U.S.C. **7474 (b)(l)(B).**

"Public Law 95-95, section 127(a) adding a new section 165(d)(2)(A) to the Act, 91 Stat. 736, 42 U.S.C. **7475** (d)(2)(A).

[63]Public **Law 95-95, section 127(a) adding a new section 165(d)(2)(C) to the Act,** 91 **Stat.** 737, 42 U.S.C. 7475 **(d)(2)(C).**

[64]Public **Law 95-95, section 127(a) adding a new section** 165(d)(2)(C)(ii) **to the Act, 91 Stat. 737, 42** U.S.C. **7475(d)(2)(C)(ii).**

[65]Public **Law** 95-95, **section 127(a) adding a new section** 165(d)(2)(C)(iii) **to the Act, 91 Stat. 737, 42** U.S.C. 7475(d)(2)(C)(iii).

[66]Public **Law 95-95, section 127(a) adding a new section** 164(d)(2)(C)(iv) **to the Act, 91 Stat. 737, 42** U.S.C. 7475(d)(2)(C)(iv).

[67]Public **Law 95-95, section 127(a) adding a new section 164(d) to the Act, 91 Stat. 736,42** U.S.C.7475(d).

'Public Law 95-95, section 128(a), adding a new section 169 A(a)(2) **to the Act, 91 Stat. 742, 42** U.S.C. **7491 (a).**

[69]Final **Identification of Mandatory Federal** Class **I Areas Where Visibility Is an Important Value, 43** F.R. **7721, Feb. 21, 1978.**

[70]Public Law 95-95, section 128(a) adding a new section 169 A(a)(3) to the Act, 91 Stat. 742, 42 U.S.C. 7491 (a)(3).

[71]Public Law 95-95, section 128(a) adding a new section 169 A(a)(1) to the Act, 91 Stat. 742, 42 U.S.C. 7491 (a)(1).

[72]Public Law 95-95, section 128(a) adding a new section 169A(b), 91 Stat. 743,42 U.S.C. 7491(b).

[73]Public Law 95-95, section 128(a) adding a new section 169A(c)(3), 91 Stat. 743,42 U.S.C. 7491(c)(3).

CLEAN WATER ACT

Federal concern with water pollution abatement dates from the Rivers and Harbors Act of 1899,[1] which authorized the U.S. Army Corps of Engineers to issue permits for the discharge of material into navigable waterways if "anchorage and navigation will not be injured thereby. " It was not until the Water Quality Act of 1965,[2] however, that Congress addressed the issue of water quality. This Act required that States adopt and meet water quality criteria (subject to Federal approval) for interstate waters within their boundaries. In the absence of State action, the criteria would be set by the Federal Government, which would exercise abatement authority. This approach to pollution control has similarities to that taken by the Clean Air Act. The standards relate to the results of actions by many individual pollution sources, but do not directly regulate those sources.

The Federal Water Pollution Control Act Amendments of 1972[3] (FWPCA) substantially restructured the Federal water pollution control program. The purpose of the amendments was to control pollution at its source by requiring water polluters to limit the amount of effluent discharged into a body of water. The Act establishes a permit system—the National Pollutant Discharge Elimination System (NPDES)—to oversee the installation of specified levels of pollution abatement equipment for all point sources of pollution, regardless of the water quality of adjacent bodies of water. (A point source is one that discharges effluent through a conduit or pipe.) The water quality standard program is also continued. More stringent effluent restrictions may be imposed if the source empties into a body of water that does not meet water quality standards.

Some mining activities constitute point sources of pollution that require NPDES permits. Effluent limitations and standards of performance have been established for certain mining activities. The Environmental Protection Agency (EPA) will develop guidelines for other categories of mining operations in the near future.[4]

Many mining operations and procedures associated with access to mineral sites, such as roadbuilding and construction activities, are not point sources and do not require NPDES permits. Areawide water treatment management programs administered by States and other local units of Government, pursuant to section 208 of FWPCA, could potentially affect those mining development and operation activities that are nonpoint sources of pollution. Because EPA originally limited areawide plans to metropolitan areas, until forced to extend them by court order,[5] section 208 has not as yet had any effect on mining activities. State submission of water quality management plans was not required until November 1, 1978.

Many activities related to mineral development such as processing, refining, and power generating may be directly affected by the permit system. But, because implementation of FWPCA has been slow, it is difficult to judge future impacts from experience during its early years. In addition, the amendments introduced by the Clean Water Act of 1977,[6] make extrapolation difficult.

FEDERAL WATER POLLUTION CONTROL ACT

The Federal Water Pollution Control Act Amendments of 1972 established a complex program to clean up the Nation's waterways. Where previous legislation had concentrated on establishing broad water quality standards,[7] FWPCA sought to place individualized, technological requirements on all polluters, and to upgrade these requirements until the ultimate goal of zero pollution discharge into navigable waters would be achieved.

Note: Footnotes for this section appear on pp. 195-197.

The stated objective of the Act is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. "a To achieve this objective, six national goals and policies are set forth:[9]

1. The national goal that the discharge of pollutants into navigable waters be eliminated by 1985;
2. The national goal that, wherever attainable, an interim goal of water quality which provides for the propagation of fish, shellfish, and wildlife; and provides for recreation in and on water, be achieved by July 1, 1983;
3. The national policy that discharge of toxic pollutants in toxic amounts be prohibited;
4. The national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;
5. The national policy that areawide waste treatment planning processes be developed and implemented to assure adequate control of sources of pollution in each State; and
6. The national policy that a major research and demonstration effort be made to develop the technology necessary to eliminate the discharge of pollutants into the navigable waters, the waters of the contiguous zones, and the oceans.

FWPCA authorized Federal and State regulatory programs and a large construction grant program designed to meet a series of deadlines for improving water quality contained in the Act. The EPA and the Army Corps of Engineers have the primary Federal responsibility for enforcement and implementation. State cooperation and planning is also an essential component of the total effort.

Many of the water quality deadlines have not been met. The Council on Environmental Quality (CEQ) characterized progress under the Act as follows :[10]

This period has been one of high expectation and significant frustration. Water quality has not improved as rapidly as we had hoped, and there are still substantial delays in fully implementing many sections of the Act.

Two different approaches to controlling sources of pollution are found in the Act. They arise from the fundamental distinction, both in legal and in practical terms, between point and nonpoint sources of pollution. A point source is any confined, discrete conveyance such as a pipe, a ditch, or even a floating craft. " Point sources release a collected stream of pollutants through sewers, pipes, ditches, and other channels. Such streams can be measured and regulated with some precision. They provide a ready locus for the application of technology to control and purify effluents. Nonpoint sources are sites from which there is uncollected runoff, Agricultural areas, mining operations, and construction sites are typical examples of nonpoint sources. They present highly complex regulatory and technological difficulties, and are subject to less stringent legal controls.

The 1972 Act established the following regulatory scheme to control pollution from point sources:

1. By July 1977, all dischargers other than municipal sewage treatment plants must have achieved the effluent limitations based on the "best practicable pollution control technology currently available" (BPT), and public treatment works must have achieved limitations based on secondary treatment .*2
2. By July 1983, nonmunicipal point sources must have in operation the "best available technology economically achievable" (BAT), and municipal sewage treatment plants must have installed the "best practicable waste treatment technology."[13]
3. Special effluent standards for toxic water pollutants based solely on environmental and safety considerations must be met prior to the 1977 deadline.[14]

4. New facilities and installations must meet standards of performance based on the "best available demonstrated control technology."[15]
5. Special effluent restrictions, based on water quality standards, must be used whenever it becomes apparent that the application of national standards will not meet water quality targets in a given basin.[16]

It is estimated that the 1977 deadlines were met by 90 percent of industrial polluters, but by only 40 percent of municipalities.[17] The control of toxic pollutants was less effective; EPA had failed to publish toxic effluent guidelines and was under court order to develop regulations for 65 toxic pollutants.[18]

The failure to meet the 1977 deadlines, coupled with new information about the effects of less stringently regulated nonpoint sources on water quality, raised questions about the requirement to implement strict BAT standards by 1983. The National Commission on Water Quality—established by section 315 of FWPCA—issued a report that recommended extending the 1977 requirement and postponing the 1983 goals and requirements for at least 5 years.[19] Two other aspects of the pollution control program—the sewage treatment construction grant program and the dredge and fill permit program administered by the Corps of Engineers (the 4041 program)—were also subjects of intense criticism. These programs, along with the BPT and BAT requirements, were viewed as placing unrealistic burdens on those sources covered by the Act.

Congress responded to many of these problems with the Clean Water Act of 1977,[20] which significantly amended FWPCA. The amended law further refines the existing regulatory scheme and places increased importance on the control of toxic effluents. On the whole, the 1977 amendments provided midcourse corrections rather than major changes in goals or objectives.

PERMIT SYSTEM

Permits implement the various standards found in the Act and in regulations; they are also used as enforcement devices. A permit, issued under section 402, which established the National Pollutant Discharge Elimination System (NPDES), is required before any pollutant (other than dredge and fill materials covered by section 4041) may be discharged from a point source into navigable waters.

A permit requires the discharger of pollutants to meet the applicable effluent limitations, technology standards, and water quality goals. Permits are obtained through the local EPA office or from the State, if the latter has qualified to take over the regulatory role. It is through the permit process that general guidelines are transformed into individual abatement requirements. Cancellation of permits for noncompliance is one method of enforcing the Act. Without a permit and the concomitant right to discharge pollutants, many industrial operations cannot be carried out.

EPA has identified nearly 65,000 dischargers subject to the NPDES. Through September 1976, 52,723 permits had been issued.[21] Issuing permits on a case-by-case basis often entails much negotiation. There must be an opportunity for a public hearing before a permit is issued. However, individual permits are not subject to the National Environmental Policy Act (NEPA) and the submission of an environmental impact statement is not required.[22]

A permit will require that a discharger meet whatever guidelines EPA has established for limiting effluents from industrial operations of that general type. As will be discussed in the next section, EPA has established industry-by-industry limitations that specify the maximum permissible discharges of various pollutants associated with the processes used in those industries. But permits do not simply recapitulate EPA effluent guidelines; a discharger maybe subject to additional requirements to meet water quality

standards or to prevent degradation of existing water quality.

Water Quality Standards and Nondegradation

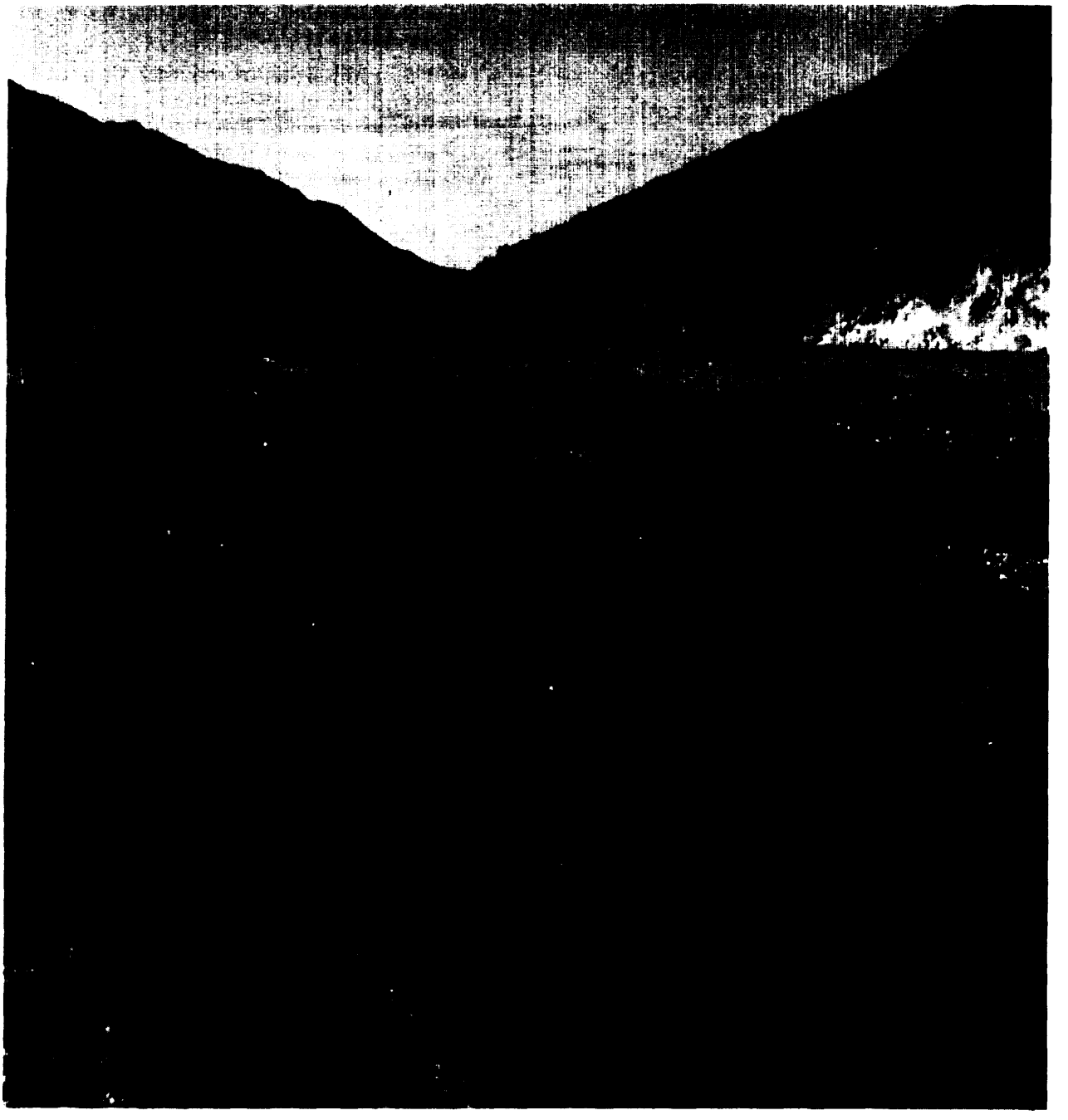
The Water Quality Act of 1965,[23] required the States to adopt water quality standards for interstate waters, for the first time. Section 303 of FWPCA continued those standards; in addition, the States were required to develop standards for intrastate waters.[24] If a State should fail to establish adequate standards for either category, EPA is authorized to do so in its stead. Periodically, the States must review and revise their water quality standards. The following guidelines for State review and revision have been established by the EPA:[25]

1. The States must review their water quality standards every 3 years and revise them where appropriate.
2. Water quality standards must protect the public health and welfare, and provide protection for downstream water quality standards.
3. The States must upgrade existing water quality standards where current water quality supports higher uses than those presently designated.
4. The States must upgrade existing water quality standards to achieve the Act's 1983 goal of fishable and swimmable waters where attainable. Attainability is to be determined on the basis of environmental, technological, social, economic, and institutional factors.
5. The States may downgrade existing water quality standards only on demonstrating that:
   - Existing standards are not attainable because of natural conditions (such as leaching from natural heavy-metal deposits);
   - Existing standards are not attainable because of irreversible man-induced conditions (as when known methods are incapable of restoring water to the designated use); or
   - The application of existing standards would have substantial and widespread adverse economic and social effects (such as a marked increase in unemployment, not due to other factors, over an extensive area, for more than 1 year).

Before a State can issue a permit for discharging a pollutant under section 402 it must have a program for review and revision of water quality standards.[26] Once a water quality standard is established, a State must identify areas for which the 1977 effluent limitations are not sufficiently stringent to implement the applicable water quality standard.[27] For such areas, the State must determine the total maximum daily load of a pollutant that is consistent with the applicable water quality standard, This information is used to set more stringent permit requirements.

The water quality standards form the basis of a program designed to prevent the degradation of presently clean waterways. The antidegradation policy has several important elements. The regulations provide, without qualification, that "No further water quality degradation which would interfere with or become injurious to existing instream water uses is allowable."[28] Thus, if a particular body of water in its existing condition could be used for sport fishing, it cannot be degraded in any way that would reduce its suitability for this activity. Similarly, if a body of water is suitable for the propagation of fish, shellfish, or wildlife, for swimming, or for drinking water supply, then it must remain suitable for these and any other possible uses for which it is now fit. This does not mean that water quality may not deteriorate at all; small increases in pollutant loads may not be inconsistent with protecting a possible present use for a body of water.

With one exception, the regulations do not permit any increase in pollutant loads in those high-quality waters that currently ex-



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ceed the levels needed to support recreation and the propagation of fish, shellfish, and wildlife in and on the water. That exception permits a State to decide, after public participation, "to allow lower water quality as a result of necessary and justifiable economic or social development."[29] It is qualified in two respects. The exception cannot be applied at all to "high-quality waters which constitute an outstanding national resource, such as



Photo Credit: OTA Staff

Alaska's rivers and streams are subject to rapid changes in depth, rate of flow, and sediment load due to natural conditions

waters of National and State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, "[30] and it cannot be applied in any way that allows water quality to fall below the levels needed to protect fish, wildlife, and recreation in and on the waters. These provisions of the antidegradation policy protect waters not only from industrial expansions and sewage treatment plants, but also from commercial, agricultural, construction, and forestry sources.

The EPA regulations provided for implementation of the national nondegradation policy in three stages:

- By April 26, 1976, each State was required to have developed and submitted to EPA for approval a "State continuing planning process" containing a schedule for the development and adoption of a statewide policy on antidegradation.
- Between April and December 1976, each State was required, after public hearings, to adopt the new statewide policy on antidegradation. This policy had to be submitted to EPA for approval and to be at least as protective as the national policy.
- By July 1, 1977, the new statewide antidegradation policy had to go into effect. After that date, all proposed activities, which would increase water pollution, have to be screened for consistency with Federal-State antidegradation requirements.

State Permit Programs

A State may assume NPDES responsibilities—28 have already done so[31]—if, in addition to having developed a continuing planning process (pursuant to section 303 (e)), it has the authority to do the following:[32]

1. Issue permits, for a period not exceeding 5 years, to ensure compliance with effluent limitations, water quality standards, standards of performance, toxic and pretreatment standards, and ocean discharge criteria;
2. Undertake inspections and monitoring;
3. Ensure that notice of permits is given to the public, the Administrator, and other affected States;
4. Reduce permit violations by enforcing civil or criminal penalties; and
5. Ensure that adequate notice is given of all materials introduced into publicly owned treatment works.

Even when a State has assumed the administration of the NPDES, the EPA Administrator may object to the issuance of any particular permit and prevent it from going into effect.[33] He also has the authority to withdraw approval of a State permit program if the State's administration of the program fails to meet the requirements of section 402.[34]

Certification for Federal Licenses

Before the granting of a Federal license or permit to conduct an activity that involves the discharge of pollutants into navigable waters, the applicant must present the certification required by section 401.[35] The certificate is to be issued by the State in which the discharge originates, if that State administers the NPDES, if it does not, then the certification must be given by EPA. A certificate must show that the activity for which a Federal license or permit is sought will comply with all applicable effluent limitations, water quality standards, pretreatment and toxic effluent restrictions, and standards of performance.[36]

EFFLUENT LIMITATIONS

The Clean Water Act, unlike its predecessors, focuses on the operations of the polluter and not just on the resultant water quality. Specific limits on effluents are prescribed and must be adhered to by individual polluters. These limitations are enforced by the NPDES permit program administered by either the EPA or a State. No discharge of any pollutant from a point source is allowed unless a permit has been granted.[37] Such per-

mits must contain schedules of compliance which guarantee that the applicable effluent limitations will be met.

The limitation of effluents is essential for implementing the Act and attaining water quality goals:[38]

> The term, 'effluent limitation, ' means any restriction established by a State or by the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance,

In practice, effluent limitations are developed by EPA on an industry-by-industry basis. Prior to the 1977 amendments, they defined the pollution loads allowable under the 1977 standard of "best practicable technology" and the 1983 standard of "best available technology economically achievable. " These guidelines will be revised to meet the 1984 standards discussed below, and new tests added for the different classes of regulated pollutants.

Point Sources

The Act establishes four major classes of pollutant sources, each of which is subject to different standards and deadlines, and is regulated by different Federal and State agencies. The four classes are: (1) industrial point sources, (2) municipal point sources, (3) nonpoint sources, and (4) dredge and fill materials. A point source is defined in the Act as follows:[39] "The term point source means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants could be discharged. " Return flows from irrigated agriculture are specifically excluded from the definition of point source,

Point sources, which are usually associated with industry and sewage treatment plants, tend to be responsible for local pollution, particularly from toxic effluents. The major thrust of the Act is aimed at controlling point sources that discharge from discernible, confined, and discrete conveyances.

Nonpoint sources, which account for the bulk of conventional pollutants affecting water quality, include surface runoff from urban and agricultural sources, the entry of air pollutants into waterways through dry fallout, and precipitation and soil runoff-including runoff from mining and construction activities.

Under the Act, point and nonpoint sources are subject to different treatment. Point sources are regulated by a permit program based on uniform technology-based standards that is designed to reduce sharply previous pollution. Nonpoint sources, on the other hand, are not regulated by such specific Federal standards. This is primarily because discharges from these sources are diffuse, difficult to monitor, and dependent on uncontrollable climatic events (as well as geographic and geologic conditions), and may differ greatly from place to place.

Industrial point sources include all point sources other than publicly owned treatment works. Under FWPCA, the effluent limitations required that industrial point sources apply the BPT as determined by EPA, before July 1, 1977, and the BAT by July 1, 1983.

The 1977 amendments made several important changes in this procedure. The July 1977 BPT deadline has been extended until April 1, 1979, for those operators of point sources who demonstrated a good faith effort to achieve compliance.[40] The BAT standards and deadline have both undergone a complete revision. Pollution from industrial point sources is now divided into three classes—toxic, conventional, and nonconventional. Each of these is treated differently.

The Act defines toxic pollutants as:[41]

> The term 'toxic pollutant' means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, in-

> halation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations, in such organisms or their offspring.

Sixty-five named toxic poll utants, which were originally the subjects of an out-of-court settlement against EPA, must meet the BAT standards by July 1, 1984.[42] Additional toxic pollutants, which are not on this list, must meet BAT standards within 3 years after effluent limitations are established.[43]

The "conventional pollutants" include but are not limited to "biological oxygen demanding, suspended solids, fecal coliform, and pH."[44] They are subject to effluent limitations that require the application of the "best conventional control technology" by July 1, 1984. This new standard takes into account a number of factors that were not considered in developing the BAT standards. These are:[45]

> Factors relating to the assessment of best conventional pollutant control technology (including measures and practices] shall include consideration of the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources, and shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, nonwater quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.

The Conference Report on the Clean Water Act of 1977 indicates that this standard is intended to be less stringent than the BAT standard in some, if not most, cases:[46]

> The cost test for conventional pollutants is a new test. It is expected to result in a determination of reasonableness, which could be somewhat more than best practicable technology or could be somewhat less than best available technology for other than conventional pollutants. The result of the cost test could be a 1984 requirement which is no more than that which would result from best practicable technology but also could result in effluent reductions equal to that required in the application of the best available technology.

Nonconventional pollutants—those classified as neither toxic nor conventional—will be subject to the BAT standard requirements no later than July 1, 1987.[47] However, the 1977 amendments provide for a waiver or modification of such requirements for the nonconventional pollutants where the following conditions are met:[48]

1. The State concurs in the waiver.
2. The requirements are, at a minimum, as stringent as the BPT standard or any special July 1977 limitations for meeting water quality standards.
3. No other point or nonpoint source will face additional cleanup requirements due to the waiver.
4. The waiver will not interfere with meeting the 1983 goal of protected public water supplies and fishable and swimmable waters.

The waiver provision appears to reflect the judgment that the nonconventional pollutants are less likely than other pollutants to pose a serious threat to water quality. The toxic pollutants present a more immediate danger to any humans, fish, or wildlife that come in contact with a body of water containing one or more of these substances. The conventional pollutants, which produce their effects over a longer time period, can cause eutrophication, odor, nonpotability, and a decreased ability to support plant and animal life, A third type of pollutant, heat or thermal pollution, which is regulated under the Water Quality Act of 1965 and section 303 of

FWPCA, can also have deleterious effects on plant, fish, and wildlife.

New Source and Pretreatment Standards

The Act imposes additional requirements on two important types of industrial point sources: newly constructed sources and sources that discharge into publicly owned treatment works. Section 306[49] of the Act requires the Administrator to establish standards of performance for newly constructed sources of pollution and specifies 27 categories of sources for which standards will be developed.[50] These include steam electric powerplants and factories for the manufacture of nonferrous metals, phosphate, and ferroalloys. EPA may add other categories where appropriate.

New source standards of performance apply the following requirements :[51]

> Standard of performance means a standard for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

In practice, standards of performance have often been equivalent to the 1983 BAT limitations developed for existing industries.[52] Any newly constructed source which complies with an applicable standard of performance is not subjected to more stringent standards during the first 10 years of its operation.[53]

Pretreatment standards are designed to limit the introduction into publicly owned treatment works of those pollutants that cannot be treated by them.[54] Publicly owned treatment works—which are also regulated by the Act—must meet standards that require the removal of specified pollutants. The pretreatment standards ensure that pollutants such as toxic effluents, which cannot be processed, are not fed to them. The 1977 Act allows the pretreatment requirements to be waived where the treatment works that further processes the discharge from an industrial point source is able to remove pollutants covered by the pretreatment standards .55

MUNICIPAL POINT SOURCES

Municipal sewage systems and treatment plants are both affected by regulatory and construction grant programs established by the Act. Municipal waste waters include wastes from homes and commercial establishments tied into sewage systems, some industrial wastes that are also tied in, and the ground water and runoff from precipitation that enters combined sewage and drainage systems. Municipal sewage treatment plants are usually designed to remove suspended solids and normal organic wastes, and to reduce the basic oxygen demand (BOD). There are two traditional types of municipal sewage treatment—primary and secondary:[56]

> In primary sewage treatment, suspended solids are allowed to settle. About 60 percent of the suspended solids is normally removed in this process, which also removes about 30 percent of BOD. Secondary treatment is a microbiological digestion process. This process enhances the BOD reduction to 85 percent or more and the solids removal to 90 percent or more. Both primary and secondary treatment reduce the BOD in waste water before discharge by removing organic matter.

The 1972 Act required all municipal point sources to utilize secondary treatment by July 1977, and to use the “best practicable waste treatment technology over the life of the works” no later than July 1, 1983. To facilitate the large construction and modifications program required to meet these goals, Title II of FWPCA established an $18 billion construction grant program for municipalities seeking to upgrade the quality of publicly owned treatment facilities.

Mining operations are not directly affected by sewage treatment regulations. But requirements for municipal waste treatment

could have an impact on the potential for mineral development. Mine development may often lead to the creation of new communities or the expansion of existing ones beyond the capacity of their sewage facilities. Taxes, zoning, and land use plans will reflect this.

To qualify for receipt of construction grants, every State or local governmental unit or authority that is responsible for waste disposal is required to develop areawide waste treatment plans and practices. Section 208[57] provides for the identification of areas with substantial water-quality control problems and for the creation of management and planning agencies in each of these identified areas. In other areas (generally rural areas), the State must act as a planning and management agent. The planning agencies, which are funded by Federal grants, are required to put into operation a "continuing areawide waste treatment management planning process." This process must include:[58]

1. Management programs that are capable of meeting the sewage treatment needs of the area over a 20-year period;
2. A regulatory program to control the location, modification, and construction of facilities that discharge water pollutants; and
3. Programs—including land use requirements—to control such nonpoint sources of pollution as agriculture, mining, and construction.

Plans under section 208 must have been submitted to EPA by November 1, 1978. State agencies that undertake planning and any local agency designated after 1975 must submit section 208 plans within 3 years of first receiving a planning grant.

Section 208 planning has taken longer to implement than was originally foreseen in 1972 because of delays in the entire municipal waste control program. The delays were caused, in part, by the Presidential impoundment of construction grant funds, and in part by EPA's failure to obligate the funds when they were made available. In response to the delays, the Clean Water Act provided extensions of the 1977 secondary treatment requirements for any municipal treatment plant where construction has not been completed or where Federal funds have been held up.[59] The extension may last until July 1, 1983, provided that the treatment works will comply with the 1983 best practicable waste treatment standard. In addition, industrial point sources, that had planned to meet 1977 standards by discharging into municipal treatment works are granted an extension for the same time period for which the treatment works receives its extension.

Nonpoint Sources

Quantities of pollutants reach rivers and streams without ever flowing through pipes, sewage plants, or outfall structures. Nonpoint sources of water pollution—including runoff from such diffuse sources as urban, agricultural, silvicultural, mining, and construction activities-have increased significantly over the past several years. As an indication of the extent of this problem, it has been estimated that:[60]

1. Storm-generated discharges account for between 40 and 80 percent of the annual total of oxygen-demanding materials;
2. Practically the entire 97 percent of the Nation's areas in rural land is a potential nonpoint source of pollution; over 400 million acres are in cropland, which delivers 2 billion tons of sediment annually to streams and lakes;
3. Animal wastes of livestock alone are estimated at 2 billion tons, equivalent to 10 times that produced by humans; and
4. Total phosphorus emissions from nonpoint sources have been estimated at 800,000 tons per year.

Nonpoint sources are regulated at the State and local levels by means of section 208 waste treatment management plans. The Act states that a 208 plan must include:[61]

A **process to (i) identify, if appropriate, mine-related sources of pollution including new, current, and abandoned surface and underground mine runoff, and (ii) set forth procedures and methods (including land use requirements) to control, to the extent feasible, such sources.**

Another relevant provision of section 208 requires similar treatment of construction activity related sources of pollution.[62]

It is uncertain, at present, what effect nonpoint source controls will have on mineral access. Many areas have not as yet submitted section 208 plans. The guidelines prepared by the EPA have focused mainly on urban problems.

The 1977 amendments include a provision[63] that allows EPA to develop regulations prescribing "best management practice" to control the nonpoint discharge of toxic and hazardous materials associated with industrial manufacturing or treatment processes. No regulations have yet been issued under this section. The Conference Report indicates that the intent of the provision "is to control runoff of toxic and hazardous materials from industrial sites resulting from poor housekeeping procedures."[64] Mining operations could be subject to regulations under this provision.

Dredge and Fill Operations

The Army Corps of Engineers was first given regulatory authority over the disposal of dredge and fill material into navigable waters by the Rivers and Harbors Act of 1899.[65] Section 404 of FWPCA continued that authority and provides that the Secretary of the Army, acting through the Chief of Engineers, may issue permits, after notice and opportunity for public hearings for the discharge of dredged and filled materials into the navigable waters at specified disposal sites.[66]

Permits issued by the Corps of Engineers for dredge and fill materials require that operations under the permit comply both with any effluent limitations and with water quality standards.[67] Permits for actions that significantly affect the environment are subject to NEPA; therefore, the Corps must prepare an environmental impact statement before issuing a permit.

When the Act was passed, the Corps interpreted its jurisdiction to mean those waters that had traditionally (since 1899) been classified as "navigable." For this reason, the Corps did not assume Federal regulatory jurisdiction over extensive amounts of wetlands throughout the country.

On March 27, 1975, as a result of a suit (Natural Resources Defense Council v. Callaway),[68] the Corps was ordered to expand its regulations beyond its traditional definition of navigability. Regulations published on July 25, 1975, established a three-phase implementation schedule for the Corps' expanded jurisdiction over the dredge and fill permit program.[69] Phase I, which went into effect in July 1975, required permits for discharges of dredge and fill into traditional navigable waters and their adjacent wetlands. Phase II, which took effect in September 1976, expanded the Corps' jurisdiction to include primary tributaries of traditionally navigable waterways, natural lakes greater than 5 acres in surface area and their adjacent wetlands. Finally, Phase III, which took effect in July 1977, included all waters up to the headwaiters where the stream flow is less than 5 cubic feet per second.

The expansion of the definition of navigable waters raised the possibility that many hitherto unregulated activities, as well as activities with little potential effect on water quality, would require +104 permits. Particular concern was expressed for conventional farming, ranching, maintenance, and construction activities. The 1977 amendments significantly altered the scope of activities subject to permit requirement. The following activities were exempted:[70]

1. Normal farming, silviculture, and ranching;
2. Maintenance of dikes, dams, levees, and transportation structures;

3. Construction of farm or stock ponds and maintenance of drainage ditches;
4. Temporary sedimentation basins on a construction site; and
5. Farm roads, forest roads, and temporary roads for moving mining equipment constructed in accordance with best management practices.

These exemptions apply only if the activity does not bring an area of navigable waters into a use to which it was not previously subject, or does not impair the flow or circulation of navigable waters, or does not reduce the reach of such waters .[71]

The 1977 amendments also allow the issuance of general permits for any category of activities that involve the discharge of dredge and fill materials.[72] General permits can be granted for a category of activities which the Secretary of the Army determines are similar in nature, cause only minimal adverse environmental effects when carried out separately, and will have only minimal cumulative adverse effects on the environment. No general permit may last longer than 5 years.

The 1977 amendments also provide for the State to administer both individual and general dredge and fill permit programs in phases II and 111 waters after approval of the program by the Administrator.[73] The State's authority for the program's approval is essentially the same one it must have to administer a 402 permit program.

Dredge and fill operations often accompany roadbuilding or construction, particularly near the coast, in wetlands, and in areas with many streams and lakes. Although temporary roads for moving mining equipment do not require permits, other access routes do. Where such operations are part of a project that would have a significant impact on the environment, the Corps must prepare an impact statement before issuing a permit.

Effluent Limits on Mining Activities

By regulation, EPA has established effluent limitations for some mining activities. The regulations are found in 40 CFR Part 436, "Mineral mining and processing point source category, " and 40 CFR Part 440, "Ore mining and dressing point source category. " These existing regulations are narrow in scope. As of June 1978, no standards of performance, pretreatment standards or effluent limitations reflecting the best available technology had been established for any mining activity. Those BPT standards that have been established cover only a small number of discharged pollutants. However, for a number of mining activities, EPA has established a no discharge limit.

The regulation with the broadest effect is undoubtedly 40 CFR Part 440, Subpart B, "Base and precious metals subcategory, " which applies to:[74]

a. Nonplacer mines operated to obtain copper-bearing ores, lead-bearing ores, zinc-bearing ores, gold-bearing ores, or silver-bearing ores;
b. Mills that employ the froth-flotation process for beneficiation of copper ores, lead ores, zinc ores, gold ores, or silver ores;
c. Mines and mills that use dump, heap, in situ leach, or vat-leach processes for the extraction of copper;
d. Mills that extract gold or silver by the cyanidation process;
e. Mills that extract gold or silver by the amalgamation process; and
f. Mines or mine and mill complexes beneficiating gold ores, silver ores, tin ores, or platinum ores by gravity separation, including placer or dredge mining.

BPT standards are established for total suspended solids and pH for all categories (except for cyanidation process mills and dump, heap, in situ leach, or vat-leach processes for which no discharge is allowed) .75 BPT limits are also placed on discharges of copper, zinc, lead, cadmium, and cyanide from regulated mines and mills.[76]

Other subparts of 40 CFR Part 440 establish BPT effluent limitations for iron ore,[77] bauxite,[78] ferroalloys,[79] uranium, radium, vanadium,[80] mercury[81] and titanium.[82] Each establishes limits on the discharge of suspended solids (in almost every case no more than 30 milligrams per liter) and pH (an allowable range between 6.0 and 9.0), as well as limits on concentrations of various metals in water discharges. For iron ore, limits are set on iron.[83] For the bauxite subcategory, limits are set on discharges of iron, lead, and zinc.[84] For the ferroalloy subcategory, limits are set for cadmium, copper, zinc, lead, arsenic, and ammonia discharges.[85] In the uranium, radium, and vanadium subcategory, guidelines are established for cadmium, zinc, arsenic, radium-226, and uranium.[86] The mercury ore subcategory establishes limits for discharge of mercury and nickel.[87] While the titanium subcategory contains limits on discharges of iron, zinc, and nickel.[88] In five instances, the regulations permit no discharge from certain types of facilities: iron ore mills employing magnetic or physical methods to beneficiate ore;[89] mines and mills that use dump, heap, in situ leach, or vat-leach methods to extract copper;[90] mills that extract gold or silver by cyanidation;[91] mills using acid or alkaline leach for extraction of uranium, radium, or vanadium;[92] and mills beneficiating mercury by gravity separation or froth-flotation.[93]

40 CFR Part 436, "Mineral mining and processing point source category" establishes effluent limitations for the class of materials generally known, as industrial minerals.[94] Most industrial minerals are processed at or near the mine site. Processing can include slurry transport of ores or intermediate product. Mine dewatering is often associated with mining and processing of building materials.

Effluent limitations in Part 436 focus on process-generated waste water, rather than on discharges from mining operations per se. The term process-generated waste water is defined as "any waste water resulting from the transport of ore or intermediate product, air emissions control, or processing exclusive of mining."[95] A zero discharge level for process-generated waste water pollutants is established for the following mineral categories: crushed stone, construction sand and gravel, gypsum, asphaltic minerals, asbestos and wollastonite, barite, fluorspar, borax, potash, sodium sulfate, frasch sulfur, bentonite, magnesite, diatomite, jade, and novaculite.[96] Allowable pollutant discharge levels have been established for process waste water and mine dewatering operations for: crushed stone (dewatering only), construction sand and gravel (dewatering only), industrial sand, phosphate rock, and graphite.[97]

FOOTNOTE REFERENCES FOR CLEAN WATER ACT

[2]Act of March 3, 1899, section. 13, 30 Stat. 1152, 33 U.S.C. 407.

[3]Water Quality Act of 1965, Public Law 89-234, 79 Stat. 903.

[4]Public Law 92-500, 86 Stat. 816.

[5]EPA effluent limitations that affect mining point sources are found at 40 CFR 436, "Mineral mining and processing point source category," and 40 CFR Part 440. "Ore mining and dressing point source category." The latter chapter covers copper, lead, zinc, gold, silver, bauxite, uranium, radium, vanadium, mercury, and titanium. The former chapter presently covers barite, fluorspar, borax, potash, phosphate, sulfur, bentonite, magnesite, diatomite, novaculite, tripoli, and graphite; guidelines are planned for trona, lithium, kyanite, aplite, kaolin, feldspar, talc, and garnet. For the most part, these chapters now contain only 1977 BPT standards for the regulated sources.

[6]*Natural* Resource *Defense* Council v. Train, 396 F. Supp. 1386 (D.D.C. 1975).

[7]Public Law 95-217, 91 Stat, 1566, 33 U.S.C. 1251 et seq.

[8]See 33 U.S.C. 1160(c), these standards are continued by section 303 of FWPCA, 33 U.S.C. 1313.

[9]Section 101(a), 33 U.S.C. 1251(a).

[10]Section 101(a)(1)-(6), 33 U.S.C. 1251(a)(1)-(6).

[10]*Environmental Quality—1976,* the Seventh **Annual Report** of **the Council on Environmental Quality,** 4 (1976) **hereafter Environment—1976.**

[11]**Section 502(14), 33** U.S.C. **1362(14).**

[12]**Section 301(b)(l), 33** U.S.C. **1o11.**

[13]Section **301(b)(2), 33** U.S.C.131 **l(b)(2).**

[14]Section **307(a), 33** U.S.C. **1317(a).**

[15]**Section 306,33** U.S.C. **1316.**

[16]Sections **301(b)(l) and 303(d), 33** U.S.C. **1311(b)(l) and 33** U.S.C. **1313(d).**

[17]**environmental Protection** *Affairs of* **the 94th Congress, p.** 97,

[18]*Environment—1976,* **pp. 16-17, 256-261.**

[19]*Report* **to the Congress by the National Commission on Water Quality, Mar. 18, 1976, pp. 7-10,**

[20]Public **Law** 95-217, **91 Stat. 1566, Dec. 27,** 1977. **Amends section 518 of FWPCA to provide that the Act may be cited as "The Federal Water Pollution Control Act" (commonly referred to as the Clean Water Act). Section 2,91 Stat 1566.**

[21]*Environmental Quality—1977,* **Eighth** *Annual* **Report** *of* **the Council on Environmental Quality** (1977) **(hereafter** *Environment— 1977).*

[22]Id.

[23]Public **Law 89-234, 79 Stat. 903.**

[24]Section 303(a)(2), **33** U.S.C. **1313(a)(2).**

[25]**40 CFR 130.17,**

[26]Section **303(e)(2), 33** U.S.C. **1313(e)(2).**

[27]Section **303(d)(l)(A), 33** U.S.C. **1313(d)(l)(A).**

[28]40 CFR 130.17(e)(l).

[29]40 CFR 130. **17(e)(2).**

[30]Id.

[31]*Environment—1*977, **at** 35. **These include California, Oregon, Washington, Montana, Colorado, Wyoming, North Dakota, Nevada, and North Carolina.**

[32]Section **402(b), 33** U.S.C. **1342(b).**

[33]Section **402(d)(2), 33 U.S. C. 1342(d)(2).**

[34]**Section 402(e)(3), 33** U.S.C. **1342(e)(3).**

[35]Section **401(a), 33 U.S. C. 1341(a).**

[36]Id.

[37]Section **301(a), 33** U.S.C.1311(a).

[38]Section 502(1 **1), 33** U.S.C.1362(11).

[39]Section **502(14),33** U.S.C. **1362(14).**

[40]**Section 309(a)(5), 33 U.S. C. 1319 (a)(5), as amended by Public Law 95-217, section 56(C), 91 Stat. 1592.**

[41]**1 Section 502(13),33** U.S.C. **1362(13).**

[42]**Section 301(b)(2)(C), 33** U.S.C. **loll; added by Public Law 95-217, section 42(a), 91** Stat.1582.

[43]**Section 301(b)(2)(D), 33** U.S.C. **loll; added by Public Law 95-217, section 42(a), 91** stat.1583.

[44]**Section 304(a)(4), 33** U.S.C. **1314(a)(4), as amended by Public Law 95-217, section 48(a), 91** Stat.1587.

[45]**Section 304(b)(4), 33** U.S.C. **1314(b)(4), as amended by Public Law 95-217, section 48(b), 91 Stat. 1587.**

[46]**House** Report **95-830,** p. 85.

[47]**Section 301(b)(2)(F), 33** U.S.C.131 **l(b)(2)(F).**

[48]Section **301(g), 33** U.S.C. **1311(g), added by Public Law 95-217, section 43,91 Stat. 1583.**

[49]Section **306,33** U.S.C. **1316.**

[50]**Section 306(b), 33** U.S.C. **1316(b).**

[51]Section 306(a)(1), 33 U.S.C. **1316(a)(l).**

[52]**Environment—1976, at 14.**

[53]Section **306(d), 33** U.S.C. **1316(d).**

[54]Section **307(b), 33** U.S.C. **1307(b).**

[55]Public **Law 95-217, section 54(a),** 91 Stat. 1591, **amending section 307(b)(l); 33** U.S.C. **1307(b)(l).**

[56]*Environment—1* **976, at 257.**

[57]Section 208, **33 U.S. C.** 1288.

[58]Section **208(b)(2), 33** U.S.C. **1288(b)(2).**

[59]Section **301(i)(l), 33** U.S.C.131 **l(i)(l), as amended by Public Law** 95-217, **section 45,91 Stat. 1584,**

[60]**Environmental Protection** *Affairs of* **the 94th Congress, p. 91,**

[61]Section **208(b)(2)(G), 33** U.S.C. 1288(b)(2)(G).

[62]Section **208(b)(2)(H), 33** U.S.C. 1288(b)(2)(H).

[63]**Section 304(d) 33** U.S.C. **1314(d), as added by Public Law 95-217, section 50,91 Stat. 1588.**

[64]House **Report 95-830, p. 80.**

[65]**33** U.S.C. 407.

[66]Section 404(a), 33 U.S. C. 1344(a).

[67]**Permits issued under section** 404 contain **the** following general conditions (ENG Form 1721):

b. That **all** activities authorized herein shall, if they involve a discharge or deposit into navigable waters or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations, and standards of performance, prohibitions, and pretreatment standards established pursuant to section 301, 302, 306 and 307 of the Federal Water Pollution Control Act of 1972 (Public Law 92-500; 86 Stat. 816), or pursuant to applicable State and local law,

c. That when the activity authorized herein involves a discharge or deposit of dredged or fill material into navigable waters, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances,

d. That the permittee agrees to make every reasonable effort to prosecute **the work authorized herein in a manner so as to minimize any adverse impact of the work on fish, wildlife, and natural environmental values.**

[68]**392 F.Supp.** 685 (D.D.C.1975).

6940 F.R. 31320, July 25,1975; 33 CFR 209.120.

[70]Section **404(f)(l), 33** U.S.C. **1344(f)(l), as amended by Public Law 95-217, section 67(b), 91 Stat. 1600.**

[71]Section **404(f)(2), 33** U.S.C. **1344(f)(2), as amended by Public Law 95-217, section 67(b), 91 Stat. 1601.**

[72]**Section 404(e), 33** U.S.C. **1344(e),**

[73]Section 404(g), 33 U.S.C. 1344(g).
[74]40 CFR 440.20.
[75]40 CFR 440.22(a).
[76]40 CFR 440.22(a).
[77]40 CFR 440, subpart A.
[78]40 CFR 440, subpart C.
[79]40 CFR 440, subpart D.
[80]40 CFR 440, subpart E.
[81]40 CFR 440, subpart F.
13240 CFR 440, subpart G.
[83]40 CFR 440.12(a).
"40 CFR 440.32 (a)(1).
[85]40 CFR 440,42(a),
[88]40 CFR 440.52(a).
[87]40 CFR 440,62(a),
[88]40 CFR 440. 72(a).
[89]40 CFR 440.12(a)(3).
'40 CFR 440.22 (a)(3).
[91]40 CFR 440.22(a)(4).
[92]40 CFR 440.52 (a)(2).
[93]40 CFR 440.62 (a)(2).
[94]Industrial minerals include sulfur, asbestos, fluorspar, gemstones, graphite, building materials, abrasives, and absorbents. For a description of industrial minerals and their role, see Charles F. Park. Earthbound, pp. 117-130 (1975).
[95]40 CFR 436.21(e).
[96]40 CFR 436.22(a), crushed stone; 40 CFR 436.32(a) construction sand and gravel; 40 CFR 436.52(a), gypsum; 40 CFR 436.62(a), asphaltic mineral; 40 CFR 436.72(a), asbestos and wollastonite; 40 CFR 436.102(b), barite (except wet process or flotation); 40 CFR 436.1 12(b), fluorspar (except heavy media separation or flotation); 40 CFR 436.132(a), borax; 40 CFR 436. 142(a), potash; 40 CFR 436.152(a), sodium sulfate; 40 CFR 436.192(a), frasch sulfur; 40 CFR 436.222(b), bentonite; 40 CFR 436.232(a), magnesite; 40 CFR 436.242(a), diatomite; 40 CFR 436.252(a), jade; and 40 CFR 436.242(a) novaculite.
9740 CFR 436.22(a)(2), crushed stone (dewatering); 40 CFR 436.32 (a)(2) construction sand and gravel (dewatering); 40 CFR 436.42(a)(2), industrial sand (HF flotation only); 40 CFR 436.42(a)(3), industrial sand (dewatering); 40 CFR 436.182(a)(l), phosphate rock; and 40 CFR 436.382(a), graphite.

COASTAL ZONE MANAGEMENT ACT

The Coastal Zone Management Act (CZMA)[1] provides a series of incentives for States to develop comprehensive land use planning and zoning programs to preserve and protect the resources of the coastal zone. The Act was passed in recognition of severe problems existing in the coastal areas and the absence of effective State and local initiatives to combat these problems.

State action under the coastal zone program has two phases: First, the development of a State management plan that meets criteria set forth in the Act and is approved by the Secretary of Commerce; second, the implementation of that plan. The aim of the law, in simplified terms, is to create State authorities with the power to manage and control all future development in the coastal region following a comprehensive management plan. The Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), acts as the Federal administrator for the CZMA program and is charged with assuring that State plans and implementation programs meet the objectives of the Act.

State participation in the CZMA program is optional, but all 30 States eligible under the Act have thus far chosen to participate.[2] There are three strong incentives to do so: States receive Federal financial assistance to develop coastal zone management plans satisfying the statutory criteria; the cost of administering approved plans will also be substantially covered by Federal grants; and a State is assured that most Federal actions directly affecting coastal areas must be 'consistent' with the approved coastal zone management plan.

The potential impact of State coastal zone management plans on mineral access is clear. A State management plan (discussed in greater detail below) must include the following: a definition of permissible land and water uses within the coastal zone; guidelines on the priority of uses in specific areas (including specific listing of low-priority uses); and an inventory and designation of areas to receive specially stringent environmental protection. Decisions in any of these areas could have a controlling impact on the feasibility of mineral extraction or access within the coastal zone.

Questions of mineral access are also affected by a section of the Act requiring State plans to provide for "adequate consideration of the national interest involved in planning for, or in the siting of facilities . . . which are necessary to meet requirements other than local in nature."[3] NOAA lists minerals as one of the resources in which there may be a national interest.[4] Transportation networks are listed among facilities in which there may be a national interest. The requirement of "adequate consideration" has been interpreted by NOAA to mean that there be a balancing of national interests in coastal resources and facilities with Federal, State, and local concerns involving adverse economic, social, or environmental impacts.[5] In any event, the State plan will have to address the question of restrictions on mineral extraction and access within the coastal zone.

THE COASTAL ZONE

The Act provides an inexact definition of the crucial term "coastal zone, " the locus for management activity. Section 304(1) states:

> The term 'coastal zone' means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal States, and includes islands, transitional and intertidal areas, salt marshes, wet lands, and beaches. . . . The zone extends inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters. Excluded from the

Note: Footnotes for this section appear on pp. 206-209.

coastal zone are lands the use of which is by law solely subject to the direction of or which is held in trust by the Federal Government, its officers, and agents.

Section 304(2) indicates that the term 'coastal waters' includes 'those waters, adjacent to shorelines, which contain a measurable quantity and percentage of seawater, including but not limited to sounds, bays, lagoons, bayous, ponds, and estuaries. '

The inland extent of the coastal zone is decided on a case by case basis.' It must include areas whose uses will have "direct and significant impact on coastal waters. " NOAA regulations list a number of significant factors such as the demographic, economic, political development, and geophysical characteristics of an area that should be considered in making decisions on the extent of coastal zone boundaries.[7]

Alaska has the longest coastline of any State, an estimated 47,300 miles of tidal ocean shoreline.[8] Much of the coastline is in, and will continue in, Federal ownership and is therefore excluded from inclusion in the coastal zone.[9] In its coastal zone plan submission of 1978, the State will initially define the Alaskan coastal zone as being seaward to the extent of State jurisdiction and landward in terms of biophysical criteria developed by the Alaska Department of Fish and Game.[10] The initial landward boundaries will be subject to modification as the plan is developed in detail.[11]

STATUTORY REQUIREMENTS FOR THE PLAN

The first phase of the CZMA process requires that the State develop a plan for managing activities in the coastal zone. At a minimum, the plan must contain the following nine elements specified in section 305(b):[12]

1. An identification of the boundaries of the coastal zone subject to the management program;
2. A definition of what shall constitute permissible land uses and water uses within the coastal zone that have a direct and significant impact on the coastal waters;
3. An inventory and designation of areas of particular concern within the coastal zone;
4. An identification of the means by which the State proposes to exert control over the land and water uses that have a direct and significant impact on the coastal waters, including a listing of relevant constitutional provisions, laws, regulations, and judicial decisions;
5. Broad guidelines on the priority of uses in particular areas, including specifically those uses of lowest priority;
6. A description of the organizational structure proposed to implement the management program, including the responsibilities and interrelationships of local, areawide, State, regional, and interstate agencies in the management process;
7. A definition of the term "beach" and a planning process for the protection of and access to public beaches and other public coastal areas of environmental, recreational, historic, esthetic, ecological, or cultural value;
8. A planning process for energy facilities that are likely to be located in or that may significantly affect the coastal zone, including, but not limited to, a process for anticipating and managing the impacts from such facilities; and
9. A planning process for (a) assessing the effects of shoreline erosion (however caused), and (b) studying and evaluating ways to control or lessen the impact of such erosion, and to restore areas adversely affected by such erosion.

These requirements are designed to ensure that qualifying plans achieve wise use of the land and water resources of the coastal zone by giving full consideration to ecological,

cultural, historic, and esthetic values as well as to the needs for economic development including the extraction of needed mineral resources. These requirements differ markedly from State plans under the clean air or water programs, [13] in which the State plans must meet specific Federal requirements for the elimination of named pollutants in a specified time frame.

DEVELOPING THE PLAN

The first Federal incentive for State participation in the CZMA program is the provision of matching grants to meet State costs in developing an acceptable plan. Grants of up to 80 percent of the State costs maybe made in each of 4 years. [14]

The CZMA offers considerable latitude to States in developing an approvable plan, but the program planning process requires that the States address the designated statutory criteria while doing so. As a result, State choices in the development of a proposed plan could affect the availability of or access to minerals on non-Federal land in coastal zones.

Key decisions in the development and implementation of a coastal zone management program include the designation of the coastal boundaries, the determination of permitted uses and their priority, the inventory and designation of areas of particular concern, and the establishment of land and water use controls. Designation of the coastal zone boundaries is the first step in the development of a management program. It determines the location and extent of territory subject to planning and controls and, equally important, those areas that are excluded from controls.

The Act recognizes that land and water uses in areas a considerable distance inland from the land-sea interface may have significant effects on the coastal environment. Therefore, the protection of this environment requires control of all areas whose uses will have "direct and significant impact on the coastal waters. " The regulation interpreting this requirement recognizes "that no simple geographic definition will satisfy the management needs of all coastal States" because of the peculiarities and variations that exist. Instead, it enumerates a number of factors, such as an area's demographic, economic, political, developmental, and geophysical, characteristics, that should be considered in determining the coastal zone boundary for a State. [15]

After designation of coastal zone limits, the State must determine what are permissible land and water uses within the coastal zone that have a direct and significant impact on the coastal waters. [16] In making these determinations, the regulations require States to consider, among other things, the "requirements for . . . extraction of mineral resources and fossil fuels . . . " and the development of indices measuring the environmental and economic impact of such activities, [17] i.e., whether they are beneficial, benign, tolerable, or adverse. A State must provide for some evaluative mechanism in its plan in order to assess environmental and economic impacts resulting from the extraction of minerals and fossil fuels.

Section 305(b) specifically requires States to identify the means by which control over permissible land and water uses will be exerted; and the regulations delineate a variety of options in terms of laws, regulatory processes, and the like, that are available to demonstrate this capacity. This requirement is reinforced by the provisions of section 306(e) that require adoption of some regulatory process to approve or disapprove of various land and water uses. State coastal zone management plans must also include "an inventory and designation of areas of particular concern within the coastal zone. " These are areas of special statewide concern, which, it is expected, will be emphasized in their development of coastal zone policies and controls.

According to regulations issued by NOAA to supply guidance to States in the development of their plans : [18]

Geographic areas of particular concern are likely to encompass not only the more-often cited areas of significant natural value or importance, but also: (a) transitional or intensely developed areas where reclamation, restoration, public access, and other actions are especially needed; and (b) those areas especially suited for intensive use or development.

The regulations recognize that States "will vary in their perception of what areas are of particular concern" and provide detailed criteria for guidance during the designation process, which could affect mineral activities in coastal areas.

In designating areas of particular concern, the States are directed to make immediacy of need a major consideration in their determinations and to base designations on a review of natural and manmade resources and the uses of the coastal areas. These include the following:[19]

1. Areas of unique, scarce, fragile, or vulnerable natural habitat, physical feature, historical significance, cultural value, and scenic importance;
2. Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, and the various trophic levels in the food web critical to their well-being;
3. Areas of substantial recreational value and/or opportunity;

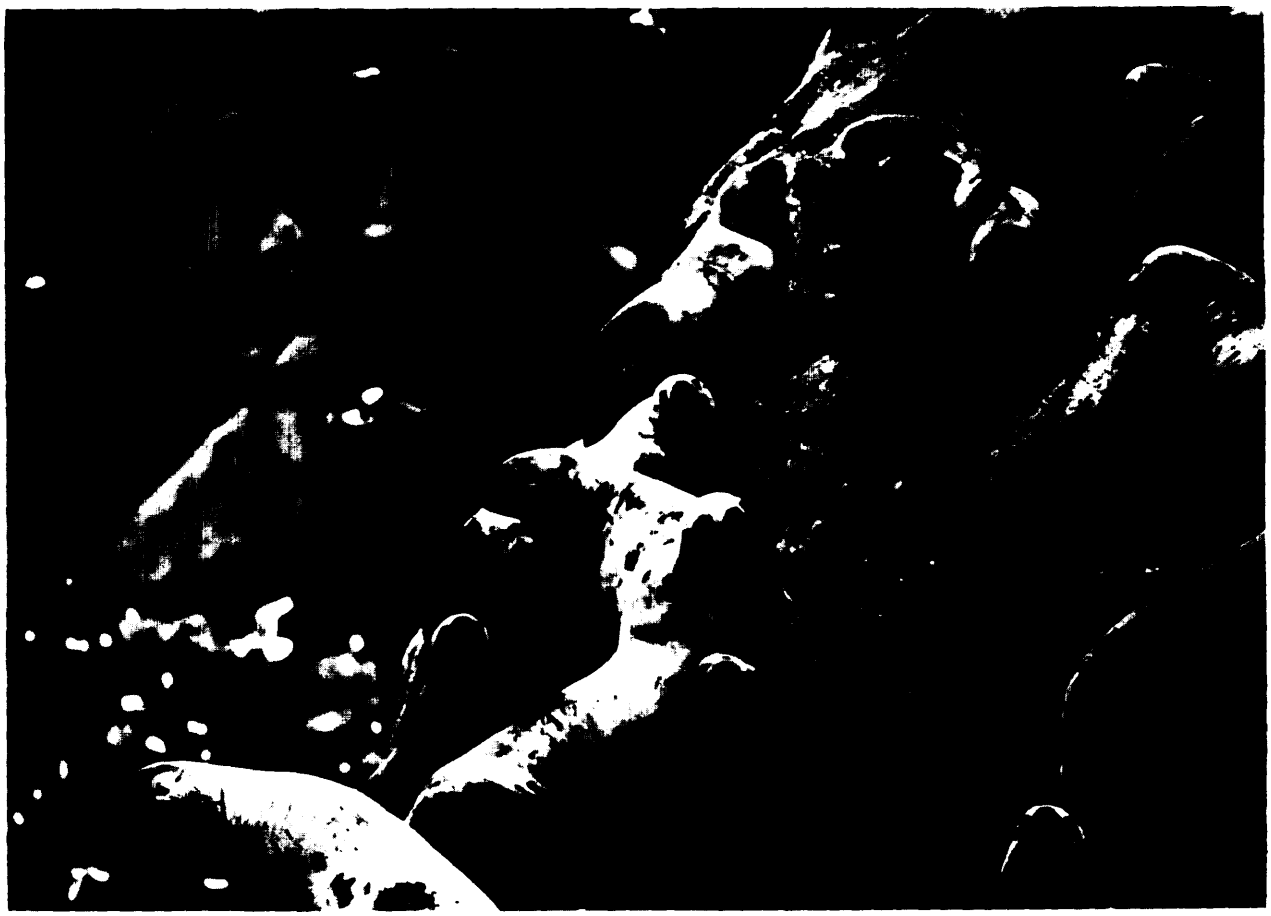

Photo Credit " U.S. Dept. of the Interior, National Park Service

Stellar Sea Lions, Kenai fjord, Alaska

4. Area where developments and facilities are dependent on the utilization of, or access to, coastal waters;
5. Areas of unique geologic or topographic significance to industrial or commercial development;
6. Areas of urban concentration where shoreline utilization and other water uses are highly competitive;
7. Areas of significant hazard if developed, owing to storms, slides, floods, erosion, settlement, etc.; and
8. Areas needed to protect, maintain, or replenish coastal lands or resources, including coastal flood plains, aquifer recharge areas, and dunes, coral and other reefs, beaches, offshore sand deposits, and mangrove stands.

The inventory and designation of areas of particular concern should assist the States in meeting the statutory requirement that management plans provide procedures for the designation of specific areas for preservation or restoration for their conservation, recreational, ecological, or aesthetic values. It should be noted that the list includes consideration of the mineral value of coastal "areas of unique geologic or topographic significance to industrial or commercial development."[20]

APPROVING THE PLAN

Once a State plan is approved by the Secretary, the State is eligible for a program administration grant under section 305 of the Act. These grants provide up to 80 percent of the cost of actually administering the programs described in the plan.[21] The Secretary is also authorized to make grants to States for program costs during the period between submission of the plan and its approval.[22]

Review and approval of plans is handled by the Office of Coastal Zone Management of NOAA.[23] Approval requires more than showing that a State plan contains the nine elements set forth in section 305(b). The Secretary must also find that the following nine requirements have been met in the plan's development.

1. The plan was developed in compliance with relevant Federal rules and regulations, and allowed opportunity for full participation by "relevant Federal and State agencies, local governments, regional organizations, port authorities, and other interested parties, public and private."[24]
2. The State has coordinated its program with local, areawide, and interstate plans applicable to areas within the coastal zone developed under section 204 of the Demonstration Cities and Metropolitan Development Act of 1966[25] and established an effective mechanism for the State coastal zone management program to maintain coordination with local governments and regional and interstate agencies. The coordination mechanism must require that the coastal zone management agency notify and receive comments from local governments on any program action that would conflict with local zoning rules. The State agency must allow 30 days for comment by the local officials; the management agency must review any such comments, prior to implementing the proposed action.[26]
3. The State has held public hearings in developing the program.[27]
4. The Governor has approved the plan.[28]
5. The Governor has designated a single agency to receive and administer section 305 grants.[29]
6. The State is organized to administer the plan.[30]
7. The State has the authority to implement the program, including authority to control land and water uses in the zone and the ability to acquire interests in property.[31] Controls over land and water may be accomplished through any one or a combination of these techniques :[32]

(a) Local implementation of State established standards and criteria subject to State administrative review;
(b) Direct State land and water use planning and regulation;
(c) Local planning and regulation of land and water uses subject to State administrative review for consistency, with State power to approve or disapprove after public notice and an opportunist y for hearings.

The plan must also include a method for assuring that local land and water use regulations "do not unreasonably restrict land or water uses of regional benefit."[33]

8. The management program must provide for planning and siting of facilities (including energy-related facilities) necessary to meet requirements that are "other than local in nature."[34]
9. The program must include a procedure to designate areas for preservation or restoration for conservation, recreational, ecological, and other values .[35]

However, compliance with the statutory requirements is not sufficient to guarantee plan approval. Regulations setting out general requirements supplementary to the statute state: "At the minimum, States shall include three broad classes of policies in their management program in order to provide a framework for the exercise of various management techniques governing coastal resources, uses, and areas."[36] These policies are: (1) resource policies directed towards the management and conservation of valuable or vulnerable coastal resources; (2) coastal development policies that address such matters as shorefront access, ports and harbors, energy development, and mineral access; and (3) governmental process policies including clarification and simplification of regulatory and permitting procedures.

The State management plan may be amended with approval of the Secretary of Commerce after public notice, consultation with affected Federal, State, and local government agencies, and an opportunity for participation by interested parties. A State may, with approval of the Secretary, implement its programs in segments in order to focus immediate attention on those coastal areas with the most serious problems, as long as the segmented management program can ultimately be consolidated into a single State program.

During the review of each State management program submitted for Federal approval, NOAA will prepare an EIS pursuant to NEPA.[37]

FEDERAL-STATE RELATIONSHIPS UNDER CZMA

The Act establishes a close relationship between the State and Federal coastal agencies conducting or licensing activities within or near the coastal zone. The coastal zone itself cannot contain "lands the use of which is by law subject solely to the discretion of, or which is held in trust by, the Federal Government''[38]—e.g., national parks, forests, wildlife refuges, petroleum reserves, and land administered by BLM. The management plan, however, can have a major effect on Federal activities that might affect the coastal zone. In addition, Federal agencies acting in and around the zone have a role in the approval of a State management plan.

Section 306(b) requires the Secretary of Commerce to consider the views of Federal agencies that might be affected by a management plan before approving that plan. Thus, Federal agencies operating in or near the zone have the opportunity to call for changes in a management plan.

Once a plan is approved, the State then has the opportunity to influence Federal activity in and near the zone due to the "Federal consistency" provision of the Act. The consistency provision is, in actuality, fourfold:

- Federal agencies that conduct or support activities directly affecting the zone

must do so in a manner consistent, to the maximum extent, with the management program.[39]

- Federal agencies undertaking a development project in the zone must ensure that the project is, to the maximum extent, consistent with the management program.[40]
- Applicants for a Federal license or permit affecting land or water uses in the zone must secure State certification that the activity complies with the management program before the Federal agency can grant the license or permit.[41]
- Applicants for Federal assistance under other Federal programs affecting the coastal zone must include the views of the appropriate State management agency on the relationship of the proposed projects to the State coastal zone plan.[42]

Exceptions to the consistency provisions may be made where the Secretary finds that the proposed Federal action is "consistent with the objectives of (the Act) or is otherwise necessary in the interests of national security."[43]

Section 307(f)[44] of the CZMA states that it does not in any way affect any requirement that is established by FWPCA, as amended,[45] or by the Clean Air Act, as amended,[46] or any requirement that is established pursuant to either of these Acts by Federal, State, or local governments. Moreover, the Act goes on to mandate that such requirements must be incorporated in the plan and must serve as the water pollution control and air pollution control requirements applicable to the coastal zone management program.

If there is a "serious disagreement" between any Federal agency and a coastal State in the development of a management plan under section 305, or in the administration of the plan under section 306, the Secretary of Commerce, in cooperation with the Executive Office of the President, shall seek to mediate the differences involved.[47] Where the disagreement arises over a State-Federal conflict in the administration of the plan, a public hearing must be held in the local area concerned.[48]

Federal land management agencies are subject to the consistency requirements of the CZMA.[49] Applications for rights-of-way or other uses of Federal lands in or affecting coastal zone areas must be consistent with any approved State management program, unless there is a decision by the Secretary of Commerce that the application is consistent with the Act or necessary in the national interest.[50] Applicants for permits or rights-of-way involving Federal lands in coastal areas in a State with an approved plan must secure State approval of their applications in addition to Federal agency approval.[51] Under the Federal Land Policy and Management Act[52] and the Forest and Rangeland Renewable Resources Act,[53] as amended, the BLM and Forest Service, respectively, are required to develop management plans for individual management units of public lands and national forests. For those units in or near designated coastal areas, the Federal plan should, under CZMA provisions, be consistent with State management plans "to the maximum extent practicable." Thus, permissible uses of Federal lands in coastal areas may, to a large degree, be controlled by individual State plans.[54]

In Alaska, where large portions of the coast will remain in Federal ownership, the development and implementation of the management program has two likely consequences. First, the affected Federal agencies will clearly have a major impact on decisions by the Secretary of Commerce and NOAA regarding the adequacy and provisions of the program. Second, the management program, when approved, will provide the State with an opportunity to influence Federal activity over a large area in and around the coast, which would otherwise be totally beyond State control.

NATIONAL INTEREST CONSIDERATIONS

While the main thrust of the CZMA program is aimed at protecting and preserving natural resources in the coastal zone, the Act contains recognition of the needs for resource development.

Section 306(c)(8)[55] requires that State plans must provide for adequate consideration of the national interest involved in planning for and siting of facilities that are necessary to meet requirements which are "other than local in nature." NOAA regulations elaborate on the meaning of this provision.[56] This requirement is not construed as compelling the States actually to include accommodations for certain types of facilities in their management programs.[57] It is intended, rather, to make sure that such national concerns are considered at an early stage of State planning and that such facilities are not arbitrarily excluded or unreasonably restricted in the management program.[58] "Requirements, which are other than local in nature" are considered to be those relating to facilities designed to serve more than one locality.

NOAA has issued guidelines in the form of regulations that identify types of facilities with siting characteristics that the Secretary of Commerce believes may involve a clear national interest.[59] These national interest requirements include interstate transportation facilities, such as interstate highways, airports, aids to navigation, ports, harbors, and railroads. Under the terms of this regulation, State plans must make reference to the views of "cognizant Federal agencies" as to how these national needs may be met in the coastal zone of that particular State. In the case of minerals, the cognizant Federal agencies are the Bureau of Mines and the Geological Survey of the Department of the Interior. For transportation facilities, Federal agencies include the Federal Highway Administration, the Federal Aviation Administration, the Coast Guard, the Army Corps of Engineers, the Maritime Administration, and the Interstate Commerce Commission.[60]

States must consult with appropriate Federal agencies and neighboring States in ascertaining local, regional, and national needs for facility sitings in or affecting the coastal zone.[61] This coordination must begin at an early stage of planning, so that national and regional needs will receive full consideration during the process of program development. The regulations emphasize that the States should actively seek the advice of concerned Federal agencies, as well as consulting with neighboring States that share coastal resources, and with regional interstate bodies.

OVERVIEW: MINERAL ACCESS AND COASTAL ZONE MANAGEMENT

There are three important elements of State implementation of the coastal zone management program that should be of active concern to mineral interests. First, is the development of a State management program plan; second, is the opportunity for public participation in the development of the plan; and third, is the consideration of national interest involved in the siting of facilities. These elements are key components in the development and operation of a coastal zone management program and establish the State guidelines and rules for regulation of activities and uses within the coastal zone. Moreover, Federal agencies, including land management agencies, are required to conduct their programs and actions in the coastal zone to comply with the State plan, to the maximum extent possible. The Coastal Zone Management Act and regulations provide for a consideration of mineral resources needs and activities, and require opportunities for public participation through which the views of the minerals industry may be heard.

The initial development of a State plan establishes the limits of the coastal zone, designates permissible activities and uses and their relative priorities, identifies areas of particular concern, and establishes a State mechanism for control of land and water uses in coastal areas. Regulations for setting per-

missible uses specifically include in the list of factors States should consider in the planning process, a consideration of the requirements for the extraction of mineral resources and fossil fuels, and the environmental and economic impacts of these activities.[62] Consideration of the transportation needs of the coastal zone, including transportation necessary for mineral resources extraction, should also be reflected in the planning process. The inventory and designation of areas of particular concern specifically include consideration of "areas of geologic or topographic significance to industrial or commercial development."[63]

A primary purpose of the Act is "to encourage the participation of the public, of Federal, State, and local governments, and of regional agencies in the development of coastal zone management programs."[64] To this end, the Act requires that there be "public notice and opportunity for full participation by Federal, State, and local governments, regional and interstate agencies, and other interested parties, public and private" in the development of the State plan and proposals for modification.[65] All public hearings held under the Act must be announced at least 30 days prior to the hearing date and all agency materials and documents must be made available to the public for review and study.[66] In addition, Federal regulations issued under the CZMA are subject to provisions of the Administrative Procedure Act and allow opportunity for public review and comment.[67]

The ample public participation provisions in the Act should, in theory, facilitate the ability of representatives of the mining industry, as well as individual miners and operators, to bring their particular needs and problems before Federal, State, and local decisionmakers. At all phases in the development, review, implementation, and modification of State coastal zone management programs these concerns—including special access and transportation needs associated with operations in or affecting the coastal zone—can be expressed. However, experience thus far suggests that neither coastal zone planners nor the mining community have addressed themselves at any length to the potential impacts of coastal zone planning on mineral access.[68] It is still relatively early in the development of the program.[69]

FOOTNOTE REFERENCES FOR COASTAL ZONE MANAGEMENT ACT

[1]Public Law 92-583, 86 Stat. 1280, Oct. 27, 1972, as amended by Public Law 94-370, 90 Stat, 1013, July 26, 1976, 16 U.S.C. 1451-1464.

[2]Council on Environmental Quality, *Environmental* Quality–1977, **The Eighth *Annual* Report *of the Council* on Environmental Quality, 1977, at 109.** CEQ **reports that management programs have been approved thus far for the States of Washington and Oregon and for the Bay Area Conservation and Development Commission of the San Francisco Bay area and** Culebra **area of Puerto Rico. Proposals have also been submitted by California and the Virgin Islands. Indiana was suspended for failing to make progress in planning a program and has applied for reinstatement.**

[3]Section **306(c)(8); 16** U.S.C. **1455(c)(8).**

[4]**15 CFR 923,52. This section contains two tables, which are characterized as illustrative of various items of national interest. Table I, "Facilities in which there may be a national interest in planning or siting" lists (1) National defense and aerospace, (2) Energy production and transmission, (3) Recreation, (4) Transportation, and (5) Regional water treatment plants. Table II, dealing with resources whose preservation might justifiably conflict with the national interest involved in the siting of facilities in table 1, lists minerals, but lists as the "Major related Federal legislation" only the Mineral Leasing Act. While this does not mean that** hardrock **minerals are not to be considered items of national interest, it may indicate that NOAA has not focused on this particular area.**

[5]15 CFR 923.52(a).

[6]A discussion of boundaries for the coastal zone is found at 15 CFR 923, subpart D.

[7]The coastal management area must include the following: (1) areas in which there are "uses subject to management" (defined at 15 CFR 923.11; in general, they include facilities which have a direct and significant impact on coastal waters, such as tank farms and refineries, industrial parks, LNG facilities, ports, etc., 15 CFR 923.11(c)(2) specifically mentions mineral and sand extraction.); (2) Special management areas (defined at 15 CFR 923.21 as areas of unique scarce or vulnerable natural habitat or historical significance or cultural value, areas of high natural productivity or essential habitat for living resources, and other areas needing stringent environmental protection); (3) transitional or intertidal areas; (4) salt marshes and wetlands; (5) islands; and (6) beaches. See 15 CFR 923.31(a).

The succeeding section of the regulation identifies other areas that should be considered for, but are not required for, inclusion in the coastal management area: (1) watersheds; (2) waters under saline influence; and [3) Indian lands not held in trust by the Federal Government.

[8]Federal-State Land Use Planning Commission for Alaska, "The D-2 Book, " Lands *of* National Interest in *Alaska,* May 1977, at 42.

'The coastal management zone cannot include "lands owned, leased, held in trust or whose use is otherwise by law solely subject to the discretion of the Federal Government. " 15 CFR 923.33(a).

'"Information concerning the current status of the Alaska coastal zone plan was provided in a communication from Mr. Roger Allington, a member of the Assessment Advisory Panel, who is serving on the State of Alaska Coastal Zone Planning Board.

'[Section 305(b); 16 U.S.C. 1454(b). Interim final regulations for the development and approval of State coastal management programs were not issued until Mar. 1, 1978, after preparation of this analysis; they superseded previously proposed and final rules governing NOAA's administration of the Act (see 43 F.R. 8378, Mar. 1, 1978, for a list of revised and superseded regulations). Although some sections of this analysis were based on previous regulations, citations are to the revised regulations of Mar. 1, *1978.*

[12]16 *U.S. C.* 1454(b).

[13]Section 110 of the Clean Air Act. See 42 U.S. C. 7410 and section 208 of the Clean Water Act, 33 U.S.C. 1288.

[14]Section 305(c); 16 U.S.C. 1454(c).

[15]15 CFR 923, subpart D, supra, notes 6 and 7.

[16]15 CFR 923, subpart B.

[17]15 CFR 920.12.

[18]38 F.R. 33046, Nov. 29, 1973.

[19]15 CFR 923.21(d).

[20]15 CFR 923.21(d)(l)(v).

[21]Section 306(a); 16 U.S.C. 1455(a).

[22]Section 305(a)(2); 16 U.S.C. 1454(a)(2).

[23]See 43 F.R. 8378, Mar. 1, 1978.

[24]Section 306 (c)(l); 16 U.S.C. 1455 (c)(l).

[25]42 U.S.C. 3334.

[26]Section 306(c)(2); 16 U.S. C. 1455(c)(2).

[27]Section 306(c)(3); 16 U.S.C. 1455(c)(3),

[28]Section 306(c)(4); 16 U.S.C. 1455(c)(4).

[29]Section 306(c)(5); 16 U.S.C. 1455(c)(5).

[30]Section 306(c)(6); 16 U.S.C. 1455(c)(6).

[31]Section 306(c)(7); 16 U.S.C. 1455(c)(7).

[32]Section 306(e)(l); 16 U.S. C. 1455(e)(l). These three control techniques are discussed at some length in the Mar. 1, 1978 regulations, 15 CFR 923,42, at 43 F.R. 8407.

[33]Section 306(e)(2); 16 U.S.C. 1455(e)(2).

[34]Section 306(c)(8); 16 U.S.C. 1455(c)(8).

[35]Section 306(c)(9); 16 U.S.C. 1455(c)(9).

[36]15 CFR 923.3(f). Mineral extraction is specifically mentioned among resource development policies.

[37]15 CFR 923.62. NOAA requires that State management programs be accompanied by "an environmental impact assessment that meets the requirements of the National Environmental Policy Act." The Office of Coastal Zone Management uses this information to determine if it must prepare an environmental impact statement. (It is almost impossible to conceive of a situation in which an EIS would not be needed.) Procedures for timing and review of the EIS are set forth at 15 CFR 923.72.

[38]Section 304(1); 16 U.S.C. 1453[1). See 15 CFR 923.33(a).

[39]Section 307(c)(1); 16 U.S.C. 1456(c)(1).

'Section 307(c)(2); 16 U.S.C. 1456(c)(2).

[41]Section 307(c)(3); 16 U.S.C. 1456(c)(3).

[42]Section 307(d); 16 U.S.C. 1456(d).

[43]Section 307(c)(3)(A), section 307(c)(3)(B)(ii) and section 307(d); 16 U.S.C. 1456(c)(3)(A), 16 U.S.C. 1456(c)(3)(B)(ii), and 16 U.S.C. 1456(d). See 15 CFR 930, Subpart H, "Secretarial Review Related to the Objectives and Purposes of the Act and National Security Interest. "

[44]16 U.S.C. 1456(f). See 15 CFR 923.44.

[45]42 U.S. C. 7401 et Seq.

[46]33 U.S.C. 1251 et seq.

[47]Section 307(h); 16 U.S.C. 1456(h). See 15 CFR 930, Subpart G, Secretarial Mediation.

48 Section 307(h)(2); 16 U.S.C. 1456(h)(2). See 15 CFR 93o, Subpart G, Secretarial Mediation.

[49]NOAA has recently published a final rule on Federal consistency with approved management programs, 43 F.R. 10510, Mar. 13, 1978. Consistency requirements for Federal lease or permit programs are at 15 CFR 923, subpart D.

[50]15 CFR 923, subpart H.

[51]See 15 CFR 930.63, State agency concurrence with applications for Federal permits or licenses; 15 CFR 930.64, Effects of State agency objection. NOAA regulations provide a process by which a State may list in advance certain Federal permit and license activities which must be reviewed for consistency, 15 CFR 930.53, and an associated procedure by which a State may have an opportunity to review other Federal permit and licensing activities should they prove to have an

impact on the coastal zone, 15 CFR 930.54. Both procedures allow for review of Federal permits and licenses relating to activities which actually take place outside the boundaries of the zone, but have an impact within the zone (see Comment, 15 CFR 930.53(b)). Whenever a State reviews an action, the applicant for the Federal permit or license must provide the State reviewing agency with data and information necessary to assess the impact of the proposed activity on the affected coastal zone. The State agency must provide for public notice of the application, 15 CFR 930.61, and, at its discretion, public hearings on the conformity of the activity with the management plan. Under the regulations, the applicant is initially required to certify that its application is in accord with the management plan, 15 CFR 930.57. The State acts as a reviewer, either concurring in the applicant's assessment, 15 CFR 930.63, or objecting, 15 CFR 930.64. If the State agency objects, then the Federal agency may not issue the permit or license, 15 CFR 930.65, unless the Secretary overrides the State decision under 15 CFR 930, subpart H.

[52]Public Law 94-579, 90 Stat. 2743, Oct. 21, 1976, 43 U.S.C. 1701 et seq. Planning requirements are at section 202, 43 U.S.C. 1712. It states, in part, that: "In the development and revision of land use plans, the Secretary (of the Interior) shall . . . (9) to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located, ., . Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act. " Section 202(c)(9), 43 U.S.C. 1712(c)(9).

[53]Public Law 93-378, 88 Stat. 476, Aug. 17, 1974, as amended by Public Law 94-588, 90 Stat. 2949, Oct. 22, 1976. 16 U.S.C. 1601, et seq. Section 6 contains requirements for national forest system planning, 16 U.S.C. 1604, but contains no specific mention of consistency with State or local management plans.

[54]There is no provision for direct State approval or disapproval of agency land use plans that control development within the coastal zone. The consistency requirement technically affects only direct Federal agency activities and activities requiring a Federal license or permit, not plans or procedures that maybe determinative of agency choices of which activities will be undertaken and which licenses and permits will be granted. Of course, if agency plans and procedures are not sensitive to coastal zone management programs, then they will merely create an internal procedure that makes choices that can be nullified when they reach fruition as direct action, licenses, or permits. Significantly, the consistency regulations do contain a provision describing a process by which management plans and the consistency requirement will be applied directly to OCS plans, 15 CFR 930, subpart E. The impact of OCS activity on the coastal zone and the question of control over that activity remains controversial and has been a central force in the development of the entire coastal zone program. It is likely that in framing the consistency regulations, as elsewhere in developing the regulatory structure for administration of the Act, other types of land use and other Federal land use planning efforts were not considered in great detail.

[55]16 U.S.C. 1456(c)(8).

[56]15 CFR 923.52.

[57]15 CFR 923.52(a).

[58]Id.

[59]See table 1, 15 CFR 923.52.

[60]Id.

[61]15 CFR 923.52(f). In addition to the national interest provision, the Act and regulations contain a related provision concerning "uses of regional benefit," 15 CFR 923.12 and 15 CFR 923.43, designed to ensure that a State plan does not prevent the development of projects that are of regional benefit.

[62]See 15 CFR 923.2(d)(8), 15 CFR 923.3(f)(2).

[63]15 CFR 923.21(d)(l)(v).

[64]Section 303(d), 16 U.S.C. 1452(d).

[65]Section 306(c)(1); 16 U.S.C. 1455(c)(1).

[66]Section 308; 16 U.S.C. 1457.

[67]Section 314; 16 U.S.C. 1463.

[68]As part of this assessment, OTA commissioned two studies of the relationship between developing coastal zone management programs and questions of mineral access. One study, *"Effects of* the Federal Coastal Zone Management Act *of* 1972 *on Access to* Minerals on Non-Federal Lands, " Earth Satellite Corporation, 1977, was a review of programs and interviews with public and private representatives in the States of Delaware, Maryland, and New Jersey. The other study, "Coastal Zone Management and Access to Onshore Minerals on Non-Federal Lands—A Threshold Assessment, " Theberge and Whitney, 1977, analyzed laws and interviewed mining interests (from major hardrock mining operators to small sand and gravel producers) and coastal zone regulatory personnel in the States of Virginia, North Carolina, and South Carolina.

Both studies came to similar conclusions. Earth Satellite reported:

> Direct (resulting from implementation of the Act) or indirect (resulting from State and local laws and regulations developed as a result of the general attitude towards land management and environmental protection fostered by CZMA and related Federal laws) environmental, social/cultural, economic, national security, recreation/scenic, transportation, institutional, or other effects on onshore non-Federal mining resulting from the CZMA have not been identified,
>
> All but a few of the mineral producers in the three State area are small businesses; most are unaware of the CZMA and none could cite specific access or blockage problems resulting from the Act.

Theberge and Whitney found:

> Even in States that have enacted or are adopting comparatively advanced coastal management and planning programs, such programs have not as yet expressly addressed the issue of access to minerals in the coastal zone, although both North Carolina and South Carolina have regulatory process and authority to do so. Although the CZM planning phase will soon enter its fourth and final year, mining interests still have an opportunity to play a meaningful role in plan development.

This lack of focus on mineral access is understandable. Plans are still in the development stage. Other controversies such as OCS development and public access to beaches have dominated the coastal zone planning process. Issues such as Surface Mining legislation, the Clean Air Act, and Alaska National Interest Lands have had higher priority for the mining community.

However, the findings of the two reports—while clearly an accurate reflection of the situation in the places and times studied—may not portray the relation of coastal zone management to minerals access at later times or in other States. The States studied shared the following characteristics: (1) None were far advanced in management planning; (2) The major mining activity was the extraction of common variety minerals; (3) All the States involved had highly developed coastlines with a history of land use control by pervasive and comprehensive zoning laws; and (4) None of the States had a particularly major Federal presence on or near the coastal zone. It is conceivable that coastal zone management will have a more appreciable impact on mineral access, in any State, when a final plan is approved and operational, and that it might have a more significant effect in States with hardrock mining potential in the coastal zone, in States which do not have a history of land use controls on coastal areas, or in States which have a significant Federal land management presence on the coastal zone.

[69] Alaska has yet to submit a coastal zone management plan. Some steps have been taken at the State and local level to begin the process. State legislation passed in 1977, S. 220, establishes a framework for State control over local decisions as allowed by section 306(e)(l)(A) of the Act, 16 U.S.C. 1455(e)(l)(A). A Coastal Zone Policy Council will develop guidelines to be implemented at the local and regional level. Every local government unit bordering on, or located in an area that has a significant impact on the coast will have authority to implement these guidelines. In unorganized areas, special new boards and commissions have been established to control use of the coast or land and water having an impact on the coast. The effects of the consistency provision will have a major bearing on the operation of the management program in Alaska for two reasons: (1) major exploration, development, and production programs planned as part of the OCS program and (2) the large amount of coastal lands that will remain under Federal ownership even after State and Native land selections are completed. The roles of Alaska Natives and the Native Corporations, which have large coastal holdings, have yet to be clarified. Although Indian tribes can operate as regional planning agencies, 15 CFR 923.92(e), the Corporations are not tribes. However, villages will implement the State Guidelines. Material supplied by Roger Allington, see supra, note 10.

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Options for Congressional Consideration

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Options for Congressional Consideration

INTRODUCTION

Congress, through the legislative decisions called for by section 17(d)(2) of the Alaska Native Claims Settlement Act (ANCSA), has a unique opportunity to influence Alaska's economic development while protecting its environmental values. The unprecedented land grants under ANCSA and under the Alaska Statehood Act, which many view as the foundation of Alaska's economic future, are creating major changes in its landownership patterns.

Following the conveyance of Native and State lands, approximately 60 percent of the State will remain in Federal ownership. Congressional decisions about the management of these Federal areas could affect mineral resource development on nearby non-Federal lands. The access policies of Federal land management agencies are thus of critical concern to non-Federal landholders. This is particularly true in remote sections of Alaska where topography, landownership patterns, and the lack of an extensive surface transportation system combine to isolate many areas from potential markets for their products.

Compared with the rest of the United States, Alaska has a limited surface transportation system. Most of the settlements throughout the State are connected by air. However, the development of mineral resources—with the exception of certain precious metals—requires a transportation system able to move large quantities of bulk materials to market. In most of Alaska, a surface transportation system—a railroad or highway—would be the only mode capable of transporting bulk ore.[1] Resolution of uncertainties about the availability of possible routes crossing Federal lands and about the conditions of their use could facilitate State planning and decisionmaking on the development of specific transportation systems.

Congressional designation of vast areas of Alaskan lands for conservation purposes, for example as parks and wildlife refuges, immediately places a restriction on their availability for other purposes. This includes their use for transportation routes and for access

[1] For a discussion of mineral transportation requirements see OTA working paper, John W. Whitney and Dennis Bryan, "Assessment of Transportation Access Requirements for Minerals Exploration and Mine Development and Operation in Alaska," in *Analysis of Laws Governing Access Across Federal Lands: Options for Access in Alaska, Volume II, Working Papers* (OTA-M-76),

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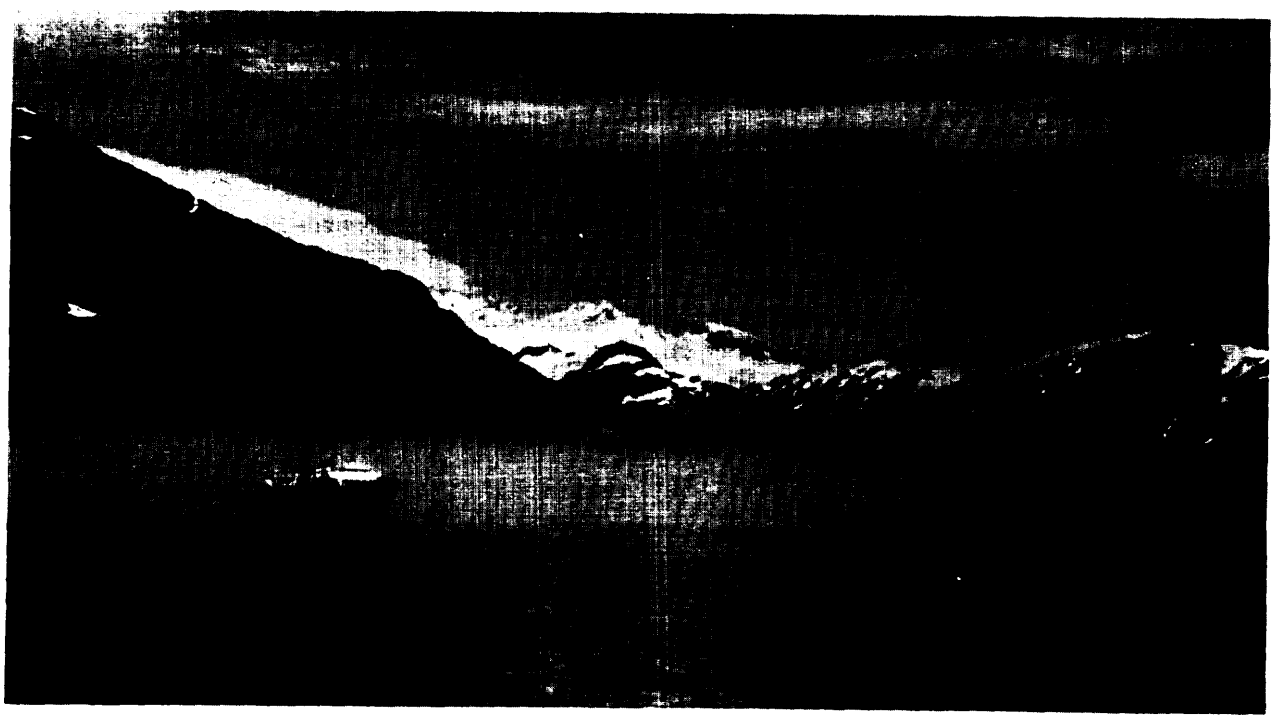

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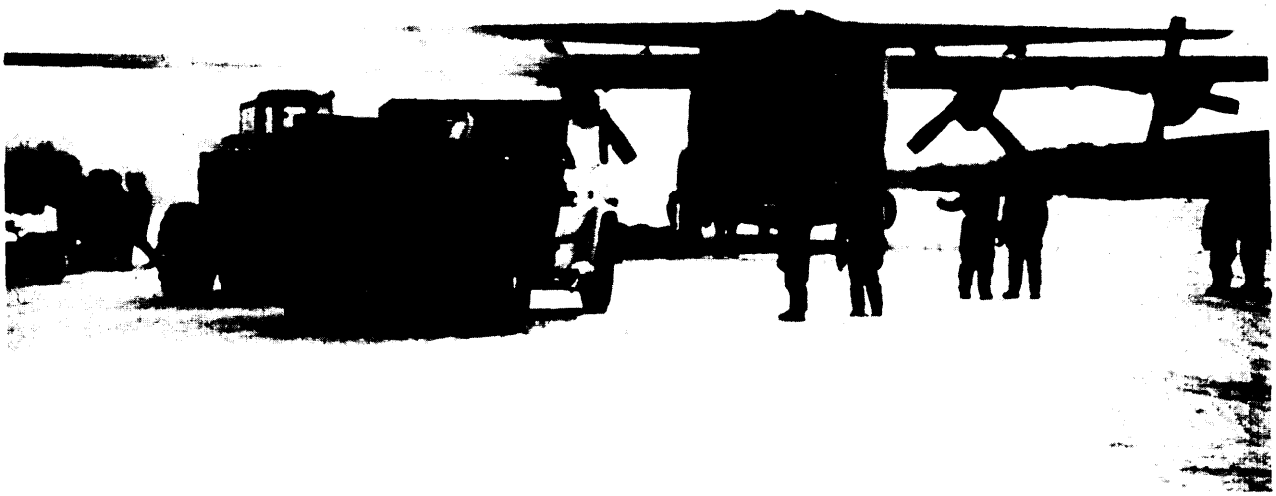

Photo Credit: The Alaska Coalition

The primary mode of transportation throughout most of Alaska is by air. Here, a Hercules air transport plane unloading heavy equipment for Trans-Alaska Pipeline construction

to non-Federal lands. Whether **or not Congress** specifically addresses future transportation demands and access needs in legislation **on the** proposed conservation areas, the d-2 decisions, either expressly **or by** implication, will have access policy aspects that could influence resource development **on** surrounding non-Federal lands.

Because of the importance of the congressional access policy decision to the development of mineral resources in Alaska, a range of possible congressional options that address the issue of the **use of** Federal lands for access have been identified. The access options, which **are** discussed in this chapter, range from the extension of the existing access policies of Federal land management systems, through special provisions for Alaskan right-of-way exceptions and Alaskan transportation system needs, to a restrictive access policy that would deny **most access uses of the** conservation system lands—the d-2 lands. (See table 5.) These options were examined using information obtained from case studies and interviews.

In addition to the access policy options discussed in this chapter, there **are** other alternatives that could aid access to mineral resources on non-Federal lands in Alaska. Some actions relate to Federal land management issues, such as the settlement of land selections and easement issues under ANCSA and the Alaska Statehood Act or providing assistance to those seeking access across Federal lands that are under new management systems. Other alternatives include planning and technical assistance to State and local governments and to Native Corporations for developing non-Federal natural resources and Alaskan transportation systems while balancing this development against the conservation systems' objectives of preservation and recreation.

The availability of possible transportation routes to serve non-Federal lands in Alaska will be influenced by the congressional decision about whether or not to allow surface access across Federal lands placed in conservation systems. If Congress allows access, it could be an incentive to Alaska's efforts to

Table 5—Summary of Selected Congressional Action Options*

Components \ Option	Option 1 Adopt Existing Access Policies	Option 2 Defer Access Decision	Option 3A & B—Limited Provisions for Alaskan Access Needs		Option 4A, B, & C Alaska Transportation Access Provisions	Option 5 Restriction of Access Across National Conservation System Lands
			A. Alaska Lands Right-of-Way	B. Boundary Shift and Land Exchanges To Exclude Access Routes		
ACCESS POLICY DECISION	Access through application of existing laws.	Specific deferral of access questions involving d-2 designations and remaining Federal lands in Alaska until a certain date, or some event in future, or indefinitely.	Special right-of-way provision for Alaskan lands for access through Federal lands to surrounded, adjacent, or otherwise isolated non-Federal lands or interests in land.	Local realinement of boundaries of conservation systems designations to exclude access routes. Land exchanges to provide access routes for non-Federal landowners, with exact locations included in d-2 designations, or by reference to maps filed later.	Use of Federal d-2 lands for Alaskan transportation system needs specifically accommodated through: (a) transportation system right-of-way provisions; or (b) designated corridors; or (c) new Federal-State review agency for Alaskan transportation systems.	Access use of Federal d-2 lands restricted beyond existing statutory limitations. Existing private rights access to surrounded lands, and existing rights-of-way would be recognized.
TIMING OF ACCESS DECISION	Now	Deferral—now; Access decision—later.	Now	Now	Now	Now
LEGISLATIVE IMPLEMENTATION	Congress makes d-2 lands designations without any provision for nonrecreational access.	Specific deferral provision in d-2 lands legislation.	Provision of d-2 lands legislation—or as new authority amendment of existing right-of-way provisions.	Provisions of d-2 lands legislation; or new land exchange authority.	Provision of d-2 lands legislation—new authority.	Provision of d-2 lands legislation, or new amendment of existing provisions—new authority.
IMPLEMENTING INSTITUTIONAL ARRANGEMENT[1]	Existing Institutions	Existing institutions	Existing institutions	Existing institutions	a) & (b) Existing institutions and/or (c) a new reviewing body for Alaska transportation systems.	Existing institutions
TRANSPORTATION SYSTEM DECISION[2]	Existing decision mechanism—Federal-State transportation planning and Federal DOT 4(f) review. Later congressional review of specific systems via program approvals and appropriations.	Existing decision mechanism—transportation systems use of Federal d-2 lands delayed until policy decision.	Existing decision mechanism—this option provision does not authorize rights-of-way for development of major transportation systems.	Existing transportation decision mechanism—local boundary shifts would leave access routes as public lands (d-1 classification) with fewer use restrictions than parks, etc., and also available for later state selection. DOT (f) review of route not required in most cases; land exchange would put route in non-Federal ownership.	a) & (b) Existing decision mechanisms; or c) existing transportation decisionmaking institutions plus new review body.	Existing decision mechanism. Use of Federal conservation system lands for Alaskan transportation system not permitted without congressional approval. (The restriction is for transportation system use and would not remove existing access guarantees for non-Federal landowners.)

*For a complete discussion see text
[1]Existing institutions include. Department of the Interior—Bureau of Land Management, National Park Service, Fish and Wildlife Service; Department of Agriculture—Forest Service
[2]Existing agencies revolved in transportation decisionmaking include: Department of Transportation—Federal Highway Administration, Federal Aviation Administration, Federal Railroad Administration; Interstate Commerce Commission; U.S. Coast Guard, Department of the Army, Corps of Engineers, and the Federal Power Commission

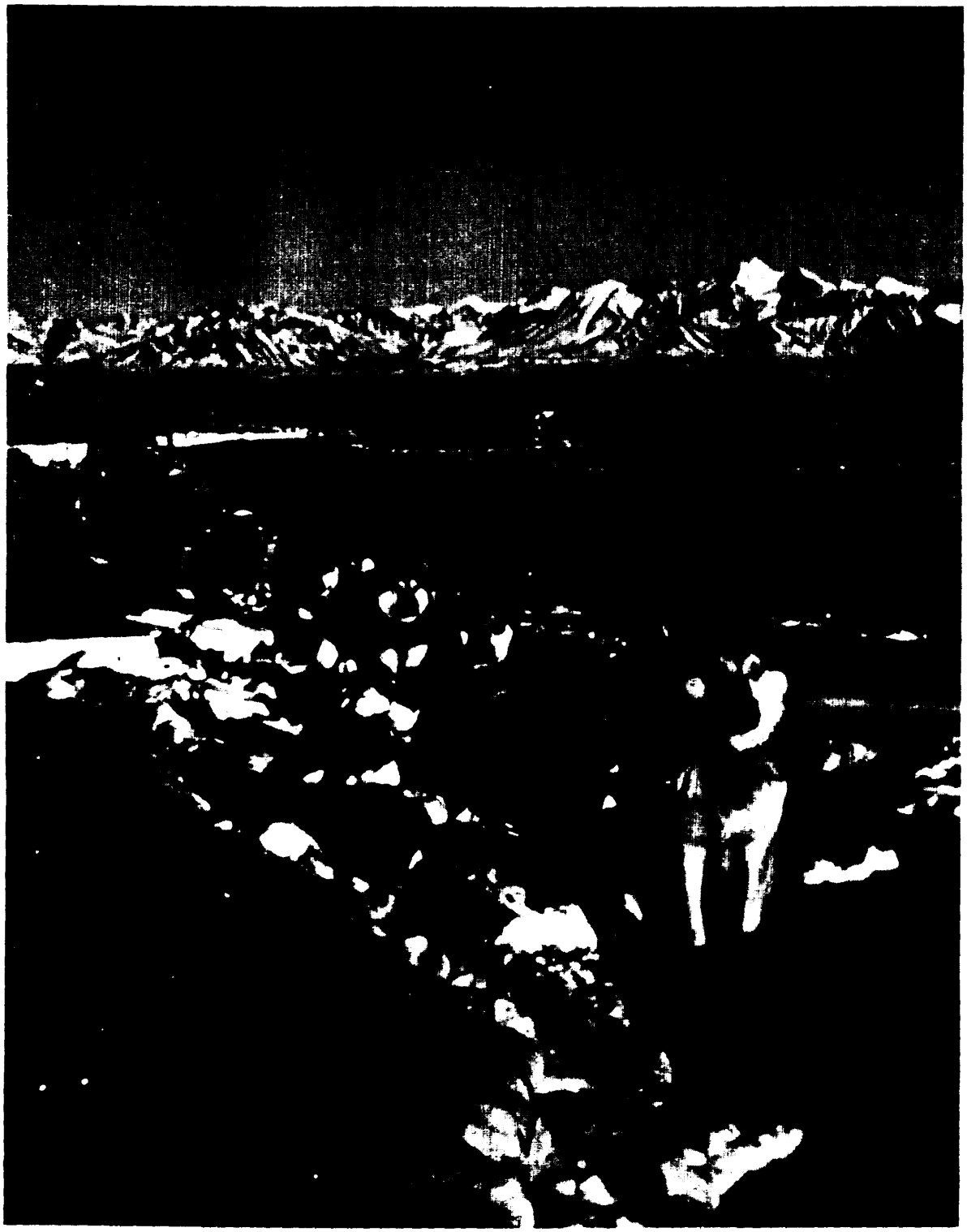

Photo Credit: The Alaska Coalition

Dog sled team—a traditional means of transportation in rural Alaska

generate a State transportation plan and priorities. Resolution of the uncertainty about the possible use of Federal d-2 lands for transportation purposes could facilitate the State's initial planning and evaluation of the transportation needs. This, in turn, could have the effect of encouraging mineral exploration and development.

Specific transportation projects must still be evaluated under established decisionmaking procedures. This evaluation process includes consideration of the economic, environmental, social, engineering, and transportation aspects of a proposed project. It also provides opportunities for the participation of State and local governments, Native Corporations, and other concerned interests. The approval of the Federal land manager is also necessary before a transportation system can be constructed over any Federal lands.

Should Congress decide to limit or prohibit the surface access use of conservation system lands, mineral exploration and development might be discouraged in those areas of Alaska that have no existing means of transporting bulk materials. Placer mining, primarily for precious metals, however, would be expected to continue. As a possible alternative, Congress could decide to allow access in some areas and to deny it in others. It is conceivable that future technological innovations will make it possible to transport large quantities of minerals in new ways. These innovations might include dirigibles, or low-draft hover craft that would be able to move heavy loads in an arctic environment. This could allow exploration and development in those areas where surface access across Federal lands is not permitted. At present, no such innovative technologies are available.

The Federal land management laws that directly control physical and legal access across Federal lands to mineral deposits on non-Federal lands, are analyzed in chapter 4. Potential limitations are identified in the access provisions of the laws that govern the various land management systems as they might affect the emerging landownership situation in Alaska.

FEDERAL LAND MANAGEMENT SYSTEMS– EXISTING ACCESS PROVISIONS

The Federal land management systems include the public lands, which are managed by the Bureau of Land Management (BLM); and those lands which are referred to in this report as the national conservation system lands. These include: the National Park System, the National Wildlife Refuge System, the National Forest System, the National Wilderness Preservation System, and the National Wild and Scenic Rivers System.

The National Park System lacks any explicit right-of-way provision granting access through park areas to non-Federal lands. While the absence of a specific provision authorizing grants of rights-of-way across national parks does not bar such use; at the same time, it does not provide assurance to **non-Federal landholders who may need to cross park lands. This lack of any assurance of access and of the terms and conditions of rights-of-way could deter potential developers of non-Federal lands.**

The Wilderness Act provides exceptions to its prohibition on roads and mechanized modes of travel through Federal wilderness areas for the holders of existing rights, and for the access needs of owners of private lands that are wholly surrounded by national forest wilderness areas. These exceptions do not extend to owners whose lands are surrounded by national park or refuge wilderness areas unless Congress expressly ex-

tends them to specific units. Even with such an extension, the exceptions for surrounded private lands and existing private access rights might not provide adequate assurance of access to isolated, but nonsurrounded, non-Federal lands. Construction of surface transportation systems through wilderness areas is prohibited without specific congressional approval. No statutory mechanism exists, however, to review the need for any such exceptions. In Alaska, where there are large areas of Federal lands proposed for wilderness status, a lack of extensive surface transportation, and topographic and engineering restrictions that limit the availability of possible access routes, express congressional approval will be required for any future surface transportation systems that cross wilderness areas.

Even after the passage of Alaska Lands legislation, uncertainty may still persist about the access use of the remaining public lands because of the wilderness study requirements of section 603 of the BLM Organic Act of 1976. All roadless areas of 5,000 acres or more, identified by the BLM as possessing wilderness characteristics, are to be classified for wilderness study as potential additions to the National Wilderness Preservation System. They must be managed so that their wilderness character is preserved until the final administrative and legislative reviews are completed. The interim management of these areas restricts any uses that might damage their wilderness value. Consequently, most surface access uses and transportation modes commonly used to move bulk minerals are prohibited. Interim restrictions on



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access across wilderness study areas could delay expansion of Alaska's surface transportation network.

The access provision of the Wild and Scenic Rivers Act distinguishes between the components of this system that are managed by the Secretary of the Interior and those that are managed by the Secretary of Agriculture. Rights-of-way across wild and scenic rivers areas that are under the jurisdiction of the Secretary of the Interior are governed by the access provisions applicable to the National Park System. Rights-of-way over components that are managed by the Secretary of Agriculture are governed by the access provisions applicable to the National Forest System.

The classification of a river as wild, scenic, or recreational is made according to certain characteristics, including its accessibility by road; wild rivers are the least accessible, scenic rivers are more accessible, and recreational rivers are the most accessible. Rivers are to be managed to preserve the values that led to their initial designation and classification. Therefore, any access use that might be detrimental to these values would be discouraged.

The remaining Federal land management systems—the public lands, the National Wildlife Refuge System, and the National Forest System—all have specific statutory authority to grant access across management areas.

TRANSPORTATION AND MINERAL RESOURCE DEVELOPMENT

Problems stemming from Alaska's limited transportation system are compounded by the lack of long-range transportation plans. Access constraints on mineral-related activities are greatest in those regions where there is no surface bulk transportation. Where some surface transportation already exists, the potential for mineral resource development could be expanded through the improvement of existing facilities to allow movement of minerals on a large scale.[2]

[2]There are, of course, many other factors that have deterred mineral resource development in Alaska and there are diverse opinions as to the likelihood of large-scale hard-rock mineral development in the future. See: Whitney, supra, note 1; Bradford H. Tuck, Land Use *Planning*, the *(D)(2)* Lands, and Alaska Resources; *Some* Economic Considerations, Federal-State Land Use Planning Commission for Alaska, August 1977; John V. Krutilla and Sterling Brubaker, Alaska *National* Interest Land Withdrawals and their Opportunity Costs, February 1976, reprinted in House Comm. on Interior and Insular Affairs, Subcomm. on General Oversight and Alaska Lands, Background Information for Alaska Lands Designations, 95th Cong., 1st sess., (Comm. Print No. 4, 1977) at 158; and Paul Engelman and Bradford Tuck with Jerry D. Kreitner and Dennis M. Dooley, Transportation and Development *of Alaska Natural Resources*, Federal-State Land Use Planning Commission for Alaska, March 1978.

Legislative designation of new additions to the national conservation systems will affect the availability of Federal lands for transportation systems. Rights-of-way across lands in conservation classifications are not available under the same conditions as rights-of-way across unreserved public lands.

Decisions about the size, costs, routes, and associated land use of major transportation systems cannot be made without appropriate governmental planning. Alaska is now in the process of assessing various proposals for meeting statewide transportation needs.

Legal, physiographic, and engineering considerations can dictate the choice of one route over another. Although proposed national conservation units may include some natural access routes, it is not presently possible to determine which routes will be needed to serve future community and resource development needs. The Federal-State Land Use Planning Commission for Alaska (FSLUPCA) was given a statutory mandate to identify transportation routes and necessary easements. It concluded that the State's economic and transportation needs were not suf-

ficiently defined to designate specific transportation corridors.[3] Until the information necessary to formulate long-range planning is available, there can be little certainty about when and where future transportation facilities should be built. The lack of such information will hamper decisionmaking by Congress and Federal land managers, as well as by non-Federal landowners and mineral resource developers.

ACCESS POLICY OPTIONS

Five general legislative access policy options (see table 5) were developed to present a range of approaches to the policy question of whether and for what purposes access should be permitted across Federal lands in Alaska. These access options deal only with Alaska lands.

The legislative access options are:

1. The application of existing access policies to Alaskan additions to national conservation systems.
2. A deferral of congressional action on an access policy for Alaskan conservation system lands.
3. Limited provisions for Alaskan access needs.
   (A) An Alaska Lands right-of-way provision; and
   (B) The exclusion of access routes from conservation system classifications by means of boundary adjustments and land exchanges.
4. Alaskan transportation system access provisions.
   (A) An Alaskan transportation system right-of-way provision;
   (B) The designation of specific transportation corridors to accommodate the development of the transportation system; and
   (C) The establishment of a special commission to review and recommend rights-of-way for transportation systems through conservation lands.
5. The restriction on the use of Alaskan conservation system lands for access.

In developing and selecting these access policy options, five common components of each option were identified. The five components are:

1. The access policy decision—whether or not to permit the use of Federal lands for access use.
2. The timing of the policy decision.
3. The legislative implementation of the policy decision.
4. The executive implementation of the legislative policy decision.
5. The relation between the access policy and how Alaskan transportation system decisions are to be made.

The central component of each option is whether or not to allow the use of Federal lands for access purposes. If allowed, access is authorized through the grant of a right-of-way or permit to cross Federal lands to reach non-Federal lands. Congress may choose to allow or to deny access, or it may adopt a combination approach which allows access in some instances and denies it in others. This could be done by imposing conditions on allowable access for a certain class of users, or purposes, or for particular geographic regions or conservation units.

[3] Federal-State Land Use Planning Commission for Alaska, "The D-2 Book," Lands of National Interest in *Alaska,* May 1977, at 129.

The second component is the timing of congressional action. Congress could decide now on an access policy as part of the d-2 legislation or it could pass legislation specifically deferring a decision on either the access issue alone or on the entire d-2 lands proposals. Congress could also decide not to take action on the d-2 lands proposals, an access policy, or a specific deferral of the access decision.

The third component is the selection of a legislative approach for implementing the access policy decision. There are three ways in which Congress can implement its access policy decision. The first is to take no specific legislative action on access. This would be done by making no provision in the d-2 lands legislation for access use of lands designated for conservation systems. The effect of this approach, in the absence of express legislative provisions, would be to extend by implication the existing laws and institutional mechanisms that control the access uses of designated lands. For example, the classification of some d-2 lands as wilderness would deny indefinitely most access uses in those areas by the operation of the Wilderness Act prohibitions. On the other hand, placing the same lands in a system with a broad purpose right-of-way provision would imply that access across these areas would be allowed, in the discretion of the managing agency, under existing laws.

The second legislative approach would be to enact a specific provision setting forth the conditions for the access use of Alaska lands. This could take the form either of a new separate provision of law or of an amendment to an existing law governing Federal land management systems. The specific additional access assurances or limitations would be in accordance with the basic access policy adopted by congress.

The third legislative approach would be to rely on existing laws and policies, but to increase legislative oversight to ensure that the congressional intent is carried out. Remedial legislation could be enacted if and when existing access provisions appeared to be inadequate.

The fourth component is the selection of an approach for executive implementation of the access policy decision. This entails first naming an agency or a department to carry out the legislative policy, and then adopting a decisionmaking process for implementation. [This designation of an agency and a procedure can be express or implied.) If there is no contrary legislative declaration, additions to existing national conservation systems—National Parks, Refuges, Forests, Wilderness, and Wild and Scenic Rivers Systems—are managed by the departments and agencies currently responsible for the management of each of these systems under existing laws and procedures.

Congress could also modify existing agencies and procedures or establish a new managing agency or decision process, An example would be the establishment of a joint Federal-State commission to review and coordinate the access uses of Alaskan conservation system lands. Such a joint commission would be a new executive body and its reviewing authority would be a modification of the existing decision process.

The fifth component is the relationship between the access policy and how Alaskan transportation system decisions are to be made. The need for transportation, the selection of mode and routes, and the method for financing the system are all determined under the existing decisionmaking apparatus of the Department of Transportation (DOT).[4] Congress can continue the existing institutions and procedures, or it can modify the existing situation, for example, by adding a joint commission or advisory panel to the decision process, or by requiring congressional review and approval of transportation system proposals involving the use of d-2 lands. Congress can also expressly set a transportation

[4]See discussion of section 4(f) of the Department of Transportation Act in chapter 6 for a description of transportation decisionmaking procedure.

policy by banning the construction of surface transportation systems on conservation system lands. This ban would have the effect of restricting the choices of both the mode and the routes of potential transportation systems. Another possibility is that Congress could specifically encourage a mode or route. This could be done, for example, by including a right-of-way provision for the possible future expansion of the Alaska railroad through certain conservation system units.

There are a number of additional conditions that could be included in developing access policy options for Alaskan lands. Some of these are:

- political-approval and review by local, State, and/or Federal bodies could be required as a prerequisite to granting access.
- Environmental—environmentally acceptable construction standards could be required (both on and off Federal lands) to minimize damage to protected scenic, ecological, and wildlife areas.
- Economic—the disclosure of financial and ownership information could be required for right-of-way permits; transportation systems could be required to be wholly or partially financed by beneficiaries; Federal aid or direct grants could be provided for transportation projects to serve conservation systems and mineral development; loan guarantees or other financial incentives for Alaskan transportation systems could be provided.
- Administrative—time limits could be imposed for processing applications for access permits and rights-of-way, and agencies could be required to coordinate their review of all applications; segmented approvals of large-scale projects that cross several management systems could be limited.
- Long-range planning—State and local governments and Native Regional and Village Corporations could be required to submit long-range plans for access and other future resource development needs to minimize ad hoc decisionmaking on transportation systems and the proliferation of access routes.
- National security—special access exceptions for emergencies such as national defense needs or critical materials shortages could be provided.

Each of the access policy options is discussed below. The discussion includes the option, its modifications, its advantages and disadvantages, and the potential effects on mineral exploration and development activities. Each option was structured to present a particular approach to the access issue so that its advantages and disadvantages would become more apparent. No single option was designed to meet the needs of all interest groups. Consequently, a combination of several options may prove to be the most comprehensive approach to the dual characteristic of access—the access needs of non-Federal landowners to cross Federal areas to reach their lands and the potential broader need to construct major transportation systems across Federal areas to serve economic development and community needs.

It should be kept in mind, however, that the choice of an access policy for Alaska d-2 lands involves a balancing of many competing interests and values, not just the access needs for the development of hardrock mineral resources of non-Federal lands, which is the focus of this assessment.

OPTION I–THE APPLICATION OF EXISTING ACCESS POLICIES TO THE ALASKAN ADDITIONS TO NATIONAL CONSERVATION SYSTEMS (STATUS QUO)

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	TRANSPORTATION SYSTEM DECISION
Access through application of existing laws.	Now	Congress makes d-2 lands designations without any provision for nonrecreational access.	Existing institutions	Existing decision mechanism—Federal-State transportation planning and Federal DOT 4(f) review. Later congressional review of specific systems via program approvals and appropriations.

Option 1, or the status quo approach, would extend the existing access policies of Federal land management systems to the conservation systems additions. Congress would designate specific areas as parks, wildlife refuges, forests, wild and scenic rivers, or wilderness areas. No express legislative access provision is needed to extend the existing land management system access policies to the new additions. Special access provisions that relate to management program, administrative, or recreational access purposes could be included without altering the basic thrust of this approach. An example of such a special provision would be an exception for the established use of snow machines or aircraft in wilderness areas for recreation, local travel, or subsistence purposes.

To implement this policy, the managing agency of each system would apply the right-of-way and access authorities, regulations, and procedures now in force. This option would continue the variations in access policies that currently exist among the different Federal land management systems.

Under Option 1, grants of access would continue to be made on a case-by-case basis, and the determination would depend on the specific circumstances of each application. Requests for the use of Federal lands for the development of transportation systems would be evaluated under the existing decisionmaking processes. The most available Federal lands for access needs would be National Forest System and public (d-1) lands, except those in wilderness study or other limited-use classifications. Right-of-way approval is left to the discretion of the managing agency. The use of wilderness areas for transportation routes would require congressional approval in most cases. The use of park, refuge, or wild and scenic rivers systems lands for access must be consistent-with the purposes of the system. The grant of access is left to the discretion of the agency. Furthermore, the use of park and refuge lands would be subject to a 4(f) review for DOT-funded projects.[5] Planning, approval, and construction of transportation systems would continue to be the responsibility of existing State and Federal transportation agencies and departments.

The extension of existing access policies to Alaskan conservation units does not mean that those policies are fixed in their present

[5]See discussion of section 4(f) of the Department of Transportation Act in chapter 6. DOT 4(f) review is an independent review to determine whether there is a prudent and feasible alternative to a proposed use of park, refuge, or recreation lands, or a historic site for a transportation project. If not, then DOT funds can only be expended if every effort has been made to minimize damage.

form. Current laws could be modified in response to specific access problems, to new information generated from the ongoing Alaskan Mineral Resources Assessment Program (AMRAP), to wilderness and transportation planning studies, or to changes in congressional or public sentiment. Congress may enact legislation to review or to change the access provisions of Federal land management laws. Moreover, under the broad discretionary management authority vested in the Secretary of the Interior and the Secretary of Agriculture, some access policies and regulations may be changed administratively in response to specific problems.

Under this option, the shortcomings and uncertainties of the access provisions in the existing laws would continue. Consequently, mineral exploration and development activities on non-Federal lands in isolated areas, where it might be necessary to cross park or wilderness lands, might be deferred or abandoned. By settling the question of the management system classification for most of Alaska's remaining lands, the d-2 land designations would reduce some of the uncertainties about access.

Transportation system planning and development would continue at its current pace under this option. There would also be improvements in existing transportation systems. Ad hoc decisions to allow the access use of Federal lands, such as the Trans-Alaska Oil Pipeline authorization, could occur in response to specific needs.

The effects of implementing Option 1 will vary according to the area and system involved. In some areas (such as nonsurrounded isolated lands in some wilderness areas and parks) access uses may be denied without any express congressional action. In other areas, access to non-Federal mineral lands will be unaffected or at least reasonably available, as long as the existing transportation systems can be improved, as necessary, for mineral resource development,[6] and there are no blockages by tracts of Federal lands. As roadless BLM-public land areas are identified and placed in the protected wilderness review category, the availability of access across d-1 lands could become a future source of uncertainty for resource developers.

[6]Recognized rights-of-way, established by public use as roads or trails before the 1976 repeal of 43 U.S.C. 932, are existing access rights and thus should be unaffected by d-2 land designations.

OPTION 2–THE DEFERRAL OF CONGRESSIONAL CONSIDERATION OF AN ACCESS POLICY FOR ALASKAN CONSERVATION SYSTEM LANDS

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	TRANSPORTATION SYSTEM DECISION
Specific deferral of access policy involving d-2 designations and remaining Federal lands in Alaska until a certain date, or some event in future, or indefinitely.	Deferral-now; Access decision--later.	Specific deferral provision in d-2 legislation.	Existing institutions.	Existing decision mechanism--transportation systems use of Federal d-2 lands delayed until policy decision.

Under Option 2, Congress would specifically defer the question of the access use of Alaskan conservation system lands. There are several means of deferral. In enacting the final d-2 designations, Congress could include a provision specifically deferring the adoption of an access and right-of-way policy for Alaskan conservation system units for future consideration. This delay could provide time for new and ongoing studies to be completed and for specific Alaskan transportation system project proposals to be prepared. (Alternatively, Congress could delay action on the d-2 proposals and extend the legislative "deadline" imposed by the expiration of d-2 withdrawals on December 18, 1978.) In addition, Congress may specify the procedure to be used in its future considerations of the access issue. In the interim, existing access policies could be applied to the d-2 additions to the conservation units, or alternatively, the deferral could be combined with a moratorium on agency approval of any nonessential access use of Alaska National Interest Lands.

If no moratorium on nonessential access uses is imposed, Option 2 is similar to Option 1 in that the access policies of existing land management systems are applied to Alaskan conservation system additions. However, by deferring the decision on the final access terms and conditions, Option 2 continues the period of uncertainty about access policies of some Federal lands. This uncertainty could discourage the expansion of mineral exploration and development in affected regions. This option also allows time for specific studies to be completed (such as AMRAP and wilderness reviews), for final Native and State landownership patterns to be determined, and for State transportation planning to proceed.

The advantage of this option is that it would assure future congressional review of the access issue and thus would provide an opportunity for the consideration of additional detailed information and for the emergence of clearly defined access needs. The time for such a reconsideration could be set at some future date, such as in 2 or 10 years; or in a specific year, such as 1990. It could be based on some future event, such as the completion of ongoing and proposed studies dealing with Alaskan resources and transportation issues; completion of the AMRAP surveys; the final conveyance of the State and Native land selections; the completion of State or regional transportation plans; or the completion of the approved management plans for the new units added to conservation systems.

As part of the deferral, Congress could request new studies and recommendations about access policies from the land management agencies, from the State, or from a commission specifically established to deal with access questions in Alaska. The studies could include an examination and report on needs, on routes, on possible system modes, and on financing arrangements. The continuation of FSLUPCA or the establishment of a special administrative task force to conduct the studies could provide opportunities for the participation of interested groups.

Under Option 2, existing land management agencies would be responsible for both the interim policy implementation and for the management of the designated additions. If a special commission or a task force is established, it would operate in conjunction with existing State and Federal institutions responsible for land management and transportation system decisions.

Congress could also include in this option the institutional mechanisms under which future legislative review would be conducted. Two examples of such mechanisms are the "legislative deadline" for action on the d-Z land withdrawals in ANCSA and the review mechanisms in the Trans-Alaska Pipeline Authorization Act and the Alaska Natural Gas Transportation Act.'

The chief advantage of this option is that deferring consideration of the access issues associated with the d-2 land additions provides more time for resolving a number of the

[7]See discussion of these Acts in chapter 5.

uncertainties that have troubled the debates over Alaska's future. These uncertainties arise from a lack of information about such factors as final landownership patterns, mineral resources, and transportation needs and routes, as well as from a lack of a clear commitment, either governmental or private, to the economic development of Alaska's hardrock mineral resources in the near term (pre-1990). The potential active mining operations have not as yet been identified, and consequently, the associated transportation and other needs also have not as yet been determined. Additional time could permit a more specific legislative response. In the interim, national resource lands would be protected, and the management classifications of approximately half of the Federal land in Alaska would be settled. Even though d-2 land designations will answer the question concerning which of the land management systems will control certain areas of Federal land in Alaska, there will still be uncertainties over Federal land management policies.

Management plans must be prepared for the d-Z conservation system additions. These plans might include proposed facilities that could be coordinated with the transportation needs of surrounding regions. Areas with special environmental, wildlife habitat, archeological, and historic values could be identified so that adequate measures to protect these areas could be incorporated into the access policy for each management unit.

It is probable that, under section 603 of the BLM Organic Act, large areas of wilderness on the remaining d-1 public lands will be inventoried and studied for inclusion in the National Wilderness Preservation System. Interim protective management of these lands will limit their availability for access purposes.

There is very little detailed information about the mineral resources potential of many areas of Alaska on which to base transportation planning. It is now anticipated that AMRAP surveys will not be completed until after 1990. Private mineral exploration efforts, to date, have been substantial, but uncertainty remains about which areas, if any, will be developed. Alaska has established a Department of Transportation and is working toward developing a State transportation plan and a set of priorities. Deferral would allow time for both State and private efforts to proceed. This would improve the effectiveness of the information on which the final decision is based.

If extensive park and wilderness designations are made, the deferral of a final access policy decision for Alaska lands could provide the mechanism under which the adequacy of existing access policies could be evaluated and specific needs to cross these lands could be addressed. In the meantime, the lands would be protectively managed and the existing access policies would be continued.

Option 2 also has several disadvantages. One of these is caused by the continued uncertainty about whether and under what conditions Federal conservation systems lands can be crossed to reach non-Federal lands, or can be used for transportation systems. The continued uncertainty about the availability of Federal lands will delay the commitment of resources for the planning and evaluation of proposed transportation systems that would require the use of Federal lands.

Many of the ongoing and projected studies previously mentioned could proceed independently of any access decision deferral. Consequently, the information base will continue to expand. But even after completion of these studies the amount of additional information that might have an influence on the access policy decision may not be substantially increased over what is presently known. For example, AMRAP surveys are, at best, only superficial inventories because their expenditures and focus are not sufficient to ascertain the exact economic mineral potential of an area or its likelihood of development.

Uncertainty about the availability of future transportation routes could deter the expan-

sion of some mineral exploration and development in those areas where no alternative transport system has been proposed. Even if during the period of deferral no moratorium were to be placed on access uses, many such uses would be limited because an agency might be reluctant to approve any nonessential rights-of-way or easements for transportation systems, which might be contrary to an eventual congressional policy.

Another means of delaying an access policy decision is to defer passage of Alaska Lands legislation. (As discussed previously, an access policy is inherent in the d-Z lands designations.) However, in the judgment of those familiar with the mining industry, continued uncertainty about the access policy and management classification of adjacent Federal lands would discourage mine planning and add to the long leadtimes involved in planning, developing, and constructing large mines (as long as 10 to 20 years according to industry sources).[8]

[8] This view was confirmed during interviews conducted by Dr. F. J. Wobber, OTA project director, in January 1977. Meetings were held with the staff of the College of Mineral Industries, and Minerals Industry Research Laboratory, University of Alaska, with Dr. C. Hawley, Alaska Miners Association; and with others familiar with mining. Additionally, interviews conducted in Arizona, Colorado, and Wyoming in May 1977, suggested that similar views were widely held by mining groups outside of Alaska. A list of persons and groups interviewed during the course of this assessment is included in appendix C.

OPTION 3–LIMITED PROVISIONS FOR ALASKAN ACCESS NEEDS

Congress could provide some relief from the anticipated effects of the application to Alaska lands of the existing access and right-of-way policies of Federal land management systems. This would ease the impact on those non-Federal landholders who could be affected by the establishment of large areas of protectively managed Federal lands. Two approaches are considered here: The first, Option 3A, provides for a special right-of-way provision for Alaska natural resource lands that would be applicable to all Federal conservation systems in Alaska; and the second, Option 3B, provides for the exclusion of transportation system routes from conservation systems classification by making minor boundary adjustments and land exchanges.

OPTION 3A–ALASKA LANDS RIGHT= OF= WAY PROVISION

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	
Special right-of-way provision for Alaskan lands for access through Federal lands to surrounded, adjacent, or otherwise isolated non-Federal lands or interests in land.	Now	Provision of d-2 lands legislation—or as new authority or amendment of existing right-of-way provisions.	Existing institutions	tion does not authorize rights-of-way for development of major transportation systems.

Option 3A provides for a special right-of-way authority that would modify the existing access policies as they apply to Alaska, thus giving a legal assurance of access to non-Federal landowners who might need to cross conservation system lands. A major purpose of this option is to provide land management agencies with the clear authority to grant rights-of-way across Federal lands to reach mineral resources on non-Federal lands. This provision would partially address the shortcomings identified in the access authorities of certain systems (such as parks, wilderness, and some wild and scenic river components) and with those systems (such as refuges and national forests) that have an adequate, but discretionary, right-of-way authority, which requires the satisfaction of certain standards of compatibility.

This special right-of-way authority would assist those landowners requiring access across Federal lands to non-Federal lands. It would remedy the shortcomings of some existing right-of-way provisions, such as the lack of any clear statutory permission to grant rights-of-way over National Park System lands for access to non-Federal lands. This option also addresses those instances where Federal landownership patterns, topography, transportation, and other local site-specific circumstances might combine to isolate non-Federal lands. If these lands are not "wholly surrounded" by a single Federal system, or subject to existing rights, the access guarantees written into the Wilderness Act may not apply because the situations are not within the exact letter of the law. In such circumstances, this special right-of-way provision could be invoked to permit the necessary access.

As part of the implementation of the Native claims settlement and statehood land grants, this special right-of-way provision would ensure that there would be adequate access to non-Federal lands and to the transportation routes needed for their development. This provision would allow access through adjacent Federal lands to the owners of lands that abut on several Federal land systems, but which are not surrounded by any single one of them. The Federal land manager would be able to require specific terms and conditions to protect Federal land values. The implementation of this provision should be carried out in the spirit of the land grants. In the same spirit, the provision would allow for the waiver of right-of-way rental payments, for reciprocal access agreements, and for the use of program facilities for access, such as Federal agency docks, roads, and airstrips.

The unprecedented Alaska Native and State land grants were made by Congress with the intent that the future development of the resources of these lands would form the basis for the economic independence of the State and of the Native Corporations. To convey these lands without reasonable assurance of the continued ability to reach and develop the resource potential would conflict with the promise of the original grants.

Both the State of Alaska and the Native Corporations have reasonable and understandable demands that the management of the remaining Federal lands in the State not constrain development activities on non-Federal lands. At the same time, other groups contend that activities on non-Federal lands should not be allowed to threaten the present and future value of Alaska's wildlife, primitive wilderness, and other natural resources, which would be preserved and protected under proposed d-2 legislation. Congress is faced with balancing these potentially conflicting demands.

Option 3A is an example of an approach that is intended to balance the demands for development and conservation. This could be accomplished as follows:

- Through a right-of-way provision, exclusively applicable to Alaska, that would ensure adequate access to non-Federal lands isolated by Federal holdings, topography, or transportation system patterns; and
- By requiring that any access grants would ensure that the natural resources,

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esthetic, and other values of the Federal lands would be protected.

In balancing the conflicting interests, Congress might choose to limit this access provision by imposing various other conditions, such as:

- Limiting the application of the provision either to certain systems or to geographical areas, e.g., to refuges, to forests, to nonwilderness areas, or to specific units or regions;
- Limiting the use of the special access provision, e.g., only to State and/or Native Corporations, or only to owners of surrounded and adjacent lands, or only to owners of all isolated lands (lands wholly surrounded by Federal lands or constrained by other legal, topographical, or transportation-imposed conditions); or
- Limiting the purposes of access, e.g., for public access use, for the development of certain resources, or for the development and requirements of a transportation system.

For the purposes of discussion, the following right-of-way provision was selected as an example of this type of approach. Legislation designating additions to conservation systems in Alaska would include a provision that authorizes the Secretary of the Interior or the Secretary of Agriculture to grant rights-of-way to owners of surrounded or otherwise isolated non-Federal lands where access is not otherwise reasonably available; or to the holders of valid resource development rights for such lands. The factors to be considered in an agency's determination of whether this provision can be applied include, but are not limited to: local landownership patterns; the purposes of the management systems involved; geography; the direction of and the distances from the closest adequate transportation network; topography, seasonal constraints, transportation, and population characteristics of the region; the purpose of the right-of-way; and whether alternative means of access are available under the circumstances.

If, for example, a Native Corporation, or its assignee, seeks access across Federal lands, and there are alternative routes over State or Native lands, it would be proper under this option to inquire whether any effort was made to obtain the right to cross these other lands. The environmental impacts of the decision would be evaluated, and the applicant would bear the costs related both to construction and to environmental protection. The requirement for payment of a fair rental value for the right-of-way might be waived if the public interest is served.

This provision, as a part of the d-2 lands legislation, would apply to conservation system lands (national parks, refuges, forests, wilderness, and wild and scenic rivers systems). Rights-of-way across the remaining public lands would be evaluated under the BLM Organic Act, or dealt with in separate legislation. Access would be available to reach isolated lands or to reach the nearest reasonable transportation network. In considering reasonable alternatives, rights-of-way in common could be required. The identification of potential access needs would be included in the management plan for the units in each of the land management systems. The existing Federal land management agencies would implement the provision. Applications for a right-of-way would be filed with the agency managing the unit to be crossed. Where multiple units were involved, the applicant would have to obtain a right-of-way for each. However, departmental regulations could provide for coordinated review of applications involving more than one management agency.

Applications and decisions on the availability of conservation system lands for the development of major transportation systems would not be covered by this special right-of-way provision. Approval for the construction of transportation systems across Federal lands either for use by the general public or for regional mineral development, would be

made under existing State and Federal laws. Routes through wilderness areas would require specific congressional exemption. This option provides non-Federal landowners with an assurance of necessary access through Federal lands. It should be interpreted broadly to assure Alaska landholders of reasonable access to their non-Federal lands for resource development.

OPTION 3B–THE EXCLUSION OF ACCESS ROUTES FROM FEDERAL CONSERVATION SYSTEMS BY MEANS OF BOUNDARY ADJUSTMENTS AND LAND EXCHANGES

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	TRANSPORTATION SYSTEM DECISION
Local realinementof conservation systems boundaries to exclude access routes. Land exchanges to provide access routes for non-Federal landowners, with exact locations included in d-2 designations, or by reference to maps filed later.	Now	Provisions of d-2 legislation; or new land exchange authority.	Existing institutions	Existing transportation decision mechanism—local boundary shifts would leave access routes as public lands (d-1 classification) with fewer use restrictions than parks, etc., and also available for later State selection. DOT 4(f) review of route not required in most cases; land exchange would put route in non-Federal ownership.

Another approach to dealing with access is to exclude those lands that encompass natural, historic, or proposed access routes from Federal conservation systems. There are two primary means of accomplishing this. The first approach is to adjust the boundaries of particular conservation units so that the route is left out of the restrictive classification and is continued in public land status. This would make the route available for State selection or for application for a transportation system right-of-way under existing laws. The second approach is to allow non-Federal landowners to acquire the necessary access routes from the Federal Government by exchanging some of their lands for Federal lands. This would place access routes under non-Federal control. Since both Native Corporations and the State have existing rights to select Federal lands, a provision allowing the exchange of selected lands for necessary access routes to serve non-Federal lands would be one reasonable mechanism of conveyance.

The access route exclusion would be accomplished by specifically designating routes in the d-2 lands legislation. The excluded routes would be identified by specific legal descriptions contained in the legislation or incorporated by reference to the final conservation system unit maps that would be compiled by the departments involved and filed with Congress within a reasonable period of time subsequent to the legislation. Under the proposals currently before Congress, Federal land management departments would file



Photo Credit: The Alaska Coalition

The Kobuk Sand Dunes north of the Arctic Circle, an unusual and fragile Arctic ecosystem proposed for preservation as part of the National Park System

maps and legal descriptions of final boundaries after the State and Native conveyances are completed.

The implementation of the option to exclude access routes from conservation systems would be part of the general responsibilities of existing agencies under ANCSA and the Federal land management laws. The State, Natives, and other interested parties would have an opportunity to comment on proposed exclusions before the final boundaries were submitted to Congress. The final maps and reports would be subject to congressional disapproval. Transportation system decisions involving the excluded routes would be made under existing laws, and applications for rights-of-way over lands that are not excluded would be evaluated under existing laws. The provision would set forth the express criteria and the specific findings of fact that would be required to support each boundary adjustment.

These findings could include that:

1. The area to be excluded is a natural, historic, or proposed access route (should a proposed transportation system not be constructed within a certain number of years, the land would revert to the original land conservation system);
2. No other route is reasonably available (reasonableness would be determined by considering such factors as those described in the option for the Alaska Lands right-of-way, Option 3A);
3. The proposed exclusion and its proposed uses do not threaten the protected values of the conservation unit involved;

4. Adequate provisions exist to protect environmental values and conservation units from the detrimental effects of transportation system development; and
5. The national interest would be served by the exclusion.

There is an inherent conflict in this approach. Some areas that contain natural access routes also possess considerable scenic, esthetic, wildlife, historic, and archeologic values that should be preserved. But this same land may also be the most reasonable location for a future surface transport route. In such a case, because of the land's unique value, the route would not meet the proposed test for administrative exclusion. For example, in Alaska, the proposed Kobuk Valley National Monument, Gates of the Arctic Park, and Selawik Wildlife Refuge contain major conservation values, yet they abut on or are crossed by the Kobuk River and other natural access routes. Excluding these access routes could weaken the degree of protection of the remaining lands; therefore any exclusion of a transportation corridor in these areas would require express congressional action.

Another complicating factor in the evaluation of particular routes is the uncertain availability of the remaining public lands. Under section 603 of the BLM Organic Act, all roadless areas of 5,000 acres or more that are identified in the inventory of public lands are to be placed in a wilderness study classification, which would be managed to preserve those values, pending administrative and legislative review of their inclusion in the National Wilderness Preservation System. Wilderness review and potential wilderness designation may restrict the use of these lands in the future. Thus, their availability as access routes is not guaranteed. The exclusion of access routes to maintain their public land status would not absolutely guarantee their availability. But, a prior congressional exclusion would be a factor to consider during any future wilderness review.

Boundary adjustments could accommodate both Alaska's transportation needs and the establishment of new conservation system units, by drawing the boundary lines for conservation systems, such as parks and refuges, so that natural, historic, and proposed transportation corridors (key mountain passes and river valleys) would be excluded. This exclusion leaves these routes classified as public lands. Such classification reduces the review and authorizations required for using these lands for transportation systems, if a demand should arise for a specific route. Proposed transportation projects on Federal lands that are classified as parks or refuges would require a DOT 4(f) review by the Secretary of Transportation.

At present, the problem with a boundary adjustment alternative is that the locations of many future transportation routes are speculative and controversial. This is because the needs and the timing of Alaska's resource development are not yet clearly defined and future transportation plans and priorities have not been adopted. There is currently no statewide consensus on the goals and priorities of expanded surface transportation. Many Native groups would oppose the development of a surface transport network because of the possibility of increased pressures on subsistence resources and rural lifestyles. However, some of these same groups may eventually need access to develop the resources on Native-owned lands.

Another method of excluding access routes from conservation classification is to authorize land exchanges in order to provide access corridors to surrounded or isolated landholders. If mineral-bearing lands were involved, a simple exchange might not be adequate because some of the lands that might be exchanged were selected specifically for their resource potential. If lands of similar value were exchanged for an access corridor the non-Federal landowner could increase the land's mineral development potential.

With the exception of large-scale land exchanges by the State, the exchange provision would probably leave most problems associated with access across Federal lands for

regional transportation systems unresolved. In regions, such as northwest Alaska, a regional surface transportation system with its supporting feeder routes is likely to cross multiple land management systems and be tens, if not hundreds, of miles long. Exchanges of such magnitude, as a means of securing a needed transportation corridor, would probably be both ineffective and unreasonably complicated. This approach, however, does offer some relief for local access problems, and might facilitate mineral exploration and development of non-Federal lands in some areas.

Non-Federal landowners seeking to exchange selected lands would request such an exchange from the Secretary of the Interior (in the case of public lands, refuges, and parks) and from the Secretary of Agriculture (for national forests). Approvals would be required to be supported by findings such as the following:

1. The non-Federal lands had been selected and approved or conveyed under either the Alaska Statehood Act or ANCSA;
2. The State or Native owner requests the exchange of lands to provide access routes to other non-Federal lands;
3* The lands to be exchanged are approximately equal in value; if not, a payment of the difference in cash may be required or waived at the discretion of the Secretary;
4. The area to be exchanged is a natural, historic, or projected transportation route to non-Federal lands;
5. No other route is reasonably available;
6. The proposed exchange poses no threat to the protected values of any conservation unit;
7. Adequate measures exist to protect environmental values and conservation units from the effects of access use; and
8. The national interest would be better served by the exchange.

The national interest includes the implementation of policies for the development of the lands granted to the State and to the Natives. These policies are reflected in the State and Native land grants which are to serve as a basis for the economic independence of the State and of the Native Corporations.

OPTION 4—ALASKAN TRANSPORTATION SYSTEM ACCESS PROVISIONS

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	TRANSPORTATION SYSTEM DECISION
Use of Federal conservation lands for Alaskan transportation system needs specifically accommodated through: (a) transportation system right-of-way provisions; or (b) designated corridors; or (c) new Federal-State review agency for Alaskan transportation systems.	Now	Provision of d-2 lands legislation—new authority.	(a) & (b) Existing institutions; or (c) a new reviewing body for Alaskan transportation systems.	(a) & (b) Existing decision mechanisms; or (c) existing transportation decisionmaking institutions plus new review body.

Under Option 4, congressional authorization is specifically provided for the use of conservation system lands where needed for the development of statewide or regional surface transportation systems. An access provision for Alaskan transportation systems would minimize some of the problems associated with traversing lands managed by different agencies under several land management systems and access policies. This would be done by establishing a single standard for the approval of transportation system rights-of-way for all conservation system lands.

Congress might choose to provide for the use of Alaska National Interest Lands so that transportation network systems can be developed to serve the economic needs of non-Federal interests in Alaska. Several approaches are examined here: first, the enactment of a right-of-way provision for an Alaskan transportation system that would be applicable to all Alaska conservation system lands; second, the reservation of specific transportation corridors through d-2 lands; and third, the establishment of a new institutional mechanism for decisionmaking on proposals for crossing conservation system lands.

OPTION 4A–AN ALASKAN TRANSPORTATION SYSTEM RIGHT-OF-WAY PROVISION

This option would enact a single transportation system right-of-way provision that would be applicable to all Alaskan conservation system units including those classified as wilderness. This provision would authorize the Secretary of the Interior (for park and refuge lands) and the Secretary of Agriculture (for forest system lands) to grant rights-of-way for transportation system purposes over lands in the national conservation systems. Specific conditions would require a finding that no other route is reasonably available, and an assurance that appropriate precautions will be taken to protect the environmental, wildlife, and historic values of the lands. These conditions would have to be satisfied before any right-of-way could be approved. Payment of the fair market value for the right-of-way as well as for the administrative costs of reviewing the application and monitoring construction and use of the right-of-way would be required. Where appropriate, the requirements to pay rental and costs could be waived in the public interest. Transportation system rights-of-way would be available to State and local governments, to Native Corporations, and to private applicants.

The Secretaries of the Interior and of Agriculture would be responsible for implementing this policy through the Federal land management agencies. In addition to the approval of a right-of-way, each proposed transportation system project would be independently evaluated by appropriate Federal, State, and local agencies. Opportunities would continue for public participation during the planning and review processes as provided by existing law. The Secretary of Transportation would conduct an independent review of federally aided transportation projects that cross parks, refuges, or other protected lands (both State and Federal). This right-of-way provision in no way diminishes the independent responsibilities of the Secretary of Transportation for the preservation of parks, refuges, and historic sites, under section 4(f) of the DOT Act.

As a further condition of this option, approval of a right-of-way could be made dependent on the completion of a comprehensive State or regional transportation plan. This option makes Federal conservation system lands available as needed under a “floating” or “blanket” easement right-of-way provision. The Federal lands involved would remain within the designated land management systems in contrast to approaches under Option 3B that would exclude access routes from conservation systems classification.

By providing a congressional authorization for transportation system rights-of-way, specific routes and modes can be identified and approved as actual needs arise. This option

permits State, Native, and private interests to plan for transportation and, where economic conditions permit, for resource development. Existing review procedures in the Departments of Agriculture, Interior, and Transportation, and other agencies for transportation system needs, routes, modes, and rate regulations would be continued. Since federally aided transportation projects are expected to be a major component of any Alaskan resource development, Congress would continue oversight and project authorization approval, as well as approval over funds, expenditures, and appropriations.

OPTION 4B–THE DESIGNATION OF TRANSPORTATION CORRIDORS THROUGH ALASKAN CONSERVATION SYSTEM LANDS

The second approach would be to designate specific easements or corridors through Federal conservation lands and to permit the Secretaries of Agriculture and of the Interior to authorize the development of transportation systems only within these corridors. Approval of rights-of-way over other conservation unit areas with no designated corridors would be granted only under the standards in existing laws. This approach differs from the boundary adjustment of Option 3B in that a corridor remains part of the system and would include areas where the simple realinement of a boundary would be insufficient to exclude an access route. Instead of making specific reservations in d-2 legislation, the final designation of corridors could be left open for specific legal description in the process of preparing management plans and maps of the final boundaries. There would be opportunities for participation and review by State, local, Native, conservation, mineral, and other interests. A reasonable period of time would be allotted for the preparation and review of corridor descriptions, maps, and management plans. They would be incorporated by reference in the d-2 lands legislation.

Implementation of this option would be by existing land management agencies. Applications for use of the corridor would be made to the Secretary of the department having land management jurisdiction over the proposed route. Decisions about requirements, modes, and financing would be made under existing transportation laws, but the allowable routes through Federal lands would be predesignated. If any variation of the route from the designated corridor were needed, the approval of the variation would be made under existing law. Use of the corridor would be available to State, Native, and private applicants who demonstrate that they have a need for constructing a transportation system and that an alternative route that does not use conservation system lands is unavailable. Independent 4(f) review by the Secretary of Transportation would be required for federally aided transportation system projects that use corridors through State or Federal park or refuge lands. The adoption of all practicable measures to minimize environmental damage from the construction and operation of the transportation system would be required as a condition of right-of-way approval.

Specific fixed transportation easements (public need corridors) through d-2 lands that encompass historic, natural, or projected access routes to non-Federal areas would limit access uses to selected corridors. These corridor lands would be included in the conservation systems, but would be made subject to a right-of-way or easement for existing or future transportation uses. The specific corridors could be defined in the legislation or included by reference by filing maps and reports within a reasonable time period after passage.

One problem with the designated or fixed corridor approach is that designated corridors might not be adequate for future mineral transportation needs because of the limited information currently available about the locations of future transport routes and the timing of resource and transportation devel-

opment. This could give rise to demands for additional access routes over Federal lands.

Under Option 4B, existing decisionmaking mechanisms for specific transportation projects would be utilized and existing authorities for land management systems would not be altered. These would remain in effect for rights-of-way for feeder lines and for transportation systems outside of the fixed corridors. (For example, under the fixed-corridor provision, a railroad might be constructed in a predesignated corridor, but a right-of-way for a feeder road from a mine of an adjoining Native Corporation to an ore-loading facility on that railroad would be granted under existing access authority.)

OPTION 4C–A NEW INSTITUTIONAL MECHANISM FOR THE REVIEW OF RIGHTS-OF-WAY FOR ALASKAN TRANSPORTATION SYSTEMS

Under this approach, Congress would establish a new decisionmaking mechanism and a new authorization for rights-of-way for major Alaskan transportation systems. Major transportation systems are those systems that would have a substantial impact on environmental values and would be incompatible with the purposes of any national conservation system units to be crossed. The responsibility for this review and recommendation could be delegated to existing agencies, to the State, or to a joint commission. The decisionmaking process would include consultation and coordination between the primary land management agency and the new review organization. Final approval for rights-of-way would rest with the Secretary of the department involved, with the President, or with Congress. This new mechanism would include both a new right-of-way authorization and implementation provisions.

For the purposes of evaluation and comparison with other options, a joint Federal-State commission was selected as illustrative of the new decisionmaking mechanism. This commission would have as part of its institutional mandate the responsibility for reviewing and recommending proposals for major Alaskan transportation systems. The commission would review applications for rights-of-way across Alaskan conservation system lands for major transportation systems. The Secretary of the Interior (for national park and refuge units) and the Secretary of Agriculture (for national forest units) would be authorized to grant final approval of the rights-of-way.

Approval of the rights-of-way would only be issued after the application had been favorably reviewed and recommended by the new Federal-State commission. The commission would conduct reviews as part of its overall institutional responsibilities, which could also include land management and transportation planning. As part of its planning responsibility, the commission would identify those areas where major transportation systems would have to cross conservation units or other Federal land.

The composition of the commission would include a broad representation of interests: Federal and State governments, officials of land management and transportation agencies, and private and Native groups. After a public hearing, or other similar opportunity for participation by interested parties, the commission's recommendations together with studies and dissenting views would be forwarded to the appropriate Secretary, who would then make a final decision.

Representatives of the affected Federal land management agency would participate during the commission review. In making a final decision, the Secretary would have the benefit of diverse views from competing interests and could give attention to the managing agency's recommendations in balancing any conflicting demands. The final decision to approve transportation system rights-of-way would remain with the Secretary of the managing department or with the State and private owners for jointly managed non-Federal lands.

The applications for major transportation system rights-of-way would be filed with the appropriate Secretaries and forwarded for review to the joint commission. The management of conservation system lands and the final approval of the right-of-way would rest with the Secretary who has jurisdiction over the unit crossed. The requirements for the preparation of environmental impact statements and other reports mandated by existing laws would continue. However, by interagency agreement, the joint commission could participate in the studies.

The final approval of specific projects, including decisions about routes and modes, would still be made by existing Federal and State transportation agencies. The modification of the transportation. system decisionmaking process would not alter existing requirements for an independent 4(f) review before federally aided transportation projects using State or Federal park or refuge lands may be approved by the Secretary of Transportation.

There is a potential problem with delegating part of the responsibility for the review of transportation system decisions involving Federal lands in Alaska to a commission. This split responsibility might undermine the authority of the Federal land manager to control the adverse environmental and other effects that could result from using Federal conservation system lands for access and thus defeat the legislative purpose of protecting these lands,

Like Options 4B and 4A, Option 4C sets forth a policy choice for authorizing the approval of transportation system rights-of-way across conservation units. The availability of specific routes would, however, depend on their identification during the planning process. The approval of actual requests for transportation rights-of-way for specific transportation projects could then follow. This option, however, provides a means of assuring that the future transportation needs of the State and of Native Corporations are accommodated in the management of the land added to conservation systems.

OPTION 5–RESTRICTION ON ACCESS ACROSS ALASKAN CONSERVATION SYSTEM LANDS

ACCESS POLICY DECISION	TIMING OF ACCESS DECISION	LEGISLATIVE IMPLEMENTATION	IMPLEMENTING INSTITUTIONAL ARRANGEMENT	TRANSPORTATION SYSTEM DECISION
Access use of conservation system lands restricted beyond existing statutory limitations. Existing access rights to surrounded private lands, and existing rights-of-way would be recognized.	Now	Provision of d-2 lands legislation, or new amendment of existing provisions—new authority.	Existing institutions	Existing decision mechanism. Use of Federal conservation system lands for Alaskan transportation system not permitted without congressional approval. (The restriction is for transportation system use and would not remove existing access guarantees for non-Federal landowners.)

In contrast to the previous four options, which deal with policies that would facilitate access through conservation units, Option 5 limits the nonessential access use of Alaskan conservation lands. This option adds a further measure of protection and preservation

to the scenic, wildlife, recreational, and historic value of these lands. This option does not impose a complete ban on crossing Federal lands to reach non-Federal holdings. Existing access rights and the needs of non-Federal landowners to reach surrounded or other isolated lands that have no other available means of access would be accommodated. However, those landowners who do not fall under existing access rights, and who would be adversely affected by not being able to reach their property, would not be able to obtain rights-of-way to use Federal conservation systems without express congressional authorization. The authority, under present law, of Federal agencies to grant rights-of-way and transportation system easements across conservation system lands would be limited. This approach is consistent with a policy decision that Alaska lands have such high value as primitive wilderness, for their scenic beauty, for their wildlife, and for their future enjoyment, that they should be protected against any use that might be detrimental to these values.

This option would deny indefinitely most access use of Federal lands in Alaska without specific congressional action, and thus would limit the discretionary access authority of existing agencies (i.e., the power to grant rights-of-way and transportation system easements). It would not, however, deny reasonable assurances of access to owners of surrounded lands or to holders of existing access rights (such as those recognized in the Wilderness Act and in the current policies of various land management systems). Other access uses would be severely restricted in order to preserve Federal lands. The restriction could apply to all or part of the d-2 conservation unit designations. Federal land management agencies and the Department of Transportation would be responsible for the implementation of the policy, and would be bound by the restrictions.

Transportation decisions would be made under existing institutions, but the additional requirement of congressional authorization would be added. Congressional approval would be required before any nonexempt access use would be granted for these lands, such as a nonexempt right-of-way or a transportation system easement. Some existing private rights, such as traditional uses and snow machine use where currently established would be permitted, provided there was no undue harm to protected conservation unit land. Rights-of-way that have been established by the public use of roads and trails over public land (under Title 43 of the U. S. C., section 932, prior to its repeal in 1976 by the passage of the BLM Organic Act) would be recognized; and their continued use, even over conservation units, would be permitted.

In addition to the restriction on the access use of Federal lands to reach non-Federal areas, rights of access to mining claims within Federal lands would also be regulated. In some instances, in order to preserve Federal lands, either a land exchange or compensation would be offered to an owner who relinquished such rights where continued or proposed access use posed a threat to protected values of the surrounding Federal area and adequate environmental safeguards could not reasonably be adopted.

By limiting the existing right-of-way authority of Federal land management agencies, Option 5 creates a special category of protected conservation system lands in Alaska with access restrictions similar in purpose to those defined in the Wilderness Act. Land management program-related activities and uses would not be restricted. Where existing rights-of-way have been granted, Congress might direct their cancellation on the expiration of the term of the right-of-way, unless unreasonable hardship would result. By limiting the authority of the managing agencies to grant rights-of-way and transportation system easements under existing laws, Option 5 imposes a greater restriction than Option 1 since it would modify present access authority.

As an additional protection or restriction on the use of Federal lands, Congress could prohibit the expenditure of funds without

prior notice to and approval by Congress for projects that would require the use of or adversely affect conservation lands. This requirement would be similar to Wild and Scenic Rivers System protections. Foreclosing most access routes across Federal lands in Alaska would impose greater restrictions on surface mobility and development than at present, and would discourage planning for federally aided transportation projects. Consequently, it would further deter the mineral exploration and development that is dependent on the availability of adequate bulk transportation to markets.

Non-Federal landowners who did not fall within the narrow exemption would not be permitted to use Federal conservation lands for access purposes. This policy could, in some circumstances, impose hardship, such as requiring potential developers to go around large protected Federal areas at substantially greater expense. The unavailability of some Federal conservation system lands might increase the demands for the use of State and Native lands for access routes and transportation system development; and might also limit future mineral exploration and development activities to those regions that are already served by adequate transport or that do not require crossing Federal conservation system lands.

Congress could be subjected to pressure for ad hoc or crisis approvals of transportation routes and systems. This could lead to the construction of environmentally damaging or inefficient routes, while more' desirable alternative routes are either foreclosed or not developed because of land use restrictions.

8

Concluding Remarks

8

Concluding Remarks

The Office of Technology Assessment (OTA) was asked to assess the effects of Federal laws, policies, and practices on access through Federal lands to non-Federal mineral-bearing lands. The decision of whether or not to allow Federal lands to be used for access requires the balancing of competing interests and values. In Alaska these values include wilderness preservation, resource development, and the subsistence culture of the Native peoples.

This report summarizes and analyzes the laws governing Federal land management systems, the laws specifically applicable to Alaskan lands, and the major environmental and land-planning laws that affect access across Federal land management systems. It also presents a variety of options or policy alternatives for congressional consideration. These options represent a range of alternatives for dealing with access policy in Alaska. These options describe alternative approaches to the access issues associated with the proposed additions to national conservation systems called for by section 17(d)(2) of the Alaska Native Claims Settlement Act.

It would be possible to develop a number of variations and combinations of the policy options described in this document. Other proposals for the management of Alaska lands and a variety of access policies have been presented in various congressional bills, in the recommendations of Federal executive departments and agencies, in the documents of the Federal-State Land Use Planning Commission for Alaska, and in other sources.

The laws governing access through protected lands constitute only one of the components of an access decision. Political, social, economic, and environmental considerations must also be taken into account. An access policy decision will clarify the terms and conditions under which access can be approved for applicants and land managers alike.

The access options developed for this report apply to Alaska where access across Federal lands is an issue of widespread concern. The absence of access options for Federal lands in other States should not be interpreted as meaning that no problems exist outside Alaska. In assessing the effects of Federal laws on access to minerals on non-Federal lands, OTA conducted interviews in Alaska, Arizona, Colorado, Wyoming, North Carolina, and other States.[1] Based on OTA interviews

[1] Appendix C contains a list of persons and groups interviewed and a list of consultant and contractor reports.

and contractor studies, it appears that there are few non-Federal minerals access problems related to Federal landownership and regional transportation patterns in States other than Alaska. These interviews included representatives of the mining industry, of local governments, of environmental and conservation groups, and of other interests. The interviews disclosed no instances where mineral development on non-Federal land was prevented by the denial of access across Federal lands. Most non-Federal mineral areas outside of Alaska are adequately served by existing transportation networks and rights-of-way.[2]

'Many of those interviewed did, however, express concern that Federal land management agency practices sometimes caused access-related problems, ("Practices" means the actions of Federal officials when implementing Federal laws, policies, and regulations.) Examples of practice-related problems are delays in processing and reviewing of permit applications and complying with overlapping or duplicative licensing and reporting requirements of Federal and State agencies. Other interviewees asserted that the management and land use policies for Federal lands could affect mineral activities on non-Federal lands, A study of the environmental and economic conflicts between Federal lands and adjacent non-Federal lands is being prepared by the Conservation Foundation with grants from the National Science Foundation and several Federal land management agencies. This report, Neighbors: Conflicts **and** Opportunities, will be available in early 1979.

Appendixes

Appendix A
Glossary

The terms below are defined as they are used in this report and supporting OTA working papers. Some may have additional connotations deriving from their usage in mining and land management. In this report, however, their meaning is limited to these definitions.

Access: Generally means a right to cross lands for a given use.

Deposits—

Mineral: A surface or underground area where sufficient quantities of minerals occur to warrant exploration. A mineral deposit may or may not be economically or technically feasible to develop, depending on its size, the concentration of its minerals, and the ease with which one or more useful components can be extracted.

Placer: A deposit of alluvial material, which has the minerals scattered through it. These deposits are found along and in riverbanks, streambanks, and in beach sands. Ore reserves are calculated on the basis of physical, economic, and technical criteria.

Porphyry: A large body of rock in or associated with a porphyry, which is an igneous rock with the ore minerals disseminated throughout. For ore reserve calculations, the boundaries are defined on the basis of economic criteria.

Ultramafic: A particular type of igneous rock that is low in silica but high in magnesium and iron, and occasionally also contains concentrations of nickel, chromium, and asbestos.

Vein: Ordinarily a small deposit consisting of massive fissure fillings of ore minerals. Ore reserves are calculated on the basis of physical boundaries and economic-technical criteria.

Easement: One person's right to make use of another's land. It is a right to use rather than a right to possess. A right-of-way is one kind of easement.

Federal Domain: Federally owned lands or interests in lands.

Federal Land Management Laws: Laws passed by Congress that directly relate to the management of Federal lands, including access. (See also: policies, regulations, statutes.)

Federal Land Management Systems: As used in this report, Federal land management systems refer to the major management categories for Federal lands. These include: (a) Public Lands, which are managed

by the Bureau of Land Management of the Department of the Interior; (b) National Park System, which is managed by the National Park Service of the Department of the Interior; (c) National Wildlife Refuge System, which is managed by the Fish and Wildlife Service of the Department of the Interior; (d) National Forest System, which is managed by the Forest Service of the Department of Agriculture; (e) National Wilderness Preservation System, components of which are managed by the land management agency designated by Congress in specific legislation (e.g., the Bureau of Land Management, the Park Service, the Forest Service, and the Fish and Wildlife Service); and (f) National Wild and Scenic Rivers System, components of which are managed by a congressionally designated land management agency.

Lands—

Acquired: Means lands which the United States obtains by deed through purchase or gift, or through condemnation proceedings. They are distinguished from public domain lands in that acquired lands may or may not have been originally owned by the Government. If originally owned by the Government, such lands have been disposed of (patented) under the public land laws and thereafter reacquired by the United States.

d-1 lands: Under section 17(d)(l) of the Alaska Native Claims Settlement Act, the Secretary of the Interior is authorized to withdraw public lands for classification in order to ensure that the public interest in these lands is adequately protected. Approximately 60 million acres not covered by other classifications or withdrawals have been withdrawn under section 17(d)(l) as public interest lands for further study and classification. No time limit was placed on the d-1 lands withdrawals. In addition to the lands under this section, considerable other acreage including d-2 land withdrawals as well as Native village and regional deficiency withdrawals (lands withdrawn to allow Native selections) have also been covered by section 17(d)(l) withdrawals. The State of Alaska may not select lands under the Alaska Statehood Act entitlements in most areas covered by the d-1 lands withdrawals.

d-2 lands: Under section 17(d)(2) of the Alaska Native Claims Settlement Act, the Secretary of the Interior was authorized to withdraw up to 80 million acres of public lands for study and recommendation to Congress for possible additions to National Park, Forest, Wildlife Refuge, and Wild and Scenic Rivers Systems. These lands are called d-2 or national interest lands. The withdrawals will retain this classification until December **18, 1978,** the congressional deadline for action on the proposals. The term d-2 lands is also loosely used to refer to the lands that will be set aside under the final d-2 proposals enacted by the Congress as parks, forests, refuges, and wild and scenic rivers whether or not the specific parcels were included in the original d-2 lands withdrawals. The 80-million-acre limitation in section 17(d)(2) does not impose any limitation on the total number of acres that eventually may be included in d-2 lands legislation, or on the number of acres the Secretary may withdraw under other authority for congressional consideration or classification. The d-2 lands are closed to entry under the public land laws and the mining and mineral leasing laws; they are also closed to State and most Native selections under the land grants of the Alaska Statehood Act and the Alaska Native Claims Settlement Act.

Federal: Any land or interest in land owned or managed by the Federal Government.

Non-Federal: Includes private, State, and local government lands but excludes Indian lands, i.e. tribal reservations and other lands held in trust by the Federal Government for a tribe or Indian. In Alaska, it refers specifically to Native and State lands. (For information on In-

dian lands, see Federal Trade Commission, Bureau of Competition, Staff Report on Mineral Leasing on Indian Lands, 1975; U.S. General Accounting Office, Management of Indian Natural Resources; Senate Comm. on Interior and Insular Affairs, 94th Cong., 2d sess. (Comm. Print 1976); American Indian Policy Review Commission, Task Force Seven Report on Reservation and the Resource Development and Protection, 1976.]

Other: Means: (1) "Withdrawn lands"--lands that have been withdrawn and dedicated to public purposes; (2) "Reserved lands"—lands that have been withdrawn from disposal and dedicated to a specific public purpose; [3) "Segregated lands"--lands included in a withdrawal, or in an application or entry, or in a proper classification that segregates them from the operation of the public land laws. [38 F.R. 35082, Dec. 21, 1973]

Public: Only those federally owned lands or interests in lands that are managed by the Bureau of Land Management of the Department of the Interior. Public lands are divided into public domain lands, which have never left Federal ownership; and acquired lands, which are lands in Federal ownership, are not in public domain, and have been obtained by the Government through purchase, condemnation, gift, or exchange. "Lands" include all interest in land, such as surface ownership, mineral rights, timber rights, and easements.

Public Domain: Means original public domain lands that have never left Federal ownership; also, lands in Federal ownership that were obtained by the Government in exchange for public lands or for timber on such lands; also original public domain lands that have reverted to Federal ownership through operation of the public land laws.

As defined in the Federal Land Policy and Management Act of 1976, the term "public lands" means any land and interest in land owned by the United States within the several States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except—(l) lands located on the Outer Continental Shelf; and (2) lands held for the benefit of Indians, Aleuts, and Eskimos. Public Law **94-579, 90** Stat. 2743, 43 U.S.C. 1702(e) (1977 supp.).

Long Term: A projection into the post-1990 period. In Alaska, it is based on the year immediately before Native Corporations become public corporations.

Lower-48: A colloquial expression used by Alaskans to refer to the contiguous 48 States.

Metals—

Additive: These include antimony, bismuth, mercury, tungsten, tin, the rare earths, and molybdenum. Their primary use is as special alloy components.

Base: These include copper, lead, zinc, and aluminum.

Ferrous: These include the three most important metallic elements, chromium, iron, and nickel, used in the manufacture of various types of steel.

Precious: These are gold, silver, and platinum. They have specialized industrial applications for communications electronics, for photography, and for catalysis in automobile pollution control devices, respectively.

Mine Development: The process of acquiring detailed metallurgical, engineering, geological, technical, and economic data necessary to justify mine planning, construction, and initial startup. For purposes of this report mine development begins with closely spaced drilling and bulk sampling that requires surface logistical support for evaluation of large deposits.

Mine Size:

Underground Mine
(short tons of ore mined/day)

Small	**less than 1,000**
Medium	**1,000 to 5,000**
Large	**more than 5,000**

Open Pit Mine
(short tons of ore mined/day)

Small. . . . . less than 5,000
Medium . . . .5,000 to 30,000
Large . . . . . more than 30,000

Placer Mine
(yd^3 mined/year)

Small. . . . . less than 600,000
Medium. . . . .600,000 to 3,600,000
Large. . . . . more than 3,600,000

Minerals—

Availability: In the broad sense in which this term is commonly used by mining personnel, availability is construed as the right of the public and the mining industry to prospect for and develop mineral resources. This includes all steps in the process of mineral resources development.

Concentrate: The product that results from milling the ore and segregating the valuable minerals. Mineral concentrates are smelted to extract the metals from the ore minerals.

Energy or Fuel: Oil and other energy minerals including geothermal, natural gas, coal, and uranium. Uranium is an energy mineral but is treated as a hardrock mineral because of the similarity in its occurrence characteristics.

Exploration: Activities leading to ore deposit identification including: regional mapping, geochemical sampling, geophysical surveying, detailed mapping, and widespaced drilling. Exploration, as defined in this study, can be adequately supported by air so that surface transportation access is not necessary until mine development appears to be warranted.

Hardrock: Refers generally to the locatable minerals. These include the metals and certain industrial nonmetallic minerals including uranium.

Leasable: The leasable minerals are essentially the fuel minerals (e.g., oil, gas, and coal, but excluding uranium), phosphate, potash, sodium salts, sulfur, which are disposed of through the Federal leasing laws.

Locatable: The locatable minerals, in contrast to the leasable and salable commodities, have been characterized as "hard to find" metallic minerals. Deposits of these minerals are often geologically obscured. They are claimed under provisions of the Mining Act of 1872, as amended in 1955.

Nonfuel: Those minerals not included in the fuels mineral group.

Occurrence: The presence of ore minerals in a rock outcropping. In some instances ore minerals may be present in sufficient quantities to be classified as a deposit. Mineral occurrences are often surface indications of underlying mineral deposits.

Production: The output of a working mine, i.e., the value or amount of its concentrate and bullion production.

Resources: Naturally occurring substances that have properties which can be put to man's use. Mineral resources include nearly all of the elements and many compounds; most are solids, but some are liquids, and a few are gases; and most are inorganic, but some of the most important (oil, coal, and natural gas) were derived from organic sources.

Salable: Certain common variety materials such as sand, gravel, and stone that are handled under the commodities disposal system.

Native: A person who is by blood relation one-fourth degree or more Alaska Indian, Aleut, or Eskimo, or any combination of the three. This includes those whose adoptive parents may not be Natives, or a person who is recognized as a Native by the Native village of which he claims to be a member or whose father or mother is or has been a member. Such a person is qualified for enrollment in a Native Regional Corporation under the Alaska Native Claims Settlement Act.

Near Term: Projection through 1990; in Alaska, it is based on the year immediately before Native Corporations become public corporations.

Non-Federal Mineral or Mining Interests: Public and private mining interests including private mining businesses, State groups involved in mineral leasing or the promotion of mineral development, and county-owned quarry operations.

Ore Grade: The quantity of a specific metal or nonmetal mineral commodity in the ore, by weight. Grade is usually expressed as percent, e.g., 3 percent copper ore. The grade of precious metal deposits is normally stated as troy ounces of metal per ton of ore.

Policies: The interpretation by different Government agencies of regulations implementing the land management and disposal laws.

Practices: The actions of Federal officials when implementing and enforcing Federal laws, policies, and regulations.

Regulation —An administrative rule issued by a Federal agency or department implementing or interpreting a statute or policy. Regulations are published in the Federal Register (F. R.) and compiled yearly in the Code of Federal Regulations (CFR). There are two types of regulation, interpretive and substantive.

Interpretive; Regulations that are issued to advise the public of an agency's interpretation or construction of the statutes and rules it administers. Interpretive regulations are not binding on those affected by them and may be presented to a court for judicial determination.

Substantive: Regulations other than those describing organizational, procedural, or practice requirements that are issued by an agency pursuant to statutory authority, and that implement a statute. Such regulations have the force and effect of law.

Right-of-way: A right of to cross the land of another. As used in this report, a right-of-way means the right to cross Federal lands by obtaining a "right-of-way" permit. The authority to grant this permit maybe found in a specific right-of-way statute or in the general discretionary management authority. Title V of the Federal Land Policy and Management Act of 1976 provides: the term "right-of-way" as used in the Act includes "an easement, lease, permit, or license to occupy, use, or traverse public lands" granted for certain purposes. (43 U.S.C. 1702(f).)

Small mining business: Small mining business or the small miner is here defined as an individual, partnership, or corporation, that is engaged in prospecting or mining as a full- or part-time business. If incorporated, it is closely held, not advertised in a major stock exchange, and is capitalized for under $1 million. In Alaska, the small miner employs less than 20 persons; and annually mines less than 600,000 yards of alluvial material (clay, sand, silt, gravel, or other material deposited by running water) or less than 50,000 tons of metallic hardrock ore, or less than 200,000 tons of coal, industrial materials, or sedimentary materials (other than placer alluvium), which require further processing.

Statute: A bill passed by Congress and signed by the President. Statutes of the United States are published in the Statutes-at-Large (Stat.) and are codified in the United States Code (U. S.C.).

Surface or Transportation Access: This term refers specifically to the right to use lands for the purpose of developing a transportation system. This includes roads and railroads.

Barrier: An obstacle that prevents surface access, e.g. the loss of access to the only mountain pass through which a region can be reached.

Restriction: A deterrent to surface access, e.g., standards set by multiple jurisdictions that require substantial legal resources, time, and costs; or a detour around a topographic obstruction such as a mountain range.

Restraint: A limitation that makes it difficult to gain surface access, e.g., a Federal permit requirement involving an indi-

vidual, local, or Federal agency that causes delays.

Market Access: An aspect of transportation access that specifically concerns the movement of minerals and their products from the mine or processing site to market.

Western United States/Eastern United States: The Western United States includes Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California; the Eastern United States includes the other 37 contiguous States in the United States.

Appendix B
Acronyms

AMRAP	—Alaska Minerals Resources Assessment Program
ANCSA	—Alaska Native Claims Settlement Act
AQCR	—Air Quality Control Region
BACT	—best available control technology
BAT	—best available technology
BLM	—Bureau of Land Management
BOD	—basic oxygen demand
BOM	—Bureau of Mines
BPT	—best practicable technology
CEQ	—Council on Environmental Quality
CZMA	—Coastal Zone Management Act
DOI	—Department of the Interior
DOT	—Department of Transportation
EIS	—environmental impact statement
EPA	—Environmental Protection Agency
ESECA	—Energy Supply and Environmental Coordination Act of 1974
FCC	—Federal Communications Commission
FEA	—Federal Energy Agency
FERC	—Federal Energy Regulatory Commission
FHWA	—Federal Highway Administration
FLPMA	—Federal Land Policy and Management Act
FPC	—Federal Power Commission
FS	—Forest Service
FSLUPCA	—Federal-State Land Use Planning Commission for Alaska
FWPCA	—Federal Water Pollution Control Act
FWS	—Fish and Wildlife Service
NAAQS	—National Ambient Air Quality Standards
NEPA	—National Environmental Policy Act
NOAA	—National Oceanic and Atmospheric Administration
NPDES	—National Pollution Discharge Elimination System
OCS	—Outer Continental Shelf
PSD	—Prevention of Significant Deterioration
SIP	—State Implementation Plan
TAP	—Trans-Alaska Pipeline
TAPS	—Trans-Alaska Pipeline System
USFS	—United States Forest Service
USGS	—United States Geological Survey

Appendix C

Public Participation and List of Supporting Documents

The effects of Federal land management laws, policies, and practices on the use of Federal lands for development of minerals on non-Federal lands has not been studied widely. Special attention was therefore given to developing the information necessary to support problem analysis and evaluation.

Non-Federal lands constitute approximately two-thirds of the total national land base potentially available for domestic minerals development. Information gathering in the contiguous United States focused on States with large Federal landholdings, such as Nevada where 87 percent of the land is federally owned. (Figure C-l.) Primary emphasis was given to Western States; a sample of Eastern States was included for completeness.

Certain States were selected for intensive analysis. In the West, Nevada and Arizona were analyzed. Information was also gathered in Colorado and Wyoming. Within the Eastern States, North Carolina was analyzed in depth. Additional information was obtained in New Jersey, Delaware, South Carolina, and Virginia. Alaska was analyzed intensively because access across Federal to non-Federal land was a prominent issue during congressional consideration of Alaska National Interest Lands legislation.

In order to complete this assessment, OTA had to conduct basic information gathering because of the dearth of published material on problems of access to non-Federal minerals. Several approaches were used to obtain the necessary information: field interviews, study area analyses, and workshops. Analysis of access issues could not have been accomplished without such information gathering and the cooperation of nearly 600 individuals and groups that were concerned or affected by Federal land management decisions. Among the groups interviewed were non-Federal landowners; Alaska Native Corporations; mining interests, including mining corporations, small mining businesses and small miners; conservation and environmental organizations; the academic community; and representatives of Federal, State, and local governments. Professional and technical organizations such as the Association of State Geologists also provided information. Contacts were maintained with these groups throughout the study.

OTA information gathering was augmented by contractor and consultant reports which assisted in the problem evaluation and

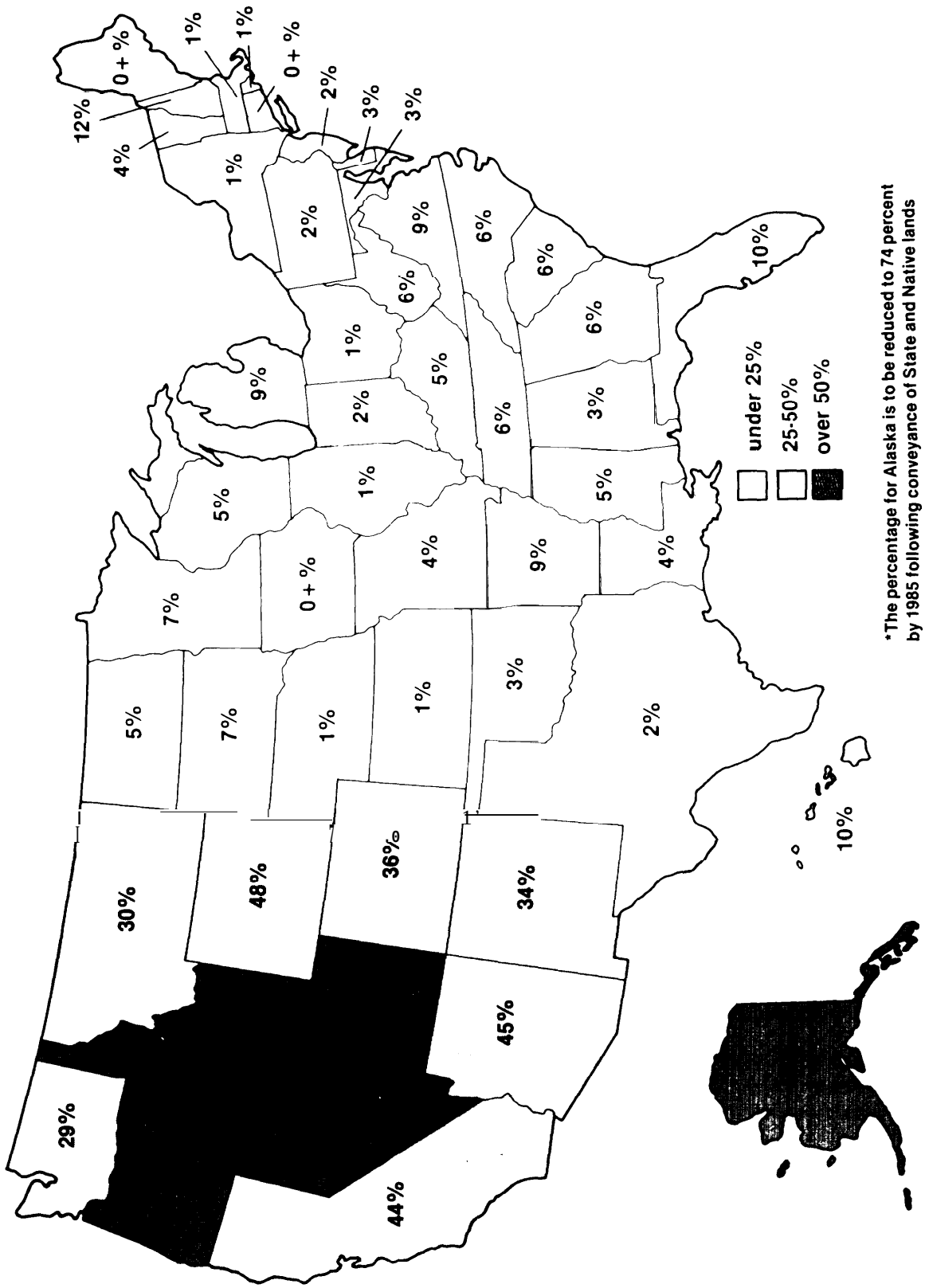

Figure C-1.—Percentage of Federal Land by State (1978)

*The percentage for Alaska is to be reduced to 74 percent by 1985 following conveyance of State and Native lands

analysis phase of the assessment. OTA staff independently verified the information obtained by contractors and consultants. The following is a list of working papers prepared for this assessment.

Minerals Accessibility to Non-Federal Lands in Arizona, W. Dresher, T. Eyde, and J. Poole, Univ. of Arizona.
Impact of Federal Land Management and Disposal Laws on Transportation Related Mineral Accessibility to Non-Federal Lands in Nevada, D. Bryan.
Assessment of Mineral Accessibility to Non-Federal Lands in North Carolina, Geological Resources, Inc.
Mineral Accessibility on Non-Federal Lands—Problem Evaluation, Harbridge House, Inc.
The Potential Relationship Between U.S. Balance of Payments and Alaska Minerals Development, J. Whitney.
Effects on the Federal Regulatory Framework on Minerals Exploration and Mine Development on Domestic Public and Private Lands, J. Whitney.
Mineral Exploration and Development Problems Arising From Public-Private Severed Estate Problems in the United States: An Industry Perspective, J. Whitney.
National Access Restrictions for Key Mineral Commodities—Analysis of Case Studies, J. Whitney.
Coastal Zone Management and Access to Onshore Minerals on Non-Federal Lands—A Threshold Assessment, B. Theberge and Scott Whitney.
Effects of the Federal Coastal Zone Management Act of 1972 on Access to Minerals on Non-Federal Lands, Earth Satellite Corp.
Transportation Access Across Federal to Non-Federal Land for Hardrock Mineral Development—Policy Alternatives for Congressional Consideration, Harbridge House, Inc.
Evaluation of Minerals Transportation Access Problems for Non-Federal Minerals Exploration and Development in Alaska, J. Whitney.
Survey of Minerals Transportation Availability for Selected Hardrock and Energy Minerals, Pan Technology, Inc.
The Federal Regulatory Framework: Effects on Minerals Exploration and Mine Development on Domestic Public and Private Lands, J. Whitney.

These working papers are on file at OTA. Persons wishing to review these working papers should contact the Materials Group, Office of Technology Assessment, Washington, D.C. 20510.

Other working papers prepared for the assessment were published by OTA as: Analysis of Laws Governing Access Across Federal Lands, Volume II, Working Papers (OTA-M-76). This volume includes the following papers:

Assessment of Transportation Access Requirements for Minerals Exploration and Mine Development and Operation in Alaska, J. Whitney and D. Bryan,
Assessment of Environmental Penalties Introduced by Transportation Access to Alaska Non-Federal Mineral Resources, B. Shaine.
The Economic Importance of the Small Miner and Small Mining Businesses in Alaska, C. Hawley and J. Whitney.

OTA relied heavily on field interviews in the contiguous United States during the early phases of the assessment. Problems associated with access use of Federal lands for exploration and development of minerals on non-Federal lands were identified in consultation with representatives of various National, State, and local interest groups. OTA gratefully acknowledges the assistance of the following individuals and groups that made technical contributions to the assessment:

Arizona

A&S Sand and Gravel Company
Allied Concrete Products, Inc.
AMAX Inc.
American Agriculture International, Inc.
American Materials, Inc.
Anamax Mining Company
Arizona Conservation Council
Arizona Mining Association
Arizona Rock and Sand Corporation
Arizona Rock Products Association
Arizonans for a Quality Environment
Bureau of Land Management, Advisory Board
Bureau of Land Management, Phoenix Grazing District
Bureau of Land Management, Safford Grazing District
Bureau of Mines, U.S.
Cinder/pumice operators*
Cities Service Minerals Corporation
Citizens of Flagstaff*
Coconino County Planning Dept.
Columbia Sand and Gravel Company
CONOCO
Construction Materials Inc.
Continental Copper Company

*Notes **a desire not to be identified** by **name or** that records of interview are unavailable.

Flagstaff Chamber of Commerce
Forest Service, U.S.
Gee-Services of Arizona
Hecla Mining Company
Inspiration Consolidated
Kerr-McGee Corporation
Mesa Sand and Rock Company
Mineral Property Owners*
National Park Service, U.S.
Nature Conservancy
Navajo Community College
Newmont Mining
Occidental Minerals Corporation
Papago Indian Tribe, Director of Mines
Peabody Coal Company
Perry Exploration Company
Phoenix Chamber of Commerce
Phoenix Rock and Sand Corporation
Pima County Assessors' Office
Ranchers*
Santa Fe Pacific Land Company
Small Mining Interests*
Southern Arizona Environmental Council
Southwest Economic Information Center
Southwest Exploration Associates
St. Joe American Corporation
State of Arizona
  Bureau of Geology and Mineral Technology
  Governor's Commission on Arizona Environment
  Land Department
  Mineral Resources Department
  State Legislature, House and Senate Natural Resources Committees
  University of Arizona, Council for Environmental Studies
  University of Arizona, Office of Arid Lands
Stop Mining Around Residential Tucson
The Superior Companies
The Tanner Companies
Tucson Sand and Soil Company
Twitty, Seville and Mills, Attorneys-at-Law
Union Rock and Sand Company
Valley Concrete and Materials
Valley National Bank
Wallaby Enterprises
Western Prospector and Miner Newspaper
White Mountain Apache Indian Tribe, Tribal Chairman

California

National Audubon Society
National Wilderness Federation
State of California
  Division of Mines and Geology

Colorado

Bureau of Land Management, U.S.
Chambers of Commerce
Citizens of Grand Junction*
Colorado Counties, Inc.
Colorado National Bank
Colorado Oil and Gas
Consolidated Coal Company
Department of Energy, U.S.
Eagle County Planning Commission
Forest Service, U.S.
National Audubon Society
Environmental Consultant*
Sand and Crushed Stone Operators*
State of Colorado
  Bureau of Mines
  Geological Survey

Delaware

Barber Sand and Gravel
Contractors Sand and Gravel
Delaware Brick Co.
Delaware Sand and Gravel
New Castle County Planning and Zoning Commission
Soil Conservation Service, Sussex County District
State of Delaware
  Office of Management, Budget, and Planning
  Department of Natural Resources and Environmental Control
  State Geological Survey
Sussex County Planning Office
Whittington's Sand and Gravel Company

District of Columbia

Bureau of Mines, Liaison Officers for Maryland and Delaware
Conservation Foundation
Department of Commerce, U.S.
  OCZM, South Atlantic Regional Manager
Department of the Interior, U.S.
Environmental Policy Center
Friends of the Earth
Sierra Club
Wilderness Society

Indiana

Indiana Department of Natural Resources, Geological Survey

Iowa

Iowa Geological Survey

*Notes a desire not to be identified by name or that records of interview are unavailable.

Maryland

Arundel Corporation
Campbell Sand and Gravel Company
Charles County Sand and Gravel
Contee Sand and Gravel Company
National Sand and Gravel Association
Stancill's Inc.
State of Maryland
  Conservation Education Council
  Department of Natural Resources
  Office of Coastal Zone Management
  Geological Survey

Michigan

Michigan Department of Natural Resources

Minnesota

Minnesota Geological Survey

Missouri

Missouri Department of Natural Resources

Montana

Forest Service, U.S.
Anaconda Company

Nevada

Air Force, U.S.
American Selco
Anaconda Company
Arrow Ready Mix
Basic Industries
Bendix
Bureau of Indian Affairs, U.S.
Bureau of Land Management, U.S.
Bureau of Mines, U.S.
Bureau of Reclamation, U.S.
Carlin Gold Mines
C.B. Concrete Company
Cities Service
Citizens Against Bureaucracy
Citizens for Mining
Consulting Economic Geologist*
Consulting Geologist*
Consulting Mining Engineer*
Desert Protective Council
Duval, Inc.
Eagle Picher Industries
Environmental Representatives*
Exploration Geologists of Nevada
Exploration Resources
Forest Service, U.S.
Freeport Exploration
Galli Exploration
Hecla Mining Company
Homestake Mining
IMCO Services
Inspiration Development
International Minerals and Chemicals Corporation
Lake Mead Recreation Area Representative*
Las Vegas Building Materials
Law Firm*
Lawrence Livermore Laboratory
Milchem Citizens for Mining
Mining Engineer*
Naval Air Station, U.S.
Nevada Association of Conservation Districts
Nevada Mining Association
Newmont Exploration
Pacific Coast Building Products
Phillips Petroleum
Ranchers Exploration and Development Corporation
Sierra Club, Toiyabe Chapter
Silica Miners
Silver King Mines
Siskon Corporation
Small Miners*
South Pacific Land Company
State of Nevada
  Conservation and Natural Resources Division
  Division of State Lands
Superior Oil
Union Carbide
University of Nevada, Mackay School of Mines
Virgin Valley Opal Miners Association
Washoe County Representative*
Washoe Jeep Squadron, Nevada Open Land
  Organized Council
Wells Cargo, Inc.

New Jersey

ASARCO
Atlantic County Citizens Council on Environment
Bureau of Mines, U.S.
Citizens*
Jessie S. Morie and Son, Inc.
New Jersey Zinc Company
Ralph Clayton and Sons Sand and Gravel
State of New Jersey
  Bureau of Geology and Topography
  Department of Environmental Protection
  Department of Transportation
  Implementation and Involvement Group, Office of CZM
Tuckahoe Sand and Gravel Company

New Mexico

New Mexico Bureau of Mines and Mineral Resources

*Notes a desire not to be identified by name or that records of interview are unavailable.

North Carolina

Appalachian Regional Commission
Army Corps of Engineers, U.S.
Basnight Construction Company
Becker Sand and Gravel Company
Borden Brick and Tile Company
Boren Clay Products Company
Bureau of Mines, U.S.
Carolina Silica Corporation
Chambers of Commerce*
City and Town Representatives*
Clark Stone Company
Coastal Zone Management and Planning Council
College of Abermarle
Cotton Patch Mines
Cranberry Magnetite Corporation
Crowell Constructors, Inc.
Cumberland Paving Company
Dare County Representatives*
Dickerson, Inc.
Earl L. Saunders Excavation
Ecologist-forester*
E. L. Wade Construction Company
Feldspar Corporation
First Colony Farms Inc.
Fish and Wildlife Service, U.S.
Foote Mineral Company
Forest Service, U.S.
Glendon Pyrophyllite Company, Inc.
Harris Mining Company
Hays Corporation
Hitchcock Corporation
Hodges Equipment Company
IMC Chemical Group, Inc.
Jacob's Creek Stone Company
J. L. Colville Construction Company
King's Mountain Mica Company
Lawson United Feldspar & Mineral Company
Lithium Corporation of America
Martin-Marietta Aggregates
Maymead Lime Company, Inc.
Melson Sand Company
Nantahala Talc and Limestone
National Park Service—Blue Ridge Parkway, U.S.
National Park Service—Great Smoky Mountain, U.S.
National Park Service—Outer Banks, U.S.
National Sand and Gravel Association
Nello L. Teer Company
Newsome Sand and Gravel
North Carolina Aggregates Association
North Carolina Granite Corporation
Outer Banks Contractors, Inc.
Perry and Daniels Inc.
PHB Emerald Corporation
Phelps Dodge Exploration
Piedmont Minerals Company, Inc.
Pine Hall Brick and Pipe Company
Powhatan Mining Company
Retired Persons*
Soil Conservation Service, U.S.
Solite Corporation
Southern Aggregates, Inc.
State of North Carolina
  Coastal Resources Advisory Council
  Department of Transportation
  Economic Coastal Management Office
  Economic Coastal Resources Commission
  Geologists*
  Highway Department Field Office Representatives*
  Land Quality Section
  Mines & Quarry Division, Dept. of Labor
  Natural and Economic Resources Department
  North Carolina Commission of Indian Affairs
  Site Planning, Parks, and Recreation Division
Statesville Brick Company
Stetson and Daniels, Inc.
Texasgulf, Inc.
University of North Carolina, Minerals Research Laboratory
University of North Carolina, Zoology Department
Wake County Planning Department
Wake Stone Corporation
Washington Chamber of Commerce

Oklahoma

Oklahoma Geological Survey

Oregon

Oregon Department of Geology and Mineral Industries

South Carolina

Addco Mining Company
Ashe Brick Company
Coastal Zone Advisory Committee
Coastal Zone Management Agency
Conservation Interests*
Gifford-Hill and Company, Inc.
Land Associates
Martin-Marietta Aggregates
National Oceanic and Atmospheric Administration, Us.
South Carolina Coastal Council
South Carolina Heritage Trust Advisory Committee
South Carolina State Development Board
U.S. Peat Corporation
Waccamaw Clay Products
W. R. Grace and Company

Utah

Utah Geological and Mineral Survey

*Notes a desire not to be identified by name or that records of interview are unavailable.

Virginia

American Mining
Baillo Sand Company, Inc.
Bureau of Land Management, U.S.
Chickahominy Sand & Gravel
Citizens*
Corps of Engineers, U.S.
Eastern Wildlife Refuge Representatives*
Environmental Consulting Firms*
Fish and Wildlife Service, U.S.—Great Dismal Swamp Refuge
Forest Service, U.S.
Geological Survey, U.S.
Gunter and Son, Inc.
J. C. Jones Sand Company
National Park Service, U.S.
Old Dominion University
R. A. Crewes Sand Pit
Sand and Gravel Operators*
State of Virginia
  Attorney General Office
  Coastal Resource Management Program
  Commerce and Resources Department
  Conservation and Economic Development Department
  Marine Resources Commission
  Mineral Resources Division
Suffolk County Government, Office of City Manager
Virginia Institute of Marine Sciences
William and Mary College

Wyoming

Bureau of Land Management, U.S.
Citizens of Jackson Hole*
Forest Service, U.S.
Ranchers*
State of Wyoming
  Environmental Quality Department
  Land Commission
  Wyoming Conservation Commission
  Wyoming Oil and Gas Conservation Commission
University Associate Professor*

*Notes a desire not to be identified by name or that records of interview are unavailable.