Biological Services Program

FWS/OBS-82/33
JULY 1982

OPPORTUNITIES TO PROTECT INSTREAM FLOWS IN ALASKA

Interagency Energy-Environment Research and Development Program
Office of Research and Development • U. S. Environmental Protection Agency

h and Wildlife Service

s. Department of the Interior

The Biological Services Program was established within the U.S. Fish and Wildlife Service to supply scientific information and methodologies on key environmental issues that impact fish and wildlife resources and their supporting ecosystems. The mission of the program is as follows:

- To strengthen the Fish and Wildlife Service in its role as a primary source of information on national fish and wildlife resources, particularly in respect to environmental impact assessment.
- To gather, analyze, and present information that will aid decisionmakers in the identification and resolution of problems associated with major changes in land and water use.
- To provide better ecological information and evaluation for Department of the Interior development programs, such as those relating to energy development.

Information developed by the Biological Services Program is intended for use in the planning and decisionmaking process to prevent or minimize the impact of development on fish and wildlife. Research activities and technical assistance services are based on an analysis of the issues, a determination of the decisionmakers involved and their information needs, and an evaluation of the state of the art to identify information gaps and to determine priorities. This is a strategy that will ensure that the products produced and disseminated are timely and useful.

Projects have been initiated in the following areas: coal extraction and conversion; power plants; geothermal, mineral and oil shale development; water resource analysis, including stream alterations and western water allocation; coastal ecosystems and Outer Continental Shelf development; and systems inventory, including National Wetland Inventory, habitat classification and analysis, and information transfer.

The Biological Services Program consists of the Office of Biological Services in Washington, D.C., which is responsible for overall planning and management; National Teams, which provide the Program's central scientific and technical expertise and arrange for contracting biological services studies with states, universities, consulting firms, and others; Regional Staffs, who provide a link to problems at the operating level; and staffs at certain Fish and Wildlife Service research facilities, who conduct in-house research studies.

FWS/OBS-82/33
July 1982

OPPORTUNITIES TO PROTECT INSTREAM FLOWS IN ALASKA

by

Mary Ray White
588 Steele Park Building
50 South Steele Street
Denver, CO 80209

Contract No. 14-16-009-79-100
Water Resources Analysis Project

Project Officer

Berton L. Lamb
Cooperative Instream Flow Service Group
Western Energy and Land Use Team
U.S. Fish and Wildlife Service
Drake Creekside Building One
2625 Redwing Road
Fort Collins, CO 80526

Performed for
Western Energy and Land Use Team
Office of Biological Services
Fish and Wildlife Service
U.S. Department of the Interior
Washington, DC 20240

This reference should be cited as:

White, M. R. 1982. Opportunities to protect instream flows in Alaska. U.S. Dept. Int., Fish Wildl. Serv. FWS/OBS-82/33. 30 pp.

Library of Congress #82-600588

FOREWORD

In Opportunities to Protect Instream Flows in Alaska, Dr. White, and her assistant, Mr. Aiken, provide the reader with a basic survey of State prerogatives and programs that may be used to protect the instream uses of water. Because of the interest and responsibilities of State fish and game agencies and other conservation organizations, most of these opportunities are related to fish and wildlife habitat. However, there are many other instream uses considered, including hydroelectric power production, recreation, navigation, downstream delivery, and waste load assimilation. The purpose of this document is to illustrate methods to protect these instream uses within the context of existing rules and regulations.

The Western Energy and Land Use Team, Office of Biological Services, U.S. Fish and Wildlife Service, has published a number of similar documents in the past. Information is now available for 25 Western and Midwestern States (Table 1).

Even though Dr. White and Mr. Aiken paid close attention to statutes, this document is not intended as a legal reference. It is designed to be a planning tool to survey current State programs, compare approaches to instream use protection, and index a preliminary evaluation of the costs and benefits of a wide range of programs. Where appropriate, a letter from the State water administration agency concerning the State's perspective on instream uses of water is included.

Dr. White has provided a summary table for each State, which serves as an index to available opportunities. We anticipate that these tables will be the reader's most valuable guide to these reports.

In some reports, opportunities in each State are presented in a single document, but in several publications, reports on States from the same geographical region are combined. The complete list of reports in this series is displayed in Table 1. The combination of State reports presents an opportunity for easy comparison of specific programs. This is particularly useful because of the wide variety of instream flow protection programs or possibilities.

The primary purpose of this series of documents is to point out the opportunities in instream flow management which currently exist so that planners and managers can anticipate development, plan appropriate programs, and evaluate the costs and benefits of certain courses of action. In addition, the reports are brief histories of the level of success of various State programs. The use of this information can result in a significant cost savings to planners and managers.

In summary, each document has an Executive Summary which discusses its purpose, uses, and limitations. Each document also has separate information tables (Table 2) which summarize the contents for each State. It is hoped that the research represented in these documents will provide the kind of overview and preliminary evaluation that will ease the burden of State, local, or Federal planners and managers as they seek to meet their increasingly complex responsibilities.

Table 1. Publications in the opportunity series.

Title	Publication Number
Instream Flow Strategies for Arizona	FWS/OBS-78/35
Instream Flow Strategies for California	FWS/OBS-78/36
Instream Flow Strategies for Colorado	FWS/OBS-78/37
Instream Flow Strategies for Idaho	FWS/OBS-78/38
Instream Flow Strategies for Montana	FWS/OBS-78/39
Instream Flow Strategies for Nevada	FWS/OBS-78/40
Instream Flow Strategies for New Mexico	FWS/OBS-78/41
Instream Flow Strategies for North Dakota	FWS/OBS-78/42
Instream Flow Strategies for Oregon	FWS/OBS-78/43
Instream Flow Strategies for South Dakota	FWS/OBS-78/44
Instream Flow Strategies for Utah	FWS/OBS-78/45
Instream Flow Strategies for Washington	FWS/OBS-78/46
Instream Flow Strategies for Wyoming	FWS/OBS-78/47
Opportunities to Protect Instream Flows in Alaska	FWS/OBS-82/33
Opportunities to Protect Instream Flows in Nebraska and Kansas	in preparation
Opportunities to Protect Instream Flows in Michigan and Wisconsin	in preparation
Opportunities to Protect Instream Flows in Minnesota and Iowa	in preparation
Opportunities to Protect Instream Flows in Texas, Oklahoma, and Arkansas	in preparation
Opportunities to Protect Instream Flows in Missouri	IFG Working Paper 308.16
Hawaiian Water Rights and Instream Flows	IFG Working Paper 308.3

EXECUTIVE SUMMARY

OBJECTIVES

This document combines the efforts of several individuals, agencies, and organizations toward a common objective: the identification; description; and preliminary evaluation of promising opportunities for protecting instream uses of water under existing Alaskan law.

This report is intended for the use of planning and management personnel who need an overview of potential opportunities for preserving instream flows. It is not intended to replace or challenge the advice of agency counsel, and it is not written to provide legal advice. Instead, it is designed as a guide for the person trying to find his way among sometimes bewildering Federal and State statutes and administrative practices. This report is not, and should not be taken as, official policy or prediction of future actions by any agency. It is simply a summary of some potential opportunities for protecting instream flows.

Toward these objectives, the U.S. Fish and Wildlife Service, through its Water Resources Analysis Project, contracted with Dr. Mary Ray White to identify and describe these opportunities under State laws and current State administrative practice. The project had two phases. In Phase I, Dr. White identified potential opportunities in each State being considered. These descriptions were reviewed for accuracy and utility by a wide range of State and Federal personnel. In Phase II, Dr. White and her associate, J. David Aiken, prepared a report for each State. Each document has undergone extensive review by State and Federal personnel.

BACKGROUND CONSIDERATIONS

Both State and Federal agencies have important roles to play in water management, particularly in instream flow preservation. The summaries offered here are not intended to suggest that Federal instream flow decisions will or should replace current State water management systems. It is very important for Federal employees to recognize that Federal water policy requires deferral to State water management policy and statutes. In addition, U.S. Department of the Interior employees should recognize that they are required to follow the water policies of the Secretary of the Interior (see letter, page viii).

In addition to deferring to State water management law, Federal employees should recognize that a close working relationship with State agencies is often the most practical way of getting things done. Resources are almost always limited and, in some cases, gathering and developing information, as required by these opportunities, may be beyond the financial power of the

agency most concerned. As a result, agencies and individuals should learn to cooperate with similarly oriented private, State, and Federal organizations to ensure success.

Many of the opportunities described in this booklet are frequently used and will be familiar to the reader. Some of them include activities that are required of U.S. Fish and Wildlife Service field personnel. Examples of these activities may be given, while no examples are necessary for others.

Federal employees should be particularly cautious when using unusual or untried approaches and should refer legal questions to the office of their Regional Solicitor or general counsel. Close cooperation with the office of the Solicitor or agency counsel will result in fewer lawsuits and more successful results overall.

The reader who wishes to protect or augment an instream flow should begin by looking at the physical and legal circumstances of the whole stream. A planner or manager should consider all types of land and water interests involved. The stream should be examined both up and downstream of the reach of interest. Downstream interests should be considered because often they have statutory or contractual power to hold water instream. This survey should include ownership, possession, and control of lands and waters, and the types of use to which the lands and waters are presently being put, such as agriculture, planned development, wilderness, or industry. It is important to remember that contracts or leases may be held by other organizations and individuals. In addition, government agencies may have authority over the land and water. Potential governing agencies are many and diverse, ranging from the Federal government to special districts and municipal bodies.

Often there is more than one way to solve an instream flow problem. When given a choice, the planner or manager should seek the least expensive, least disruptive, and simplest solution to the problem. In some cases, this may mean having a conversation with a landowner or local administrator, sending a letter to the owner or lessee of land and water, or simply arranging a meeting between two water users who could stagger their withdrawals or in some other way provide for a stream.

Offering information on instream flow needs to other agencies of State or Federal government is complex and often provided for by specific statutes. The most risky, complex, and expensive approach to protecting streams is the use of lawsuits. In some cases, litigation may be a necessary part of protecting a right and cannot be avoided. When possible, the manager should stay out of the courts. Lawsuits are expensive, and their outcome is often unpredictable.

In using this report, the reader should be aware of its purpose and limitations. First, only a few of many possible opportunities are described herein. The user should exercise initiative, judgment, and creativity in dealing with any specific situation. Second, this report should be used only as a starting point. In any situation related to the acquisition of water rights, legal advice should be sought. This report should in no way be construed as a substitute for the opinion of a private attorney, attorney general, or agency counsel. Third, this report is neither a policy nor a decision

document; it is simply a collection of opportunities which appear to have utility in a variety of situations.

The purpose of this booklet is to encourage cooperative and innovative thinking by all persons interested in instream flows for fish and wildlife, recreation, and watershed management at Federal, State, or local levels of government, as well as private individuals and wildlife organizations. Many talented people want to protect instream flows; their cooperation in a variety of approaches will be necessary to solve the problem.

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH M
JUNEAU, ALASKA 99811
PHONE:
(907)465-2400

March 1, 1982

Mr. Berton L. Lamb
Cooperative Instream Flow Service Group
Western Energy and Land Use Team
U. S. Fish and Wildlife Service
2625 Redwing Road
Fort Collins, Colorado 80526

Dear Mr. Lamb:

My staff and I have reviewed the final draft of your booklet entitled "Opportunities to Protect Instream Flows in Alaska." I believe the booklet will be informative to those interested in instream flow protection in Alaska.

I particularly endorse the stance as stated in the preface that a close working relationship between federal, state and local governments and the private sector is necessary to effectively manage Alaska's natural resources. I would like to emphasize that while I endorse the usefulness of this booklet, it is the position of the Department of Natural Resources that the policies and recommendations contained in the booklet are not biding on present or future actions by this agency.

I appreciate the opportunity to review the booklet and to provide the Department's position with regard to this publication.

Sincerely,

John W. Katz

John W. Katz
Commissioner

cc: Mary Lu Harle, Water Mgmt. Officer

Table 2. Opportunities for protecting instream flows in Alaska.

Title	Identification		Application				
			Initiation		Implementation		
	General description	Applicable situations	Parties	Actions	Parties	Actions	Expenditures
Department of Natural Resources Conditions on Appropriative Rights (see page 2)	Appropriation permits may be conditioned or denied to protect stream flows. A.S. 46.15.010, et seq. Applicants may be required to supply stream flow data.	When applications are filed for water permits which would harm flows.	Other appropriators, State agencies, public interest groups; Dept. of Natural Resources.	Protest inappropriate applications, revise and promulgate regulations.	Dept. of Natural Resources.	Condition or deny applications for appropriation; require data.	Hearing costs; study and information costs for appropriators.
Reservation of Instream Flows (see page 7)	Instream flows can be reserved from appropriation to protect stream flow needs. Alaska Constitution, Art. VIII, Sec. 3 and 13, A.S. 46.15.010, et seq.	All streams and rivers not fully appropriated.	State agencies, individuals, governmental subdivisions.	Apply for reservation of water for the permitted purposes.	Dept. of Natural Resources.	Approve applications for reservations.	Study costs; adminstrative costs.

Table 2. (Continued)

Title	Identification		Application				
			Initiation		Implementation		
	General description	Applicable situations	Parties	Actions	Parties	Actions	Expenditures
Department of Fish and Game Adquisition of Land and Water (see page 11)	Dept. of Fish and Game can acquire water and real property to protect stream flows and can condition permits to protect habitat. A.S. 16.05.020, et seq.	Identified habitat acquisition needs; submission of permit applications.	Alaska Dept. of Fish and Game.	Study stream needs; identify habitat.	Alaska Dept. of Fish and Game.	Acquire and manage lands and waters to protect flows, condition permits.	Study, acquisition, and management costs.
Anadromous Fish Permits (see page 15)	Conditions in these permits can protect streams. A.S. 16.05.840	Application for permits for activities that affect streams.	Alaska Dept. of Fish and Game.	Study effects of activities on stream.	Alaska Dept. of Fish and Game.	Impose conditions on permits or deny permits.	Administrative costs.
Pollution Laws (see page 18)	Classification of streams, development of State water pollution control plan, loans to cities for water supply can all protect streams. A.S. 46.35.010; 46.03.080; 46.03.030.	Unclassified streams, loan applications from cities.	Alaska Dept. of Environmental Conservation.	Keep abreast of activities affecting streams.	Alaska Dept. of Environmental Conservation.	Alaska Dept. of Environmental Conservation.	Administrative costs.

Table 2. (Continued)

Title	Identification		Application				
			Initiation		Implementation		
	General description	Applicable situations	Parties	Actions	Parties	Actions	Expenditures
Municipal Condemnation (see page 19)	City condemnation or appropriation of water supplies upstream of use can protect flows. A.S. 90.55.240	Cities in need of water or anticipating growth in water needs.	City government.	Locate water source; negotiate with owners; if unappropriated, apply for permit.	Dept. of Natural Resources.	Exercise eminent domain power; grant permit.	Condemnation or appropriation costs.
Renewable Resources Fund (see page 20)	This statutory fund may be a source of money to support appropriations for appropriative and reserved instream water rights for participating agencies. A.S. 37.11.040	Mitigation plans, fish and wildlife projects.	Alaska Dept. of Natural Resources; Dept. Fish and Game; Dept. of Environmental Conservation; Dept. of Commerce and Economical Development.	Prepare plans for expenditure of final income.	Alaska Renewable Resource Corporation.	Provide financial assistance to recommended projects.	Sufficient funds to support projects and planning costs.
Coastal Zone Management (see page 21)	Programs aimed at coastal needs can protect flow values. A.S. 46.40.010 et seq.	Ongoing work of the Commission.	Alaskan Coastal Policy Council.	Study fishery needs dependent on instream flows.	Alaskan Coastal Policy Council.	Incorporate upstream needs in overall and specific policy decisions and in published guide.	Administrative costs; study costs.

Table 2. (Concluded)

Title	Identification		Application				
			Initiation		Implementation		
	General description	Applicable situations	Parties	Actions	Parties	Actions	Expenditures
Marine Fisheries Compact (see page 22)	Legislation to protect anadromous fish can be important to streams. A.S. 16.45.010	Ongoing work of Commission.	Marine Fisheries Compact Commission.	Study needs of compact States.	Marine Fisheries Compact Commission.	Recommend legislation and police power coordination.	Administrative costs; study and drafting costs.
The Public Trust Doctrine (see page 23)	State control of resources must consider public rights.	State-owned property, State-controlled land and water rights.	Individuals, corporation.	Study uses of public trust lands and waters.	Individuals, corporations.	Petition or sue State agencies to enforce public rights.	Legal costs.

CONTENTS

INTRODUCTION

With a few exceptions, the rivers of Alaska have adequate instream flow largely because significant water demand for out-of-stream uses has not yet occurred. Water resource development is expected to increase as oil and gas development, hydroelectric projects, and a transfer of public lands into private ownership increase. Because of Alaska's vast size and great variation of terrain, Alaskan rivers have a great variety of types; many of these rivers have their low flow in the winter months. The remoteness and relative inaccessibility of a great number of river systems in Alaska make it difficult and expensive to develop a data base comparable to that available for other United States rivers. In Alaska, basic research has not yet begun on many Alaskan water courses. Alaskan natural resource managers must cope with lack of inventory and measurement of stream hydraulics, hydrology, and biology.

Existing information on the fishery resources and aquatic habitats of Alaska within specific river drainages ranges from the most fundamental and generalized to localized and specific data on species managed by the Alaska Department of Fish and Game in areas where competition for these species is keen. It should be noted, however, that information on all species, even those studied in greastest detail such as salmon, is still largely preliminary. Additional data must be collected on selected species and life phases present in each drainage, including data on their interrelationship with other species and with their physiochemical surroundings. These data are required for determining instream flow reservations.

DEPARTMENT OF NATURAL RESOURCES
CONDITIONS ON APPROPRIATIVE RIGHTS

OPPORTUNITY

In issuing a water use permit, the Department of Natural Resources (DNR) Commissioner may require modification of plans and may include conditions, restrictions, and limitations. These conditions could provide protection of instream uses [AS 46.15.010, et seq.].

BACKGROUND

The Water Use Act takes its authority from provisions in the Alaska Constitution, which became operative in 1959 upon statehood. Article VIII, Section 3, provides that, wherever occurring in their natural State, fish, wildlife, and waters are reserved to the people for common use. Article VIII, Section 13, provides that all waters, except mineral and medicinal waters, are subject to appropriation, that priority of appropriation shall give prior right, that appropriation of water shall be limited to State purposes and subject to preferences among beneficial uses and to "the general reservation of fish and wildlife."

The Water Use Act governs the withdrawal and use of water in Alaska [AS 46.15.010 et seq.]. This statute is administered by the DNR, one section of which has responsibility for regulating appropriation of water.

Appropriation is defined as "the diversion, impounding, or withdrawal of a quantity of water from a source of water for a beneficial use or the reservation of water." [AS 46.15.260(1)]. Beneficial use includes fish and wildlife use.

Appropriative Water Rights

The Water Use Act establishes a procedure for gaining appropriative water rights, involving the following steps: (1) the potential appropriator makes application on a DNR form to the Commissioner for a permit to appropriate; (2) notice is published by the Commissioner of the application, and interested parties may object; and (3) hearings are held and a decision given within thirty days after receipt of the last objection or the conclusion of the hearing.

The Water Resources Section of the Division of Lands was reorganized in January 1978, when the Water Management Section was established in the Division of Forest Land and Water Management within the Department of Natural Resources. Permit applications are made to one of the Division's three district offices.

Permits are issued after review by the Water Management Section in the Division's central office.

Statutory criteria exist for the issuance of an appropriative permit. The Commissioner is to issue a permit if the proposed appropriation is consistent with the "public interest," a term which includes no adverse effect on fish and game resources and on public recreational opportunities, the public health, and upon access to navigable or public waters.

In the past, there has been a de facto protection of instream flow uses. Each new application has been evaluated in terms of its effect on the flow of the stream. The flow needs of the stream are not separately established in advance of appropriators' demands. This is a round-about method of ensuring sufficient amounts of water for instream usage, and depends upon the personal inclination of the Commissioner and his assistants. This system is particularly subject to a stream's being over-appropriated by accident.

Abandonment

The Commissioner may find water rights abandoned or forfeited by the holder. They then revert to the State [AS 46.15.140]. If this provision were vigorously enforced, it would have the effect of holding flows in the stream.

Transfers

The permission of the Commissioner is required before an appropriation may be sold, leased, transferred, or severed from the land to which it is appurtenant [AS 46.15.160]. When reviewing applications for such transfers, the Commissioner could consider instream flow needs and condition his approval or limitations on such transfers accordingly. In a pre-Water Act case, the Alaska Supreme Court recognized that an appropriator may change his point of diversion or place of use so long as such change does not prejudice the rights of later appropriators [Elgar v. Baker, 4 Alaska 142 (1910)].

On the other hand, the Act makes it clear that later appropriators are not entitled to maintenance of stream or ground water conditions unless they cannot reasonably acquire water. As a result, this protection, available in many other prior appropriative States, is not afforded streams or junior appropriations in Alaska.

Inventories

One of the major problems facing Alaskan resource managers is a lack of basic information on the State's waters. The Department of Natural Resources is directed to adopt regulations providing for the systematic collection, recording, and distribution of data on the waters of the State [AS 41.08.035]. The lack of data on the location and quantity of water must be overcome before coherent planning and instream protection can occur.

In the present absence of firm instream flow data, the Department of Natural Resources may be lenient in granting water permit applications. Development of hard data on the State's waters would help the Department in reviewing the applications. One potential source of this data can be prospective water users.

Frank Trelease drafted the 1961 proposed Water Code for Alaska, of which the present Water Use Act is a section. His subsequent analysis of the administration of the Water Use Act is a thoughtful examination of administrative procedures, problems, and possible solutions for those problems (Trelease 1976). Although some of the problems have been solved and some of his proposals have been adopted, the report remains very helpful for anyone interested in water use and administration in Alaska.

Some problems have remained with the Water Management Section of DNR since its inception. The Section has been understaffed and overworked by the enormous backlog of applications for permits, both for previously existing rights and new permits. There have also been problems in coordination with other departments of State government. The considerations listed in the Act [AS 46.15.080], including the effect on fish and game resources, public recreational opportunities, and public health, are difficult to consider fully for each application in view of the size of the overall task.

EXAMPLE

Present permits include this language:

During the effective period of this permit, the permittee shall comply with the following conditions:

CONDITIONS:

1. Follow acceptable engineering standards in exercising the rights granted herein.

2. Comply with all applicable laws and any rules and/or regulations issued thereunder.

3. Indemnify the State against and hold it harmless from any and all claims, demands, suits, loss, liability, and expense for injury to, or death of, persons and damages to, or loss of, property arising out of, or connected with, the exercise of the privileges covered by this permit.

4. Notify the Alaska Division of Forest, Land and Water Management upon CHANGE OF ADDRESS or TRANSFER OF ANY REAL PROPERTY related thereto.

Conditions to protect instream flow could be included in this portion of the permit. These might include release of a specific flow regime from reservoirs and maximum rates of change in flows or they might permit diversions only when certain gages register specified flows.

For example, the statute setting up the Denali State Park [AS 41.20.300, 310] contains provisions that are typical of such conditions. Moreover, it illustrates the State Park interests in water.

> The purpose of ... this chapter is to restrict ... State-owned lands and waters to use as a State park ... closing the described lands

> and waters to multiple use ... These lands and waters are reserved from all uses incompatible with their primary function as a park area. Statutes establishing State parks protect the water within the parks, and have enough force to support a requirement that the Division of Parks be notified whenever applications are made for appropriations in or near parks in order that the park can prepare to oppose the application. The preferred approach would be to have the parks requirements for water established as conditions which would automatically be applied to all applications for appropriations on or near the park.

DNR has authority to limit appropriations, based on various types of public interests, under the authority of AS 46.15.100. In determining whether a proposed appropriation will further the public interest, DNR must consider the appropriation's effect on fish, game, public recreational opportunities, and public health, as well as the loss of alternate uses of the water. Permits granted to appropriators are subject to conditions. As a routine matter, the Division of Forest Land and Water Management has included printed conditions on all permits, with room on the permit for additional conditions that may be needed.

EVALUATION

This kind of reservation of flows requires the DNR to repeat the reservation in every permit granted for the particular stream and perhaps to fight the battle many times. After consideration of the public interest requirements of a particular stream, DNR could make a finding that public interest requires a certain flow in a particular stream and that no permit should be issued without including that flow as a condition. Support for such a condition is found in the requirement for approval of the project by the Commissioner of Fish and Game "... for the proper protection of fish and game" [AS 16.05.870,.880]. A general condition, imposed upon all permits on a particular stream, developed after careful consideration by these two departments of the State government, would have a strong position if challenged.

DNR could require the applicant to hire an independent consultant from a list of qualified firms selected by the Alaska Land Resources Manager's subcommittee on instream flows. This consultant would conduct appropriate studies to supply data to DNR pertinent to evaluating the public interest aspect of the applicant's proposal.

Requiring more data from the applicant could in effect put the burden on the applicant to protect instream flows, a shifting of responsibility that would benefit many users and the general public. This approach would be low cost, uniform, and relatively easy to enforce, because the presence of the required data could be checked when the application for appropriation was first reviewed by DNR.

SOURCES

Statutes and cases summarized in the text are not relisted here.

Curran, H., and L. Dwight. 1979. Analysis of Alaska Water Use Act and its interaction with Federal reserved water rights. Institute of Water Resources. University of Alaska, Fairbanks.

Hickman, G. 1979. Letter from Deputy Director, U.S. Fish and Wildlife Service to Commissioner, Alaska Department of Natural Resources. 15 June.

Ott, A. G., and K. E. Tarbox. 1977. Instream flow, applicability of existing methodologies for Alaskan waters. Alaska Department of Fish and Game.

Trelease, F. J. 1974. Water law: resource use and environmental protection. 2nd Ed. St. Paul, MN. West Publishing Company.

U.S. Water Resources Council. 1980. State of the States: water resources planning and management. U.S. Water Resources Council.

RESERVATION OF INSTREAM FLOWS

OPPORTUNITY

The new provisions of the Water Use Act permitting reservation of instream flows can be exercised by State agencies, Federal entities, individuals, and conservation interests to protect instream flows within the context of Alaska's prior appropriation water right system [AS 16.030].

BACKGROUND

In June 1980, a bill amending the Water Use Act was passed which achieved what had been attempted for many years. It made possible the reservation of instream flows in Alaskan waters. Waters are now reserved to the people for common use and are subject to appropriation and beneficial use and to reservation of instream flows or levels of water [AS 46.15.030]. This reservation is a right which accrues to the State, an agency or political subdivision of the State, an agency of the United States, or a person. It is a right to reserve sufficient water to maintain a specified instream flow or level of water at a specified point on a stream or body of water over specified times or an entire year. The provisions of specificity appear to be designed to prevent extremely broad and vast claims from being made. The purposes of the reservation of water are limited to:

1. Protection of fish and wildlife habitat, migration, and propagation;

2. Recreation and park purposes;

3. Navigation and transportation purposes; and

4. Sanitary and water quality purposes.

The Attorney General has issued an opinion to the Governor stating that any certificate issued must be issued to a governmental agency which DNR determines to be the most appropriate trustee for the right. There is some question, however, whether the opinion directly contradicts the provisions of the statute, which directs the Commissioner of DNR to proceed in accordance with normal certificate issuing procedures.

Under the new Act, the Commissioner of DNR is to issue the certificate if he finds that prior appropriators will be unaffected, a demonstrable need exists, unappropriated water exists, and the proposed reservation is in the public interest.

Every ten years, the Commissioner of DNR is required to review every reservation issued to determine whether the purpose for which the certificate is issued still applies. If it does not, he may revoke or modify the certificate.

The new statute amends several definitions in the Water Use Act and adds to "beneficial use" fish and shellfish processing, navigation and transportation, and maintenance of water quality.

It appears from the bill that persons who might logically apply for reserved rights include, in addition to State and governmental agencies, persons and corporations interested in navigation and transportation by water, which should include operators of float planes, municipalities and other suppliers of water, and persons, such as guides, fishermen, and associations of fishermen, whose livelihood depends upon fish and wildlife. Staff of DNR is, as of this writing, drafting regulations and integrating the instream flow provisions of the Water Use Act into the Department's water rights program (Katz 1981).

There is very limited use of water for irrigation in Alaska, as compared to other western States. Many entities have an interest in water use allocation for energy, mineral, fish processing, and municipal development, in addition to supporting Alaska's vast fish and wildlife resources.

EVALUATION

This carefully considered and long-debated statute should answer many of the concerns of persons interested in instream flow in Alaska. Although there may be some question within State agencies as to who may properly reserve water, this question will be settled either administratively or judicially with the early applications for instream rights. One problem with the Act is that it is based on the assumption that the Department of Natural Resources Water Management Section has sufficient staffing to process applications promptly. In fact, the Section is undermanned and underfunded and has a backlog to work through. Applications under the new statute will necessarily be last on the list.

Currently, the DNR is allocating more resources to water management activities.

> During the past year, a significant number of the older backlog of water rights has been adjudicated, though new applications continue to be filed. DNR's instream flow program is just being initiated. The Department has hired personnel trained and experienced in appropriate skills, techniques and methodologies to work on applications for instream flow reservations and anticipates further increases in that staff (Katz 1981).

The Attorney General relied upon the public trust doctrine to support his interpretation that the certificate of reservation be issued, not to individuals, but to an appropriate government agency, as determined by DNR (Katz 1981). The granting of a certificate by the State does not delegate or give away State title or authority to govern this important natural resource. The

certificate carefully conditions the use of any water to which a right is granted. The required review by the Department of Natural Resources ensures that the public use for which the water was reserved is protected as long as necessary. The statute does not, on its face, provide for "citizen suits", but, rather, provides for citizen application for grant of water rights for instream flows. During the long history of this legislation, a bill limited to State and governmental agencies was repeatedly defeated. This indicates that the intent of the legislators was, indeed, to permit individual citizens to appropriate water instream.

Requiring the appropriator for instream flows to be an agency of the State would place an economic burden upon whichever agency is charged with this responsibility. In some instances (e.g. Federal agencies, Native corporations, associations of commercial fishermen, and environmental organizations with a recognized interest in stream maintenance), it is appropriate for entities other than State agencies to reserve water for instream flow uses. Accordingly, the burden of making application for the appropriation, with its attendent study costs, would be distributed broadly. Some industries are economically dependent upon instream uses to survive. Commercial fishing, navigation, subsistence hunting and fishing may legitimately seek to maintain instream flows in the waterways.

The Alaska National Interest Lands Conservation Act [ANILCA] [P.L. 96-487], enacted 2 December 1980, places large acreages under the management of U.S. Forest Service (USFS), Fish and Wildlife Service (FWS), National Park Service (NPS), and the Bureau of Land Management (BLM). According to an Executive Order currently being developed, these agencies are expected to quantify the Federal reserve rights (including instream uses on their lands, where appropriate) within five years.

There appear to be few logical differences between permitting an agency of the State or Federal government and another type of organization to reserve instream flows; the issue may come down to one of keeping the power in the State government's hands, rather than permitting it to be exercised by the individuals and corporations in the private sector. The Commissioner retains discretion to deny or limit, or even to declare abandoned, the reservation.

SOURCES

Statutes and cases summarized in the text are not relisted here.

Alaska House Bill 118: An Act Relating to Rivers, Lakes, Streams, and Other Bodies of Water in the State; and Providing for Effective date; effective 19 June 1980.

Curran, H., and L. Dwight. 1979. Analysis of Alaska Water Use Act and its interaction with Federal reserved water rights. Institute of Water Resources. University of Alaska, Fairbanks.

Estes, C. 1979. Alaska Department of Fish and Game, Habitat Protection Division. Personal communication. 21 November.

Hickman, G. 1979. Acting Area Director, Fish and Wildlife Service. Letter to R. LeResche, Commissioner, Alaska Department of Natural Resources. 7 January.

Katz, J. W. 1981. Letter from Commissioner, Alaska Department of Natural Resources. 14 December.

Ott, A. G., and K. E. Tarbox. 1977. Instream flow, applicability of existing methodologies for Alaskan waters. Alaska Department of Fish and Game.

Trelease, F. J. 1976. Draft report to Chief, Planning and Research Section. Alaska Department of Natural Resources. 22 October.

DEPARTMENT OF FISH AND GAME
ACQUISITION OF LAND AND WATER

OPPORTUNITY

The Department of Fish and Game has the power to acquire water and other real property by purchase or lease in order to manage, maintain, improve, or extend the fish, game, and aquatic resources of the State [AS Title 16].

BACKGROUND

In the recent amendments to the Water Use Act, through which State agencies may apply for reservation of instream waters, the logical State agency for many reservations will be Alaska Department of Fish and Game (ADF&G), which can act promptly on critical rivers. The Fish and Game Fund, which may be used to acquire land and water, is made up from money received from the sale of licenses, furs, settlements of claims, and other sources.

This Department enjoys other opportunities to protect Alaskan waters. For example, lands and waters controlled by the ADF&G also can be managed to preserve instream flows; ADF&G may also assist DNR in evaluating applications to appropriate water.

The Water Use Act requires notice to the ADF&G of an application for water appropriation. The Commissioner of DNR is obliged to evaluate the effect on fish and game resources of each proposed appropriation. These two sections of the statute [AS 46.15.070 and .080] give ADF&G considerable leverage on proposed appropriations that may affect instream flows. In practice, a negative recommendation from ADF&G may very well mean refusal of a permit. Assistance from ADF&G in evaluating these permits is very helpful in protecting waters of the State from over- or misappropriation.

The Boards of Fisheries and Game may set apart areas for fish reserves and game reserves, as well as governing fishing and hunting and engaging in research and watershed and habitat improvement. These set-aside areas protect instream flows arising in them because ADF&G manages all its lands with instream flows in mind.

Within the Alaska Department of Fish and Game, the Sport Fish Division coordinates the Department's collection and anlysis of instream flow related hydrological, water quality, and biological data. The Habitat Division has the lead regulatory function with respect to instream flow reservations. Its work includes the following duties:

1. The Division acts under the general powers, duties, and functions of the Commissioner to maintain and protect fish and wildlife habitat and to foster a broad appreciation of habitat values, issues, and concerns [AS 16.05 .020(2) and .050(5)].

2. The Division is charged with regulatory responsibilities for maintaining and protecting the biological integrity of all anadromous spawning and freshwater rearing areas in Alaska [AS 16.05.870].

3. The Division carries out a regulatory program which is designed to ensure that opportunities exist for continued free movement of all fish species in the waters of the State [AS 16.05.840].

4. Through maximum intergovernmental and interagency involvement and participation in private development activities, the Division coordinates the Department's response in: (a) recommending best management practices for the protection of the State's habitat resources; and (b) identifying and recommending for special management attention, areas of special fish, wildlife, and/or habitat values [AS 16.05.020(2) and .050(5)].

5. The Division acts to promote and protect access to important fish and wildlife resource areas (as recommended by the other Divisions) for the use and enjoyment of the State's commercial, recreational, and subsistence publics [AS 16.05.020(2)].

6. The Division is charged with coordinating the departmental responsibility to submit annually to the Alaska legislature a list of additional critical habitat areas which are recommended for legislative designation [AS 16.20.270].

7. The Division is charged with coordinating a regulatory program for the protection of species habitats in legislatively designated critical habitats, refuges, and sanctuaries [AS 16.20.050 - .060, .120, and .250 - .260].

The Department of Fish and Game is taking several steps to integrate its programs with land and water management programs in other agencies. For example, the Section has on file a standing grant request for funding under Section 208 of the Federal Clean Water Act. Section 208 deals with control of non-point sources of water pollution. The Act places strong emphasis on attaining and maintaining a level of water quality which will provide for protection of fish and wildlife. In Alaska, the Department of Environmental Conservation acts as the implementing agency for Section 208 programs. Because expertise in fish and wildlife matters lies in the Department of Fish and Game, however, the Alaska 208 program provides an opportunity for cooperative planning for a Statewide water quality management program which is responsive to the needs of fish and wildlife resources. Both agencies stand to gain. The Department of Environmental Conservation will benefit because a broader range of expertise will be brought to bear on water quality issues. The Department of Fish and Game will benefit because aquatic habitat will be

considered in regulations of another agency. Each agency will be supporting the other in matters relating to freshwater and marine pollution.

Areas which the legislature has found essential to wildlife and fisheries resources are designated as either a game refuge, a critical habitat area, or a game sanctuary. Management of these areas is the responsibility of ADF&G.

Construction, exploration, and development work within these areas requires the appropriate permit: a State game refuge permit; a critical habitat permit; or a State game sanctuary permit. Each of these permits is reviewed by the ADF&G Habitat Protection Division.

The Commissioner of Fish and Game is to submit a list of critical habitat areas to the legislature annually [AS 16.20.220]. The Commissioner can include instream flow needs in these critical habitat area considerations and designations. After a broad habitat area has been set aside, an application can also be made by ADF&G to DNR for specific appropriation or reserved flow rights to ensure protection for flows in these areas.

EXAMPLE

The Commissioner has the power under the general provisions of the fish and game statute to protect the fish resources of the State in the interest of the economic and general well being of the State. In 1976, the State Fish and Game Commissioner ordered an immediate halt to unauthorized water withdrawals from two north slope rivers by the British Petroleum-Alaska and Atlantic Richfield Companies. At least one of the water permits involved included the condition that "rates of water taken from the Sag River during periods of ice cover shall be limited by requirements for fish." The ADF&G determined that whitefish and arctic char overwintering ponds along the Sag and Kuparuk Rivers had been pumped dangerously low.

This direct intervention and enforcement of a water rights matter by the Fish and Game Commissioner raised problems of constitutional dimensions under Article VIII, Sections 13 and 16, which govern appropriation of water and the condemnation of interests in water.

On the other hand, the action had the desired effect of halting the withdrawals. Until the staff of the Water Management Section of DNR is sufficient to enforce the conditions imposed in its permits, such actions by ADF&G remain a possibility.

EVALUATION

Because the instream flow statute is relatively new, its effectiveness is not established. ADF&G water rights for instream flows can provide specific protection for streams of concern in addition to the protection afforded by area-wide designation.

As amended by H.B. 118, AS 16.05.870 empowers the Commissioner of Fish and Game to designate various rivers, lakes, and streams that are important

for the spawning, rearing, or migration of anadromous fish. Previous classifications expired 31 July 1982, unless the Commissioner reevaluates the waters and determines that they are still important for one of these purposes. After the waterways have been designated, any person who wishes to construct a project, or use, divert, or otherwise alter the natural flow of the river, must notify the Commissioner of this intention. The Commissioner may then require that person or agency to submit full plans of the work and require the person to obtain written approval from the Commissioner as to the sufficiency of the plans before the work begins.

Similar to the Department of Natural Resources, there is the incorrect assumption that the Department of Fish and Game has sufficient staffing and funding to collect and analyze data and perform regulatory functions for both reserving instream flows and Title 16 functions. Unless this oversight is corrected, protection of fish and wildlife resources could be diminished.

ANADROMOUS FISH PERMITS

OPPORTUNITY

Conditions on permits granted by Alaska Department of Fish and Game (ADF&G) for activities affecting anadromous fisheries in streams can protect streamflows [AS 16.05.840].

BACKGROUND

In administering the ADF&G regulatory program designed to ensure free movement of fish species in the waters of the State, the Department issues permits for activities in streams. These permits are in the form of letters, which allow them to be flexible, personal, and tailored to the specific situation and the needs of the particular stream in question. These permits generally describe the waters involved and outline the value and uses of that stream or stretch of stream to the species of fish that have been identified to use it.

It is unlawful for anyone to interfere with salmon spawning streams and waters by obstructing, diverting, or polluting them, or erecting dams which interfere with the salmon [AS 16.10.010]. Permits are required from the Department of Environmental Conservation and the Department of Health and Social Services; these are in addition to the permit from the Department of Fish and Game required under Section 16.05.840 for construction of fishways. A draft of uniform regulations for enforcing the Title 16 fish and wildlife habitat protection laws has been written by ADF&G and is being reviewed by other State agencies.

A Territorial Statute [AS 46.10.010 - .030] makes it unlawful to obstruct, divert, pollute, or erect dams on waters used by salmon without first obtaining a permit from the then Department of Health and Welfare, which may require construction of fishways and fish ladders. This statute is not now administered by any department and has been replaced by the Anadromous Fish Law and the Water Use Act and the power of ADF&G under AS 16.05.840 to require construction of fishways.

Anadromous species afforded protection under the Act include five species of Pacific salmon, Dolly Varden, rainbow trout, Arctic char, cheefish, whitefish, eulachon, and any other anadromous species known by the ADF&G to be using particular lakes or streams. These species make up the greatest part of the commercial, sport, and subsistence fisheries of Alaska.

Although almost all coastal tributaries in Alaska provide habitat for the spawning, incubation, rearing, overwintering, or passage of anadromous fishes,

the Anadromous Fish Act directed the ADF&G to specify the various rivers, lakes, and streams or parts of them that are important for the spawning or migration of anadromous fishes. The list of specified waters can be used by the ADF&G during permit procedures to ensure that important anadromous fish habitats are not degraded by individuals, organizations, industries, or governmental agencies whose activities affect existing water quality or flows.

The present Catalog of Waters Important for the Spawning and Migration of Anadromous Fishes was revised in 1974 and is presently being revised. Additions to, and deletions from, the list are inevitable as new information is incorporated into the Catalog. This Catalog is used as a guide in permit applications.

ADF&G advises all users of the Catalog that, considering the limitations of existing data, it is wise to assume that all streams provide valuable anadromous fish habitat until there is sound evidence to the contrary. A conservative approach is further warranted because the cumulative habitat contributions of many small streams may be very important, although the habitat provided by each may seem insignificant.

EXAMPLE

Conditions are placed on the project approval in the form of stipulations, which are adapted to the type of application and the requirements of the particular stream. These conditions may range from such standard and minimum conditions as limiting the period during which work can be conducted and requiring that fuel and oil be stored over 100 feet from the stream, to such site-specific conditions as the following:

1. There shall be no inwater equipment work or any gravel removed from below water table level at the time of excavation. An exception of inwater vehicle work is that channel changes involving the mainstem of the _____ Creek may be performed between _____ and _____.

2. All encountered debris (drift logs/stumps) shall be stacked along the east bank of the floodplain for flood control protection.

3. Equipment may cross the small drainage channel lying immediately off the east bank of the floodplain at any time for gravel hauling purposes only and to stack debris (logs) against the east bank.

4. Gravel shall be removed in shallow, even lifts so as not to create any pits or depressions which would serve as fish entrapment areas after high water.

5. There shall be no gravel washing operations conducted on the _____ Creek floodplain nor any fuel stored or equipment refueled within _____ feet of the floodplain.

EVALUATION

The use of the letters has the additional advantage of offering an opportunity, which is generally used by ADF&G, to explain the reasons for any unusual or difficult conditions contained in the permit. This approach allows ADF&G to avoid problems of misunderstanding and to encourage the cooperation of the permittee by making its requirements meaningful and rational to him.

SOURCES

Statutes and cases summarized in the text are not relisted here.

Alaska Department of Fish and Game. 1975. Catalog of waters important for spawning and migration of anadromous fishes. Alaska Department of Fish and Game.

_____. 1979. Habitat Protection Section, Office of Projects Review. State game refuges, critical habitat areas, and game sanctuary. Alaska Department of Fish and Game.

Alaska House Bill 118: An Act Relating to Rivers, Lakes, Streams, and Other Bodies of Water in the State; and Providing for Effective Date; effective 19 June 1980.

Alaska Office of Coastal Management. 1979. Alaska coastal land and water use guide. Vol. 1. Alaska Office of Coastal Management.

Clark, J. A. 1980. Alaska's Habitat Protection Program. Habitat Protection Division, Alaska Department of Fish and Game.

Estes, C. 1979. Alaska Department of Fish and Game, Habitat Protection Division. Personal communication. 21 November.

Estes, C. 1981. Alaska Department of Fish and Game. Sport Fish/SU Hydro Division. Personal Communication. 12 October.

Estes, C. 1982. Alaska Department of Fish and Game. Sport Fish/SU Hydro Division. Letter to Dr. Berton L. Lamb. 3 June.

Ott, A. G., and K. E. Tarbox. 1977. Instream flow, applicability of existing methodologies for Alaskan waters. Alaska Department of Fish and Game.

Skoog, R. O. 1981. Memorandum to Division Directors, Section Chiefs and Regional Supervisors pertaining to Instream Flow Investigation and Analysis. September 3, 1981. Alaska Department of Fish and Game. Commissioner's Office. Juneau.

ENVIRONMENTAL PROGRAMS

POLLUTION LAWS

Opportunity

The Department of Environmental Conservation can protect instream flows through wise administration of pollution laws and regulations, classification of streams, active pursuit of its water quality responsibilities, and administration of programs of municipal loans to encourage preservation of flows [AS Title 46].

Background

The Alaska Department of Environmental Conservation (DEC) was created to protect the State's natural resources and environment and to coordinate all State, Federal, and local air, water, and environmental conservation programs [AS Title 46]. Under this statute, the DEC has complete control over the various programs and policies regarding pollution around the State.

The Environmental Procedure Coordination Act [AS 46.35.010, et seq.] was passed to set up a simplified procedure in obtaining the necessary State permits for various construction activities. One master application may be submitted to the Department of Environmental Conservation, which will forward the application to the appropriate State agencies for action. The advantage of this statute is that it ensures that the proper agency will be notified of activities in its area of responsibility.

The DEC's duties include classification of the waters of the State for water quality purposes. Thus far, Ship Creek in Anchorage and the Chena River have been classified by use. Increased stream data produced by this work may enable all State agencies to make more intelligent decisions on stream flows.

The State-wide water pollution control plan developed under AS 46.03.080 can include elements of instream flow protection. The approaches available under the Federal Clean Water Act [P.L. 92-500] planning program are useful in protecting waters included in State plans. Review and updating of the plan can cover streams for which new instream flow data become available through the efforts of DNR and ADF&G.

The DEC has adopted the National Pollutant Discharge Elimination System (NPDES) permit as the required State permit for waste disposal in the State. This waste disposal permit is required for all industrial or commercial operations which result in the disposal of solid or liquid waste materials into the water of the State. The permit is effective for no longer than five years.

Example

Under AS 46.03.030, the Department of Environmental Conservation makes grants and loans for water supply systems to municipalities. It can offer loans in situations that can be structured to protect flows.

The Department can review both of these options: (1) Can these funds be used to purchase or acquire water rights for municipal supply upstream of the municipality, using the bed of the stream to transport the rights closer to the municipality? Such a program would, in effect, preserve instream flows; and (2) The Department can consider the future and expanding needs of the municipality. It may be possible for the Department to condition its loan or grant of funds so that the municipality will acquire more water rights than its present minimum needs. Leaving these rights in the stream may be a way of obtaining instream flows for the short term. This approach is similar to city condemnation of upstream water.

Evaluation

This opportunity carries a burden: As a municipality grows, it will, itself, take the water from the stream to the detriment of instream flow values downstream of the city.

MUNICIPAL CONDEMNATION

Opportunity

Cities can condemn water for public water supplies upstream of the point of use, effectively protecting instream flows in any waterway used to transport the water [AS 09.55.240].

Background

In Alaska, eminent domain may be exercised for raising the banks of streams; removing obstructions; and widening, deepening, or straightening of a channel, as well as reservoir sites, ditches, canals, and other means of supplying water and floating logs on non-navigable streams [AS 09.55.240]. In addition, the use of water for mining, power, and municipal purposes is declared to be beneficial to the public and to the public uses.

Municipalities and other agencies with the power of eminent domain may find it advisable to condemn water for municipal and other permitted public uses under this statute. Private property which may be taken includes all real property, as well as lands belonging to the State.

In addition, under AS 46.15.150, a public water supply is a preferred use; an application for a preferred use shall be granted a permit and shall be granted preference over other appropriators under the statute. The applicant for this type of use must agree to compensate any permit or certificate holder for damages. This section results in a right of condemnation for public water supply uses, which may be of use in critical situations. For example, a downstream town could condemn water in a river and effectively prevent

upstream appropriation. For the reach of stream above the town necessary to supply the town's needs, stream flows would be protected.

Evaluation

The advantage of condemnation is that it is certain; the land or water right is permanently out of private control. Municipal condemnation of upstream water rights for water supply purposes may provide instream flows while the water is in transit. The disadvantages of this approach are that condemnation can be expensive, as well as politically unpopular.

RENEWABLE RESOURCES FUND

Opportunity

This statutory fund may be a source of money to support appropriations for appropriative and reserved instream water rights for participating agencies [AS 37.11.040].

Background

The Alaska Renewable Resources Development Fund [AS 37.11.040], while not specifically directed to instream flows, may be applicable to those needs. The purpose of the fund is to guarantee the enhancement and development of the State's renewable resources. It is funded by 5% of State receipts from mineral lease bonuses, rentals, and royalties. Income received from the investment of the fund principal is to be used to provide funding for capital and operating appropriations for rehabilitation of renewable resources programs. The Departments of Natural Resources, Fish and Game, Environmental Conservation, and Commerce and Economic Development are to prepare plans for expenditures from fund income. Another section of the statute establishes the Alaska Renewable Resources Corporation, which has the power of acquiring, holding, and using real and other property. One of its duties is to provide financial assistance for projects which the board finds will accomplish the purposes of the corporation and promote the utilization of the State's renewable resources, such as salmon.

Evaluation

This fund may be a potential source of money for investigating, quantifying, identifying, promoting, enhancing, and using instream flows within the State. Fish and water should qualify as renewable resources of the State of Alaska and, thus, activities involving them are within the area of concern of the fund. The 1980 amendments to the Water Use Act, permitting application by agencies and persons for reservation of instream flows, offer an opportunity to protect flows that should be investigated by the departments that administer the fund. Monies from the fund could be used for engineering, biological, and hydrological studies to support applications for reservations of instream flows. Applicants to hold the rights could be a State agency or the Alaska Renewable Resource Corporation, which should be secure from charges of private exploitation of the water.

COASTAL ZONE MANAGEMENT

Opportunity

The Policy Council of the Alaskan Coastal Management Program (ACMP) can be aware of instream needs and can be encouraged to approve coastal resource district programs which create beneficial effects upstream [AS 46.40.010].

Background

The Alaskan Coastal Management Program is designed to manage and protect coastal land and water and other resources so as to avoid damage and degradation, while providing for human needs. Coastal management districts are to develop programs, including summaries of needs, regulations, and policies for that district. The Alaskan Coastal Policy Council is in charge of overall policies, as well as specific policies for areas in need of special attention, and approval review of district programs.

The Alaska Coastal Policy Council is responsible for adopting standards for the use of coastal resource districts and State agencies in carrying out their responsibilities according to the Alaska Coastal Management Act (ACMA). The Act was designed so that its provisions could be implemented through exercise of already existing authorities and regulations, without creating new regulatory structures. State agencies affected by the ACMA include the Department of Environmental Conservation, the Department of Natural Resources, the Department of Fish and Game, the Department of Transportation and Public Facilities, the Department of Law, and the Department of Military Affairs.

The Council has published a guide to coastal land and water use in 1979, which provides a compilation of existing authorities and regulations which affect that use. It can be considered an elaboration of Alaska Administrative Code Chapter 6, which includes the ACMA regulations providing guidelines for development of coastal uses and protection of coastal resources and habitat. While stream flows are considered in this guide, particularly in the "rivers, streams, and lakes" section, the effects coastal development can have on instream flow, and the necessity of instream flows for intelligently guided coastal development, are not major thrusts of the guide. As the guide is revised and brought up to date, inclusion of fresh water inflow to estuaries and other instream uses may be included, both to make the guide more complete and to increase the general awareness of instream needs and values.

Evaluation

A more thorough exploration of instream needs and values in the ACMP guide would be inexpensive and would probably reach a large number of persons. Because only summaries of already known material would be required, little personnel time would be necessary to implement this strategy.

MARINE FISHERIES COMPACT

Opportunity

The members of this Commission can examine and recommend legislation to the signatory States in order to protect anadromous and marine fishery resources [AS 16.45.010].

Background

The Pacific Marine Fisheries Compact is intended to promote the better use of fisheries, including anadromous fisheries, in the Pacific States. The Commission formed under the compact may recommend coordination of police powers of the various States and study methods for promoting conservation and preventing waste of fisheries resources. The Commission is to make recommendations to the legislatures in the States and to the governors of legislation dealing with conservation of these resources.

Evaluation

As with similar councils and autonomous groups, the effectiveness of this Commission depends on the reasonableness of its proposals, as well as the personal and political ties its members have in the signatory States. Good proposals to protect marine and anadromous fish can promote instream needs and values. Good proposals will, however, require background work by biologists and hydrologists and possibly legal costs involved in drafting proposed statutes.

SOURCES

Statutes and cases summarized in the text are not relisted here.

Alaska House Bill 118: An Act Relating to Rivers, Lakes, Streams, and Other Bodies of Water in the State; and Providing for Effective Date; effective 19 June 1980.

Alaska Office of Coastal Management. 1979. Alaska coastal land and water use guide. Vol. 1. Alaska Office of Coastal Management.

Clark, J. A. 1980. Alaska's Habitat Protection Program. Alaska Department of Fish and Game.

Condon, W. 1980. Letter from Alaska Attorney General to J. Hammond, Governor, State of Alaska. 16 June.

Ott, A. G., and K. E. Tarbox. 1977. Instream flow, applicability of existing methodologies for Alaskan waters. Alaska Department of Fish and Game.

U.S. Water Resources Council. 1980. State of the States: water resources planning and management. U.S. Water Resources Council.

THE PUBLIC TRUST DOCTRINE

OPPORTUNITY

Each State owns certain property which it holds in trust for public uses. It holds this property not as a proprietor, free to sell or exchange it at will, but as a government, which must consider and benefit the entire public in any transaction involving public trust property. The responsibility of the State as trustee is the heart of the public trust doctrine. Under this doctrine, sale or grant of this trust property to private people can be examined very carefully by the courts, which may invalidate such sales or grants if the rights of the public have been slighted.

BACKGROUND

The public trust doctrine has the breadth and substance to be useful as a tool of general application for citizens trying to develop a comprehensive legal approach to resource management problems. It provides the concept of a legal right in the general public, it is enforceable against the government, and it can be interpreted consistently with present concerns for environmental quality. The public trust doctrine is both a source of legislative power and a court-enforced restraint on legislative and administrative power.

It is the duty of the State to exercise its control of the public trust waters within the State borders in the public interest. Cases concerning public trust rights in land can generally be applied directly to interests in water. While the doctrine is ancient, going back to the time of the Romans, vigorous application of it is relatively recent in this country. As a result, many States do not have a well developed body of case law on the public trust. This means that public trust rights in instream flow are not likely to be precluded by previous decisions, but offer a fresh new opportunity for protecting those waters.

As a general rule, public trust waters are navigable waters, and a division of waters into "navigable" and "nonnavigable" is another way of dividing them into public and private waters. This State power of control cannot be surrendered, alienated, or delegated, except for a public purpose or a use which is for public benefit. The power to make rules and regulations governing these navigable waters may be delegated to administrative agencies, however. This power of the State to govern and control public waters is perpetual, and all privileges or uses granted in public waters are subject to this power.

State grants and administration of water rights fall under the public trust, especially in cases in which State administration of water leads to severe damage to public rights or use of that water. There also appears to be

a definite trend to extend the public trust to waters alone, without adjacent lands, and to include nonnavigable as well as navigable waters, regardless of ownership of the stream bed. This trend affects instream flow protection because, when diversions and other activities in the streams reduce the instream flow and the public right of use is diminished, the public trust may have been violated. It may be possible, in such cases, to rectify the situation by resorting to the public trust doctrine in the courts.

Similarly, wildlife is the property of the State and may be a resource protected by the public trust doctrine in various States. If instream flows are so reduced as to destroy fish and wildlife, it may be possible to use the public trust doctrine to restore the flows.

On the other hand, this public trust doctrine is not a sure-fire way to cure all instream flow ills. It must be examined carefully, and each State's cases and statutes on the question must be thoroughly considered by counsel.

A review of court decisions in this area produces many general statements that seem to say that the government may never sell or alienate trust property by giving it to a private owner and that it may not change the use to which that property has been devoted in the past. Careful study of the cases, however, shows that this language does not, in fact, determine the limits of the State's legitimate authority in dealing with its trust property. There is no general prohibition against disposition of trust properties, even on a large scale. A State may, for example, recognize private ownership in tidelands and submerged lands below the high water mark. On the other hand, courts do not look kindly on such grants and usually interpret them restrictively. What is found in the cases is neither a hair splitting preservation of every inch of public trust property against any change nor a precise maintenance of every historical pattern of use. When the Wisconsin Supreme Court permitted a portion of Milwaukee harborland on Lake Michigan to be granted to a large steel company to build navigation facilities, it made the point clearly:

> It is not the law, as we view it, that the State, represented by its legislature, must forever be quiescent in the administration of the trust doctrine, to the extent of leaving the shore of Lake Michigan in all instances in the same condition and contour as they existed prior to the advent of the White civilization in the territorial area of Wisconsin. [City of Milwaukee v. State, 193 Wisc. 423, 214 N.W. 820 (1927)]

The traditional cases do suggest that no grant may be made by the State to a private party if the grant is so large that the State will effectively have given up its authority to govern. On the other hand, a grant is not illegal merely because it diminishes in some degree some traditional public use.

The most celebrated public trust case in American law is the decision of the United States Supreme Court in Illinois Central Railroad Company v. Illinois [146 U.S. 387 (1892)]. In 1869, the Illinois legislature made an extensive grant of submerged lands, in fee simple, to the Illinois Central Railroad. That grant included all the land underlying Lake Michigan for one

mile out from the shoreline and extending one mile in length along the central business district of Chicago. This amounted to more than 1,000 acres of incalculable value, including virtually the whole commercial waterfront of the city. By 1873, the legislature had repented of its generosity and repealed the 1869 grant. The legislature then sued to have the original grant declared invalid.

The Supreme Court upheld the State's claim and wrote one of the very few opinions in which direct conveyance of trust lands has been held to be beyond the power of a State legislature. The court did not actually prohibit the disposition of trust lands to private parties; its holding was much more limited. What a State may not do, the court said, is to divest itself of authority to govern the whole of an area in which it has responsibility to exercise its police power. To grant almost the entire waterfront of a major city to a private company is, in effect, to abdicate legislative authority over navigation.

But the mere granting of property to a private owner does not automatically prevent the exercise of governmental authority; for States routinely regulate privately owned land. The court's decision makes sense only because the court determined that the States have special regulatory obligations over shorelands which are inconsistent with large-scale private ownership.

The court pointed out that the title that Illinois held to the navigable waters of Lake Michigan is:

> ...different in character from that which the State holds in lands intended for sale ... It is a title held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein free from the obstruction or interferences of private parties [146 U.S. 387 (1892)].

This language expresses the central theme of public trust cases. When a State holds a resource which is available for the free use of the general public, a court will be displeased with any governmental conduct which will either reallocate that resource to more restricted uses or subject public uses to the self-interest of private parties.

In the development of the public trust doctrine before and after the Illinois Central case, three types of restrictions are often imposed on governmental authority: (1) the property subject to the trust must not only be used for a public purpose, but it must also be held available for use by the general public; (2) the property may not be sold even for a fair cash price; and (3) the property must be maintained for particular types of uses. These types of uses are usually either traditional uses, such as navigation, recreation, or fishing, or uses which are in some way related to the natural uses peculiar to that resource. For example, San Francisco Bay can be said to have a trust enforced on it so that it may be used only for water related uses. A dock marina might be appropriate, but filling up the bay for trash disposal is not. These three restrictions are at the center of all public trust cases.

The public trust doctrine is supported by a mixture of ideas. One recurring idea is that certain interests or resources are so important to

every citizen that the free availability of the resources is imperative. Another idea in these cases is that some resources are so particularly the gift of nature that they should be preserved for the use of the entire population. This idea led to the laws of early New England reserving "great ponds" for general use. A third idea is that certain uses have a particularly public nature which makes exclusive use by private persons not appropriate. For example, it is a general rule of water law that a water user does not own property rights in water in the same way he owns the clothes on his back. He owns only a right of use, which incorporates the needs of others. Water has a public nature which makes its adaptation to entirely private use inappropriate and obliges the government to regulate water use for the benefit of the general community.

A critical question is "What lands or interests in property does the State hold?" Within each State, this question may be answered differently. With respect to waters, this question is often answered in terms of navigation. For example, the State may have declared itself the owner of all navigable waters or have defined navigable waters as waters of a certain width or waters capable of supporting a certain kind of commerce. These definitions may come from the State constitution, legislation, or the courts. In each State, it is important to first look at what the State owns before applying the public trust doctrine to that property, whether it is land or waters.

Some States have declared all waters to be the property of the State. Generally, however, the idea of navigability is fundamentally important to the public trust doctrine. Dividing waters into navigable and nonnavigable waters is another way of dividing them into public and private waters in many States and, therefore, into public trust and non-public trust waters. The Federal test for navigability for determining title to submerged lands derives from the case of The Daniel Ball [77 U.S. 557 (1871)]. This test defines public navigable rivers as those which are navigable in fact; i.e., those which are used or could be used as highways for commerce in the customary mode of trade and travel on water. Navigability for title purposes is to be tested as of the date of statehood for States other than the thirteen original colonies. This test is rather vague and capacity for use in commerce may be shown by experimentation, as well as by actual use.

States are free to impose the public trust on waters which are not navigable under Federal title standards. States can and do imply their own State tests of navigability to determine whether waters are public for State purposes. Some States have adopted statutory definitions of navigability. For example, in Texas, the statutory test of navigability in non-title streams is whether the State's stream maintains an average width of 30 feet from its mouth up. Texas holds title to streams that fit this description in trust for the people. The Michigan test of navigability is the saw log or floating log test. Under this test, a stream is navigable if it can float logs to market. In Wisconsin and Minnesota, the recreational use or pleasure boat test is used. So long as lakes or streams are capable of use for pleasure boating, they are navigable. As the definition of navigability expands through the activity of Federal and State courts, the area of waters and lands subject to the public trust doctrine expands.

This can be seen in a recent Arkansas case. Arkansas v. McIlroy [Ark. Sup. Ct. (Docket No. 79-320, March 17, 1980)]. A riparian owner on the

Mulberry River sued a number of canoeists to prevent their traveling down the river, a stream suitable for expert canoeists. The court found that the stream was floatable for six months of the year and expanded the Arkansas definition of "navigability in fact" from the old Federal test of commercial usefulness, which the court described as "a remnant of the steamboat era", to a new test. The court found that the stream was navigable because it could be used for a substantial portion of the year for recreational purposes. The court compared the stream with a public highway and declared that the neighboring owners could no more close the stream to travelers on such a public waterway than they could close a public highway. An interesting aspect of the case for persons interested in instream flows is that this radically expands the Arkansas definition of navigable waters and should, as a result, expand those portions of Arkansas' streams which are subject to the public trust.

Because public trust law is in a constant State of change and development, principles from other States are useful and sometimes necessary for development of a another State's laws.

United States courts have generally been willing to interfere in four types of situations: (1) public property has been disposed of at less than a fair market price when nothing indicates an obvious reason for a subsidy; (2) when authority to make resource use decisions has been granted to a private interest which may subordinate public uses to the private interest; (3) where broadly based public uses have been reallocated to private uses or to narrower public uses; and (4) where the resource is not being used for its natural purposes.

The usefulness of the public trust doctrine in promoting instream flows could arise in the situation in which a State had made an improper grant of some or all of its State-owned waters for private purposes to the detriment of the public. This might arise in several ways. A State might have permitted over appropriation to dry up a navigable stream. Suit could be filed against the State to cancel those permits or sales of water, based on the idea that they are invalid because they are in violation of the public trust which the State must uphold. Another example would be an administrative scheme in which a bare minimum of the necessary instream flow was retained, effectively destroying the stream for public use for navigation and recreation. In that case, suit could be brought against the administrative agency of the State.

In any case, using public trust arguments for preserving instream flows involves a court suit, protracted litigation and appeals, but also possibly great rewards. The doctrine is like the reserved rights doctrine to preserve instream flows. It involves considerable costs and risks, but potentially great returns. Flows that are once declared part of the public trust are later unlikely to be allocated to private uses.

Most States have had regretful experience with the sale of public trust property to private developers and agencies which seem to promote the interests of private developers. Many public trust cases result from efforts to retract the excessive generosity of early State legislatures and land management agencies. Several specific approaches have been adopted to deal with the broad range of public trust questions: (1) State constitution and legislative enactments have restrained sale of trust property; (2) courts and legislatures have required that the public trust be preserved in any sales or grants;

(3) sales and leases have been restricted to ensure that they are consistent with the public trust; (4) courts and legislatures have required that sales may be made only for full market value and that the money from the sales is devoted to replacing the trust uses given over to private or to other Statewide public purposes; and (5) courts have read legislation narrowly to limit the power of the government to convey public trust lands and the authority of administrative agencies to dispose of them.

THE WISCONSIN EXAMPLE

The Supreme Court of Wisconsin has worked out a clearer meaning of the public trust doctrine than has any other State. Its cases can be seen as examples of the best use of this doctrine. The first important case, Priewe v. Wisconsin State Land and Development Co. [93 Wisc. 534, 67 N.W. 918 (1896)], invalidated a State statute permitting a promoter to drain a public lake. In later cases, the court has been able to oppose the tendency of the State legislature and administrative agencies to subordinate public advantages to private enterprises.

The Wisconsin Supreme Court has taken the position that, when the public interest of a project is unclear, those who promote the project must justify it and cannot simply rely on the old assumptions of legislative wisdom or administrative discretion. This justification can, in fact, be made, and the Wisconsin court, in later cases, permitted navigable waters to be converted to private land in cases where the broad impact of the change promoted public use.

The Supreme Court established five factors which are useful in evaluating situations in which the public trust doctrine may permit private control: (1) where public bodies will control the use of the area; (2) where the area will be devoted to public purposes and open to the public; (3) where the diminution of lake area will be very small when compared with the whole; (4) where public use of the lake as a lake will be destroyed or greatly impaired; and (5) where the disappointment of those members of the public who may desire to boat, fish, or swim in the area to be filled is negligible when compared with the greater convenience to be afforded those members of the public trust who use the city park. State v. Public Service Comm'n [275 Wisc. 112, 81 N.W.2d 71 (1957)].

The result of these five factors is that administrative agencies must show, from time to time, that they possess the expertise and concern for the public interest which they claim to hold.

Wisconsin has also developed a line of cases in which the court has held that the governmental body whose decisions are being questioned does not represent the public interest at large. A municipal act might possibly be struck down because the subject matter of the act is a Statewide concern and could be affected only by the State legislature.

In Wisconsin practice, the use of the public rights doctrine seems to be a way of saying that public interest in recreation is one of the most important of the State's interests to be protected by water law. The public trust is a method used by the courts to protect this interest. The balancing of costs

and benefits under this approach can permit, for instance, filling in part of a lake or a park or granting a substantial area of harbor to a steel company for docks and loading facilities.

ALASKA

Alaska's Constitution and the Water Use Act, as well as Alaska's territorial laws and 43 U.S.C. § 661, all provide that water is held by the sovereign in trust for the public.

Access to navigable or public waters is governed by AS 38.05.127, which requires that the Department of Natural Resources, through regulations, shall determine whether a body of water is navigable water for the sale, lease, grant, or disposal of any interest in State land adjacent to a body of water. If the water is found navigable, the Department must provide for easements and rights-of-way to ensure access to the water. It should be noted that whether a stream is navigable for the purpose of State ownership "is in the first instance a question of Federal law." Moreover, "State control of navigable waters is subject to the paramount Federal navigation rights" (AS 38.05.127).

In another context, the Alaska Native Claims Appeal Board has determined that the Kandik and Nation Rivers are navigable under the terms of the Alaska Native Claim Settlement Act. As a result, the riverbed acreage was not charged against the Native Corporations Land Entitlement. This decision reversed an initial decision by BLM on the same question.

Once a definition of navigability has been reached for the State, the public trust doctrine should apply to that navigable water. The State has control over navigable waters within its borders. If the State finds the waters of a stream necessary for navigation, then instream flows will necessarily be preserved. The broadest possible definition of navigability by the Department of Natural Resources would ensure a substantial measure of protection of instream flows. This statute is the first step in that direction.

It has been argued that no private right to a reservation of instream flows should be granted by DNR because all the waters of the State are held by the State as a trust. There is, however, no logical difference between granting a right to reserve State water in the stream and a permit to use State water outside the stream. A clear legislative or judicial definition of the extent of the public trust in water would assist DNR in administering the Water Use Act under the State Constitution.

This strategy may be fairly expensive, time-consuming, and uncertain. The potential payoffs, however, can be very great (Landon 1981). In States that have not yet developed this doctrine fully, protection can be extended to many streams that cannot be reached by other methods. Proper parties to use this approach would be conservation organizations, State agencies, political subdivisions, or the State itself.

SOURCES

Alaska House Bill 118: An Act Relating to Rivers, Lakes, Streams, and Other Bodies of Water in the State; and Providing for Effective Date; effective 19 June 1980.

Althaus, H. S. 1978. Public trust rights. Prepared for Regional Solicitor, Portland Region, U.S. Department of the Interior.

Condon, W. 1980. Letter from Alaska Attorney General to J. Hammond, Governor, State of Alaska. 16 June.

Landon, B. M. 1981. Letter from Attorney-Advisor, U.S. Department of the Interior, Office of the Regional Solicitor, Alaska Region. 7 October.

Sax, J. L. 1970. The public trust doctrine in natural resource law: effective judicial intervention. Vol. 68 Michigan Law Review. pp. 473.

Smith, F. E. 1980. The public trust doctrine, instream flows and resources: a discussion paper. Prepared by the California Water Policy Center; U.S. Fish and Wildlife Service, California-Nevada Area Office.

Trelease, F. J. 1974. Water law: resource use and environmental protection. 2nd Ed. St Paul, MN. West Publishing Co.