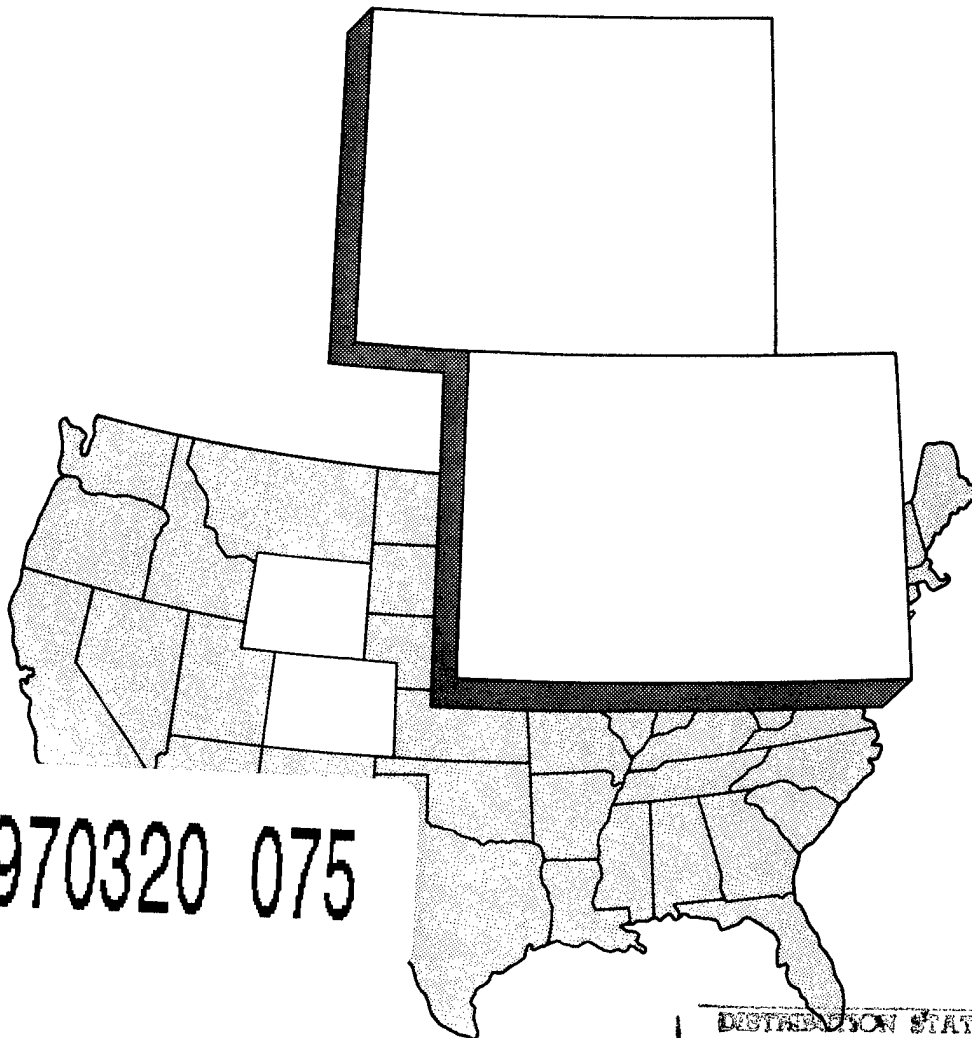


OPPORTUNITIES TO PROTECT INSTREAM FLOWS IN COLORADO AND WYOMING



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Fish and Wildlife Service

U.S. Department of the Interior

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Opportunities to Protect Instream Flows and Wetland Uses of Water in North Carolina		In preparation
Opportunities to Protect Instream Flows and Wetland Uses of Water in Kentucky		In preparation

^aAvailable from the National Ecology Center, U.S. Fish and Wildlife Service, 2627 Redwing Road, Fort Collins, CO 80526-2899.

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OPPORTUNITIES TO PROTECT INSTREAM FLOWS
IN COLORADO AND WYOMING

by

Terrence L. Trembly
Aquatic Systems Branch
National Ecology Center
U.S. Fish and Wildlife Service
Drake Creekside Building One
2627 Redwing Road
Fort Collins, CO 80526-2899

with a special section
on the public trust

by

George A. Gould
McGeorge School of Law
3200 Fifth Avenue
Sacramento, CA 95817

Project Officer

Berton L. Lamb
Aquatic Systems Branch
National Ecology Center
U.S. Fish and Wildlife Service
2627 Redwing Road
Fort Collins, CO 80526-2899

National Ecology Center
Fish and Wildlife Service
U.S. Department of the Interior
Washington, DC 20240

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PREFACE

The National Ecology Center has published a number of documents similar to this one in the past. Information is now available for 30 States (see inside front cover).

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 combined State reports present 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 that currently exist under State law 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 saving for planners and managers.

In summary, each document has an introduction discussing its purpose, uses, and limitations. Each document also has a separate information table summarizing the contents for each State. It is hoped that the research represented in these reports 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.

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INTRODUCTION

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 laws in Colorado and Wyoming.

This report is intended for the use of State and Federal 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, nor is it written to provide legal advice. Instead, it is designed as a guide for the person trying to find his or her way among sometimes bewildering 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 uses.

Toward these objectives, the U.S. Fish and Wildlife Service, through its Water Resources Analysis Project, contracted in 1977 with Richard Dewsnup and Dallin Jensen to identify available strategies under State and Federal laws, interstate compacts, and water quality laws. A second firm, Enviro Control, Inc., was contracted to evaluate the most promising strategies. Two of the resulting documents were Instream Flow Strategies for Colorado and Instream Flow Strategies for Wyoming, which have been revised, updated, and combined in this report. Discussion of instream flow programs and opportunities for each State--Colorado and Wyoming--are written so that each report can be read independently, with minimal cross referencing from one State report to another.

BACKGROUND CONSIDERATIONS

Both State and Federal agencies have important roles to play in water management, particularly in instream flow preservation. This report is written from the perspective that the States have primary authority over water management, unless they are limited or superceded by an act of Congress or duly authorized Federal program or project.

The summaries offered here are not intended to suggest that Federal instream flow decisions will or should replace current State water administration or management systems. It is important for Federal employees to recognize the importance of State water management policy and statutes. A close working relationship between State and Federal agencies is often the most practical way of getting things accomplished. Resources are always limited and, in some cases, gathering and developing information 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. This report is a continuation of that effort.

The reader who wishes to understand opportunities for protection of an instream flow and wetlands should begin by looking at the physical and legal circumstances of the entire stream or waterbody. 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 their present uses, such as agriculture, planned development, wilderness, or industry.

It is important to remember that contracts or leases may be held by several 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. Therefore, a knowledge of the various instream flow and wetlands opportunities is important. The reader should refer to Tables 1 and 2 for a summarized guide to these opportunities.

Instream flow problems may include appropriation conflicts, lack of flow, or administrative difficulties. When possible, 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 the land and water, or simply arranging a meeting between water users who could stagger their withdrawals or, in some other way, provide for a stream flow. However, these are informal methods and offer no legal protection, so their usefulness is limited to those situations in which voluntary arrangements are acceptable.

Offering information on streamflow needs to other agencies of State or Federal Government is complex and is often provided for by specific statutes. A risky, complex, and often 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.

In using this report, the reader should be aware of its purpose and limitations. First, only a few of many possible opportunities are described. 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 that appear to have utility in a variety of situations.

The purpose of this report is to encourage cooperative and innovative thinking by all persons interested in instream flows for fish, wildlife, 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 further this goal.

Table 1. Opportunities to protect instream flows in Colorado.

Title	General description	Applicable situations
State appropriation of instream flows (see page 12)	Thirteen-year-old statutory program for appropriations of instream flows by Colorado Water Conservation Board.	Statewide acquisition program
Private appropriation of instream flows (see page 28)	Ability to implement such a program is highly uncertain.	Possible statewide acquisition
State condemnation/reallocations of water rights (see page 30)	No opportunities exist at this time (included for comparison purposes)	Not applicable
Water quality classification system (see page 35)	Opportunity to apply instream flow appropriation opportunities to protect water quality use classifications and ensure long-term flows in critical segments.	Statewide application; especially low critical flow segments

Table 2. Opportunities to protect instream flows in Wyoming.

Title	General description	Applicable situations
State appropriation of instream flows (see page 54)	New (1986) enabling legislation for acquisition of instream flows in streams and reservoirs to be held in the name of the State of Wyoming.	Statewide acquisition program
Discretionary water permit authority (see page 61)	State engineer "public interest" authority to deny water permits that would affect instream flows.	New permits, water transfers and exchanges
Incorporation of instream flows in water project design and operation (see page 62)	The State legislature has included instream flow maintenance considerations in individual water project design and operation.	Individual water projects
Purchase or lease of water rights at legislature's direction (see page 64)	Wyoming Game and Fish authorization to lease/purchase water for instream flow/fishery maintenance purposes on project-by-project basis as determined by the legislature.	Individual water projects
Prioritization/categorization of stream segments for instream flow protection (see page 66)	Wyoming Game and Fish and Department of Environmental Quality classification systems for streams/lakes/reservoirs classify/prioritize these water bodies on fisheries and water quality protection basis.	Statewide program, continually updated

Table 2. (Concluded)

Title	General description	Applicable situations
Wyoming water development program (see page 71)	Statewide water project planning, design and construction program encourages evaluation of projects with recreation, fisheries, and wildlife management potential, including instream flow opportunities.	Individual water projects
Major industrial/energy project review (see page 73)	Major industrial/energy projects are required to obtain State permits for construction and operation. Such permits may require certain mitigation measures to minimize project impacts.	Individual major industrial/energy project facilities
State water records analyzed (see page 74)	Careful water record examination theoretically can reveal extent to which protection of instream flows may be necessary under various previously listed strategies.	Statewide to individual stream segment

OPPORTUNITIES TO PROTECT INSTREAM FLOWS IN COLORADO

by

Terrence L. Trembly

INTRODUCTION

Colorado, like many other Western States, has increasing and competing demands on its water resources. Growing human population, agriculture, energy and other natural resource development that requires water, and an expanding demand for a variety of water-based recreation have increased competition for Colorado's water resources. These competing uses have stimulated Colorado's lawmakers to enact an instream flow program within the State water rights system.

This paper focuses on the opportunities to protect instream flows in Colorado under existing State laws and procedures. These State laws and the primary agency responsible for their administration--the Colorado Water Conservation Board--place emphasis on preservation of instream flows for the protection and enhancement of fish and other wildlife values. It should be pointed out that instream flows may serve many purposes, however, and more than one purpose may be served by a particular instream flow provision in any given stream segment. Instream flows may be advantageous for the following reasons:

- (1) stock watering;
- (2) water based recreation--swimming, rafting, kayaking, boating;
- (3) aesthetics;
- (4) aquatic life protection and production;
- (5) wildlife habitat--waterfowl, large and small game animals;
- (6) aquifer recharge;
- (7) dilution water for effluent discharges from municipal and industrial wastewater sources;
- (8) maintaining water delivery to downstream users; and
- (9) channel maintenance/flushing flows.

An understanding of the State administrative agencies that have responsibility, directly or indirectly, for water resource management or administration is essential to determining the opportunities and constraints for implementing instream flow strategies in Colorado. The following is a brief description of each State agency that may in some way influence or affect stream flows.

COLORADO WATER MANAGEMENT AGENCIES

The legal basis of allocation of water rights in the State of Colorado is the doctrine of "prior appropriation." This water law doctrine is the foundation of water allocation in nearly all of the Western States. Under this doctrine, the first to put water to beneficial use has the first right to use the water. This is often referred to as "first-in-time is first-in-right," and simply means that the earliest rights are entitled to water first during times of short supply, while rights junior to the early rights may be supplied by what water remains. Two key entities have important roles in the adjudication and administration of water rights in Colorado: the Water Courts and the State Water Engineer.

Water Courts

The water courts are empowered to adjudicate water rights in Colorado. Each of the seven water divisions, which are defined on a geographic basis following the major river drainages, has a water judge, who is appointed by the Supreme Court of Colorado. Referees are designated by each judge on the basis of their ability to make expert recommendations on water matters (CRS § 37-92-203 (4)).¹ The opinions of these referees are not binding in court, but usually influence the final decision.

No judge other than the one designated as water judge shall act with respect to water matters within that division. Water matters include only those matters specified in Colorado law to be heard by the water judge (CRS § 37-92-203(1)).

State Water Engineer

The authority for administering the water as property of the public dedicated to the use of the people of the State, is placed with the State Engineer.

The Office of the State Engineer in the Division of Water Resources has the responsibility to administer the laws pertaining to water rights and, as requested by the Governor or required by State statutes, gives counsel or renders service to other State agencies. The State Engineer is a Civil Service appointed official and reports to the Executive Director of the Department of Natural Resources.

Each of the seven divisions has a water engineer who assists the State Engineer in performing various administrative functions set forth in Colorado law (CRS § 37-92-202).

The roles of the water judges in adjudicating water rights and the State Engineer in administering these rights are more fully discussed in later sections of this report.

¹All references to Colorado statutes shall mean Colorado Revised Statutes as compiled in 1973 and the 1986 cumulative supplement, as applicable.

Colorado Water Conservation Board

The Colorado Water Conservation Board (CWCB) is a 13-member board that is empowered to promote conservation of waters in the State of Colorado in order to secure the greatest use of such waters and the utmost prevention of floods (CRS § 37-60-106).

The board consists of nine members appointed by the governor--four from the Western Slope and five from the Eastern Slope--to represent the various drainage basins set forth in the statutes (CRS § 37-60-104). The Executive Director of the Department of Natural Resources, Attorney General, State Engineer, and staff director of the CWCB are ex-officio members.

The duties of the board include a broad range of water resource project planning and development functions within the statutory prescribed but undefined concept of "water conservation." Additionally, the CWCB is the exclusive State agency empowered by S.B.97 (1973), the State instream flow program, to appropriate or acquire waters for instream flow purposes (CRS § 37-60-101 through 104). Due to the varied water interests represented throughout the State, the CWCB must carefully weigh the potential impacts to all water users before proceeding to request an appropriation for instream flow purposes. The CWCB has a very close working relationship with the Colorado Division of Wildlife, Attorney General, and the State Engineer when pursuing an instream flow appropriation under the instream flow program.

Colorado Division of Wildlife

The Colorado Division of Wildlife (DOW) is the State agency responsible for management of Colorado's wildlife. The DOW is under the jurisdiction of an eight-member commission appointed by the governor. Commissioners are selected from four geographically defined districts (two from each) within the State (CRS § 33-1-101 through 105).

The DOW plays an important role in the State's instream flow program. The DOW has an instream flow coordinator who works closely with the Colorado Water Conservation Board in determining priority in the designation of instream flows. The division maintains extensive data on aquatic life and conducts surveys on waterbodies that may be considered for inclusion in the State's instream flow program.

Colorado Water Resources and Power Development Authority

In 1981, the Colorado Legislature created the Colorado Water Resources and Power Development Authority (CWRPA) for the purpose of initiating, constructing, and operating State sponsored water resource conservation and development projects (CRS § 39-95-102(1)).

The CWRPA is empowered to expend public funds for these water development purposes (CRS § 29-95-102(2)) and to act as a bonding authority to provide sufficient funds to carry out its responsibilities (CRS § 37-95-109). It is essentially an autonomous entity. It is not an agency of State government, and it is not subject to administrative direction by any department, commission, board, bureau, or agency of the State except as prescribed within the statutes creating the CWRPA (CRS § 37-95-104(1)).

The powers of the CWRPA are vested in a board of directors consisting of nine members who are appointed by the Governor, with consent of the Colorado Senate. Each director is chosen to represent a drainage basin within the State, as set forth in the statutes (CRS § 39-95-64).

The CWRPA is empowered to designate the Colorado Water Conservation Board (or other person or governmental agency) to act as its agent in connection with the planning, design, development, construction, management, operation, and participation in its projects (CRS § 37-95-106(k)(II)).

It is also empowered to adopt rules and regulations for the use, management, and operation of any hydroelectric and water management facilities financed by the authority. Before any proposed project can receive consideration for construction funding by the CWRPA, the Colorado Water Conservation Board must first review the feasibility study of the proposed project, and the General Assembly must authorize the CWRPA to proceed to consider the construction of the project (CRS § 37-95-107(1)(a)).

CWRPA does not have any statutory direction to include instream flow considerations for project construction or operation. The only opportunity for such consideration would be through CWRPA coordination activities with the Colorado Water Conservation Board. If instream flows were determined to be desirable benefits of any project, the CWCB would take steps to appropriate or acquire water rights under the provisions of the instream flow program, which it administers (CRS § 37-92-102(3)). This has not been done to date.

Colorado Water Quality Control Commission

The Water Quality Control Commission (WQCC), a commission within the Colorado Department of Health, is responsible for the development and maintenance of a comprehensive and effective water pollution control program in the State (CRS § 25-8-201, 202). Members of the WQCC are appointed by the Governor.

The WQCC cannot appropriate waters for instream flows. However, the policies, rules, and regulations of the WQCC affecting water quality, including water quality standards, water use classifications, discharge permit requirements, and other matters, raise certain questions regarding the desirability and practicality of maintaining stream flow conditions in stream segments. Water quality-quantity relationships are becoming an ever increasing concern as water use competition and growth continue, but at this time there is no direct statutory legal link between these two elements in the State of Colorado.

OVERVIEW OF COLORADO WATER LAW--PRIOR APPROPRIATION

Colorado, like many other Western States, administers water under the prior appropriation doctrine. Under this doctrine the person with the oldest properly adjudicated water rights has the first right to use the water.

Administration of the prior appropriation doctrine varies in the Western States that recognize the doctrine. Colorado has some unique factors in its appropriation system. The central figure in most State administrative systems is a designated public official or board--usually a State Engineer. This official collects necessary information, develops and maintains diversion records, enforces the priority system, and is given general administrative control over the use and distribution of water. The usual means to identify the extent of an appropriator's right is by a permit issued by the State Engineer that specifies the date of appropriation, the location of the diversion, amount and timing of the diversion, and the use to which the water is to be put. The permit system is used in all Western States except Colorado (Gould 1979).

The prior appropriation doctrine of water rights has been in place in Colorado since statehood. The Colorado Constitution, adopted in 1876, states:

Section 5. Water of streams public property. The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided.

Section 6. Diverting unappropriated water - priority preferred uses. The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied. Priority of appropriation shall give the better right as between those using the water for the same purpose; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes. (Colo. Const. Art. XVI).

In an 1882 decision by the Colorado Supreme Court, the doctrine of riparian rights--an appropriation system predominant in the Eastern states--was completely rejected, and the court held that the appropriation doctrine was the law in Colorado even prior to adoption of the Colorado Constitution [Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882)].

The doctrine of prior appropriation has evolved slowly through the development and application of case law as decreed by the Colorado appellate courts, in an attempt to meet the needs for a comprehensive workable system for administering water. In 1969, the Colorado Legislature adopted the Water Rights Determination and Administration Act, which codified many previous court decisions for regulation and administration of the State's surface waters (1969 Colo. Sess. Laws Ch. Codified as CRS § 37-92-101 through 602 (1973 and Cum. Supp. 1985)). This administrative water rights system is a key element of any State instream flow program opportunity.

Adjudication of Water Rights Under the 1969 Act

In Colorado, the control on the use and distribution of water is carried out through two offices--a water court and the State Engineer. The water court adjudicates the water right and may call upon the judgement of an expert referee to aid in the decision. No State permit is required to appropriate water in Colorado; adjudication by the water court and subsequent decree takes the place of a permit.

The first step in the process is to file an application with the clerk of the proper water court, that is, the court governing the geographic district in which the right is sought. Opposing statements are also filed with the water clerk. The State and Division Engineers are sent copies of applications and oppositions.

No later than the end of the month in which the application is submitted, the water clerk must publish a resume of applications in a general circulation newspaper. The water court may also require radio and television broadcasts. Additionally, a copy of the resume must be sent to any person who would be affected by the ruling.

The referee must make a ruling within 60 days of the filing of the last notices of opposition. The application may be approved, disapproved in whole or in part, or referred to the water court. The water court selects a hearing date for cases referred by the referee. The court also hears cases where the referee's ruling has been protested.

The water court will confirm, modify, reverse, or reverse and remand the ruling of the referee in cases where the ruling has been protested. In cases where there has been no protest, the court may confirm and approve the application. In cases where there is no protest, no appellate review will be allowed, but applications that have been protested may be subject to appellate review.

An overview of the water rights adjudication framework in Colorado is provided in Figure 1.

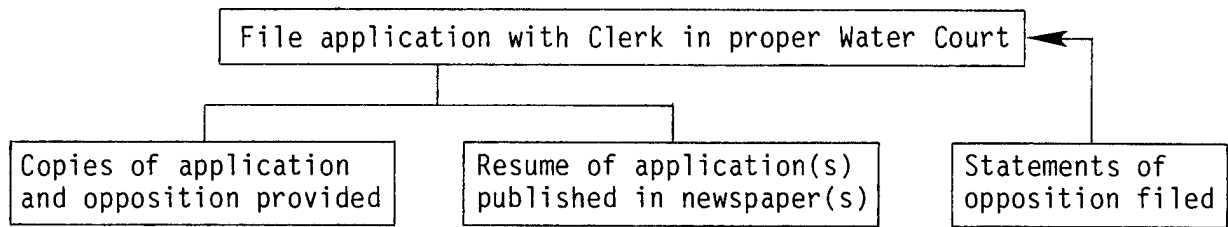
STATE APPROPRIATION OF INSTREAM FLOWS

Opportunity

In 1973, the Colorado Legislature passed, for the first time, a statute that directly provides for authority of the Colorado Water Conservation Board (CWCB) to appropriate streamflows for preservation of the "natural environment to a reasonable degree" (CRS § 37-92-102). Colorado's minimum stream flow legislation is frequently called "Senate Bill 97" (1973 Colo. Sess. Laws Ch. 442).

Background

Under S.B. 97, the CWCB has made significant progress in appropriating water to remain instream. The following detailed discussion is, in essence, a



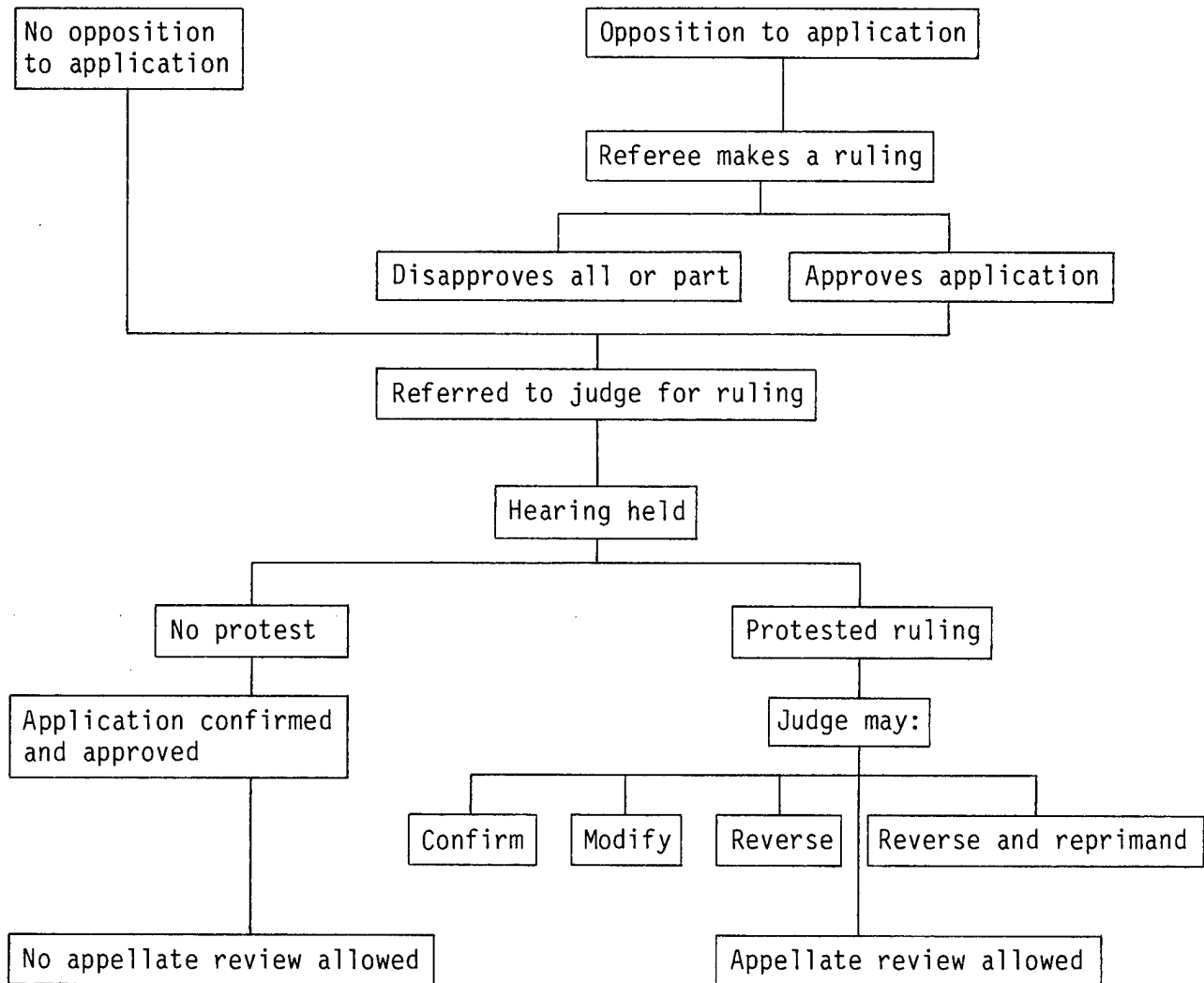


Figure 1. Application and adjudication procedures for water rights in Colorado.

chronology of the refinement of Colorado's instream flow program, subsequent amendments to the law, and administrative interpretation of the law by the CWCB.

In contrast to instream flow statutes enacted in many other States, Colorado's law is quite short and is easily incorporated into other provisions pertaining to administration of Colorado's water resources.

The relevant text of S.B. 97 as passed by the Colorado Legislature in 1973, and subsequently amended, is provided below. (Capital letters indicate new material added to existing statutes, bracketed words indicate deletions from existing statutes. These statutory provisions are now codified as CRS §§ 37-92-103(3); 103(4); 103(10); 102 (1973 and Cum. Supp. 1985), respectively.

Section 1. 148-21-3 (6), (7) and (10), Colorado Revised Statutes 1963 (1969 Supp.), are amended to read:

148-21-3. Definition. (6) "Appropriation" means [the [diversion of a certain portion of the waters of the state and] the application of [the same] A CERTAIN PORTION OF THE WATERS OF THE STATE to a beneficial use.

(7) "Beneficial use" is the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the [diversion] APPROPRIATION is lawfully made and, without limiting the generality of the foregoing, shall include the impoundment of water for recreational purposes, including fishery or wildlife. FOR THE BENEFIT AND ENJOYMENT OF PRESENT AND FUTURE GENERATIONS, "BENEFICIAL USE" SHALL ALSO INCLUDE THE APPROPRIATION BY THE STATE OF COLORADO IN THE MANNER PRESCRIBED BY LAW OF SUCH MINIMUM FLOWS BETWEEN SPECIFIC POINTS OR LEVELS FOR AND ON NATURAL STREAMS AND LAKES AS ARE REQUIRED TO PRESERVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE.

(10) "Priority" means the seniority by date as of which a water right is entitled to [divert] USE or conditional water right will be entitled to [divert] USE and the relative seniority of a water right or a conditional water right in relation to other water rights and conditional water rights deriving their supply from a common source.

Section 2. 148-21-2, Colorado Revised Statutes 1963 (1969 Supp.), is amended BY THE ADDITION OF A NEW SUBSECTION to read:

184-21-2. Declaration of policy. (3) Further recognizing the need to correlate the activities of mankind with some reasonable preservation of the natural environment, the Colorado water conservation board is hereby vested with the authority, on behalf of the people of the state of Colorado, to appropriate in a manner consistent with sections 5 and 6 of article XVI of the state constitution, or acquire, such waters of natural streams and lakes as may be required to preserve the natural environment to a reasonable degree. Prior to the initiation of any such appropriation, the

board shall request recommendations from the division of wildlife and the division of parks and outdoor recreation. Nothing in this article shall be construed as authorizing any state agency to acquire water by eminent domain, or to deprive the people of the state of Colorado of the beneficial use of those waters available by law and interstate compact.

The constitutionality of S.B. 97 was challenged and upheld by the Colorado Supreme Court in the case of Colorado River Water Conservation District v. Colorado Water Conservation Board [197 Colo. 469, 594 P2d 570 (1979)]. Under the facts of this case, the Colorado River Water Conservation District and other plaintiffs challenged the authority of the Colorado Water Conservation Board to apply for and receive water right decrees for three segments of the Crystal River and its tributary, Avalanche Creek, located in Gunnison, Pitkin, and Garfield Counties. The decision is summarized below in some detail because of the importance of the Colorado Supreme Court's rulings relative to the status of instream flow appropriations under the Colorado Constitution and the enabling legislation enacted by the Colorado Legislature.

The challenges against the instream flow law were based on four key arguments:

1. S.B. 97 is unconstitutional and the decreed priorities are void because a requirement of a physical diversion is absent.
2. The water court erred in not limiting the awards to "waters available by law and interstate compact."
3. S.B. 97 is unconstitutionally vague and makes an impermissible delegation of legislative authority to the Water Conservation Board.
4. The Water Conservation Board failed to establish the quantity of water necessary to "preserve the natural environment to a reasonable degree."

In addressing the first issue, the Colorado Supreme Court acknowledged that a diversion has been conventionally considered the act of taking water from a stream and transporting it to another location for use, but that until the 1969 Water Rights Determination Act (CRS § 37-92-101 to 502) made a diversion an essential element of appropriation, the diversion requirement was a court-made element. "As to the appropriation of water, the Colorado Constitution uses the word "divert" only once, and here it was not used to make an essential element of an appropriation" [supra, at 573].

The rationale for this provision in the Constitution was to negate any thought that Colorado would follow the riparian doctrine in the acquisition and use of water [supra, at 573]. The court used the reasoning set forth earlier in Thomas v. Guiraud, 6 Colo. 530 (1883), wherein that court stated:

The word 'divert' must be interpreted in connection with the word 'appropriation' and with other language used in the remaining sections of that instrument referring to the subject of irrigation.

We think there may be a constitutional appropriation of water without its being at the instant taken from the bed of the stream. This court has held that the true test of the appropriation of water is the successful application thereof to the beneficial use designated, and the method of distributing or carrying the same, or making such application, is immaterial. [Thomas v. Guiraud, 6 Colo. 530, (1883).]

The court also elaborated on other aspects of Colorado's rejection of the riparian doctrine and subsequent legislation, including the "Meadow Act" (which was enacted in 1880, and remains in the statute books as CRS 37-86-113 (1973)) in which the legislature determined that "a valid appropriation may be made without a headgate or ditch of natural overflow waters with the right to construct a ditch for the taking of such waters with the priority when the stream subsides." The constitutionality of the Meadow Act was subsequently upheld in two cases that came before the Court in 1909 and 1910. Additionally, the Court noted that the State of Idaho, which has a constitutional provision similar to Colorado's, upheld that its Constitution does not require actual physical diversion. State Dept. of Parks v. Dept. of Water Admin. [96 Idaho 440, 530 P.2d 924 (1974)].

The court explained that it was not until 1969 that the legislature prescribed the first statutory requirement that a diversion was required as an element of appropriation:

(5) 'Diversion' or 'divert' means removing water from its natural course or location, or controlling water in its natural course or location, by means of a ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device.

From this initial statutory language the general assembly made a modification, eliminating an actual diversion requirement from the definition of an appropriation in S.B. 97.

With this rationale, the Court held that under S.B. 97 the Colorado Water Conservation Board can make an instream appropriation without diversion in the conventional sense. The Court further emphasized that this holding did not cause any erosion to other Colorado cases that held that a diversion is an essential element of the water appropriations involved in those cases [supra, at 574].

As to second issue, that "the water court erred in not limiting the awards to 'water available by law and interstate compact'," the Water Conservation Districts intended that the wording in S.B. 97 mean that junior appropriators may have these rights adjudicated and they would be superior to those decreed to the Water Conservation Board, and that this wording means that the only awards the WCB may receive are to water already adjudicated to senior appropriators downstream. The court disagreed with the Water Conservation Districts' position and stated that:

The legislature's intent is quite clear that these appropriations are to protect and preserve the natural habitat and that the decrees confirming them award priorities which are superior to the rights of those who may later appropriate. Otherwise upstream appropriations could later be made, the stream dried up, and the whole purpose of the legislation destroyed.

In confirmation of this point, the court adopted the language of the water court:

There was no evidence that these appropriations resulted in any people of the State of Colorado being deprived of the beneficial use of water. Until such time as a person is in fact deprived of the beneficial use of available water because of these appropriations the alleged harm is purely speculative and must be rejected [supra, at 575].

Thus, this question has been reserved for future consideration.

The third issue, whether "S.B.97 is unconstitutionally vague and makes an impermissible delegation of legislative authority to the Water Board," was easily dismissed. Over objections by the Districts, the Court determined that the General Assembly has established "what job must be done" with sufficient clarity. It has also answered "who must do it," since it is specifically the Colorado Water Board that is authorized to appropriate water to accomplish the legislature's purpose. It has sufficiently described the scope of the Colorado Water Board's authority [supra, at 577].

The Court further determined that it was sufficient that the Colorado Division of Parks and Outdoor Recreation (DPOR) could base its conclusion and recommendations for parks and recreation purposes on the basis of extensive reports done by the Division of Wildlife (DOW).

The fourth issue, that "the Water Conservation Board failed to establish the quantity of water necessary to 'preserve the natural environment to a reasonable degree'," was also dismissed. The Court determined that the appropriation of the minimum flows necessary to preserve certain fish species also would suffice to maintain the rest of the natural environment. This determination was based on the Colorado Water Board's considerations including review of DOW's reports and DPOR's comments. The Districts were unable to show that the Colorado Water Board's conclusion was unfounded or arbitrary [supra, at 578].

As previously mentioned in the discussion under issue two, above, at least one concern was not resolved in the case, that being whether the State may, by virtue of the minimum streamflow, deprive holders of consumptive use decrees of the actual beneficial consumptive use of water (S. Balcomb, Water Attorney, Delaney and Balcomb, Glenwood Springs, CO; letter dated 31 January 1986). Several water interests believe that the statute can be construed such that an instream flow appropriation may not defeat a beneficial consumptive use, even

though the later use is junior in priority to the instream flow appropriation (Balcolb, unpubl.).

After 8 years of operation under S.B. 97, the Colorado Legislature amended the law with the enactment of S.B. 414 in 1981. The general purpose of S.B. 414 was to clarify procedures for appropriation of instream flow and to establish principles and limitations that would govern appropriation, by providing additional guidance to the State agencies involved in the process.

The following language was added to the end of CRS § 37 92-102 (1973) and Cum. Supp. (1986).

Any appropriation made pursuant to this subsection (3) shall be subject to the following principles and limitations:

- (a) Any such appropriation which is based upon water imported from one water division to another by some other appropriator shall not as against the appropriator of such imported water or his successor in interest, constitute a claim, bar, or use for any purpose whatsoever.
- (b) Any such appropriation shall be subject to the present uses or exchanges of water being made by other water users pursuant to appropriation or practices in existence on the date of such appropriation, whether or not previously confirmed by court order or decree.
- (c) Before initiating a water rights filing, the board shall determine that the natural environment will be preserved to a reasonable degree by the water available for the appropriation to be made; that there is a natural environment that can be preserved to a reasonable degree with the Board's water right, if granted; and that such environment can exist without material injury to water rights.
- (d) Nothing in this section is intended or shall be construed to allow condemnation by this state or any person of easements or rights of way across private lands to gain access to a segment of a stream or lake where a water right decree has been awarded to the Water Conservation Board. (CRS § 37-92-102 (1973 and Cum. Supp. 1986)).

In the spring of 1986, the Colorado Legislature passed S.B. 91, amending CRS § 37-92-102(3), which requires the CWCB to request recommendations from the U.S. Department of Agriculture and the U.S. Department of the Interior regarding appropriation or acquisition of water for "preservation of the environment to a reasonable degree." Under previous State law, only DOW and DPOR were required to be consulted by the CWCB in determining requests for appropriation or acquisition of water under the CWCB's instream flow program. However, the program has always included consideration of comments from the public.

Additionally, S.B. 91 clarifies and, possibly, expands the authority of the CWCB to:

acquire water by grant, purchase, bequest, devise, lease, exchange or contractual agreement from or with any person, including granted entity, such water, water rights, or interests in water as the board determines may be required to preserve the natural environment to a reasonable degree, and the board may initiate applications which it determines as necessary or desirable for utilizing such water, water rights, or interests in water, including applications for changes of water rights or augmentation plants for this purpose (CRS § 37-92-102(3)).

Several legal scholars argue that these powers were implicit in the CWCB prior to the enactment of S.B. 91; however, their addition serves to provide useful clarifying directions (Gregg Hobbs, Water Attorney; pers. comm., February 1986).

S.B. 91 was intended to be an invitation to the Federal Government to enter into a cooperative approach with the State of Colorado in establishing instream flows and lake-level habitat preservation on Federally administered lands through the statewide system for the administration of water rights (Martha Ezzard, Colorado Senator and sponsor of S.B. 91, pers. comm., April 1986). Advocates of the approach set forth in S.B. 91 point out that they prefer the mechanisms now in place in Colorado for establishing instream flows over the assertion of Federal reserved water rights. Because of the origin and nature of Federal reserved rights as a court-made doctrine, the full bounds or limits of the rights are speculative and provide no certainty as to possible future applications. This uncertainty was most recently manifested in the Federal reserved rights controversy for wilderness areas.

In fact, recent legislative changes to Colorado's instream flow program contained in S.B. 91 have come about as a result of debate over Federal reserved rights for Colorado wilderness areas. More specifically, debate has focused on whether they exist, and if they do in fact exist, what is their nature and extent. In the Federal District Court case of Sierra Club v. Block [622 F. Supp. 842 (D. Colo. 1985)], the Sierra Club brought suit against the Federal Government (Forest Service and National Park Service) for failing to exercise its statutory duties to protect Federal water rights implied in the designation of lands under the Wilderness Act (16 U.S.C. §§ 1131 et. seq.), in the face of possible depletion of a portion of these waters as a result of water development proposed within or adjacent to several wilderness areas. Judge William Kane, in a lengthy opinion, traced the origin of Federal reserved rights to water and concluded that their existence can be extended to Federal wilderness areas, as of the date of the creation of the wilderness area. However, he did not conclude that the Federal Government must comply with its statutory duty to protect waters in wilderness areas exclusively through claiming reserved water rights under the Federal reserved rights doctrine. Rather, he remanded the action, directing the Federal defendants to reevaluate all of their alternatives for complying with their statutorily imposed duty to protect wilderness water resources. The defendants were required to submit a

plan (by April 1, 1986) to the court describing their proposed actions to protect these wilderness water rights.

The Forest Service report stated that there are no present threats to wilderness water resources in Colorado. Existing water rights within Colorado wilderness areas must obtain Presidential approval, pursuant to 16 U.S.C. 1133 (d)(4), in order to perfect undeveloped conditional rights or modify perfected rights. Water rights on private land outside of wilderness areas, which might affect wilderness waters, can be controlled by application of a number of statutes, including the Wilderness Act (16 U.S.C. 1131-1136), the Organic Administration Act of 1897 (16 U.S.C. 473-482, 551), and the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

Other protective strategies could include denial or conditioning of land use authorization on Forest Service land outside of wilderness areas, but in areas critical to wilderness water resources; acquisition of land or water rights by the Forest Service in other critical areas; recommendations to the President, Department of Justice, or other Federal agencies concerning their responses to threats to wilderness water resources; and coordination with the State of Colorado in water resource planning that may affect the status of wilderness water. The Forest Service report concluded that it was unnecessary to make any recommendations, since no identified threats to wilderness water resources existed. The report did not specifically mention the use of Colorado's instream flow program, but the program may be applicable in some situations.

Judge Kane responded to the Forest Service Report in a memorandum opinion and order, issued on June 3, 1987. Finding the report incomplete, he criticized the government's unwillingness to consider adjudication of wilderness area reserved water rights. The matter was once again remanded to the Federal defendants, with an order to submit a plan in accordance with Judge Kane's original directives by September 1, 1987. Failure to produce such a report, warned the judge, would lead to sanctions of "formidable magnitude" [Sierra Club v. Lyng et al., and Colorado Water Congress et al. Memorandum Opinion and Order, June 3, 1987, p. 17].

The question of the plaintiff's motion for summary judgment was partially upheld and partially denied. To the extent that the Sierra Club sought a ruling stating that Federal reserved water rights presented the only acceptable means of protection for wilderness water resources, the motion was denied. However, the Court did grant that the alternative methods of protection proposed by the Forest Service demonstrated an abuse of that agency's discretion.

The impact of S.B. 91 is not known at this time. It can be said, however, that it has brought additional attention and focus to the possible application of CWCB powers to provide protection for instream flows by providing possible alternatives for assertions of Federal reserved water rights, and by stating the means by which the CWCB may obtain water and water rights for inclusion in the State instream flow program, resolving any lingering doubts that may have persisted under the old law.

Nature of CWCB Water Rights

The nature and long-range viability of the water rights held by the CWCB under its instream flow program has also become a point of interest for various reasons. Detractors of the program who would like to see the program ended or severely limited argue that all rights would revert back to the State of Colorado as unappropriated water and would then become available for new appropriations by private interests.

The more commonly held view, however, is that the water rights acquired under the instream flow program are held in public trust on behalf of the people of the State of Colorado. If the instream flow program were to be repealed or the CWCB abolished, the water rights obtained under the program would likely remain and be administered under a limited public trust concept. This public trust concept is to be distinguished from the application of a public trust doctrine over all surface waters of the State. In Colorado, this broader public trust doctrine is thought to have been rejected in People v. Emmert [198 Colo. 137, 579 P2d. 1025 (1979)]. See the Public Trust section of this report, or Hobbs (1986) for more detailed discussions of the possible application of a limited public trust concept for Colorado instream flow program water rights.

CWCB Administrative Procedures for Implementation of the Instream Flow Program

The general statutory provisions of Colorado's instream flow law leaves considerable opportunity for administrative discretion in determining the operational characteristics of the program. The CWCB has established a set of general administrative procedures for initiating, processing, filing, and maintaining water rights appropriations authorized under the instream flow law (Procedures for the Administration of the Instream Flow/Natural Lake Level Program, CWCB, July 10, 1981 as amended May 3, 1985). The procedures identify the functions of the CWCB, DOW, DPOR, and the Attorney General (AG) and are summarized below.

1. Requests for Recommendations for Appropriation

The director of the CWCB requests written recommendations from DOW and DPOR for stream segments for which appropriations may be sought. The recommendation contains a statement that the agencies have determined that there is a natural environment that can be preserved to a reasonable degree. (Under the provisions of S.B. 91, presumably a similar request may be extended to the Federal Government, with assistance from DOW and DPOR.) The recommendations of DOW and of DPOR are to be received by the CWCB staff at least 75 days prior to the CWCB meeting where they are to be presented.

2. CWCB Staff Review of Recommendations

On receipt of recommendations from DOW and DPOR, the CWCB staff reviews each recommendation and the supporting data. Following this review, the CWCB staff prepares preliminary recommendations and notifies persons on a mailing list kept by the CWCB that these segments are being considered for appropriation of water.

During this preliminary period, prior to advancement to final notice, the CWCB staff consults with the appropriate division engineers and other individuals that the staff deems appropriate. The staff considers comments received during the preliminary notice period, makes revisions to its preliminary recommendations where appropriate, and mails the final notice. The staff makes an effort to resolve objections to its final recommendations before the recommendations are published in a final notice.

3. CWCB Action on Staff Recommendations

The CWCB then considers each application and acts on the staff's final recommendations as contained in the final notice by approving, rejecting, or modifying them. The CWCB may, at its discretion, postpone action in order to lengthen the public comment period or obtain additional information as it may desire. In making its decision the CWCB must determine that the natural environment will be preserved to a reasonable degree by the water available, for the appropriation to be made; that there is a natural environment that can be preserved to a reasonable degree with the CWCB's water right, if granted; and that such an environment can exist without material injury to existing water rights.

4. Filing of Water Rights Applications for Instream Flows

Within five days of the CWCB's final approval, the staff is required to forward the approved appropriations to the AG, who files applications in the appropriate water court and represents the CWCB in all subsequent court proceedings on the subject water right claims. Such filings claim as the date of appropriation the date the CWCB acted to approve the appropriations. Such filings are subject to the provisions of CRS § 37-92-102(3)(a) and (b). The CWCB, DOW, and DPOR provide any necessary technical support to the AG during the water court proceedings.

The director advises the CWCB at its next regular meeting of any statements of opposition that have been filed against the appropriation(s) and keeps the CWCB current on all such statements of opposition.

No litigation regarding the CWCB's appropriation(s) is to be taken to trial without prior CWCB approval. If the matter is to be taken to trial, the CWCB informs its staff director of the terms and conditions, if any, upon which he is authorized to settle the case.

No compromise and settlement of the objector's claims negotiated prior to trial with parties who have filed statements of opposition to the CWCB's appropriation(s) is to be filed with the court until approved by the CWCB, unless the settlement is entered into pursuant to instruction from the CWCB.

5. Notification and Public Comment Procedures

A. Preliminary Notice

Copies of the CWCB staff's preliminary recommendations are sent to individuals on mailing lists compiled by the CWCB.

Notice is given to boards of county commissioners only if there are recommendations within their county. Notice also is given to county commissioners of the adjacent downstream county(s).

The date of mailing of a preliminary notice is approximately 30 days prior to the CWCB meeting at which it is to be formally presented. This date then constitutes the beginning of the public comment period.

If preliminary recommendations are not advanced to final notice status within a period of 6 months from the date of initial notification, then a renotification of the preliminary recommendations is made and the public comment period reinitiated accordingly.

B. Final Notice

Copies of the CWCB staff's final recommendations are sent to individuals on mailing lists compiled by the CWCB.

Again, notice is given to county commissioners only if there are recommendations within their county. Notice also is given to county commissioners of the adjacent downstream county(s).

The date of mailing of a final notice is approximately 30 days prior to the CWCB meeting at which final recommendations are to be presented.

In order for a final recommendation to be presented for the CWCB's consideration, it must have been presented to the CWCB through preliminary notice at a prior CWCB meeting.

C. Public Comment

Comments may be made orally or in writing to the CWCB staff. The public comment period begins with mailing of the preliminary notice. Oral presentations may be made to the CWCB at its meetings, but are supplemented with a written statement when possible.

6. Procedures for Filing Statements of Opposition and Protests to Referee's Rulings

The director of the CWCB requests the AG to file statements of opposition and protests to referee's ruling on behalf of the CWCB whenever the degree of potential injury to a CWCB water right exceeds

one percent of the CWCB water right, as determined by the CWCB staff. When the degree of potential injury is one percent or less, the director is required to file a statement of opposition or protest to referee's ruling only when he has reason to believe that a CWCB water right may be significantly injured if an application for a change of water right or plan of augmentation, alone or in combination with other current or future applications, is approved.

The director advises the CWCB at its next regular meeting of any such statements of opposition or protests to referee's ruling that have been filed. At that time, the director provides, to the extent information is available, a summary of:

- (1) the applicant's requested change of water right or plan of augmentation,
- (2) the CWCB water right affected and the data upon which said water right appropriation was based,
- (3) the potential injury to the CWCB water right, and
- (4) other pertinent information.

The director also provides a recommendation as to whether the statements of opposition or protests to referee's rulings should be pursued by the CWCB in order to preserve the natural environment to a reasonable degree.

The CWCB then authorizes the director to do one of two things:

- (1) ratify the statements of opposition or protests to referee's rulings or
- (2) withdraw said statements of protests.

The director is required to keep the CWCB current on all such statements and protests and all attempts to settle such objections. Settlement of the CWCB's objections negotiated prior to trial are not to be filed with the court until approved by the CWCB.

Technical Considerations for Instream Flow Filings

Three major factors are considered by the CWCB prior to filing for an instream flow reservation:

- (1) Documentation of the existence of a natural environment worthy of protection--DOW staff conducts a thorough survey of the stream segment, which includes a characterization of the fish population by species, size, and number; an inventory of benthic invertebrates; and, as appropriate, a water chemistry analysis. The segment is evaluated on the basis of accessibility to the public, as well as water quality and fish population.

- (2) Quantification of flow necessary for preserving that environment to a reasonable degree--DOW staff then makes a determination of the quantity of water necessary to accomplish this objective, using one or more standardized field methodologies to evaluate the physical characteristics and habitat necessary to sustain fish and benthic invertebrate survival and reproduction, and fish passage during low-flow periods. The minimum required streamflow is then determined based on three principal criteria: mean depth, mean velocity, and wetted perimeter. These criteria are combined with other hydraulic parameters, and streamflows necessary for maintaining a fishery habitat are determined with the application of a computer program. Additional modifications and refinements may be made by expert judgement of DOW fish biologists.
- (3) Description of Reach of Stream to be included in the Right--Following the factors described in 1 and 2, the stream reach is described by landmarks and legal description.

Preliminary considerations for natural lake level findings follow a similar procedure.

Evaluation

Under Colorado's original instream flow law and its subsequent amendments, CWCB has been successful in appropriating instream flows and natural lake level water rights throughout the State, over the last thirteen years. The approach used by CWCB has resulted in protection of instream flows of priority stream segments. The administrative procedure that CWCB follows has been carefully identified and allows for maximum public input prior to CWCB seeking instream flow rights.

CWCB Public Notice Prior to Filing

Critics of CWCB implementation of the instream flow program statutes point out that the law does not require CWCB to give preliminary and final notice to the public that certain streams segments are being considered for appropriation of water prior to actual filing for a water right. These critics argue that giving preliminary and final notice prior to filing allows others on the affected segment to file before CWCB and obtain a water right that is senior to CWCB's. This could have the effect of pre-empting the objectives of the instream flow program on critical segments where the exercise of old and new private appropriations, senior to those filed for by the CWCB, could result in denial of an appropriation for instream flow purposes. These objectives might be defended because the stream could be over-appropriated, or the State would provide a less valuable junior right that is of little utility for protecting the natural environment to a reasonable degree during water-short years.

The contrasting view of the current administrative procedure for recommending and filing for instream flows is that prior notice to the public is necessary to resolve objections to the recommended filings prior to actions in the water court. This is perceived by supporters of the current approach to minimize costly administrative, technical, and legal costs to the State and

objectors or other interested parties in attempting to resolve potential problems in water court. This strategy also promotes public acceptance of the program and its administrative efficiency.

Private filing for a water right, in most instances, requires a fairly substantial effort on the part of the would be appropriator to demonstrate to the water court's satisfaction that the appropriated water is being or will be put to use in the near future. The most troublesome filings of water rights that would affect the subsequent filing for instream flow rights are conditional filings for large quantities of water wherein the appropriator has not yet put the water to beneficial use but intends to do so following the occurrence of a series of events, including water resource planning, surveys, land acquisition, or construction of necessary diversion works and reservoirs.

Colorado law provides for an applicant to obtain a conditional decree to hold rights to a particular quantity of water for a future project. To obtain a conditional decree, in the filing the appropriator must demonstrate present intent to put the water to beneficial use and to proceed with due diligence to divert the water. (For a more detailed treatment of the legal concepts discussed here the reader is directed to the following Colorado cases: Colorado River Water Conservation District v. Vidler Tunnel Co. [197 Colo. 413, 594 P.2d 566 (1979)]; Elk-Rifle Water Co. v. Templeton [173 Colo. 438, 484 P.2d 1211 (1971)]; Colorado River Water Conservation District v. Rudlay Mountain Power Co. [174 Colo. 309, 486 P.2d 438 (1971)]; Denver v. Sheriff [105 Colo. 93, 96 P.2d 836 (1939)]; City and County of Denver v. Northern Colorado Water Conservancy Dist. [130 Colo. 375, 276 P.2d 992 (1954)]).

It is not known how many stream segments have had private filings made prior to CWCB filings as a result of the public notice policy of the CWCB.

Effect of S.B. 414 on Administrative Procedures

In following the directives of the legislature in administering the original instream flow law and S.B. 414, CWCB has been very careful in seeking compliance with the statutory requirement of CRS 37-82-102(3) wherein ". . . the Colorado water conservation board is hereby vested with the authority, on behalf of the people of the state of Colorado, to appropriate in a manner consistent with sections 5 and 6 of Article XVI of the state constitution, or acquire such waters of natural streams and lakes as may be required to preserve the natural environment to a reasonable degree" (emphasis added.).

CWCB has interpreted its statutory directives to include evaluation of three major technical considerations prior to filing for an instream flow. The mechanics of these technical evaluations have been previously discussed.

1. Documentation of the existence of a natural environment worthy of protection.
2. Quantification of the flow necessary for preserving that environment to a reasonable degree.

3. Description of the reach of stream to be included in the right.

In making such an evaluation, as required by statute, CWCB seeks recommendations from DOW and DOPR. The staffs of all three agencies may work jointly on data collection, analysis, and determination of final parameters for an instream flow filing.

Although not limited by law, CWCB has focused its appropriation efforts exclusively on aquatic life and riparian habitat protection. The term "natural environment" is not defined in the statute, and arguably the CWCB could appropriate waters for recreational, aesthetic, or other purposes, even if the target stream segment could not support aquatic life for reasons other than water quantity. In a practical sense, however, this combination of stream attributes would be found in few segments.

A summary of instream flow and natural lake-level water rights filings prepared by the Colorado Division of Wildlife shows that water rights under the program have been appropriated on 6633 miles of stream in 1074 separate stream segments and have been made for natural lake-level filings on 485 lakes as of December 15, 1986. A summary of the number of appropriations by water division is provided in Table 1.

Administration of CWCB Water Rights

The successful implementation of the Colorado instream flow program is dependent on the administration of the water rights that have been appropriated for instream use during critical low-flow periods. Administration of water rights to protect established private rights rests with the Office of the State Engineer.

In the fourteen year history of the program, CWCB has never placed a call to the State Engineer to administer the stream to satisfy its instream flow rights appropriations (M. Cassen, Asst. AG, State of Colo.; pers. comm., January 19, 1986).

In the continuing efforts to protect the integrity of its appropriations, CWCB regularly files statements of opposition to those water rights applications that may adversely affect its appropriations. The results of these statements of opposition have been, in some cases, stipulations by the applicant, which are apparently sufficient to protect the instream appropriations.

One impediment to effective implementation and administration of the water rights held by CWCB is the ability to accurately measure the amount of water that passes through the stream segment in which the instream flow right is held. The only means to accomplish this is through stream gauging and/or visual monitoring of the segment.

CWCB has no stream gauges of its own with which to monitor the segment. Infrequently, a stream gauge operated by U.S. Geological Survey, State Engineer, or some other entity (public or private) may be present somewhere on the stream segment. Field personnel of DOW or DOPR may be called on to make visual inspections, or to read stream gauges. However, continuous reliable,

Table 1. Summary of instream flow/natural lake level appropriations as of January 1, 1985.

Water division	Number of stream segments decreed/undecreed	Number of stream miles decreed/undecreed	Number of natural lakes
1	86/57	652.2/392.9	35
2	123/0	589.6/0	85
3	101/4	805.1/44.7	48
4	184/20	1120.7/219.2	84
5	217/60	1158.7/402.8	141
6	140/0	594.6/0	43
7	78/3	625.3/26.9	49
Subtotal	930/144	5546.2/1086.5	485
TOTAL	1074	6632.7	485

(Source: Colorado Water Conservation Board, December 15, 1986).

periodic monitoring of streamflows within the stream segments may not occur, making compliance difficult to evaluate. The CWCB envisions the establishment of a program for monitoring the most critical streams or stream segments, since continual monitoring of 1,100 streams is probably not feasible. The plan would include provisions for installing gauges and assigning an appropriate agency, perhaps DOW, to monitor the gauges (Gene Jensock, CWCB; pers. comm., April 1, 1987).

PRIVATE APPROPRIATION OF INSTREAM FLOWS

Opportunity

The opportunity for appropriation of water for instream flow purposes is apparently an open question in Colorado. The likelihood of success of private appropriators to follow State procedural requirements to record an appropriation for instream flows is unknown. The ability to make such an appropriation is not specifically prohibited by law, and there are certain interest groups that believe that Colorado law allows such an appropriation.

Background

Prior to the enactment of S.B. 97 (CRS § 37-92-103(3)) and the Colorado Supreme Court decision of Colorado River Water Conservation District v.

Colorado Water Conservation Board [197 Colo. 469, 594 P2d 510 (1979)], it was thought that an actual physical diversion of water was required as an element of appropriation in Colorado. The court, in Colorado River Water Conservation District held that this was not so and gave considerable historical development on the origin of this requirement as an element of appropriation in Colorado water law. (See Section on State Appropriation of Instream Flows for more discussion on this subject.)

Additionally, S.B. 97 changed the definitions of "appropriation," "beneficial use," and "priority" as follows. (Capital letters indicate new material added to existing statutes, bracketed words indicate deletions from existing statutes. These statutes are now codified as CRS §§ 37-92-103(3); 103(4); 103(10); and 102(1973 and Cum. Supp. 1985.):

Section 1. 148-21-3 (6), (7), and (10), Colorado Revised Statutes 1963 (1969 Supp.), are amended to read:

148-21-3. Definitions. (6) "Appropriation" means the [diversion of a certain portion of the waters of the state and the] application of [the same] A CERTAIN PORTION OF THE WATERS OF THE STATE to a beneficial use.

(7) "Beneficial use" is the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the [diversion] APPROPRIATION is lawfully made and, without limiting the generality of the foregoing shall include the impoundment of water for recreational purposes, including fishery or wildlife. FOR THE BENEFIT AND ENJOYMENT OF PRESENT AND FUTURE GENERATIONS, "BENEFICIAL USE" SHALL ALSO INCLUDE THE APPROPRIATION BY THE STATE OF COLORADO IN THE MANNER PRESCRIBED BY LAW OF SUCH MINIMUM FLOWS BETWEEN SPECIFIC POINTS OR LEVELS FOR AND ON NATURAL STREAMS AND LAKES AS ARE REQUIRED TO PRESERVE THE NATURAL ENVIRONMENT TO A REASONABLE DEGREE.

(10) "Priority" means the seniority by date as of which a water right is entitled to [divert] USE or conditional water right will be entitled to [divert] USE and the relative seniority of a water right or a conditional water right in relation to other water rights and conditional water rights deriving their supply from a common source.

One reading of these definitions, excluding the other language of S.B. 97 giving authority to the CWCB to appropriate or acquire waters of streams and lakes "as may be required to preserve the natural environment to a reasonable degree," suggests that anyone may "appropriate" water for "beneficial" use to include such appropriation for recreation, fisheries, or wildlife, and that water need not be diverted to perfect the appropriation.

Example

In December of 1986, the City of Fort Collins filed for water rights for the Poudre River Recreational Corridor and the Poudre River Dilution Corridor.

Beneficial uses of this water are municipal, including recreation, preservation of fish and wildlife habitat, and sewage treatment dilution. Noting that the City has been investing in stream improvements for these uses, such as a trail system for access, channel improvements, and the like, the City's position is that the utility of the Recreational Corridor will be greatly reduced without assurance of water of sufficient quantity and quality. A diversion is not necessary for these uses, therefore Fort Collins has filed for instream water rights.

The Colorado Water Conservation Board filed a statement of opposition to the City's application on the grounds that only the CWCB may file for an instream flow. The City of Fort Collins, however, cites CRS § 37-92-102(3), which empowers the CWCB to appropriate minimum stream flows or lake levels "as may be required to protect the environment to a reasonable degree." Although the City has no argument with this concept, their reasoning is that the City is not seeking to acquire minimum flow rights; rather, their intent is to appropriate specific quantities of water for specific beneficial uses, which are defined in CRS § 148-21-3(7) as including fishery and wildlife. Although the City of Fort Collins believes that the minimum stream flow program of the CWCB is a necessary one, it also believes that Colorado law allows for the type of instream water rights for which the City has filed. As of the writing of this report, the matter has not been resolved.

Evaluation

The question of appropriation or acquisition of instream flows in Colorado by individuals or organizations other than the CWCB is unsettled. Several legal questions arise regarding the interpretation of S.B. 97. Advocates of the position that only the CWCB can appropriate water for instream flow purposes argue that the legislative intent of the definition changes for "appropriation," "beneficial use," and "priority" can only be read in the context of the specific language that authorizes the CWCB to appropriate and acquire water for the people of Colorado. They contend the legislature intended to place this power exclusively in the CWCB. Therefore, the CWCB's policy is to file statements of opposition when private parties attempt to appropriate water for instream flows.

Advocates of a broader reading of the statute argue that anyone may appropriate or acquire waters for instream flow purposes. The detailed legal arguments that support either of these positions go beyond the scope of this paper.

STATE CONDEMNATION AND REALLOCATION OF WATER RIGHTS

Condemnation of existing water rights for use as instream flows is expressly prohibited in Colorado (CRS § 37-92-102).

STATE/FEDERAL COOPERATIVE APPROPRIATION OF INSTREAM FLOWS

Concern for protection of aquatic habitat for fish and bird species from adverse effects of depleted streamflows from water resource development and

water use has encouraged creative solutions that meet the needs of State and Federal environmental protection laws, while allowing water development to continue.

Several applications of these approaches have been or are being tried in Colorado, using the framework of the State's instream flow program as an implementation mechanism.

Two specific applications will be examined, which involve the National Environmental Policy Act (42 U.S.C. 4321-4370) and the Endangered Species Act (16 U.S.C. 1531-1543).

Mitigation Agreements on Critical Stream Segments

Opportunity. As previously noted, the primary focus of this document is on the instream flow protection strategies available under Colorado law. This section discusses a unique creative opportunity provided by the State program to implement mitigation measures which may be required under the National Environmental Policy Act to protect instream flows.

Background. In addition to the Colorado Water Conservation Board's Instream Flow/Natural Lake Level Program established under S.B. 97, the National Environmental Policy Act (NEPA) has also afforded an opportunity for the protection of instream flow values in Colorado. Participants in Federal projects may be required to maintain certain levels of streamflow as mitigation for, or protection against, adverse environmental impacts. The CWCB's instream flow program has provided one mechanism to implement this type of mitigation measure.

In cases where significant environmental impacts would result from implementation of a certain Federal project or action, maintenance of instream flows, often in combination with stream habitat improvements and stocking, have been proposed to the responsible Federal agency as mitigation for adverse impacts. However, a bypass from a Federal project or permit does not ensure that water will remain in the stream, because the water may become available for appropriation under State law once it has been bypassed.

Example. Recently, the United States Bureau of Reclamation in cooperation with the Colorado River Water Conservation District conducted an Environmental Impact Assessment (EIA) to evaluate the environmental impacts associated with marketing water from the Bureau's Green Mountain Reservoir. Several alternatives evaluating various levels of water sales were considered. Under one "full-sales" alternative, maintaining instream flow values for the protection of the natural environment was evaluated as a potential constraint on the diversion or depletion of streamflow. The instream flow numerical values considered by that alternative were those currently recommended or appropriated by the CWCB under S.B. 97. They were selected because they were readily available for most streams identified as sources for water requests and were based on a widely recognized and proven methodology. The Federal contracting agency then had the option of requiring that like flows be maintained to mitigate or prevent adverse impacts to the environment resulting from the sale of Green Mountain Reservoir water.

The primary water requestors were several ski areas to whom Green Mountain water was essential for replacing out-of-priority diversions for snowmaking. Because of the unique pattern of diversions (low winter flow periods) associated with snowmaking uses and the location of the ski areas high within the drainage basins, the potential for adverse impacts to valuable aquatic resources was considered significant in the EIA.

The Division of Wildlife (DOW) and the CWCB met with representatives of each of the ski areas in which the EIA indicated water sales would adversely impact the stream and, hence, the aquatic resource. These interested parties proceeded with the goal of developing a comprehensive mitigation plan that would provide adequate protection for the natural environment while at the same time allow for development of the water resources required by the ski areas. Essentially, the final plans consisted of three components:

- operational constraints on diversion of water for snowmaking,
- stream habitat improvements, and
- fish stocking of selected stream reaches.

These plans were formalized in memoranda of agreements between the Department of Natural Resources and each ski area and, in turn, submitted to the Bureau of Reclamation as the ski areas' proposals for mitigation on streams where significant impacts were identified.

These mitigation agreements have been developed between the State of Colorado Department of Natural Resources and Keystone-Arapaho Basin ski areas in Summit County on the Snake River from its confluence with the North Fork of the Snake River to the confluence with Dillon Reservoir; Copper Mountain ski area in Summit County on West Tenmile Creek and Ten Mile Creek to the confluence with Dillon Reservoir; Breckenridge ski area in Summit County on the Blue River from approximately one mile above its confluence with Swan River to its confluence with Swan River.

The agreements are to be incorporated into the court decrees for water rights for instream flows. To allow for the need for possible modifications to the agreements, the effectiveness of the mitigation measures is to be monitored and evaluated every two years. [A copy of the Keystone-Arapaho Basin agreement is provided as Appendix A to the Colorado section of this document.]

Evaluation. In this example, the State program for appropriation of instream flows provided the mechanism by which significant adverse impacts to the aquatic environment could be mitigated. Maintenance of instream flows throughout a reach of stream (from point A to point B) has significant advantage over a required flow from a Federal project because the decree specifies the reach where instream flows will be protected. In contrast, a release from a Federal project only ensures that a given flow is met at a specific point on the stream. Water may be withdrawn above or below that point, so long as the flow requirement is met at the point where it is specified.

This strategy also provides for administration of these instream flow water rights within the State appropriative system, a preferred strategy from the State's perspective.

This is an example of one way in which the State, the Federal Government, and private industry have worked together to preserve the natural environment to a reasonable degree, meet NEPA requirements, and allow continued reasonable development and use of the State's water resources.

Upper Colorado River Basin Proposal

Opportunity. Conflict surrounding development of water in the Upper Colorado River Basin at the alleged expense of certain fish species listed under the Endangered Species Act has in the past few years created controversy and polarization of various State and Federal agencies, water development interests, and environmental protection groups. The existence of a State instream flow program in Colorado and recent enactment of programs in Wyoming and Utah have provided an opportunity to apply State instream flow water laws to achieve objectives of Federal laws to protect plants and animals listed under the Endangered Species Act (ESA).

The approach, although untested, provides considerable flexibility to work within the State appropriative water systems to protect aquatic habitat and endangered species.

Background. The Endangered Species Act of 1973 and its subsequent amendments (16 U.S.C. § 1531-1543) seek to provide Federal protection for threatened or endangered animal and plant species. The major provision of the law is to insure that any action authorized funded or carried out by any Federal agency is not likely to jeopardize the continual existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species, which is determined by the Secretary of the Department of Interior after consultation with affected States [16 USC §§ 1536a(2)]. This process is more generally referred to as a Section 7 consultation, named after the appropriate provision of the ESA. Under Section 7, a report issued by the Department of Interior, which points out such adverse effects to an endangered or threatened species, and which may prohibit or condition Federal Action, is called a "jeopardy opinion."

Recent use of Section 7, jeopardy opinions that require mitigation measures, that could, in effect, stop water projects in several of the Western States has brought about considerable unrest in the water development community, but has provided opportunities to explore creative solutions to allowing water projects to proceed while avoiding conflicts with the ESA. One such opportunity that has received considerable attention in the last several years resulted from proposed water development in the Upper Colorado River Basin in Colorado, Wyoming, and Utah, where three endangered fish species exist: the Colorado squawfish (Ptychocheilus lucius), bonytail chub (Gila elegans), and humpback chub (Gila cypha). In addition, the razorback sucker (Xyrauchen texanus), although not officially listed under the ESA, has been included in the evaluation of various water development proposals.

In early 1984, the FWS, Region 6 (Denver), organized a Federal/State Coordinating Committee for the Upper Colorado River Basin. The charge of the Committee was established formally in late 1984 by a memorandum of understanding (MOU) among FWS, Bureau of Reclamation, and the States of Colorado, Wyoming, and Utah. The memorandum also established a technical study committee and several subcommittees. Representatives of various water users and conservation groups were invited to serve on these committees and to provide data and analyses for recommendation to the Coordinating Committee.

The Coordinating Committee's responsibilities were narrowly prescribed by the MOU to identify reasonable and prudent alternatives that would preserve the endangered species while permitting new water development to proceed in the Upper Basin (Dunkle 1986).

The efforts of the Coordinating Committee culminated in a report entitled "Draft Recovery Implementation Program for Rare and Endangered Fish Species in the Upper Colorado River Basin [September 10, 1986]. The approach advocated in the report envisions a full recovery and delisting of the target fish species within 15 years, while providing a means of protecting the species within the framework of State water laws and allowing water development to proceed in the Upper Basin.

The current proposal to protect and provide for instream flows differs substantially from the process envisioned by the FWS in 1983. Its main focus now is to provide opportunities to protect instream flows for rare or endangered species within State water rights systems and interstate water compacts. In contrast, the 1983 proposal stressed the need for habitat evaluation and research into means of reestablishing populations of the endangered fish species. The implementation and management of instream flows is based on four fundamental principles:

1. Provision and maintenance of instream flows at certain times, locations, and in certain quantities is necessary to protect and recover endangered fish species and habitat in the Upper Colorado River Basin.
2. Water for instream flows will be provided as part of a comprehensive recovery program that addresses the Upper Basin and fish species habitat needs as a system.
3. Recovery and protection of threatened and endangered species is to be a cooperative effort of the Federal Government, the States, water and power users, and environmental organizations. This means, among other things, that the cost of providing instream flows and other recovery activities will be shared by these parties.
4. Water rights for instream flows established under this process will be appropriated, acquired, and administered pursuant to State law and will therefore be legal pursuant to State law and protected as any water right under State laws. Where water rights for instream flows cannot be obtained, they will be protected through contracts or administrative agreements with holders of appropriate water rights. In no case shall the Federal Government condemn water

rights for the purpose of protecting endangered species (Pitts 1986).

Additionally, species management techniques will be implemented as part of the program, including habitat management development and maintenance, stocking of hatchery-raised rare or endangered species, research data management and monitoring. Simultaneous implementation of all program elements is considered important for the success of the program.

Implementation of the program required a cooperative agreement, which was signed by the governors of Colorado, Utah, and Wyoming and the Secretary of the U.S. Department of Interior. Initial program funding from Congress and continuing annual operational funding from both the Federal and State governments is necessary. Many portions of capital funding will go to water rights acquisition and nonflow habitat development and maintenance. Capital costs are anticipated to be approximately 15 to 35 million dollars during the 15-year period.

Evaluation. The Upper Colorado River program is still in its early stages. Much of its success will depend on a continuing cooperative spirit at the Federal and State levels, as well as on the availability of funds for procuring water rights by Federal or State water development interests, or by environmental groups.

The proposal offers a means to mitigate effects of water development on rare and endangered fish species. The existing State water rights systems may be used to acquire and protect instream flows. It is anticipated that in Colorado the water rights held for instream flows by the State will require full protection by the State.

This comprehensive approach to protecting instream flows may have applications for other river basins in the West. Another possible application of the approach is in the Platte River Basin, involving the States of Colorado, Wyoming, and Nebraska. In Nebraska, a Section 7 consultation involving whooping crane habitat resulted in denial of a Section 404 Federal Clean Water Act dredge and fill permit, which delayed and perhaps stopped a water development project in Colorado. A similar coordinating committee has been organized for the Platte River. Because the endangered species involved are migrating birds, including the whooping crane (*Grus americana*), least tern (*Sterna antillarum*), and bald eagle (*Haliaeetus leucocephalus*) (and the threatened piping plover (*Charadrius melodus*)), the complexity of the problem and possible solutions are even more complex. However, the potential still exists to protect critical habitat of the threatened or endangered species within the context of State systems for administering water rights.

WATER QUALITY CLASSIFICATION SYSTEM

Opportunity

The Federal Clean Water Act and the Colorado Water Quality Act require that water use classifications and water quality standards be established to

protect those uses. These laws only indirectly consider water quantity in the water use designation process. Application of the Colorado instream flow program to stream segments where water quantity may be a major factor to attaining a use classification may provide long-term assurances for dilution water for waste water discharges, thereby assisting in management planning for wastewater treatment works, as well as meeting the instream flow law's objective of attempting to "preserve the natural environment to a reasonable degree."

Background

Pursuant to Section 303 of the Federal Clean Water Act (33 U.S.C. § 1373) and the Colorado Water Quality Act (CRS §§ 25-8-202 and 203), which implements the Federal Clean Water Act in Colorado, the Colorado Water Quality Control Commission (WQCC) may establish water use classifications and water quality standards for a number of physical, chemical, and biological parameters to protect designated uses.

The water quality classification of water bodies for various uses is not by itself an instream flow protection strategy. It does, however, provide an opportunity to use the powers of the Colorado Water Conservation Board to protect streamflows to ensure that water use classifications can be met on a water quantity basis. This is an important aspect because the water quality classification system minimizes any consideration of the amount of water necessary to ensure that a water use classification can be met.

The WQCC is empowered to "develop and maintain a comprehensive and effective program for prevention control and abatement of water pollution and for water quality protection throughout the entire state . . ." (CRS §§ 25-8-201, 202).

Pursuant to these general powers, the WQCC may classify State waters by regulation as to "present beneficial uses of the water, or the beneficial uses that may be reasonably expected in the future for which the water is suitable in its present condition, or the beneficial uses for which it is to become suitable as a goal" (CRS § 25-8-203(c)).

In determining whether to classify waters for a particular use, the WQCC may consider any relevant characteristics, including:

The character and uses of the land area bordering the water; the need to protect the quality of the water for beneficial uses (e.g., domestic agricultural, municipal, and industrial uses; the protection and propagation of fish and wildlife, recreation, drinking water; or other beneficial uses that the WQCC deems consistent with the policies of CRS § 25-8-102); and the need to minimize negative impacts on water rights. The WQCC may also consider the type and character of the water (surface or subsurface, lake or stream) together with volume, flow depth, stream gradient, temperature, surface area involved, and daily or seasonal variability of any such characteristics (CRS § 25-8-203).

The water quality use classification system currently applied recognizes recreation (2 classes), agriculture, aquatic life (2 classes with warm/cold water subclass designation), domestic water supply (2 classes), and high quality water designation.

The use classifications are primarily oriented to protecting designated uses by assigning numeric standards to water quality parameters to protect each use classification. Use classifications are assigned to particular stream segments, lakes, and reservoirs. Each classified water body may have more than one use classification, and the most restrictive numeric standard for each water quality parameter will apply.

Since, for many water quality parameters, the most restrictive numeric standard is for an aquatic life classification, it may be said that in most instances the aquatic life classification "drives" the use classification system.

In assigning use classifications to particular stream segments the WQCC is guided by the following:

- (a) Classifications should be directed towards the realization of the water quality goals as set forth in the Federal and State Acts.
- (b) It is State law and policy to prevent any water quality degradation that can interfere with present uses.
- (c) Upstream classifications must not jeopardize downstream classifications or actual uses.
- (d) Classifications must protect all current classified and actual uses, unless it is determined after a public hearing that downgrading is justifiable.
- (e) Classifications should be for the highest water quality attainable. Attainability is to be judged by whether or not the use classification can be attained in approximately twenty (20) years by any recognized control techniques that are environmentally, economically, and socially acceptable as determined by the Commission after public hearings.
- (f) Nonchemical quality parameters such as flow and stream bed conditions are valid quality concerns (5CCR 1002-8 3.1.6(1) (a)-(f)).

Water quality standards are intended to apply at all times except where surface waters are below minimum annual average seven-consecutive-day flow expected to occur once in 10 years. For certain substances, such as ammonia, the low flow exceptions may be based on the seasonal average seven-consecutive-day low flow that is expected to occur once in 10 years. Each season normally consists of a minimum of 3 months (5 CCR 1002-8 (3.19)). The WQCC, however, may change these regulations when it reviews its rules, as required by Federal law, every three years (33 U.S.C. § 1373).

Waters not yet classified. Discharges into waters not presently classified by the WQCC must meet established effluent limitation regulations, the basic and antidegradation standards, and control regulations. Effluent flows that reach a classified body of water, even though the discharge point is to a water not yet classified, must be of a quality that will not cause the standards of the classified body of water to be violated. This means that availability of dilution water in the classified water body may be extremely important.

The concept of a "mixing zone" for pollutants is also an important consideration. A mixing zone is that area of a water body, designated on a case-by-case basis by the WQCC, that is contiguous to a point source discharge and in which the standards may not apply. A mixing zone is intended to serve as a zone of initial dilution in the immediate area of discharge, but may not be allowed for some pollutants. A mixing zone is most effective when dilution water is present.

The size and shape of the mixing zone will be determined by the WQCC after considering some of the following factors:

- (1) Where necessary to protect aquatic life, there shall be a zone of passage around the mixing zone which allows sufficient passage of aquatic life so as not to have a detrimental effect on their population.
- (2) Biological communities or populations of imported species shall not be interfered with to a degree which is damaging to the ecosystem in adjacent waters; nor shall there be detrimental effects to other beneficial uses.
- (3) There shall be no mixing zones for certain harmful substances such as those identified pursuant to 307(a) of the Federal Clean Water Act.
- (4) Mixing zones shall not overlap so as to cause harmful effects in adjacent waters or to interfere with zones of passage
(5 CCR 1002-8-3.19(1)(a)).

The classification of water bodies, establishment of standards to protect the water use, efficient discharge limits for certain pollutants, and desirability of establishing a mixing zone for certain pollutants is to a large extent affected by the seasonal distribution and amount of water present in a stream segment. This long-term assurance that such water will be available may aid in achieving water use distributions and standards for streams with critical low flow conditions.

Because of the restrictive view of classification for water quality, while not specifically ensuring water quantity, a number of concerns arise related to the importance of instream flows:

1. Even though a water body may be designated for a use classification, and standards are established for water quality purposes, the use

may not be achieved because there is insufficient water on a year-round or seasonal basis to sustain the use.

2. Because water, if present, is not appropriated for instream flow purposes, the water may be freely diverted or transferred within the segment under State water appropriation rules. This could reduce or eliminate the streamflow in the segment, while requiring that stream standards for water quality still be met through NPDES discharge permit requisites or nonpoint source control strategies.
3. For stream segments with critical low flow conditions and that receive wastewater discharges from municipal or industrial sources, the assurance of long-term availability of dilution waters or mixing zone flows gives some certainty for technical and financial planning to meet treatment level requirements. The ability to provide for instream flows in a particular segment during critical low flow periods may reduce or eliminate the need for increased treatment level requirements and attendant capital construction and operation and maintenance costs for certain categories of pollutant discharges.

The water quantity-streamflow issue for water use classifications, however, is a two-edged sword. On one side, the lack of quantity of water during critical low flow periods (for example during winter months or during summer months) is suggestive that a stream segment should not be classified for a particular use--say aquatic life (fish maintenance or propagation)--or should be classified or reclassified on a seasonal basis. This, in turn, makes a stronger argument to allow wastewater dischargers to meet only minimum treatment level requirements without having to spend more money for capital construction and operation/ maintenance costs for higher levels of pollutant removal. On the other side is the concern that because there is no guarantee of a certain quantity of dilution water into which a wastewater discharger may introduce pollutants, correspondingly, there may be increased pollution control costs that would result from the displacement of dilution water as a result of water being withdrawn from the stream to satisfy an upstream appropriation, or a change in point of diversion for an existing water right. In this case, there may be economic advantages to the dischargers and to other water users on the stream segment having waters appropriated for instream use to protect the use classification from a water quantity standpoint. Dischargers may avoid the additional expenditure of funds for pollution control where minimum public health requirements are met, and the pollutant load may be reduced to acceptable regulatory levels if the dilution water is available.

The application of this strategy is extremely complex and must be examined in light of the social and economic values of the individual stream, the seasonal hydrology, the economics of wastewater treatment alternatives, and the legal implications of acquiring water for pollutant dilution purposes--including the State and Federal water quality law requirements that prohibit water quality degradation.

Example

Application for instream flow appropriations by the CWCB to help achieve water quality water use classifications has not been attempted and may not be

allowable under current Colorado statutes. However, the desirability of employing such an approach may increase in the future if wastewater dischargers are confronted with construction of expensive wastewater treatment facilities to meet higher levels of pollutant reduction (e.g., ammonia removal for municipal waste water treatment facilities) and if dischargers desire assurances that dilution waters under normal low flow conditions will be available.

Currently, there are low flow analyses being conducted by the Colorado State University Department of Civil Engineering on several streams in Colorado where statistical determination of low flow conditions may in some way affect the level of wastewater treatment required by municipal and industrial discharges. These stream segments are:

- (1) Cache la Poudre River through Fort Collins,
- (2) South Platte River through Denver,
- (3) St. Vrain through Lyons,
- (4) Big Thompson through Loveland,
- (5) Blue River below Dillon Reservoir to Green Mountain Reservoir,
- (6) Clear Creek through Golden, and
- (7) Coal Creek above Plainview.

It may be that if a water supply source is available, affected dischargers may wish to attempt acquiring water rights through the CWCB to retain instream flow for dilution purposes, during low-flow conditions, to ensure that water use classification standards can be met. Additionally, this strategy may be examined as an alternative to expenditure of funds for increased treatment level requirements for pollutants such as ammonia or heavy metals.

Evaluation

The exercise of CWCB powers to appropriate or acquire waters for maintaining low flow conditions for protection of water quality-water use classifications as heretofore described has never been attempted in Colorado. This may be because the CWCB does not feel that it has the power at this time to make recommendations for such inclusions in the instream flow program. This strategy may be advantageous to wastewater dischargers, particularly municipalities faced with the possibility of expensive ammonia removal requirements to meet NPDES discharge permit requirements, and to interest groups that desire to protect or enhance the water quality-use classification of a particular stream segment to protect the natural environment to a reasonable degree.

The critical political/economic issue to overcome is whether a stream segment should be classified for a particular use under the WQCC's use classification-water quality standards system where the availability of water to satisfy the use is critical. Some interests will argue that it makes little sense to classify for aquatic life a stream segment in the lower part of a drainage where the stream can be legally dried up when all water rights on the stream are exercised, e.g., the Cache la Poudre River between the City of Fort Collins and the City of Greeley (For background on the complex hydrology of this stream segment see Alternative Technical Strategies for

Aiding National Water Quality Goals, Larimer-Weld Regional Council of Governments, 1977.)

Another issue to be considered is whether the CWCB would, in fact, exercise its powers to appropriate or acquire waters for this purpose. The statutes might be interpreted as allowing the CWCB to do so, but the CWCB has taken the position that it lacks authority to request appropriations for this purpose. The more likely approach would be for an interest group, perhaps a group of affected dischargers, to make arrangements for the purchase of senior water rights and bequeath them to the CWCB to hold in trust for the people of Colorado for the purpose of maintaining instream flows through the designated stream segment.

On some stream segments where all water rights are held downstream of any existing wastewater discharges, it is also possible for alternative strategies to be used to accomplish the same purposes as having the CWCB hold water rights. For example, dischargers or the CWCB could contract with senior downstream water rights holders to keep their water instream to their points of diversion below the affected segment and not to enter into any agreement to sell or transfer the water right in any way that would reduce the streamflow past the point of waste discharge.

The desirability of using such a strategy is largely dependent on public sentiment, economics of acquiring water rights, and the costs of waste-water treatment.

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APPENDIX A

MEMORANDUM OF AGREEMENT
BETWEEN
KEYSTONE ARAPAHOE LIMITED PARTNERSHIP,
A COLORADO LIMITED PARTNERSHIP,
AND
THE STATE OF COLORADO,
DEPARTMENT OF NATURAL RESOURCES,
RELATING TO MINIMUM INSTREAM FLOWS
AND MITIGATION MEASURES
ON THE
SNAKE RIVER, SUMMIT COUNTY, COLORADO

WHEREAS the Department of Natural Resources and its agencies ("State") are invested with the duty of conserving and protecting the natural environment of Colorado, and have been granted authority to protect the aquatic environment of Colorado rivers and streams by appropriating rights to minimum instream flows; and

WHEREAS the State and Keystone Arapahoe Limited Partnership, a Colorado Limited Partnership ("Keystone") share a common interest in protecting and preserving the environment of the State, while encouraging the economic vitality of the ski industry; and

WHEREAS the economic vitality of the ski industry is dependent upon the production of artificial snow; and

WHEREAS Keystone currently has rights to divert water for snowmaking purposes at a rate of 7.3 cubic feet per second from the Snake River at a point described on the map appended hereto and incorporated herein by reference, pursuant to decrees entered by the District court, Water Division 5, in Case Nos. 81-CW-416; and

WHEREAS Keystone intends to purchase approximately 25 acre feet of water to augment domestic/commercial uses either from Green Mountain Reservoir (as evidenced by its request for long-term water contracts dated June 21, 1984) or from other sources unrelated to the Green Mountain Reservoir; and

WHEREAS Keystone intends to purchase approximately 1,500 acre feet of water to augment the above-described snowmaking and domestic/commercial diversions either from the Green Mountain Reservoir, obtained pursuant to Keystone's request for long-term water contracts dated June 21, 1984, or from other sources of water unrelated to Green Mountain Reservoir; and

WHEREAS Keystone intends to purchase up to 240 acre feet of water from Green Mountain Reservoir or from other sources unrelated to Green Mountain Reservoir in order to meet its obligations to prevent injury to vested water rights pursuant to a Water User Agreement dated September 18, 1985, between Keystone and the Board of County Commissioners of Summit County, such water to be credited to the use of the City and County of Denver and not to be used to permit diversions in excess of the above-described 1,500 acre feet; and

WHEREAS the State and the Summit County ski areas, including Keystone, have been cooperating with state and federal agencies in the preparation of the environmental impact statement analyzing the potential impacts of Green Mountain water sales, and have thoroughly examined the hydrology, aquatic biology, and ecology of the Snake River; and

WHEREAS the State and Keystone have reached agreement on minimum instream flows, bypass rates, and mitigation measures which will protect and preserve the natural environment while allowing Keystone to make reasonable use of the waters of the Snake River and of water purchased from Green Mountain Reservoir or other sources of water for augmentation and exchange, which sources are unrelated to Green Mountain Reservoir;

NOW THEREFORE, the State and Keystone agree as follows:

(1) MINIMUM INSTREAM FLOWS. An extensive and thorough investigation of the aquatic environment of the Snake River indicates that the following minimum instream flows, with the exceptions and conditions described in subparagraph (1)a. below, will meet the objectives set forth in Colo. Rev. Stat. § 37-92-102(3).

<u>Stream Segment</u>	<u>Period</u>	<u>Quantity</u>
Snake River from confluence with North Fork Snake River at approximately lat. 39 36 18N, long. 105 56 30W to confluence with Dillon Reservoir in SE 1/4 NE 1/4 S21 T5S R77W 6PM, measured at Keystone's point of diversion ²	May 1 - Sep 30 Oct 1 - Apr 30	12.0 cfs 6.0 cfs ¹

¹Subject to the exceptions specified in subparagraph (1)a.

²Keystone's present point of snowmaking diversion is identified in the appended map. For purposes of Keystone's compliance with the Colorado Water Conservation Board's minimum instream flows and with this Agreement (based on Keystone's present point of snowmaking diversion as described in the appended map), a gauge at the measuring point described herein shall be the sole point of measurement of stream flows in the segment identified in paragraph (1).

Keystone and the State agree that such minimum instream flows, with the modifications described below, will preserve to a reasonable degree the natural environment of the Snake River between the confluence of the North Fork of the Snake River and its mouth at Dillon Reservoir, and that Keystone's diversions can be made without material injury to such natural environment.

Keystone shall be bound to the above-referenced minimum instream flows with the following exceptions and conditions:

a. Snowmaking and Domestic/Commercial Diversions. Between October 1 and April 30, Keystone shall have the right to divert water for snowmaking and domestic/commercial uses, under its water rights and through its utilization of exchanges of water from Green Mountain Reservoir or from other sources unrelated to Green Mountain Reservoir, at a rate which could cause the flow of the Snake River, measured at Keystone's present point of snowmaking diversion, to fall below 6 cfs but in no event lower than 2 cfs, PROVIDED that Keystone's right to make such diversions below 6 cfs shall be contingent upon approval of such diversions by the United States Forest Service. Keystone and the State agree that such diversions below 6 cfs are expected to be necessary only under infrequent conditions of low stream flow and/or low snowfall.

b. Fishery Enhancement. Keystone, in an effort to enhance the existing fishery, in consultation with the State, will perform channel modification on the Snake River between its present point of snowmaking diversion and the confluence of Keystone Gulch in the form of random boulder placement to enhance holding habitat for fish, subject to the following conditions:

(i) The cost of such boulder placement shall not exceed \$15,000 to a third party contractor;

(ii) Keystone will not be required to undertake any work which would result in injury to wetland areas, or to attempt to cross privately-held lands if the landowners or tenants are unwilling to consent to access;

(iii) Boulder placement will be limited to stream reaches accessible to the public;

(iv) Keystone's obligations under this subparagraph shall be discharged if it is unable to procure any necessary State or Federal permits; and

(v) The boulder placement program will be completed by October 1987.

c. Stocking. So long as Keystone engages in snowmaking activities as described in the preceding "Whereas" clauses, Keystone will annually stock the Snake River between its present point of snowmaking diversion, described in the attached map, and the mouth of the Snake at Dillon Reservoir with 2,000 pounds of catachable rainbow trout in periodic stocking plants at locations to be selected by the Division of Wildlife ("DOW") in consultation with Keystone. In the event that fish are not commercially available, the DOW, in consultation with Keystone, shall specify an alternative mitigation program at a cost not

to exceed the cost of fish stocking. (Alternatives include, but are not limited to, cash payments to the State or supplemental stocking in a subsequent season when fish become commercially available.)

(2) GENERAL TERMS AND CONDITIONS. In order to effectuate this agreement, the State and Keystone agree as follows:

a. Statutory Minimum Instream Flow Filings. The State, through the Colorado Water Conservtion Board ("CWCBC"), plans to file in 1986 in proceedings under "Senate Bill 97" as amended, Colo. Rev. Stat. § 37-92-102(3) applications for minimum instream flow appropriations in the amounts described in the table in paragraph (1) and the modifications thereof in subparagraph (1)a. above. The CWCBC will request and make reasonable efforts to obtain as part of any such decree the following:

(i) the incorporation of this Agreement into such decree; and

(ii) a finding of fact that such decree will protect the natural environment to a reasonable degree.

b. Support for Minimum Instream Flow Filings. Keystone agrees to support the filing, terms, and conditions described in subparagraph (1)a. above, and the minimum flows specified in paragraph (1) above by providing technical or lay testimony in water court to assist the CWCBC in securing decrees for the minimum instream flows specified in paragraph (1) and further agrees not to file a statement of opposition to such a filing, provided it is consistent with the terms of this Agreement. For filings on the Blue River below Dillon Reservoir, Keystone agrees to provide the State, upon request, information Keystone has obtained from its technical consultants regarding the Blue River.

c. Instream Flows and Mitigation Measures Are Conclusive. The State agrees that the minimum instream flows, bypasses, and enhancement measures described in the table and text above, subject to the stipulations of this Agreement, resolve all questions of required mitigation to the aquatic environment on the Snake River below its confluence with the North Fork of the Snake River related to Keystone's snowmaking and domestic/commercial diversions described herein, and that the State, in future proceedings before other governmental bodies, whether federal, state, or local, will support these flows and measures as being adequate to protect the environment. This support shall consist of testimony, memoranda, or letters to the entity conducting the future proceedings setting forth the State's position that the flows and mitigation measures embodied in this Agreement are adequate to protect the environment.

d. Agreement Applicable to Green Mountain Water Sales, Exchanges and Augmentation Plans Using Green Mountain or Other Water. The State agrees that the terms of this Agreement apply to the exchange of water between Keystone and the United States Bureau of Reclamation involving up to 1,740 acre feet of water stored in Green Mountain Reservoir, as contemplated by Keystone's request for long term water contracts dated June 21, 1984, or to exchanges of water from other sources, used to augment the snowmaking and

domestic/commercial diversions described herein, and any augmentation plans involving such exchanges that would allow Keystone to divert 7.3 cfs at the point of diversion described in the attached map, and to divert 25 acre feet of water for domestic/commercial uses as described herein. The State agrees to support such augmentation plans PROVIDED:

(i) that this Agreement shall not be construed to prohibit the Colorado State Engineer from filing statements of opposition to such augmentation plans on grounds related to impacts on, and administration of, water rights other than those held by the CWCB, to the extent permitted by law, and further PROVIDED;

(ii) that if Keystone opts to use a source of augmentation water other than Green Mountain, this Agreement shall not prevent the State from opposing such an application for a plan of augmentation on grounds related solely to impacts to the stream reaches at or below the source or sources of augmentation water.

e. Enforcement.

(i) The CWCB agrees that, at any time it seeks enforcement of the terms and conditions in paragraph (1)a. of this Agreement, it shall concurrently exercise a call for its water against all junior diverters.

f. Other Minimum Instream Flow Filings. Minimum instream flows promulgated on other stream reaches downstream from the point of snowmaking diversion indicated in the appended map shall not be construed in any way to affect Keystone's right to divert 1,500 acre feet as described herein, PROVIDED that the State reserves the right to object to plans of augmentation involving water sources other than Green Mountain as provided for in subparagraph (2)d.(ii).

g. Conditional Obligations. Except as provided for hereafter, the terms and conditions of this Agreement shall be binding on the parties upon execution of the Agreement. Keystone's obligations under this Agreement are conditioned upon compliance by the State with the terms and conditions herein, and upon the following:

(i) the issuance of a final decree, within three years of the date of execution of this Agreement, in the appropriate water court, of minimum instream flows as provided for in Colo. Rev. Stat. § 37-92-102(3), with terms and conditions substantially similar to, but no more burdensome than those contained in this Agreement; and

(ii) the diversion of water for snowmaking and domestic/commercial purposes as described above, augmented either by (A) water stored in Green Mountain Reservoir purchased under long-term or other contracts with the Bureau of Reclamation and/or its agents, with terms and conditions substantially similar to, but no more burdensome than those contained in this Agreement; or (B) water purchased, exchanged, or augmented from other sources unrelated to Green Mountain Reservoir.

Further, the disapproval by Colorado water court of any augmentation plan or plans necessary to effectuate Keystone's diversions referred to in subparagraph 2(g)(ii), which would have the effect of preventing Keystone from making those diversions, shall discharge Keystone's obligations under this Agreement. In the event the minimum instream flow statute (Colo. Rev. Stat. § 37-92-102(3)) and the CWCB's water rights described in paragraph (1) herein are nullified by legislative, judicial, or administrative action, and Keystone has obtained augmentation water for the above-referenced snowmaking and municipal uses for the above-referenced snowmaking and municipal uses from sources other than federal facilities, under circumstances in which neither federal permits nor contracts are required, Keystone may at its option be discharged from its obligations under this Agreement.

h. Stream Gauge. Keystone agrees to install, maintain, and operate a stream flow gauge necessary to assist in monitoring the terms of this Agreement, and to make gauge records available to the State on a reasonable basis.

i. Monitoring of Mitigation Program. Keystone and the State shall meet within two years of the execution of this Agreement to discuss the effectiveness of the fishery enhancement provisions specified in subparagraphs (1)(c) and (d). In the event either party identifies a deficiency in these provisions, the provisions may be modified by mutual agreement.

This Agreement shall be binding on Keystone Arapahoe Limited Partnership, a Colorado Limited Partnership, its successors and assigns.

AGREED TO this 11 day of March, 1986.

THE DEPARTMENT OF NATURAL
RESOURCES AND ITS AGENCIES

By: SIGNED
David Getches, Director,
Department of Natural Resources

KEYSTONE ARAPAHOE LIMITED
PARTNERSHIP

By: Summit Resort Development
Company, General Partner

SIGNED
Jerry D. Jones,
Vice President

OPPORTUNITIES TO PROTECT INSTREAM FLOWS IN WYOMING

by

Terrence L. Trembly

INTRODUCTION

The State of Wyoming is a land of diversity and contrasts. The land area of Wyoming is over 97,200 square miles, making it the ninth largest State in the Union. Over 46 percent of the land is owned by the Federal Government.

In 1980, Wyoming had a population of 469,557, a dramatic increase of over 41 percent of the 1970 population of 332,416 (U.S. Department of Commerce, Bureau of Census). While the population of Wyoming is sparse compared to many other States, the local and National interests in the water, lands, minerals, and energy resources of Wyoming are ever-present and will continue to be important in the future.

Water in the West is a coveted resource. Increasing interest in maximizing the use of Wyoming water to meet the needs of various water user groups has stemmed from recent mineral and energy development of the 1970's, increased recreation and tourism on public and private lands, recognition of the need to protect the historical agricultural economy, public demands for environmental protection and improvement, and an increasing human population. Water has always played an integral part in the economic development of Wyoming.

These competing interests for water have resulted in the enactment of a number of State and Federal laws that directly or indirectly affect some aspect of water resource management. Such laws have made available many opportunities to maximize the available water resources and to attempt to meet the needs of different water user groups. These laws have also created State administrative agencies with potentially overlapping responsibilities and, in some cases, partially incompatible or conflicting objectives. It is important to understand these agencies and their functions in order to identify opportunities to protect instream flows.

BACKGROUND TO WYOMING OPPORTUNITIES

The remainder of this paper focuses on the opportunities to protect instream flows in Wyoming, under existing State laws and regulations. Several of these State laws and the agencies responsible for administering them place emphasis on preservation of instream flows for the protection and enhancement of fish and other wildlife values. However, instream flows may serve many purposes not directly recognized in a statute, and there may be more than one purpose served by a particular instream flow reservation in any given stream segment, lake, or reservoir. Instream flows may be advantageous for:

- (1) stock watering;
- (2) water based recreation--swimming, rafting, kayaking, boating;
- (3) aesthetics;
- (4) aquatic life protection and production;
- (5) wildlife habitat--waterfowl, large and small game animals;
- (6) aquifer recharge;
- (7) dilution water for effluent discharges from municipal and industrial wastewater sources;
- (8) maintaining water delivery to downstream users; and
- (9) channel maintenance/flushing flows.

An understanding of the State administrative agencies that have responsibilities, directly or indirectly, for water resource management or administration is essential to determining the opportunities and constraints for implementing instream flow strategies in Wyoming. The following is a brief discussion of each State agency that may in some way influence or affect instream flows. The Wyoming Board of Control, the Wyoming Water Development Commission, the Department of Environmental Quality, the Game and Fish Commission, and the Industrial Siting Council are discussed.

WYOMING STATE AGENCIES

Board of Control

The basis of allocation of water rights in the State of Wyoming is the doctrine of "prior appropriation." This common Western water law doctrine is the foundation of water allocation in nearly all of the Western States. Generally, under this doctrine, the first to put water to beneficial use has the first right to use the water. This is often referred to as, "first-in time is first in right," and means that the earliest rights are entitled to water first during time of short supply, while rights junior to the early rights may be supplied by the water that remains.

The Wyoming Constitution states that: "The water of all natural streams, springs, lakes or other collections of still water, within the boundaries of the State, are hereby declared to be the property of the State" (Wyo. Const., Article 8-001).

To administer water as State property, the Wyoming Constitution places the supervision of the waters of the State of Wyoming and their appropriation, distribution, and diversion under the authority of the State Engineer and the Board of Control. The Board of Control is composed of the State Engineer and the superintendents of four geographically defined water divisions throughout the State (Wyo. Const. Article 8-002). The actual administration of water in Wyoming is more fully discussed in a following section of this report.

Game and Fish Commission

The Wyoming Game and Fish Commission is the agency responsible for management of the State's wildlife resources. In carrying out this charge the commission is empowered:

1. To acquire lands and waters . . . by purchase, lease, agreement, gift or devise . . . and to develop, improve, operate and maintain them for (B) . . . management of game animals, protected animals and birds . . . fish, and their restoration, propagation, or protection (Wyoming Statute § 23-1-302 (iii)(B)).¹
2. To sell or exchange land, water, or other property which is no longer of any practical use to the Commission (WS § 23-1-301 (v)).
3. To enter into cooperative agreements with Federal agencies, corporations, associations, individuals and land owners for the development of State Control of Wildlife management and demonstration projects (WS § 23-1-302(xi)).
4. To supervise the protection, management and propagation of fish and all fish culture of a public nature . . . now owned or established in the future by Wyoming (WS § 23-1-302(xii)).

The Game and Fish Commission also is empowered to recommend stream reaches for instream flow designations. In 1984, the Game and Fish Commission was further specifically empowered to contract with the Lower Clear Creek Irrigation District (in consultation with the Wyoming Water Development Commission) for the release of storage water to provide streamflows to maintain, enhance, or create fish habitat on Piney Creek and Clear Creek in Johnson and Sheridan Counties (WS § 23-1-302(c)(g)). Although this project was terminated after two years due to the infeasibility of establishing a fishery in Lower Clear Creek, the legislation may pave the way for similar projects in the future.

Wyoming Water Development Commission

In 1975, the Wyoming Legislature created the Wyoming Water Development Commission to "foster, promote and encourage the optimal development of the state's human, industrial, mineral, agricultural water and recreational resources." To accomplish this objective, the Wyoming Water Development Commission was created in 1979 and, through its administrator, is empowered to carry out planning, financing, construction, acquisition and operation of projects and facilities for the conservation, storage, distribution and use of water necessary to develop and preserve Wyoming's water and related land resources. The program encourages multidisciplinary projects including preservation and development of fish and wildlife resources, and making waters of the State available for municipal, domestic, agricultural, and recreational purposes (WS § 41-2-112).

A more detailed discussion of the role of the Water Development Commission is included in a later section of this paper.

¹Hereafter all references to Wyoming Statutes shall mean Wyoming Statutes as compiled in 1977 and the 1986 Cumulative Supplement, as applicable, and will be abbreviated as "WS."

Department of Environmental Quality--Water Quality

The Wyoming Department of Environmental Quality (DEQ) is the agency responsible for the protection of air, land, and water from pollution in the State (WS § 35-11-102). In carrying out its responsibilities as the State's water pollution control agency, as authorized by the Wyoming Environmental Quality Act and the Federal Water Pollution Control Act (33 U.S.C. § 1251 et. seq.), the legislature has empowered DEQ to adopt rules, regulations, and standards for the protection of water quality for various water use categories (WS § 35-11-302). Objectives of the Wyoming Water Pollution Control Program are designed to maintain water quality commensurate with water uses including: agriculture, fish and wildlife, industry, public water supply, recreation, and scenic value (Wyoming Water Quality Rules and Regulations Chapter 1 § 3). To implement these protection objectives, Wyoming has adopted four classes of surface water use classifications (Classes I-IV). The classes are based on the assumption that for most water quality parameters, protection and propagation of fish requires the highest water quality. These classes are discussed in more detail in another section of this paper.

Wyoming Industrial Development and Siting Council

Any industrial facility with an estimated construction cost of at least fifty million dollars (1975 dollars, inflated quarterly); or any energy-generating and conversion plant that is designed to produce 1 million cubic feet of synthetic gas per day or is capable of producing fifteen thousand barrels or more of liquid hydrocarbon products per day by any extraction process involving the direct or indirect conversion of coal, oil shale, or tar sands; or any facility that is capable of producing or enriching uranium minerals in quantities exceeding five hundred pounds of U 308 (yellow cake) is required to have a permit issued by the Wyoming Industrial and Development Siting Council (Siting Council) prior to construction (WS § 35-12-101, 102, 106).

Any facility, with respect to such permit, must be constructed, operated, and maintained in conformity with the permit, and with any terms, conditions and modifications contained in the permit.

In determining whether to grant a permit, and in placing any conditions on the permit, the Siting Council gives careful consideration to the environmental, social, and economic stresses that may result from the proposed facility or expansion of an existing facility. The Siting Council is required to give special attention to the water needs of the facility and may consult with State agencies, including the Wyoming Game and Fish Department, in determining the effects on fish and wildlife from the proposed project. The Siting Council may place conditions on the construction of a facility, which will mitigate the adverse effects of the construction and operation of the facility.

PRIOR APPROPRIATION WATER RIGHTS--GENERAL

Water rights in the State of Wyoming are administered under the Prior Appropriation Doctrine. Under this doctrine, the first person to put the water to beneficial use has the first right. The Prior Appropriation Doctrine

is, in various forms, the basis for determining the priority of water rights in most Western States.

The basis for applying the doctrine in Wyoming is the Wyoming Constitution. The Wyoming Constitution provides that "the water of all natural streams, springs, lakes, or other collections of still water, within the boundaries of the State, are hereby declared to be the property of the State (Wyo. Const. Article 8-001). The State regulates the State's waters through the office of the State Engineer, who oversees and supervises the distribution of water in the State.

To facilitate the administration of the State's waters, the State has been divided into four water divisions. Water Division No. 1 includes the North and South Platte River drainages and the Little Snake and Niobrara River drainages. Water Division No. 2 includes all drainages north of the Niobrara and North Platte drainages and east of the Big Horn Mountains. Water Division No. 3 includes the Big Horn and Clark's Fork River drainages. Water Division No. 4 includes the Green, Bear, and Snake River drainages. Each water division is administered by a superintendent, with the assistance of water commissioners within the various drainages. The four superintendents and the State Engineer compose the State Board of Control. The board meets quarterly to adjudicate or finalize water rights and to consider other matters pertaining to water rights, such as changes in points of diversion or other amendments or corrections of water rights (WS § 41-4-201 et. seq.).

To initially acquire a water right, a water user must secure a permit from the State Engineer. Water rights cannot be obtained by historic use or adverse possession. Acquisition of a water right is initiated by applying for a permit and following certain administrative procedures to obtain a valid water right.

Generally, the elements of perfecting a water right by appropriation in Wyoming are initiation by the appropriator or his agent in the manner prescribed by law; pursuing the construction of works in connection with it; if necessary, with reasonable diligence; and applying the water to beneficial use within a reasonable time [State v. Laramie Rivers Co. 136 P.2d 487, 59 Wyo. 9 (1943)].

Described even more generally for analytical purposes, the elements of an appropriation water right in Wyoming and other States in the West are said to typically consist of the following, manifested by physical acts:

- (1) the intent to appropriate water,
- (2) notice to others of the appropriation,
- (3) compliance with State prescribed formalities,
- (4) a diversion of water, and
- (5) application of the water to a beneficial use.

Historically, the issue of whether an actual physical diversion of water from a stream course is a necessary element to appropriate water was an open legal question in Wyoming. However, the new instream flow law (Enrolled Act No. 53, 1986) clarifies that an actual physical diversion of water is not

needed, at least not for an instream flow appropriation by the State of Wyoming (Stone 1986). Whether a physical diversion is required for appropriation by a private entity, however, remains an open question. A recent Colorado case, Colorado River Water Conservation District v. Colorado Water Conservation Board [596 P.2d 570, 197 Colo. 469 (1979)], tested and affirmed the constitutionality of Colorado's instream flow law, and provides some background on this issue. Under Wyoming's modern permit system, the first three elements of appropriation are satisfied automatically. Application for a permit shows intent to appropriate, granting of the permit provides notice to others, and compliance with State formalities is actually the permitting procedure. The first three elements pose no problems to acquiring a right by appropriation to protect instream flows. The effects of compliance with element (4), a diversion of water, and element (5), application of the water to beneficial use, are more speculative with respect to an instream flow appropriation by a private party.

The following sections of this report identify various means of protecting existing stream flows and acquiring instream flows through both the legislative process and administrative mechanisms available under Wyoming law. In view of the recent nature of Wyoming instream protection strategies, the reader is encouraged to read these opportunities in their broadest context and seek additional detail on the approaches from the various State administrative agencies that may be involved in advocating or administering instream flows, or from legal counsel familiar with these opportunities.

STATE APPROPRIATION AND ACQUISITION OF INSTREAM FLOWS

Opportunity

The simplest and most effective means of accommodating instream flow protection is the enactment of a statutory framework that provides for the appropriation of instream flows by a State agency, operating within the State appropriation permit system.

On March 18, 1986, the Governor of Wyoming signed into law Enrolled Act No. 53 (WS § 41-3-1001 to 1014), an Act recognizing appropriation of Wyoming waters for instream flow purposes. Since the act was passed during the writing of this report, there is no operating history of the law, and its effectiveness as an opportunity to provide for the appropriation of instream flows cannot be evaluated.

Background

Until the passage of Enrolled Act No. 53, there were no express provisions in the Wyoming statutes for the appropriation of State waters for instream flow purposes. For this reason, some history on the enactment of the new law is appropriate. Instream flow legislation has been the subject of considerable attention in the Wyoming Legislature in recent years and has been a sharply focused area of public debate in the past two years, because the legislative process had not yielded concrete results.

In 1973, the Wyoming Legislature attempted to recognize the importance of fisheries, wildlife, recreation, and aesthetics in the State water laws by authorizing a "stream preservation feasibility study to determine methods and criteria for preserving the scenic and recreational quality of Wyoming rivers and streams" (WS § 41-2-101, 103).

The 1973 law created a 14-member study committee, consisting of representatives from 8 State commissions and agencies, as well as 4 legislators and 2 representatives from the public at large. The study committee was charged in part with the following duties:

- (a) The study committee shall:
 - (i) Make preliminary surveys to define the character, quality, recreational, scenic, historical, aesthetic, fish and wildlife potential, and any other values to be considered in preserving streams for public use and benefit;
 - (ii) Evaluate and describe the potential of any streams which might be identified as meeting the criteria of the preservation system;
 - (iii) Prepare a report on the proposed preservation system for presentation to the governor on or before October 1, 1974, and also make the report available to the public;
 - (iv) Prepare and submit to the legislature any recommendations for a stream preservation system on or before January 1, 1975.

This study effort resulted in a report entitled "Final Report of the Stream Preservation Feasibility Study Committee" (October 1974). The report of the committee acknowledged the fact that Wyoming was changing from a sparsely populated agricultural State to a more densely populated State whose economic future would be largely shaped by energy development and industry, and that continued preservation/conservation of Wyoming's rivers and streams would be dependent upon a combination of State laws to protect stream channels, designation of streams and rivers in a formal protection system, and recognition of instream flows as a beneficial use of water under Wyoming law. Included in the committee's recommendations were two comprehensive legislative bills to accomplish these perceived needs. However, no legislative actions were taken to preserve instream flows in the next nine years.

During the next several years statutory proposals to directly authorize the appropriation of instream flows were introduced to the Wyoming Legislature; however, no general laws were passed on the appropriation of instream flows on a statewide basis.

The failure of the Wyoming Legislature to enact general instream flow enabling legislation led to a very aggressive grass-roots public interest campaign to enact a law providing for instream flows. A petition sponsored by local conservation groups, which contained the prerequisite number of signatures of qualified registered voters from all counties in Wyoming, became

the first public initiative on any issue ever to qualify for a Wyoming general election ballot. The issue was to have been voted on in a general election in November 1986. The legislature responded in March of 1986 by passing the instream flow legislation, Enrolled Action No. 53.

Additionally, in an attempt to address instream flow needs for water development projects on a case-by-case basis, the Wyoming Legislature has in the last several years enacted project-specific statutes that in some way incorporate instream flows into new water project design and operation. These are discussed in some detail in later sections of this report.

The full text of Enrolled Act No. 53 is provided as an appendix to this report (Appendix B). Following is a brief synopsis of the essential elements of the law.

General provisions. The statute provides that unappropriated water flowing in any stream or drainage may be appropriated for instream flows to maintain or improve existing fisheries and that these instream flows may be declared a beneficial use of water on a case-by-case basis by the State Engineer, if the use does not impair or diminish the rights of any other appropriator in Wyoming (WS § 41-3-1001(b)).

Storage of water in any drainage in Wyoming for the purpose of providing a recreational pool or the release of water for instream flows to establish or maintain new or existing fisheries is recognized as a beneficial use of water subject to normal stream loss (WS § 41-3-1001(a)).

Waters used for the purpose of providing instream flows for fisheries shall be the minimum flow necessary to establish, improve, or maintain fisheries (WS § 41-3-1001(c) and (d)).

The establishment of stream flows will be determined on a segment by segment basis for which the water right is granted and the determination of the minimum amount of water required for the instream flow purpose shall be defined specifically, and once the waters allowed for the instream flow have passed through the specific stream segment all rights to the water are relinquished and the water will then become available for reappropriation, diversion, and beneficial uses (WS § 41-3-1002(a) and (b)).

Storage water appropriated for the purpose of providing instream flows in specified segments as existing water rights that are converted to instream flows by the State of Wyoming under provisions of Wyo. Stat. § 41-3-1002(c) may later be sold, transferred, or otherwise conveyed to any other purpose. In such cases, a public hearing must be held by the Board of Control prior to such disposition (WS § 41-3-1002(c)).

Additionally, instream flows that may be held in certain geographic areas of the State as set forth in the statute are subject to diversion and appropriation by any person for other beneficial uses. Specifically, such places include, within one mile upstream from any point where the instream flows cross the Wyoming State line and within one mile upstream from any point where the instream flows enter Big Horn Lake, Flaming Gorge Reservoir, and Palisades

Reservoir (WS § 41-3-1002(d)(i) through (v)). This protects the use of waters allocated to the State of Wyoming by interstate compacts.

Game and Fish Commission responsibilities. The Game and Fish Commission is given a number of responsibilities in implementing the instream flow law. The Game and Fish Commission may report to the Water Development Commission on an annual basis those specific stream segments that the Game and Fish Commission considers to have the most critical need for instream flows. Included in the segment description is an identification of the end-points of the stream segment where the need for the instream flow would begin and end, the time of year when the flows are most critical, and a detailed description of the minimum amount of water necessary to provide adequate instream flows (WS § 41-3-1003(b)). The Game and Fish Commission is required to construct any water measuring devices that the State Engineer considers necessary for the administration of an instream flow right.

In June 1986, the Game and Fish Commission sponsored an instream flow workshop. The purpose of this workshop was to develop guidelines for implementation of the new instream flow law. In so doing, the Commission noted that it had employed instream flow biologists since 1979 and had conducted instream flow studies on more than 100 streams. Therefore, much of the groundwork was in place for the preliminary filings.

The main points of the guidelines were that the Commission would proceed slowly with proposing the first few filings in order to become familiar with the process and ensure the success of these first filings; incremental analysis would be used in these filings; water rights and hydrology would be analyzed before proposing streams for filing; the Commission would coordinate with other agencies and area biologists before filings; informational public meetings would be held by the Commission; and more instream flow studies would be conducted in 1987.

The guidelines also specified the Game and Fish Commission's filing priorities, based on the Wyoming Stream Fishery Classification System. This is discussed in more detail in a later section of this report.

Water Development Division of the Economic Development and Stabilization Board responsibilities. The Water Development Division of the Economic Development and Stabilization Board (EDSB) is the sole State agency responsible for filing applications in the name of the State of Wyoming for appropriation for instream flows. Applications are to be made for those stream segments recommended by the Game and Fish Commission (WS § 41-3-1003(c)).

Water Development Commission responsibilities. As previously mentioned, pursuant to WS § 41-3-1003(c) the Water Development Division of EDSB is responsible for filing permits to appropriate water for instream flows for those stream segments recommended by the Game and Fish Commission. After filing of such applications, the Wyoming Water Development Commission determines the feasibility of providing instream flows for the recommended segments of streams from unappropriated direct flows or from existing or new storage facilities. The feasibility study is to include a determination of the water necessary to maintain or improve existing fisheries or, if

appropriate, provide for new fisheries (WS § 41-3-1004(a)). The feasibility study is also to include the availability of possible storage sites, the estimated cost of providing storage, as well as any other findings or conclusions as the Wyoming Water Development Commission deems appropriate (WS § 41-3-1004 (a)).

A report of the Water Development Commission's findings is then made to the Game and Fish Commission and the legislature.

Certain elements of the Water Development Commission's authority for feasibility studies and reporting may be delegated to the of Water Development Division of the Economic Development and Stabilization Board (WS § 41-3-1004 (c)).

State Engineer responsibilities. The State Engineer processes State of Wyoming application for permits or changes and transfers of use, just as it would for any other application, subject to two additional requirements. The State Engineer may not grant any permits to appropriate or store water for instream flows prior to completion of a feasibility study as required in WS § 41-3-1004, or prior to a public hearing as required in WS § 41-3-1006 (WS § 41-3-1003). Applications requesting changes and transfers of use can only be acted on by the Board of Control.

Acquisition of existing water rights for instream flow purposes. The statutes provide that the State of Wyoming may acquire any existing water rights in streams of Wyoming by transfer or gift for the purpose of providing instream flows, subject to procedures in Wyoming law as set forth in WS § 41-3-1004. Any rights acquired and changed are to be held in the name of the State and administered by the State Engineer and the Board of Control. The Board and the State Engineer are to administer the waters to ensure that the instream flows do not interfere with existing water rights or impair the value of existing rights or selected property (WS § 41-3-1007(a)).

For purposes of changes in water rights, the Wyoming Game and Fish Commission is to act as the petitioner for a change (WS § 41-3-1007(a)). Any rights that are acquired and changed are limited to a specified stream segment as determined by the Board of Control, and the priority date of the right will remain intact (WS § 1-3-1007(b)).

Appropriation of unappropriated waters for direct instream flows. Applications for a permit to appropriate direct flow waters for instream flows may be made for specified stream segments, subject to certain limitations as to the minimum amount of water required and the instream flow purpose, as previously discussed under General Provisions of the statute contained in WS § 41-3-1002 (WS § 43-1-1006(a)).

Before submission of an application for an instream flow appropriation the Game and Fish Commission is required to conduct relevant studies on the proposal (WS § 41-3-1006(c)).

The applicant for an instream flow is required to publish a notice of the application and hearing in a newspaper of general circulation in the area near

the proposed site of the appropriation for two weeks prior to the hearing. The notice must briefly describe the application (WS § 41-3-1006(d)). In addition, the Game and Fish Commission will conduct public meetings prior to the hearings so that instream flow objectives can be explained to the public.

Prior to granting or denying the application, the State Engineer is required to conduct any studies deemed necessary to evaluate the proposed instream flow and the amount of water necessary to maintain existing fisheries, and to hold a public hearing on the application. At the hearing, the Game and Fish Commission shall present its studies, and any other interested parties may present their views on the proposed instream flow appropriation (WS § 41-3-1006(e)).

The State Engineer may place conditions on the permit, if granted, that require a review of the continuation of the permit as an instream flow appropriation (WS § 41-3-1006(e)).

Instream flow appropriations cannot be made from waters included as a portion of the consumptive share of water allocated to the State of Wyoming under any interstate compact or United States Supreme Court decree, and the amount of water appropriated for instream flows shall not be permitted to exceed the amount of water that is allocated under interstate compact or Supreme Court decree (WS § 41-3-1006(g) and (h)).

Calls for regulation of streams. The Game and Fish Commission is required to report to the Water Development Division of the Economic Development and Stabilization Board the need to regulate a stream to protect the priority of an instream flow right. The report is to contain information establishing present or future damage to the fishery in the event that the stream is not regulated. The water division is required to forward the report to the State Engineer who will regulate the stream only if present or future injury to the fishery has been shown, if the call for regulation is not a futile call, or if the call will not impair senior water rights (WS § 41-3-1008).

Additional miscellaneous provisions. The act does not grant powers of condemnation to the Game and Fish Department for acquisition of existing water rights for the purpose of providing instream flows, nor is it to be construed to impair or diminish the value of an existing water right (WS § 41-3-1009).

If any other appropriator in a drainage where waters are allowed for instream flow proves in district court that his right to use appropriated waters has been impaired or diminished by the instream flow, the costs of litigation, including reasonable attorney fees, shall be borne by the holder of the instream flow right, the State of Wyoming (WS § 41-3-1010).

No right to water for purposes of providing instream flows may be acquired through the process of abandonment nor shall any beneficiary of instream flow rights granted under the act be qualified to file for abandonment (WS § 41-3-1011). Nothing in the act is to be construed to grant the right to access through or upon private property to reach streams where instream flows are maintained, nor does the act operate to grant any right of eminent domain to acquire the rights of access through private property (WS § 41-3-1012).

Example

The State Engineer has received two applications for permits to appropriate instream flows, one involving the canyon of Clark's Fork (a tributary of the Yellowstone River) and one for instream flows in the upstream canyon reach of the Middle Fork of the Powder River. No action has been taken on either application, pending the submission of all required reports and material (George L. Christopoulos, State Engineer; pers. comm., March 3, 1987).

Evaluation

The enactment of instream flow legislation in Wyoming is a significant step forward in recognizing the appropriation of waters for instream flows in Wyoming. The extent to which the new law is administered by the various State agencies will determine how successful this new program will be. Several general observations about the new law are in order.

New appropriations of water under the law will carry a water right priority that is junior to existing water rights. Thus, on streams that are overappropriated, or where senior water rights exist above segments that have junior status instream flows, the instream flows may not be able to protect the purpose for which the instream flows have been made when the senior rights are in priority. The solution in this situation may be the release of storage water to produce the desired instream flow at times when the senior water right is being exercised. This may occur during the irrigation season, whereas during the winter months, the natural flow can provide for the instream flow requirements. It is not known whether such releases would be exercised under the State's program, or whether compliance with a request might be voluntary on the part of a downstream holder of a senior water right.

Acquisition of existing water rights under the provisions of the law has certain advantages over new appropriations because the acquired right will carry over the earlier priority date of the right when it is changed or transferred to an instream flow. The major obstacle in implementing the acquisition of instream flows is an available source of funds for procuring these existing rights. Possible sources of funding could include general appropriations from the legislature, private gifts or bequests of water rights from private parties, or public agencies, including the United States government. A long-term benefit of the State program for holders of existing water rights could be the creation of a new market for water rights.

Since there is no operating history under the new law, its effectiveness cannot be evaluated. Any legal analysis of the law at this time would be premature and speculative.

As with any new program of this type, several years of working with the statute, identifying its strong points and shortcomings, will be necessary to refine the program to meet the needs of Wyoming. Additionally, agency guidelines will add detail to the general concepts set forth in the statutes.

DISCRETIONARY WATER PERMIT AUTHORITY

Opportunity

Even in light of the new legislation for appropriation of instream flows by the State of Wyoming, as set forth in Enrolled Act No. 53, the existing statutory framework allows the opportunity to appropriate waters for instream flow purposes, thereby avoiding the "actual" physical diversion requirement or that an appropriator assert physical control over waters to perfect a water right. For example, Wyoming, like several other Western States, provides that "in the administration of water rights on any stream and in the consideration of any application for permits, the State Engineer may require that water be provided to meet reasonable demands for instream stock use" (WS § 41-3-306).¹ Additionally, the new instream flow law recognizes the release of water for fisheries as a beneficial use of water (WS § 41-3-1001(a)).

The State Engineer also has some administrative discretion in approving or rejecting an application for a permit for a water right to properly guard the "public interest" (WS § 41-4-503; 41-4-505(a)). The public interest provision can be used defensively to protect instream flows. Used in this manner, the administrative discretion of the State Engineer under the "public interest" provisions may be applied to deny an application that would reduce or eliminate instream flows necessary to protect fisheries, where the applicant is proposing to change a point of diversion, transfer a water right, or apply for previously unappropriated waters. Such administrative discretion can be applied, independent of the new instream flow law.

Background

The "public interest" doctrine in administration of water rights by the State Engineer has had limited use in Wyoming. No administrative guidelines have been developed to assist in a determination of when the public interest has been affected to a point where the State Engineer might deny, condition, or approve an application in the "public interest." Also, there is no Wyoming case law testing the strength of the doctrine as it might be applied to a particular situation (G. Christopulos, Wyoming State Engineer; pers. comm., August 28, 1985).

Traditionally, Western States have exercised administrative discretion under the public interest to deny appropriations to protect water project users from economically unsound projects or to prevent smaller projects from interfering with larger ones. Historically, exercise of the power to deny or condition appropriations on the ground that they are inconsistent with the "public interest" has been used sparingly. Today, the definition of public interest is expanding in many States, in two ways: (1) environmental values

¹Note that according to the State Engineer, "We believe it would be unconstitutional to administer existing water rights under this statute without the expressed consent to providing the instream stock use by all appropriators" (George L. Christopulos, State Engineer, pers. comm., March 3, 1987).

have been added to the list of relevant criteria in considering appropriation applications; and (2) State environmental policy acts have been held applicable to water appropriation applications, resulting in a broadening of the water agency (State Engineer's) jurisdiction for taking "public interest" considerations into account.

It would appear that there is considerable latitude under developing legal doctrines in the "public interest" provision whereby the Wyoming State Engineer could deny or condition appropriations so as to protect instream flows, independent of the new instream flow law.

Example

As of the writing of this report, the Wyoming State Engineer has not been presented with an application for a permit that he has had to deny or condition to protect instream flows. It is anticipated that such instances will occur in the implementation of the new instream flow legislation. As previously noted, however, two applications for instream flow appropriations have been received in the State Engineer's office, and will be acted on when all required reports are submitted.

Evaluation

The Wyoming State Engineer believes that each application for a water right or a modification to an existing water right, such as a change in use or a change in point of diversion, must be examined carefully to determine its impacts to other water rights and, under the "public interest" doctrine, the application must be closely evaluated to see if application will injure or enhance instream values (G. Christopoulos, Wyoming State Engineer; pers. comm., August 28, 1985).

Aside from the newly enacted instream flow law, no formal administrative mechanisms exist to vest protection of instream values on particular stream segments. The public interest strategy is subject to considerable administrative discretion and does not provide predictable results in stream segments that are susceptible to numerous changes in points of diversions, use, or on streams that have not been fully appropriated. It is, in part, the responsibility of the Wyoming Game and Fish Commission to come forward in the water rights application process with information to assist the State Engineer in determining whether the public interest is protected by granting or conditioning a water right that protects or injures various instream values (M. Stone, Ecological Services Manager, Wyoming Game and Fish Dept.; pers. comm., August 28, 1985).

INCORPORATION OF INSTREAM FLOWS IN WATER PROJECT DESIGN AND OPERATION

Opportunity

Instream flow considerations may be included in the design and operation of water resource storage projects.

Background

Up to the enactment of the new Wyoming instream flow law in March of 1986 (WS § 41-3-1001 through 1013), the Wyoming Legislature has attempted to include some recognition of instream flows and fishery habitat maintenance and enhancement in individual water project authorizations. This has been accomplished largely by formal study of proposed water projects by the Wyoming Water Development Commission, which today includes fish and wildlife management considerations in project evaluation (see section on Wyoming Water Development Program for a more elaborate discussion).

Example

In the 1985 legislative session, the Wyoming Legislature authorized the Deer Creek Reservoir Project (1985 Wyo. Gen. Sess. Laws Chapter 89). In the bill authorizing the project, and providing for an appropriation for its construction, the operation of the project is also specified.

The primary purpose of the Deer Creek Reservoir Project is "to supply municipal water to Wyoming communities in the North Platte River drainage below Alcova Reservoir that demonstrate a need for water and wish to participate in the project; however the use of stored water is not limited to municipal use" (Section 4(a)).

The act further specifies that after the initial filling of the reservoir, the project shall be operated in such a manner as to ensure compliance with a schedule of monthly minimum releases, ". . . unless making these releases will affect the projects capability to meet municipal demands" (Section 4(b)). These monthly minimum releases range between 10-15 cubic feet per second (cfs), with 15 cfs being required from April through September.

The statute does not require that streamflows, once released, remain in the stream below the dam for any designated distance, and section 4(d) affirms the administration of Deer Creek pursuant to State law.

In addition to the new Deer Creek project, the Wyoming Legislature, in 1985, also authorized the enlargement of the Sulphur Creek Reservoir to accommodate an additional 12,500 acre-feet above its present size of 19,774 acre-feet (1985 Wyo. Sess. Laws Ch. 101). The project is essentially a municipal-industrial water supply reservoir for the City of Evanston. The management plan for operation of the reservoir specifies that the city shall not divert water into the Sulphur Creek supply system when the flow of Bear Creek is less than 35 cfs between November 1 and March 31 of each year, and that the city will not divert water into Bear Canal when the flow of the Bear River is less than 100 cfs between April 1 and October 31 of each year.

The statute further requires that after the initial filling of the enlarged reservoir, the project will be operated so as to provide minimum releases of 9 cfs or reservoir inflow, whichever is less, from the enlarged dam, unless doing so would affect the project's capability to meet municipal demands.

Additionally, any releases of water from the dam may not be sold, leased, or assigned by the city within one and one-half miles downstream. Also, a minimum pool level of the enlarged reservoir is established such that a minimum of 4,180 acre feet is maintained in the reservoir except as under certain conditions for municipal demands.

An older project, authorized by the 1981 Wyoming Legislature, provides for the rehabilitation and reconstruction of Park Reservoir in Sheridan County (WS § 41-2-501 through 507). The project authorization provides for a minimum pool level for fisheries and flushing flows on the East fork of Big Goose Creek; it also provides for minimum streamflows to the East fork of Big Goose Creek when inflow into the reservoir drops below 45 cfs (WS § 41-2-504). Additionally, the authorization provides for the development of a management plan that includes "agriculture, municipal, recreational, and environmental uses" (WS § 41-2-502 and 505).

Evaluation

Prior to March 1986, the State of Wyoming did not have a program to preserve instream flows through direct appropriations by any State agency. Several examples have been found in which the State legislature has attempted to recognize a minimum streamflow as part of the design and operation of a State funded water project. The extent to which such strategies will be successful is unknown, since two of these projects (Deer Creek, Sulphur Creek) have not yet been constructed, and there is no significant operating history of the Park Reservoir project. One major concern with the anticipated minimum streamflow is that there is apparently no legal requirement that the water remain in the stream channel of Deer Creek once the water has been released from Deer Creek Reservoir.

PURCHASE AND LEASE OF WATER RIGHTS AT LEGISLATURE'S DIRECTION

Opportunity

The Wyoming Game and Fish Commission is empowered to enter into contractual arrangements that may include the purchase or lease of waters for reservation of instream flows under certain circumstances. The statute explicitly empowers the Commission to acquire waters by purchase or lease (WS § 23-1-302(iii)(B)). This authority may be construed to encompass the purchase of both direct flow rights and reservoir storage. Such rights must be used by the Game and Fish Commission for the purposes encompassed in the existing water rights, such as irrigation or domestic use. However, under the new provisions of WS 41-3-1007, the Commission may petition for a change in use to instream flow.

Background

The Game and Fish Commission currently does not have any general statutory powers for the purchase or lease of direct flow rights or reservoir storage to protect instream flows. Under the new instream flow legislation passed in March 1986, the Game and Fish Commission may recommend stream segments and

other water bodies needing instream flow protection. New flows may be acquired through appropriation or as a gift or transfer, provided the change in use of the acquired right is in accordance with WS 41-3-1004. In the past, the Commission has been authorized to develop lease arrangements on a project basis under direction of specific legislation enacted by the Wyoming Legislature, through cooperation with the Wyoming Farm Loan Board. Costs of storage projects may also be shared with other water users, paid by funds from the water development account, or covered in other ways determined by the State legislature (WS § 41-3-1005).

Example

Piney Creek/Clear Creek storage water for fish habitat. Pursuant to 1985 amendments to WS § 11-34-302 and § 23-1-302, the Wyoming Game and Fish Commission may, after consultation with the Wyoming Water Development Commission, enter into agreements with the Lower Clear Creek Irrigation District for the release of storage waters "to provide stream flows to maintain, enhance or create fish habitat on Piney Creek and Clear Creek in Johnson and Sheridan Counties" (WS § 23-1-302(c); 1985 Wyo. Sess. Laws Ch. 173).

Under these provisions, the Wyoming Game and Fish Commission is authorized to contract with the Lower Clear Creek Irrigation District (LCCID) for release of up to 10,000 acre-feet of stored water for instream flow purposes, if the Commission specifically finds that it is desirable to maintain, enhance, or create fish habitat in the identified stream segment, that the implants will be successful, and that the cost of the storage water is commensurate with the benefits the State will receive. The legislation provided for payment of up to \$50,000 per year, for up to 5 years, from the Wyoming Water Development account to LCCID.

Further, sufficient access must be provided so that the public may benefit from improved fishing. The agreement was approached on a test basis and was not considered permanent. Some critics of the program perceived the arrangement as a financial subsidy to the District to assist in defraying project costs that might otherwise result in financial stress to the District. Flooding during 1985 prevented the fishing potential from being evaluated, but during 1986 conditions for the successful establishment of a fishery were as good as could be expected for lower Clear Creek. Based on analysis of the 1986 results, the Game and Fish Commission recommended termination of the project, and this was done.

Evaluation

The development of contractual arrangements for the lease or purchase of water rights (direct flow or storage rights) by the Wyoming Game and Fish Commission has not been aggressively pursued for three major reasons: (1) uncertainty of legal authority for in situ (in place) appropriation of instream flows and perceived lack of agency authority, (2) enactment of new instream flow legislation, and (3) lack of funds for purchase or lease of water rights.

Previous to the enactment of the new instream flow legislation, it was unsettled whether an element of appropriation in Wyoming required "actual" diversion of water and whether instream flows were a beneficial use of water. During that time, the Wyoming Game and Fish Commission had been reluctant to explore or exercise its powers to lease or purchase water rights, in the absence of specific enabling legislation.

Certainly, the lack of funding to lease or purchase direct flow or storage rights is an impediment to implementation of any water acquisition strategy. While funding for purchase or lease of water rights is not at present budgeted for this purpose, funds could be reallocated from other game and fish budget programs, if desired. Additionally, the Commission is empowered to acquire waters by gift or devise (WS § 23-1-302(iii)(B)). The Commission also regularly accepts monetary donations, and such donations may be earmarked for a specific program or project.

It appears that under these broad powers the Commission could establish a strategy for instream flow acquisition through lease or purchase of water, with funding from Game and Fish Department revenues, private donations of water rights, or private funding. The Game and Fish Department has established a statewide program for acquiring instream flows. As the program is refined, it may include strategies for financing.

PRIORITIZATION/CATEGORIZATION OF STREAM SEGMENTS FOR INSTREAM FLOW PROTECTION

Opportunity

The categorization of stream segments as to their importance for fish production, recreation, or other use potential is not in and of itself a strategy for instream flow protection. Such categorization or prioritization, however, helps to identify those stream segments, lakes, and reservoirs that may be deserving of some level of more deliberate resource management by State and Federal agencies.

The prioritization can be used to direct limited funds to protect and manage high priority water bodies and to alert State and Federal agencies and the public to these uses when various activities or projects that may affect them are being considered.

Background

Two categorization or prioritization systems that should be factored into any instream flow protection strategy are the Wyoming Game and Fish Commission stream fisheries classification system and the Wyoming Department of Environmental Quality water use classification for water quality. A brief description of each system follows.

Stream fishery classification system. The Wyoming Game and Fish Commission, in carrying out its statutory charge as the State agency generally responsible for management, restoration, propagation, and protection of fish and wildlife, has initiated a stream fishery classification system. In 1961,

the Commission published its first Wyoming Stream Fishery Classification Map. The purpose of the map, and the Game and Fish Commission program from which it is derived, is to present in a comprehensive manner the extent, location, and relative value of the State's major stream fisheries. To accomplish this purpose, each stream is rated according to its relative productivity, aesthetic quality, access to users, and actual fisherman use. The rating system classifies streams into one of five classes. Since 1961, the map, classification system, and supporting inventory data base have been substantially expanded, updated, and computerized. Lakes and reservoirs also have been included. The most recent map update was in 1977. The most recent inventory update was conducted in 1985. The classification system recognizes the following classes:

- Class 1 - Premium Trout Waters - fisheries of National importance
- Class 2 - Very Good Trout Waters - fisheries of statewide importance
- Class 3 - Important Trout Waters - fisheries of regional importance
- Class 4 - Low Production Waters - fisheries frequently of local importance but generally incapable of sustaining substantial fishing pressure.
- Class 5 - Very Low Production Waters - Often incapable of sustaining a fishery.

As of 1985, there were approximately 16,000 miles of classified streams. The number of miles of stream in each classification are contained in Table 1.

The classification system and map are periodically updated and provide an excellent source of information on important fishery streams, lakes, and reservoirs. The Wyoming Game and Fish Commission uses the stream fishery classification system in determining priorities for instream flow studies and filings. Class 1 and 2 streams with public access, streams where dewatering threats exist, and streams where flow agreements are in place are the highest priorities. In some cases, it may be more efficient to file for an instream flow on a Class 3 stream in conjunction with a Class 1 or Class 2 stream, rather than exhaust all of the higher classes first. These priorities were included as a part of the implementation guidelines developed by the Commission, and presented at a workshop in June 1986.

Water quality classification system. Pursuant to Section 303 of the Federal Clean Water Act (33 U.S.C. § 1313) and Section 35-11-102 of the Wyoming Environmental Quality Act, waters of the State may be classified for their various uses, and water quality standards may be promulgated to protect these uses (WS § 35-11-3). Objectives of the Wyoming Water Pollution Control program are to maintain water quality commensurate with the classified use. Possible uses that may be considered in assigning a use classification are: agriculture, fish and wildlife, industry, public water supply, recreation, and scenic value.

Table 1. Mile Classified Streams Wyoming Stream Classification System.

Classification		Miles	Percent Total
Class I	Premium Trout Waters	420.0	2.7
Class II	Very Good Trout Waters	1180.0	7.4
Class III	Important Trout Waters	7048.0	44.5
Class IV	Low Production Waters	6054.0	38.2
Class V	Very Low Production Waters	1143.2	<u>7.2</u>
Total		15846.2	100.0

Source: Wyoming Game and Fish Commission, June 1985.

The majority of the remainder of unclassified streams are expected to be predominantly in Classes IV and V.

To implement these protection objectives, Wyoming has adopted four classes of surface waters (Classes I-IV).

Wyoming water use classifications are as follows:

Class I - Those surface waters in which no further water quality degradation by point source discharges other than from dams will be allowed. In designating Class I waters, the Environmental Quality Control shall consider water quality, aesthetic, scenic, recreational, ecological, agricultural, botanical, zoological, municipal, industrial, historical, geological, cultural, archeological, fish and wildlife, the presence of significant quantities of developable water and other values of present and future benefit to the people.

Class II - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to be presently supporting game fish or have the hydrologic and natural water quality potential to support game fish.

Class III - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to be presently supporting non-game fish or have the hydrologic and natural water quality potential to support non-game fish.

Class IV - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to not have the hydrologic or natural water quality potential to support fish.

In addition to the above basic classes, all Class I, II and III waters shall receive sub-designation by the Wyoming Game and Fish Department as either "cold water" or "warm water" fisheries (Water Quality Standards for Wyoming Surface Waters, § 1-4(a) through (d)).

These classes are based on the assumption that water quality for protection and propagation of fish, for most physical and chemical parameters, is higher than for other water uses. Therefore, Wyoming's surface water classes are based on fish and wildlife use. Classification of waters into one of these four classes, including a warm or cold water subclass, is an indication of the relative importance that has been placed on these waters by the State for water quality protection. Their classification does not make any assumptions regarding the availability of water quantity to support the protection and/or propagation of fishes in these waters. There is no guarantee that if the desired level of water quality is met, that sufficient water quantity will be available to provide for protection and propagation needs. Water quantity is a separate concern, including the possible need for instream flows. Classification of all waters of the State is a continuing effort of the State Program Plan for Water Quality Management, which is conducted on an annual basis. In this program, the State will revise and update classification of its surface waters based on new information and changing social values.

Any person who intends to discharge waste water into waters of the State must obtain a discharge permit pursuant to Sec. 402 of the Federal Clean Water Act, WS § 35-11-301, and the regulations promulgated by the DEQ to implement the discharge permit system. A discharge permit will specify the quality, location, and volume of discharge that may be allowed to go to the receiving water. The discharge permit may be issued, subject to certain terms and conditions, if the proposed discharge will not reduce the quality of the receiving waters such that the assigned stream classification cannot be met.

In some instances, depending on the nature of the discharge as municipal or industrial waste, the total allowable volume and concentration of wastes will be dependent upon the amount and availability of the receiving water to dilute the concentrations of waste effluent with the higher quality receiving water and assimilate it within a defined mixing zone.

The design criteria for dilution waters of the receiving stream is termed the 7Q10, or a statistically determined low streamflow that occurs for 7 consecutive days once in 10 years. If minimum instream flows can be maintained or increased, the treatment level requirements for the discharges can possibly be reduced or, at least, maintained as the discharge volume of a particular pollutant at a given concentration is increased.

Discharges to a stream segment are not assured of continuing streamflows such that the quantity of dilution water, or 7Q10, will remain constant over

time. Where waters are subject to appropriation, changes in points of diversion, etc., the streamflow may be depleted, perhaps requiring the discharge to increase its treatment level to achieve water quality standards for that segment of the stream.

Because of this, as part of the appropriation doctrine of water law and the need to meet instream water quality standards, there may be some incentive for dischargers to want to acquire instream flows to protect a 7Q10 low-flow condition. Water quality may be enhanced by maintaining minimum instream flows for dilution purposes, thereby reducing pollution control costs for certain pollutants that may be assimilated more rapidly in the presence of the additional streamflows (for example, ammonia discharges, which are toxic to fish life). (See Colorado opportunities portion of this report for a discussion of the importance of stream flow dilution water and water quality use classifications systems.)

Evaluation

The Wyoming stream fishery classification system provides one means to determine streams, lakes, and reservoirs that are productive fisheries, have public access, and are considered important State resources.

The Department of Environmental Quality water quality classification system is also an important mechanism for assessing streams, lakes, and reservoirs that are determined to be important for various uses and that may be considered as candidates for instream flow protection strategies.

Utilization of minimum stream flows for dilution purposes to permanently establish a 7Q10, or some other desirable or predictable stream flow, for stream segments on which there are municipal and/or industrial discharges may be a satisfactory and less costly alternative to increased treatment requirements. This alternative, however, is subject to minimum statutory treatment level requirements that may be established for industrial source categories and municipal discharges by State or Federal law.

Additionally, use of this opportunity may have a perceived adverse effect by dischargers. For example, a stream that was once classified as Class IV because of a lack of water quantity to support fish, may be considered for upgrading to Class III or even Class II because it now has the water quality to support fish and may have commensurate water quality standards established to meet the new use classification. This, in turn, could result in higher treatment level requirements and costs for municipal and industrial dischargers. Thus, these dischargers would likely resist the appropriation of instream flows for maintaining or establishing fisheries, because it could increase costs for waste treatment. Each stream segment must be evaluated for these tradeoffs.

WYOMING WATER DEVELOPMENT PROGRAM

Opportunity

The Wyoming Water Development Program was undertaken by the State of Wyoming to encourage and implement multipurpose water projects throughout the State. The Water Development Program can be used as a means to incorporate fish and wildlife management and instream flow considerations into individual water project design, construction, and operation.

The provisions of the Wyoming Water Development Program are also an indication and recognition by the Wyoming Legislature that instream flows are an important beneficial use of water. This recognition is an important political inroad into future appropriation of waters for instream flow purposes. The establishment of projects that incorporate instream flows and recognize instream uses sets a valuable precedent for more projects with these considerations.

Background

The Wyoming Water Development Program is authorized in WS § 41-2 112 through 115. The purpose of the program is to "foster, promote and encourage the optimal development of the state's human, industrial, mineral, agricultural water and recreation resources," through the establishment of a water development commission, and "procedures for the planning, selection, financing, construction, acquisition and operation of projects and facilities for the conservation, storage, distribution and use of water, necessary in the public interest to develop and preserve Wyomings water and related land resources."

The emphasis of the State's program is to encourage development of water facilities for irrigation, reduction of flood damage, abatement of pollution, preservation and development of fish and wildlife resources, and protection and improvement of public lands. The program further "shall help make available the waters of this state for all beneficial uses, including but not limited to municipal, domestic, agricultural, industrial, instream flows, hydroelectric power and recreational purposes, conservation of land resources and protection of the health, safety and general welfare of the people of the state of Wyoming" (WS § 41-2-112(a)).

The Wyoming Water Development Commission also emphasizes multipurpose water projects for maximum benefits and cost allocation, as well as identification of project costs and benefits to be considered in project financing recommendations (WS § 41-2-112(b)(i) and (ii)).

In studying individual projects for financing and construction a four level analysis is used, and at each level various environmental and recreational problems and opportunities are studied.

Level 1 - Reconnaissance studies - Description of a proposed water project, including identification of need for the project proposed supplies and demands, an assessment of environmental considerations and constraints including recreational use of water in storage.

Level 2 - Feasibility Studies - A detailed analysis of factors relevant to the development operation and maintenance of the proposed project including an identification of major problems and opportunities concerning project development and the environmental, recreational, social and economic effects of development and a recommendation of the WDC to continue or terminate project consideration, and drafting of enabling legislation to take the project to the next level of study.

Level 3 - Development Plans - A final design and cost estimates, including project financing identification of water rights and land interests to be acquired, and draft legislation describing the details of construction, operation and financing of the proposed project, including reimbursement of predevelopment costs from the beneficiaries of the project.

Level 4 - Construction and Operations Plans - Plans prepared pursuant to legislation which authorizes the project.

[Water Quality Standards for Wyoming Surface Waters, § 1-4(a) through (d).]

State agencies are required to cooperate with the Water Development Commission (WDC) in preparation of the studies. To formalize its relationship with WDC, the Wyoming Game and Fish Commission has entered into a Memorandum of Agreement (MOA). The purpose of the MOA is to facilitate the incorporation of fish and wildlife considerations in WDC projects and the collection of fish and wildlife baseline data at each of the four levels of water project development, and to analyze data, assess impacts, and develop and refine mitigation, enhancement, or impact reduction measures.

Example

The Deer Creek and Sulphur Creek projects are discussed in this report in the section on Incorporation of Instream Flows in Water Project Design and Construction.

Evaluation

Through the incorporation of fish and wildlife considerations in water project development the Game and Fish Commission, WDC, and the legislature can, to the extent practicable, include fish protection and enhancement measures as a part of water project design, construction, and operation. Such measures can include provision of instream flows.

Since the program is so new, and the operating history of the program so short, there is no real basis to examine the success of this program. It is fair to say, however, that Wyoming has made a conscious effort to include instream flow protection as a recognized component of its Water Resources Development Program.

MAJOR INDUSTRIAL/ENERGY PROJECT REVIEW

Opportunity

The Wyoming Industrial Development and Siting Council is empowered to issue permits for the construction, operation, and maintenance of energy generation and conversion facilities that exceed a certain size or have an estimated construction cost of over fifty million dollars (1975 dollars, inflated quarterly).

In choosing whether to grant such permits, the Siting Council has considerable discretion to evaluate the impacts of the proposed facility and to require mitigation measures. The Council may give special attention to water needs of the facility, including instream flow considerations.

Background

Any industrial facility with an estimated construction cost of at least fifty million dollars (1975 dollars), or any energy generating and conversion plant that is designed to produce 1 million cubic feet of synthetic gas per day or capable of producing fifteen thousand barrels or more of liquid hydrocarbon products per day by any extraction process involving the direct or indirect conversion of coal, oil shale, or tar sands, or any facility that is capable of producing or enriching uranium minerals in quantities exceeding five hundred pounds of U 308 (yellow cake) is required to have a permit issued by the Wyoming Industrial and Development Siting Council prior to construction (WS § 35-12-101, 102, 106). Any such facility must be constructed, operated, and maintained in conformity with the permit, and any terms, conditions and modifications contained in the permit.

In determining whether to grant a permit, the Council is empowered to consider the environmental, social, and economic stresses that may result from the proposed facility or expansion of an existing facility. The Council is required to give special attention to the water needs of the facility and may consult with State agencies, including the Wyoming Game and Fish Department, in determining the effects on fish and wildlife from the proposed project. The Council may place conditions on the construction of a facility that will mitigate the adverse effects of the construction and operation of the facility.

Example

In most applications processed for industrial siting permits under the statute, since 1975, the Wyoming Fish and Game Department believes it has been partially successful in requesting that the Council require mitigation measures such as acquiring access for the public to streams and purchasing replacement waters for those that would be displaced as a result of plant operation.

Evaluation

The Council permitting process provides an opportunity for the Wyoming Game and Fish Department, other State agencies, and the public to request that mitigation measures be included as a part of major industrial facility siting

(including expansion of existing facilities), operating, and maintenance (J. Palma, Water attorney, Cheyenne, Wyoming; pers. comm., August 28, 1985). A major criticism of the permitting procedure is that facilities that are smaller in cost or energy production capability than specified in the statutes are not covered by permitting requirements, and therefore no mitigation measures or conditions of construction and operation may be imposed (M. Stone, Ecological Services Manager, Wyoming Game and Fish Department; pers. comm., August 28, 1985).

STATE WATER RECORDS ANALYSIS

Opportunity

The analysis of water rights on a particular stream segment is not, in and of itself, a means by which instream flows may be protected. However, it is a starting point by which a group interested in protecting instream flows may begin to evaluate various factors that will affect streamflows in a particular segment. Any interested party could find this opportunity useful in evaluating which tactics would be appropriate to obtain instream flows. For example, if it is determined by analysis of streamflow records that a stream is over appropriated, application to the State Engineer for a new appropriation on a stream would be a less preferred strategy than lease or purchase of existing senior water rights.

Background

Records of water rights are available to the public through the office of the State Engineer. For every stream in Wyoming the recorded water rights will specify the ownership in which the right is held, the priority date of each right, the point of diversion, and the beneficial use for which the water is to be used. Since this is public information it is available at minimal cost to cover photocopying.

Additionally, streamflow and diversion records may be available for particular stream segments. With considerable effort, depending on the number of stream gages and diversions in a stream reach, an experienced hydrologist or water engineer can evaluate the data from streamflow records, recorded water rights, and State diversion records to determine the extent to which recorded water rights are exercised and the amount of water still available for appropriation.

Evaluation

Knowledge of the hydrology of a stream drainage, or portion thereof, is important to understanding the need for protection of instream flows and the methods to accomplish it. The Wyoming State Engineer keeps comprehensive records of water rights, diversions, and streamflows that are useful in analyzing the hydrology and water use on a stream. However, the accuracy of streamflow records is questionable in certain instances. In reviewing water rights, interested persons should be cognizant of the potential limitations of these records and seek assistance from the office of the State Engineer or other professionals familiar with the data.

Analysis of these records is not an instream flow protection strategy. It only shows the ownership, diversion points, an indication of the amounts of water diverted, and beneficial uses at a particular point in time. Water rights may be purchased or leased, and diversion points and use may be changed under the prior appropriation doctrine pursuant to certain rights and duties that accompany the water right.

The State Water Control Board is responsible for determining whether such changes in diversion points and beneficial uses will be allowed. Applications for these changes are made by filing a petition for a change with the State Engineer. Certain public notice and public hearing requirements may be required (WS § 41-3-103, 104, 106).

In determining whether to grant a change of use or transfer, the Water Control Board will consider all facts it believes are pertinent to the transfer, including:

- (1) economic loss to the community and the State if the use from which the right is transferred is discontinued,
- (2) the extent to which such economic loss will be offset by the new use, and
- (3) whether other sources of water are available for the new use.

(WS § 41-3-104(a))

When combined with the "public interest" provisions of WS § 41-4-505(a) and 503, it is within the discretion of the Board of Control to prohibit a water transfer that could adversely affect minimum streamflows in critical stream segments. No example has been found where this discretionary power has been exercised in this way.

Opportunities under analysis of State water records should be used in part to prioritize stream segments for instream flow preservation strategies and to bring low streamflow concerns to the attention of the Water Control Board.

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THE PUBLIC TRUST DOCTRINE

by

George A. Gould

INTRODUCTION

Stated simply and very generally, the public trust doctrine expresses the concept that a State owns or holds certain resources "in trust" for the public. That is, the State owns these resources not as a "proprietor," but as a "trustee." Consequently, the State is not free to deal with a trust resource as it might deal with other State property, such as an office building; rather, the trust imposes duties and limitations on the State with regard to the use of the resource. More specifically, these duties and limitations become important when the State conveys the resource to private parties or creates private rights in it.

The public trust doctrine has particular relevance for the protection of instream flows because, as discussed below, historically the doctrine has been concerned with the protection of public rights in waters. Nevertheless, the doctrine is not a panacea. It is not recognized in all jurisdictions, and the effect of the doctrine varies greatly where recognized. The doctrine has substantial limitations, even in those jurisdictions that have embraced it most enthusiastically. Furthermore, the doctrine is a developing one; in no State is it fully fleshed-out. As in all developing common-law (judge-made) doctrines, courts borrow heavily, but selectively, from other jurisdictions, making results unpredictable. The subsequent discussion sets forth the doctrine, followed by a discussion of the doctrine's application in Montana.

NAVIGABLE WATERS

Before examining the public trust doctrine, a bit of explanation concerning navigable waters is in order, because of the doctrine's traditional association with navigable waters. The concept of navigation serves several functions in American jurisprudence, and the definition or criteria used to determine navigability frequently vary, depending on the function that is being served. Nevertheless, a determination that a body of water is navigable is essentially a determination that it is a "public," as opposed to a "private," body of water. In effect, this means that the general public has the right to use that body of water for some purposes.

The special importance of navigable waters may be difficult to appreciate today. Such waters, however, were the principal means of commerce and travel

until this century. Consequently, the policy of preserving them as open public highways is certainly understandable in a historical context.

Under English common law, the Crown "owned" navigable bodies of water. When the American colonies gained their independence from England, they succeeded to the ownership of the beds of navigable waters as successors in interest to the Crown. Moreover, the United States Supreme Court held that new States admitted to the Union became the owner of the beds of navigable bodies of water within their boundaries under the "equal footing" doctrine.

American "federalism" further complicates the matter. Although the States succeeded to ownership of the beds, the Federal Government retained paramount control over the use of interstate waters pursuant to its powers over interstate commerce. This paramount control is typically called the "navigation servitude." While both the navigation servitude and the public trust doctrine have roots in the concept of navigability and to some extent represent similar concerns, the two are not to be confused. Of major significance, the navigation servitude has not been construed to impose any duties on the Federal Government or limitation on the uses that the Federal Government authorizes others to make of navigable waters. A detailed examination of the navigation servitude is beyond the scope of this discussion. The servitude is mentioned here principally for purposes of completeness.

DEVELOPMENT OF THE PUBLIC TRUST DOCTRINE--THE ILLINOIS CENTRAL RAILROAD CASE

Some legal scholars have traced the public trust doctrine to Roman law of the Emperor Justinian or to English common law. Other scholars have expressed doubt that the doctrine was a part of the law of Rome or of England, at least not in a form that bears a resemblance to the current doctrine. All scholars agree, however, that American origins of the doctrine are found in the case of Illinois Central Railroad v. State of Illinois [146 U.S. 387 (1892)], decided by the United States Supreme Court in 1892. Even today, courts frequently refer to this case when discussing the doctrine. Thus, it merits examination in some detail.

The Illinois Central case resulted from a statute enacted by the Illinois legislature in 1869 that gave 1,000 acres of the bed of Lake Michigan, composing almost the entire Chicago waterfront, to the railroad. Four years later the legislature thought better of the matter and repealed the statute. As could be expected, the railroad asserted that the legislature had no right to take back the waterfront. The United States Supreme Court, however, upheld the legislature's right to revoke the grant. The Court stated that the State's title to lands under a navigable body of water was different in character from its title to lands that the State held for sale. The title to these lands, the Court said, was held "in trust for the people of the State that they may carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties."

As has often been the case where the public trust doctrine is involved, the Illinois Central decision raises more questions than it answers. The decision makes it clear, however, that a State is prohibited from conveying

absolute title to the bed of a navigable body of water or, at least, having made such a conveyance, is permitted to revoke its conveyance, in some cases. The underlined words in the prior sentence emphasize that the Court did not invalidate all conveyances of trust property. The Court expressly stated that grants of lands for wharves, piers, docks and other structures in aid of commerce, and grants that do not impair the public interest in the lands and waters remaining are valid.

One other aspect of the decision merits discussion at this point: its impact, or lack thereof, on the Illinois treasury. Even without the public trust doctrine, the legislature could have taken back the waterfront through an exercise of the power of eminent domain. By finding that the grant was revocable, however, the Supreme Court permitted the legislature to reacquire the tract without exercising the power of eminent domain and without complying with its attendant requirement to pay compensation to the railroad. The potential to avoid the payment of compensation, because there has been no "taking" of property, is an attractive feature of the public trust doctrine.

For many years following the Illinois Central decision, the public trust doctrine remained an arcane body of law that dealt only with the beds of navigable bodies of water. Moreover, it was principally a "land use" doctrine, rather than a water law doctrine. That is, it dealt with the beds of navigable waters and not with the waters themselves. In recent years, however, the doctrine has experienced a major expansion. A variety of new resources and new uses have been encompassed within the doctrine, and the doctrine has been seen as a major device in efforts to protect the environment. Nevertheless, the doctrine remains closely tied to navigable waters in most jurisdictions.

STATE LAW OR FEDERAL LAW?

The source of law applied in Illinois Central was not made clear by the Court. One might suppose in reading the opinion that the Court was applying Federal law, perhaps even Federal constitutional law. In a later case, Appleby v. City of New York [271 U.S. 364 (1926)], however, the Court stated that the Illinois Central decision was based on Illinois law, not Federal law, although it did not identify any particular Illinois constitutional provision, State statute, or common law rule. In any case, today it is generally assumed that the public trust doctrine is a matter of State law. Thus, the doctrine is not a single uniform body of law binding on all States; rather, each State is free to reject the doctrine or to accept it in whatever form the State chooses.

PROPERTY SUBJECT TO THE TRUST

As noted above, historically the public trust doctrine applied only to the beds of navigable waters. Recent decisions have extended it to other resources, such as beaches, parks, and even "all natural resources." For instream flow purposes, however, only two extensions are important: extension of the waters subject to the doctrine and extension of the trust to the water itself, rather than just the beds of water.

Under the equal footing doctrine, a State received title to the beds of waters that were "navigable in fact" at the time the State was admitted to the Union. The Supreme Court has said that waters are "navigable in fact" if they are used, or susceptible of being used, in their ordinary condition, as highways for trade or travel [The Daniel Ball, 77 U.S. 557 (1871)], a much more liberal definition than the English definition, which restricts navigability to waters that are subject to the ebb and flow of the tide. Many States, however, adopted even more liberal tests of navigability, such as the "pleasure boat test." Because navigability for purposes of determining title to the beds of watercourses is a question of Federal law, a State does not own the beds of waters that are navigable only under a more liberal State test; nevertheless, the public trust doctrine has usually been extended to such waters.

The first indication that the public trust doctrine applied to the water itself occurred in a 1976 decision, United Plainsmen Ass'n v. North Dakota State Water Conservation Comm. [247 N.W.2d 457 (1976)]. That decision, however, was rather narrow in scope, holding only that the North Dakota State Water Conservation Commission must engage in water planning to determine the effects of allocation on present water supplies and future water needs before it could issue permits for the appropriation of water.

The principal decision on this issue is the "Mono Lake" case, National Audubon Society v. Superior Court of Alpine County [189 Cal.Rptr. 346 (1983)]. In this case, the Audubon Society argued that the diversion of water by the City of Los Angeles from four of the five tributaries supplying Mono Lake was causing extensive environmental damage to the lake and was in violation of the public trust doctrine. Los Angeles replied that it had a permit from the State of California, issued in 1940, which authorized these diversions. It further argued that the public trust doctrine had been completely subsumed by the California water rights statutes. The California Supreme Court disagreed, holding that consumptive water rights are subject to the public trust doctrine. The court further held that because the effects of these diversions on a trust resource, Mono Lake, had not been considered when the permits were issued in 1940, it was proper to consider them now.

The decision further expanded the scope of the doctrine by holding that it could be applied to water in nonnavigable tributaries, to prevent harm to navigable bodies of water. The court expressly refused, however, to consider whether the doctrine might extend to nonnavigable tributaries themselves.

TRUST PURPOSES

Historically, the public trust doctrine protected the public's rights to use navigable waters for navigation, commerce, and fishing. Recent decisions, however, have expanded the protection to all sorts of water-related activities, including hunting, swimming, rafting, boating, and bathing, and even to preserve tidelands "in their natural state so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area" [National Audubon Society, *supra*]. On the other hand, in the case just cited the California Supreme Court limited trust

purposes to activities "in the vicinity" of trust waters and refused to extend the trust to all "public uses," stating that if this were done the doctrine would, as a practical matter, impose no restrictions on the State's allocation of trust property. Some courts, however, have simply equated trust purposes with "public purposes" thereby effectively emasculating the doctrine.

LIMITATIONS IMPOSED BY THE PUBLIC TRUST DOCTRINE

In some cases, the public trust doctrine appears to be primarily a procedural device. One of the leading advocates of the doctrine, Professor Joseph Sax, emphasized its procedural nature as a device for correcting imperfections in the democratic process. As Sax explained it, misallocation of resources sometimes occurs because a small, well-organized minority takes advantage of a diffused, disorganized majority. Courts apply the doctrine to prevent misallocation, typically by referring the decision to a governmental body with a more broadly based constituency, perhaps even the legislature itself (See Sax, "The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention," 68 Mich. L. Rev. 471 (1970)). For example, courts have held that a grant by an administrative body that is contrary to a trust purpose is not valid unless it is supported by clear statutory authority. This has the effect of requiring legislative approval for any grant of trust resources for which there is not clear statutory authority. Another approach reverses the usual presumption of administrative regularity where a decision contrary to the public trust is involved, thus placing the burden on the agency to show that it acted in accordance with law.

On the other hand, the public trust has frequently been given substantive content, as it was in Illinois Central. That decision indicates that the State of Illinois cannot convey the Chicago waterfront absolutely and irrevocably, no matter what the procedure involved. Even where given a substantive effect, however, the doctrine does not invalidate all grants of trust property. Building on themes developed by the Supreme Court in Illinois Central, courts have held that those grants that carry out trust purposes or that do not substantially impair trust purposes are valid. A related approach holds that a grant of trust property conveys title, but the property remains subject to a "servitude," which prohibits the use of the property in a manner that is inconsistent with trust purposes, and which permits the State to subject the property to trust uses at some time in the future. Still another approach is to require that the trust purposes be carefully considered and negative effects minimized when making grants of trust property.

Because the effect of the public trust doctrine on consumptive water rights is of particular importance where instream values are concerned, the Mono Lake decision merits further examination. In that decision, the court acknowledged that the appropriation and diversion of water "does not promote, and may unavoidably harm, the trust uses at the source stream." The court also acknowledged, however, the importance of the appropriation of water to the population and economy of the State. Consequently, in an effort to accomodate water use and the public trust doctrine, the court held that the state "has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible."

The formula that the California Supreme Court articulated essentially imposes a balancing test in which the State's need to appropriate and divert water is weighed against trust purposes on a case-by-case basis. As such, the doctrine appears to be little different than California's longstanding requirement that the Water Resources Control Board consider the "public interest" when granting permits for the appropriation of water; however, it differs from the requirement in two important respects. First, according to the court, the public trust doctrine imposes on the State a duty of continuing supervision over the appropriation and use of water. Thus, the State is not confined by past allocation decisions but has the power and the responsibility periodically to reconsider the effect of existing appropriations on trust resources and values and to require adjustments in existing uses to protect trust purposes where appropriate. Second, the State is apparently powerless to dispense with its trust obligations, unlike its power to legislatively repeal statutes requiring the Water Resources Control Board to consider the public interest.

APPLICATION OF THE PUBLIC TRUST DOCTRINE

The identification of a resource as a trust resource and the determination that a particular activity is protected by the doctrine is only the first step. The next step is to determine what legal significance this has. As an initial matter, it appears that the public trust doctrine is significant in two general ways. First, it may provide a legal basis for State regulation of a resource. Second, it may provide grounds for challenging the actions of the State or a private party.

As to the first area, the public trust doctrine would not seem to be an important source of State power to regulate for the purpose of protecting instream values. Modern interpretations of the "police power" of States probably provide a sufficient basis for such regulation. Furthermore, in western States, constitutional or statutory enactments creating State or public "ownership" of water provide an additional basis for State regulation. Nevertheless, in a case where regulation is questionable, the public trust doctrine might provide an additional argument for upholding regulation. For example, if a State with a very strong constitutional tradition for the appropriation of water by private persons were to enact legislation providing for instream flow protection of some sort, the public trust doctrine might be relied on, at least in part, as authority for the legislation.

The doctrine could aid State regulation in one additional way. A regulatory scheme that imposes new limitations or requirements on existing water rights, such as a statute requiring all irrigators to take specified steps to conserve water, may be attacked as an unconstitutional "taking" of property. As discussed below, however, the public trust doctrine usually avoids the taking issue. Consequently, it could provide a judicial rationale for upholding such regulation in the face of a constitutional attack.

Historically, the public trust doctrine has been used principally for the second purpose, that is, to challenge the actions of the State (State agencies) or private parties with regard to trust resources. Modern developments in administrative law, such as liberal "standing" rules and the "hard look" standard of judicial review, may have rendered the public trust doctrine

largely superfluous where State action is challenged, although the doctrine may provide a basis for imposing substantive duties or limitations (e.g., United Plainsmen Ass'n, supra) on a State agency in a few cases.

The doctrine's greatest impact has been in cases challenging private parties. The challenge may be raised by another private party, as was done in Mono Lake, or it may be raised by the State, as was done in Illinois Central. The private party who holds title to the trust property will normally assert that his title is "vested" property that cannot be taken or diminished without the payment of compensation. The public trust doctrine, however, typically eliminates any obligation to pay compensation. The reasoning is that the title the private party received from the State was subject to a "limitation" in favor of the public. Thus, nothing is "taken" when the superior trust interest is asserted to terminate or diminish the private party's rights. As the California Supreme Court said in Mono Lake, a party "can claim no vested right to bar recognition of the trust or state action to carry out its purposes."

This power to apply the limitations of the public trust retroactively without a taking of property makes the doctrine a uniquely powerful tool. Because of the doctrine, the State of Illinois was able to take back the Chicago waterfront without payment of compensation. Similarly, water rights granted to Los Angeles 45 years ago may be terminated or limited to protect Mono Lake, the payment of compensation.

THE PUBLIC TRUST DOCTRINE AND INSTREAM FLOWS

The public trust doctrine has many potential applications as a strategy for preserving instream flows.

1. The doctrine might form the basis for an argument that a State water rights agency is required to consider the effect of a proposed appropriation on instream values before granting a permit authorizing the appropriation. This strategy could be particularly important in a State that does not have a statute requiring the agency to consider the "public interest" when granting permits, or in a State where the "public interest" does not include consideration of environmental values.
2. As a variation on example 1, the doctrine might be used as the basis for requiring the adoption of alternatives that maximize the use of existing diversions before granting new appropriations. For example, a municipality might be required to engage in recycling and conservation before being permitted to make new appropriations.
3. The doctrine might be used to prevent the destruction of aquatic habitat. For example, a stream channelization project might be prohibited because it violates the public trust.
4. The doctrine could be used to terminate or limit existing water uses that are particularly harmful to instream values, as may be done in Mono Lake.

5. The doctrine might be used as the legal basis for legislation creating a statewide program of water conservation.

In assessing the effectiveness of the doctrine in the above situations or in other situations, the many limitations of the doctrine discussed above must be considered. For example, if a particular State applies the doctrine only to the beds of watercourses that are navigable under the Federal test, or if it limits the trust to traditional purposes, such as commerce, the doctrine may be of little use in protecting instream flows. Furthermore, in many jurisdictions it will be impossible to ascertain the state of the law because there are no decisions, or perhaps only a single limited decision, addressing the doctrine.

THE PUBLIC TRUST DOCTRINE IN COLORADO AND WYOMING

Neither Colorado nor Wyoming has any case law discussing the public trust doctrine. In one recent Colorado case, People v. Emmert [597 P.2d 1025 (Colo. 1979)], the Colorado Supreme Court listed the public trust doctrine as one of several possible rationales for finding a public right to float nonnavigable streams. However, without discussing the doctrine, the court concluded that no such right existed in Colorado. While this decision cannot be taken as a clear rejection of the doctrine, it does suggest a lack of receptivity on the part of the court. In any case, the lack of law in both states makes future application of the doctrine unpredictable.

APPENDIX A

ORIGINAL HOUSE BILL NO. 0209
ENTROLLED ACT NO. 53, HOUSE OF REPRESENTATIVES
FORTY-EIGHT LEGISLATURE OF THE STATE OF WYOMING
1986 BUDGET SESSION

AN ACT to create W.S. 41-3-1001 through 41-3-1014 relating to water for instream flow purposes; declaring storage of water for recreation purposes or the release of instream flows to establish or maintain fisheries, to be a beneficial use; providing waters appropriated for instream flows may be sold or transferred under certain conditions; providing for identification of areas of critical need; providing for study of feasibility of supplying instream flows existing or new storage facilities; authorizing construction of measuring devices; requiring a report and recommendation to the legislature; authorizing delegation of authority; providing for direct flow appropriations if water storage is not feasible; providing for acquisition of existing rights; providing the holder of instream flow rights may call for regulation under certain conditions; providing limitations on appropriations for instream flow purposes; and providing for an effective date.

Be It Enacted by the Legislature of the State of Wyoming:

Section 1. W.S. 41-3-1001 through 41-3-1014 are created to read:

ARTICLE 10
INSTREAM FLOWS

41-3-1001. Waters stored for instream flows a beneficial use of water; natural stream flows allowed for instream flows.

(a) The storage of water in any drainage in Wyoming for the purpose of providing a recreational pool or the release of water for instream flows to establish or maintain new or existing fisheries is a beneficial use of water subject to normal stream loss.

(b) Unappropriated water flowing in any stream or drainage in Wyoming may be appropriated for instream flows to maintain or improve existing fisheries and declared a beneficial use of water on a case by case basis by the state engineer if such use does not impair or diminish the rights of any other appropriator in Wyoming.

(c) Waters used for the purpose of providing instream flows under subsection (a) of this section shall be the minimum flow necessary to establish or maintain fisheries.

(d) Waters used for the purpose of providing instream flows under subsection (b) of this section shall be the minimum flow necessary to maintain or improve existing fisheries.

41-3-1002. Instream flows to be by stream segment; water for instream flows may be sold, transferred or otherwise conveyed under certain restrictions; ownership restricted.

(a) All waters used for the purpose of providing instream flows shall be applied only to that segment of the stream for which they are granted. The stream segment and the determination of a minimum amount of water required for instream flow purposes shall be defined specifically.

(b) After waters allowed for instream flows have passed through the specific stream segment, all rights to those instream flow waters are relinquished, and the water shall be available for reappropriation, diversion and beneficial use.

(c) Storage water appropriated for the purpose of providing instream flows in specified stream segments or existing water rights which are converted to instream flow under provisions of W.S. 41-3-1007 of this act may later be sold, transferred or otherwise conveyed to any other purpose pursuant to the requirements of W.S. 41-3-104, except that the board of control shall require that an advertised public hearing be held.

(d) Any person may divert and appropriate, as provided by law, instream flow waters for any beneficial use other than for instream flows at the following places:

(i) Within one (1) mile upstream from any point where the instream flows cross the Wyoming state line;

(ii) Within one (1) mile upstream from any point where the instream flows enter the main stem of the North Platte River;

(iii) Within one (1) mile upstream from any point where the instream flows enter the Big Horn Lake;

(iv) Within one (1) mile upstream from any point where the instream flows enter the Palisades Reservoir.

(e) No person other than the state of Wyoming shall own any instream flow water right.

41-3-1003. Game and fish commission; construction of measuring devices; recommendations; permits.

(a) The game and fish commission shall construct any measuring device the state engineer considers necessary for the administration of an instream flow right.

(b) The state game and fish commission may report to the water development commission annually those specific segments of stream which the game and fish commission considers to have the most critical need for instream flows. The game and fish commission shall identify the points on the stream at which the need for instream flows begins and ends, the time of year when the flows are most critical and a detailed description of the minimum amount of water necessary to provide adequate instream flows.

(c) The division of water development within the economic development and stabilization board shall file applications in the name of the state of Wyoming for permits to appropriate water for instream flows in those segments of stream recommended by the game and fish commission. The state engineer shall not grant any permits to appropriate or store water for instream flows prior to the completion of the study provided by W.S. 41-3-1004 or prior to the hearing required by W.S. 41-3-1006.

41-3-1004. Water development commission to determine storage feasibility; report to the game and fish commission and the legislature; delegation of authority.

(a) Immediately after permits have been applied for under W.S. 41-3-1003 (c), the water development commission shall determine the feasibility of providing instream flows for the recommended segments of streams from unappropriated direct flows or from existing storage facilities or from new facilities. The feasibility study shall include a determination of water necessary to maintain or improve existing fisheries for water rights under W.S. 41-3-1001(b) or of water necessary to provide fisheries for water rights under W.S. 41-3-1001(a). The feasibility study shall also include the availability of storage sites, the estimated cost of providing any required storage and such other findings and conclusions as the water development commission deems appropriate.

(b) The water development commission shall make a report to the game and fish commission and the legislature outlining their findings.

(c) The water development commission may delegate its authority under W.S. 41-3-1003 through 41-3-1006 to the division of water development within the economic development and stabilization board for particular stream segments.

41-3-1005. Approval of storage project. If the water development commission determines that storage of water to provide instream flows is feasible and in the interest of the state of Wyoming, it shall request authority from the legislature to proceed with the design and construction of storage facilities and the storage of sufficient water for such purposes. The costs of the project may be shared with other water users benefiting therefrom, or paid solely from funds appropriated from the water development account, or otherwise as the legislature directs.

41-3-1006. Appropriation of unappropriated waters for direct instream flows.

(a) Any application for a permit to appropriate direct flow waters for the purpose of providing instream flows shall be by stream segment, as defined in W.S. 41-3-1002.

(b) If the water development commission, under W.S. 41-3-1004, determines that storage of water for the purpose of providing instream flows is not feasible but that appropriation of direct flow water appears feasible, but the state engineer shall act on applications for permits to appropriate water filed under W.S. 41-3-1003(c) in the name of the state of Wyoming.

(c) Subsequent to submission of an application for an instream flow appropriation, the game and fish commission shall conduct relevant studies on the proposal.

(d) The applicant for an instream flow water right shall publish a notice of the application and hearing in a newspaper of general circulation in the area near the proposed reservoir site or stream segment, once each week for at least two (2) consecutive weeks prior to the hearing provided by subsection (e) of this section which notice shall briefly describe the application.

(e) Prior to granting or denying the application, the state engineer shall conduct any studies as are deemed necessary to evaluate the proposed instream flow and the necessary amount of water to maintain existing fisheries and shall hold a public hearing. At the public hearing, the game and fish commission shall present its studies and any other interested parties shall present views on the proposed instream flow appropriation. The state engineer may place a condition on the permit, if one is granted, requiring a review of the continuation of the permit as an instream flow appropriation.

(f) If an application for an instream flow appropriation is approved by the state engineer, it shall be deemed that work has been commenced and completed and beneficial use made thirty (30) days after the date of approval for purposes of W.S. 41-4-506 and proof of appropriation shall not be submitted until three (3) years thereafter.

(g) The state engineer shall not issue an instream flow permit where the instream flow right would be included as a portion of the consumptive share of water allocated to the state of Wyoming under interstate compact or United States supreme court decree.

(h) The amount of water appropriated for instream flow in each river basin in Wyoming shall not result in more water leaving the state than the amount of water that is allocated by interstate compact or United States supreme court decree for downstream uses outside of Wyoming.

41-3-1007. Acquisition of existing rights for instream flow purposes.

(a) The state of Wyoming may acquire any existing water rights in streams of Wyoming by transfer or gift for the purpose of providing instream flows, provided that a change in use of the right acquired shall be in accordance with W.S. 41-3-104. Any right acquired and changed shall be in the name of

the state of Wyoming and shall be administered by the state engineer and the board of control, who shall insure that the use of water for instream flows shall not interfere with existing water rights or impair the value of such rights or related property. The game and fish commission shall act as a petitioner in a petition for change in use under this section.

(b) Any such water rights acquired and changed shall be limited to a specified stream segment by the board of control with priority date intact.

41-3-1008. Holder of instream flow rights may call for regulation of streams if injury to fisheries can be shown.

(a) The game and fish commission shall report to the water division within the economic development and stabilization board the need to regulate a stream to protect the priority of an instream flow right. The report shall include information establishing present or future damage to the fishery if the stream is not regulated. The division of water development, on the next working day, shall submit the report to the state engineer and call for stream regulation. The state engineer shall not regulate the stream to protect the instream flow right:

(i) Unless present or future injury to the fishery has been shown;

(ii) If the call for regulation is a futile call; or

(iii) If the call for regulation will impair senior water rights.

41-3-1009. Statement regarding condemnation and impairment of existing water rights. This act does not grant, nor shall it operate or be so construed to grant the power of condemnation to the game and fish department for acquisition of existing water rights for the purpose of providing instream flows, nor shall it operate or be so construed as to impair or diminish the value of or divest existing water rights.

41-3-1010. Litigation costs. If any other appropriator in a drainage where waters are allowed for instream flows proves in district court that his right to use appropriated waters has been impaired or diminished by the allowance for instream flows, the costs of litigation, including reasonable attorney fees, shall be borne by the holder of the instream flow right.

41-3-1011. Abandonment. No right to water for the purposes of providing instream flow may be acquired through the process of abandonment nor shall any beneficiary of instream flow rights granted under this act be qualified under W.S. 41-3-401 and 41-3-402 to file for abandonment.

41-3-1012. Ingress and egress. Nothing in this act shall grant, nor shall it be construed to grant the right of ingress or egress through or upon private property to reach streams where instream flows are maintained, nor shall it operate or be so construed as to grant any right of eminent domain to acquire the right of ingress or egress through private property to any waters so maintained.

41-3-1013. Condemnation. Notwithstanding W.S. 1-26-505, a city or town may condemn any portion of a water right authorized and acquired under this act for municipal water purposes in the manner provided by law.

41-3-1014. Interstate compact and United States supreme court decree. Nothing in this act shall be construed to supersede, impair or abrogate the right of the state of Wyoming to fully utilize and appropriate to consumptive beneficial use, those quantities of water allocated to the state of Wyoming by interstate compact or United States supreme court decree.

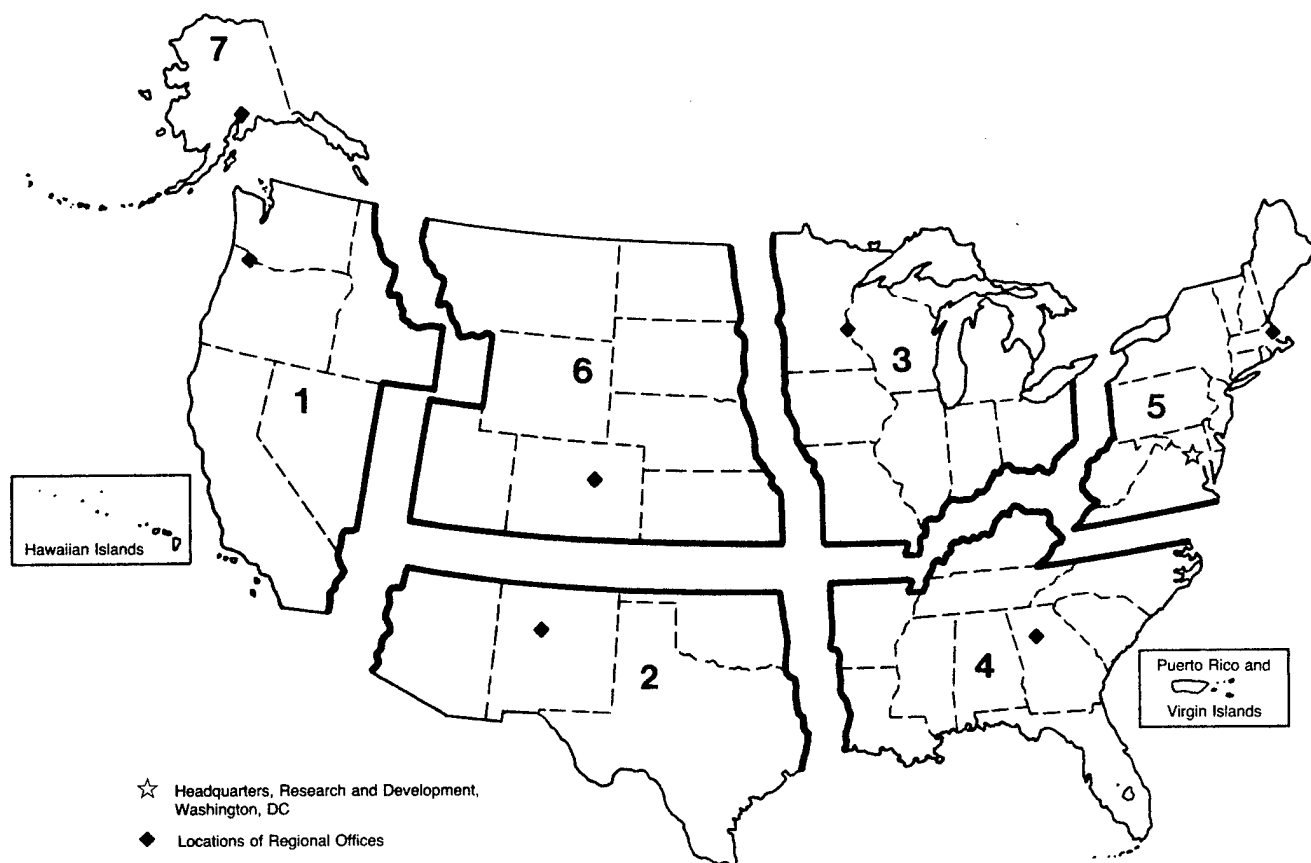
APPENDIX B

IFIS*STRATEGIES DATA SET

The IFIS*STRATEGIES Data Set is a computerized information file that contains records on the subject of State and Federal water law, especially as those laws apply to the protection of instream uses of water. Records contained in the data set are summaries of statutes, court decisions, regulations, scholarly articles, and official decrees. The purposes of the data set are: (1) to provide rapid information searches for use in developing general background information on water rights, (2) to serve as general reference for planners and water users to begin a search for relevant statutes and guidelines, and (3) to maintain a resource for water managers who seek to develop instream use programs. Each record in the data set refers to a particular State, and contains a title, keywords, abstract, citation, and cross-reference to other records. The data set can be searched by either State name or key work. The program allows the user to combine records into reports suitable for individual needs. For those who are not regular users of IFIS*STRATEGIES, the Instream Flow Group provides occasional custom searches of the data set on request.

For information on this data set, contact Berton L. Lamb, Administrative Analyst, Aquatic System Branch (FTS 323-5321 or Commercial 303 226-9321).

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REGION 1

Regional Director
U.S. Fish and Wildlife Service
Lloyd Five Hundred Building, Suite 1692
500 N.E. Multnomah Street
Portland, Oregon 97232

REGION 2

Regional Director
U.S. Fish and Wildlife Service
P.O. Box 1306
Albuquerque, New Mexico 87103

REGION 3

Regional Director
U.S. Fish and Wildlife Service
Federal Building, Fort Snelling
Twin Cities, Minnesota 55111

REGION 4

Regional Director
U.S. Fish and Wildlife Service
Richard B. Russell Building
75 Spring Street, S.W.
Atlanta, Georgia 30303

REGION 5

Regional Director
U.S. Fish and Wildlife Service
One Gateway Center
Newton Corner, Massachusetts 02158

REGION 6

Regional Director
U.S. Fish and Wildlife Service
P.O. Box 25486
Denver Federal Center
Denver, Colorado 80225

REGION 7

Regional Director
U.S. Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503



Preserve Our Natural Resources



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