Maintaining Minimum Stream Flows for Wildlife and Recreation

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MAINTAINING MINIMUM STREAM FLOWS
FOR WILDLIFE AND RECREATION,

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I. WHAT ARE INSTREAM USES AND WHY WORRY ABOUT THEM?

A. Definition. Instream uses are non-consumptive uses of water that are confined to the banks and bed of a stream or lake.

B. Rationale For Protection. Instream uses are a matter of public (and thus legal) concern because of the growing realization that historic water use patterns based on impoundments, consumptive withdrawals and the use of watersheds as sinks for waste disposal have high social costs in the form of foregone recreational and environmental values. See Final Report of the National Water Commission, Water Policies For the Future 19-37 and 271-292 (1973)

II. HOW ARE INSTREAM FLOW NEEDS CALCULATED?

A. Who Should Decide To Protect? Because existing legal regimes allow or recognize the right to acquire private property interests in the use of water out of a stream, instream flows must be affirmatively protected. The options are (1) legislative protection of specific streams, (2) administrative allocation of water for this use, and (3) private initiatives to acquire and maintain rights for this purpose. Congress and state legislatures have intervened in specific "dam-it" versus "preserve it" controversies
to withdraw specific rivers or reaches from development. However, the modern rationale for the recognition of instream uses is that they are a method of recognizing basin-wide environmental values and therefore stabilizing basin-wide development. Thus, the issues are both technical and judgmental, and the legislature is not the ideal forum for such decision-making. Private initiative through the claim of instream flow rights, while theoretically possible, has high opportunity costs. Because in the western states, the right to use water is relatively costless, there would be few cost constraints on the ability of private interests to claim instream rights in unappropriated waters. Because the benefits of instream uses accrue to the public generally, it seems appropriate that they be protected only by public bodies, and by default water allocation agencies seem to be the best choice.

B. Purpose of Recognition. The purpose of instream flow preservation are generally stated as (1) fish and wildlife preservation, (2) recreation enhancement, (3) aesthetic enhancement, (4) pollution abatement and (5) the stabilization of water availability for consumptive uses.

C. Role of Department of Interior. The Cooperative Instream Flow Group, United States Department of
Interior, Fish and Wildlife Service is (was?) the lead federal agency in developing instream flow measurement methodologies and coordinating federal-state cooperation. In brief, the Instream Flow Group initially used fish or other species protect-as a proxy for all instream flow values and assessment methodologies for setting instream preservation flows. Such flows are defined "[t]hat range of flows within a stream required to preserve the existing levels of fish, wildlife, other aquatic organisms and related recreational opportunities."

The Group uses a PHABSIM (Physical Habitat Simulation) model to produce technical recommendations. The two major variables are (1) depth and (2) velocity.

D. Technical References:


3. Various other technical papers and state by state surveys of preservation flow strategies that exist in draft form.
III. HOW ARE INSTREAM USES PROTECTED IN A RIPARIAN OR
APPROPRIATIVE-RIPARIAN JURISDICTION?

A. Who May Claim? Instream flow rights may only
be claimed by a private riparian or a public entity
that owns riparian land.

B. Natural Flow Theory and Reasonable Use Theory.
Instream uses are recognized under the natural flow
to theory and reasonable use theory.

1. A riparian may claim a right to enjoy the
natural flow of a stream for recreational and
aesthetic purposes under the natural flow
theory. Collens v. New Canaan Water Co., 155
Conn. 477, 234 A.2d 825 (1967).

2. Recreational use and a limited right to
view are reasonable uses but, to prevail
against other users a riparian must prove
that there has been a total destruction of
the use. City of Los Angeles v. Aitken, 10
Cal. App. 2d 460, 52 P.2d 585 (1935), hearing
denied. (loss of view). Under this theory,
a riparian may not claim a right to the natu-
ral or uninterrupted flow for recreational use
or view. Dunlap v. North Carolina Power &
Light, _____ N.C. _____, 195 S.E. 43 (1938).
3. Because riparian rights may be exercised at any time, it is theoretically possible for a present upstream riparian use to be enjoined in order to protect the future needs of a downstream riparian, but the courts in both pure riparian states, Pyle v. Gilbert, 245 Ga. 403, 265 S.E. 2d 584 (1979), and dual systems are limiting this possibility. In Re Waters of Long Valley Creek System, 158 Cal. Rptr. 750, 599 P.2d 656 (1979).

C. State Wild and Scenic Rivers Programs. States along the Pacific Coast and in the Mid-West and East have enacted state wild and scenic river programs modeled on the Federal Wild and Scenic Rivers Act of 1968. e.g. Calif. Pub. Res. Code §5093.50-65; Ore. Rev. Stat. §390.805-.925; Kentucky Revised Stat. §§146.200-.360; Minn. Stat. Ann. §§104.31 .31-.40; and N.Y. Envir. Conser. Law, Art. 15, tit. 7 §§429-k-v. These acts are primarily concerned with preventing impoundments, diversions, and with the control of land use in the river corridor. The constitutionality of Minnesota's legislation was upheld in Pine County v. State Department of Natural Resources, 280 N.W.2d 625 (Minn. 1979). See also Commonwealth ex rel
IV. HOW ARE INSTREAM FLOWS PROTECTED IN APPROPRIATION STATES?

A. Direct State Methods. There are three direct methods of protecting instream flows under state law. These are:

1. **Instream Flow Appropriations.** These appropriations are generally claimed by public bodies pursuant to specific enabling legislation.

2. **Instream Flow Reservations.** In some states the legislature has withdrawn specific waters from appropriation; in other states the legislature has authorized state agencies to withdraw and reserve water for instream uses. A reservation has the effect of denying private and public appropriation of surplus water but technically the state holds no water right to the flow so the method of protection is different from an instream flow appropriation and may have different consequences.

3. **Permit Conditions.** Appropriations for direct diversion or impoundment may be conditioned on the maintenance of a schedule of
flow releases for instream uses.

B. **Indirect Methods.** There are a variety of indirect methods of instream flow protection. Attempts to limit the transfer of water rights, especially from agriculture to industrial/energy production uses, and to promote the more efficient use of water may result in more water being available for instream uses. See Environmental Defense Fund v. East Bay Municipal Utility District ___, Cal. 3d ___, 605 P.2d 1 (1980).

C. **Appropriation of Instream Uses.**
   1. **Constitutional Objections.** The constitutions of Colorado, Idaho, and Nebraska provide that "The right to divert and appropriate the unappropriated waters of any natural stream to beneficial uses, shall never be denied" e.g., Idaho Const., art. 15, section 3. However, the supreme courts of Colorado and Idaho have sanctioned instream appropriations pursuant to legislative authorization. Colorado River Water Conservation Dist. v. Colorado Water Conservation Board, ____ Colo. ___, 594 P.2d 924 (1979) and State, Department of Parks v. Idaho Department of Water Admin., 96 Idaho 440, 530 P.2d 924 (1974).
2. **Legislative Authorizations.** The legislatures of Colorado, Colo. Rev. Stat. 37-92-102(3), Idaho, Idaho Code §42-1501-1505, and Washington, Rev. Code of Wash. Ann. §90.03.345, allow state agencies to make in-stream appropriations. The following challenges have been raised with respect to instream appropriations of unappropriated waters:

a. The use is not beneficial. Compare the plurality and concurring opinions in Department of Parks, *supra*.

b. The legislation is an unconstitutional delegation of legislative authority because there are insufficient standards to guide the state agency in making the appropriation. Colorado Water Conservation Dist., *supra*.

c. A physical diversion of the water is required. *e.g.* State ex rel Reynolds v. Miranda, 83 N.M. 443, 493 P.2d 409 (1972). This argument has been rejected where the legislature has expressly or impliedly abolished the requirement, but two California intermediate appellate courts have held that neither private associations, California Trout, Inc., v. State Water Resources Control Board, 90 Cal. App. 3d 816, 153 Cal. Rptr. 672 (1979), nor the state, Fullerton v. State
Water Resources Control Board, 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979) can appropriate instream flows absent specific enabling legislation because a physical diversion is a necessary condition for a perfected appropriation.


E. Denial of State Appropriation Permits. Most state water allocation agencies have the power to deny appropriation permits for public interest reasons, e.g. Oregon Revised Statutes §537.170(3) and Utah Code Ann. §73-3-8 (denial if permit unreasonably affects public recreation or the natural stream environment). This power has tradi-
tionally been used only to knock out inefficient projects or to reserve water for a more efficient or beneficial project, but it could be a source of instream flow recognition in states that tie permit applications to statewide water plans that include minimum flows. e.g., Oregon Revised Statues §536.320(2). See Comment, Preserving Instream Flows in Oregon's Rivers and Streams, 11 Environmental Law (379, 390-406 (1981).

F. Conditions on State Appropriation Permits. The power to deny includes the power to condition and states use this power to require a schedule of flow releases from diversions and impoundments. Rev. Code of Wash. Ann. §90.03.247 imposes a duty to impose such conditions to implement the state's preservation flow program.

Whenever an application for a permit to make beneficial use of public waters is approved relating to a stream or other water body for which minimum flows or levels have been adopted and are in effect at the time of approval, the permit shall be conditioned to protect the levels or flows. No agency may establish minimum flows and levels or similar water flow or level restrictions for any stream or lake of the state other than the department of ecology whose authority to establish is exclusive, as provided in chapter 90.03 RCW and RCW 90.22.010 and 90.54.040. The provisions of other statutes, including but not limited to RCW
75.20.100 and chapter 43.21C RCW, may not be interpreted in a manner that is inconsistent with this section. In establishing such minimum flows, levels, or similar restrictions, the department shall, during all stages of development by the department of ecology of minimum flow proposals, consult with, and carefully consider the recommendations of, the department of fisheries, the state game commission, the state energy office, the department of agriculture, and representatives of the affected Indian tribes.


G. Modification of Reservation. Mont. Code Ann. §85-2-316 (10) allows reallocation of a reservation to another "qualified reservant" when "the board finds that all or part of the reservation is not required for its purpose and that the need for the reallocation has been shown by the applicant to outweigh the need shown by the original reservant." (italics added).

H. Literature Sources

State Programs


5. **New Mexico.** Note, Appropriation By the State of Minimum Flows in New Mexico's Streams, 15 Natural Resources J. 809 (1975).


**General**


2. Johnson, Legal Assurances of Adequate Flows of
V. FEDERAL PROTECTION OF INSTREAM VALUES. The federal government may protect instream values directly (1) by claiming proprietary rights for instream flows, (2) by withdrawing certain rivers from federal development or FERC licensing jurisdiction, (3) by denying or conditioning the right to divert or impound pursuant to statutes such as the Endangered Species Act and Section 404 of the Clean Water Act, and (4) and through administration of the Clean Water Act generally.

A. Federal Reserved Rights. Federal reserved rights arise when Congress reserves public land for a water-related purpose. The federal government
is entitled to the minimum amount of water necessary to satisfy the purpose of the reservation.


1. The standards for claiming instream flows are very strict. United States v. New Mexico, 438 U.S. 696 (1978) denied Forest Services claims for instream flows and set three threshold standards that must be met. The right (1) must relate to the original purpose of the reservation, (2) an implied versus an express right must be necessary to prevent the original purpose of the reservation from being frustrated, and (3) the use must be a primary, not a secondary purpose. See Fairfax and Tarlock, No Water For the Woods: A Critical Analysis of United States v. New Mexico, 15 Idaho L. Rev. 509 (1979).

2. To evade the primary-secondary limitation announced in New Mexico, the Department of Interior issued an Opinion claiming the right to make federal appropriations of unappropriated waters arising on public lands for secondary public land uses. Federal Water Rights of the National Park Service, Fish and Wildlife Service, Bureau of Reclamation and the Bureau of Land Management, 86 Interior

3. Reserved rights may be claimed by Indian reservations. Winters v. United States, 207 U.S. 564 (1908). The original purpose of the Winters doctrine was to give Indians sufficient water to become integrated into a white irrigation society. However, Indians now claim aboriginal water rights to maintain a traditional tribal culture and economic base such as fishing and these rights may involve substantial instream flows. See United States v. Adair, 478 F. Supp. 336 (D. Ore. 1979).

United States v. New Mexico, however, undercuts this theory. See generally Morrison, Comments on Indian Water Rights, 41 Mont. L. Rev. 49 (1980).
B. The Wild and Scenic Rivers Act of 1968. This Act creates a system of federal wild and scenic rivers. Reaches of rivers included in the system are protected from dams and other inconsistent water-related projects; reaches are protected to some extent from inconsistent upstream or downstream developments; land use in the river corridor is also regulated to enhance the values for which the river was included in the system.

1. There are three (3) classes of rivers - wild, scenic and recreational. 16 U.S.C. §1273(b).

2. A river may be included in the system by an act of Congress, 16 U.S.C. §1274 as amended, or by the Secretary of Interior's approval of a state administered river. 16 U.S.C. §1273(a).

3. In addition to permanently designated rivers. 16 U.S.C. §1276. These are Congressionally designated rivers that must be evaluated by the Secretaries of Agriculture and Interior for possible inclusion. Study Rivers are protected from FERC licensing for three years after inclusion on the Section 1276 Study list unless a negative recommendation on inclusion is made. 16 U.S.C. §1278, as amended.
4. Protection of included reaches from up and downstream developments is provided by 16. U.S.C. 1278(a)-(b), as amended:

(a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated in section 1274 of this title as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary (hereeto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and
wildlife values present in the area on October 2, 1968. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this chapter and would affect the component and the values to be protected by it under this chapter. Any license heretofore or hereafter issued by the Federal Power Commission affecting the New River of North Carolina shall continue to be effective only for that portion of the river which is not included in the National Wild and Scenic Rivers System pursuant to
section 1273 of this title and no project or undertaking so licensed shall be permitted to invade, inundate or otherwise adversely affect such river segment.

Construction Projects on Rivers on Rivers Designated for Potential Addition to System

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is listed in section 1276(a) of this title, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary responsible for its study or approval.

The relationship between Agriculture and Interior's duties and Federal Energy Regulatory Commission jurisdiction is not clear. The first major case to consider the issue holds only that the FERC
could license a dam 11 miles upstream from a
study river and hold a separate proceeding to
consider the issue of proper downstream flows.
Swinomish Tribal Community v. Federal Energy
Regulatory Commission, 627 F.2d 499 (D.C. Cir.
1980).

C. Federal Permits and Other Federal Actions

Instream Values. Instream values are considered
in all planning and evaluation activity carried
on by the Water Resources Council (which may be
terminated by the Reagan Administration). There
are four major opportunities when the federal
government is required to consider and perhaps to
implement instream flow protection strategies in
connection with specific projects. These are:
(1) federal actions for which an environmental im-
pact statement must be prepared, (2) occasions when
consultation with the Department of the Interior is
required under the Fish and Wildlife Coordination
Act (this will often be done in connection with
NEPA), (3) the evaluation of projects that threaten
endangered species protected under the Endangered
Species Act, and (4) the issuance of Section 404
of the Clean Water Act permits.

a. NEPA. Almost any water resources-related
federal activity will trigger application of the National Environmental Policy Act. 42 U.S.C. §§4331-44.

i. No action and environmentally advantageous alternatives such as flow enhancement are mandated as part of the requirement that a detailed EIS be filed. e.g., Save the Niobrara River Assoc., Inc. v. Andrus, 483 F. Supp. 844 (D. Neb. 1979). However, the Supreme Court has indicated that NEPAS duties are essentially procedural and that an agency in making a final decision on the merits is not required to give environmental values priority over other values. Stryker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, (1980).

ii. A project that threatens instream values may cannot be attacked indirectly by arguing that the benefit-cost analysis prepared in connection with the EIS is technically defective. e.g., Robinson v. Knebel, 550 F.2d 442 (8th Cir. 1977). See C. Meyers and A. Tarlock, Water Resource Management 2d 577-78 (1980).
b. **Fish and Wildlife Coordination Act.** The Fish and Wildlife Coordination Act, 16 U.S.C. §661-666(c) was passed "to provide that wildlife considerations shall receive equal consideration and be coordinated with other features of water resource development . . . ." The key enforcement mechanism is mandatory consultation with the Fish and Wildlife Service by any U.S. department or agency and any federal permittee before the project is planned and constructed. The Fish and Wildlife Coordination Action may be stronger than NEPA because (1) it requires that fish and wildlife values be considered earlier than the EIS stage, (2) preservation of instream flows is a legitimate project purpose and (3) mitigation measures to preserve fish and wildlife may be required.

i. Mandatory consultation has resulted in the modification of federal project design. A Federal Water and Power Service hydroelectric addition of a third unit to the Anderson Ranch Power Plant on the Boise River includes improved year-round flows in the South Fork of the Boise
River as a result of the consideration of three alternative operating plans. Blumm, Hydropower vs. Salmon: The Struggle of the Pacific Northwest's Anadromous Fish Resources for a Peaceful Coexistence with the Federal Columbia River Power System, 11 Environmental Law 215 (1980) discusses the application of the Fishland Wildlife Coordination Act to preserve the Columbia's salmon runs.


c. The Endangered Species Act, 16 U.S.C §§1531-43, as amended, requires that federal agencies "ensure" that listed endangered species are not impaired by a federal activity.

i. Greyrocks. The first major controversy to be decided under the 1978 amendments was the Greyrocks Reservoir. After a district court enjoined construction of a reservoir in Wyoming to protect the habitat of the Whopping Crane in Nebraska (and incidently Nebraska irrigators) and the exemption process was started. A settlement involving flow leases and a habitat preservation trust fund was reached.


d. **Section 404 Permits.** It has been argued that Section 404 of the Clean Water Act may require the issuing agency to attach minimum flow release conditions.

i. Navigable Waters are broadly defined, United States v. Texas Pipeline Co., 611 F.2d 345 (10th Cir. 1979) and Wyoming v. Hoffman, 437 (D. Wyo. 1977).


D. **Flow Protection Under the Clean Water Act**

1. **Dilution is the Solution.** A point source discharger may not receive credit for discharging into clean water. Weyerhaeuser

2. **Non-Degradation.** Federal designation of a river for non-degradation protection may be a basis to preclude further diversions, if the effluent returned to the stream would impair the value for instream uses. 43 C.F.R. §130.17. But cf. 33 U.S.C. §1251 (g) which expresses a policy against federal encroachment of state water rights.

3. **Storage.** Pollution abatement is a permissible objective of storage, but it can be a substitute for treatment at the source. 33 U.S.C. §1252. One district court has suggested that dams may be point sources of pollution. South Carolina Wildlife Fed'n v. Alexander, 457 F. Supp. 118 (D.S.C. 1978).