Legal Implications of Instream Flows and Other Nonconsumptive Uses

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WESTERN WATER LAW IN TRANSITION

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I. Introduction to Nonconsumptive Water Uses

A. Very few uses of water are truly nonconsumptive.
   1. Hydropower usually involves impoundment, thereby increasing surface evaporation.
   2. Water diversions to fish ponds and hatcheries also increases consumptive use of water through evaporation.
   3. Five to ten percent of water diverted for domestic purposes is generally consumed through in-house use and the effluent treatment process.
   4. Even gravel washing and processing is currently considered consumptive due to carry-off of water attached to the gravel and to evaporation.

B. Instream flow uses, however, are nonconsumptive and are varied in nature. Such purposes include:
   1. Maintenance of fish populations and other aquatic biota.
   2. Protection of wildlife and the riparian environment.
   3. Recreational use by rafters and fishers.
   4. Aesthetic and spiritual values of free-flowing waters.
   5. Dilution of industrial discharges and other pollutants.
   6. Transport of sediment to maintain the viability of the natural stream channel.
      a. The U.S. Forest Service is making claim to reserved instream flow rights throughout the West
based upon the role that such flows play in maintaining channel integrity. It asserts that viable stream channels are needed "for securing favorable conditions of water flows" as mandated by Congress in the establishment of the National Forest system. (The Organic Act of 1897 as codified at 16 U.S.C. 475. For a description of these claims, see Shupe, "Reserved Instream Flow Rights in the National Forests: Round 2", WNRL Digest, Commentary - Spring 1985, at p. 23.)

b. This need for instream flows to protect stream channels has also resulted in a court ruling disallowing the permitting of a reservoir that would deplete flow in the South Platte River, which in turn might allow vegetation to encroach upon the natural stream channel. Such encroachment was found to potentially threaten the whooping crane, in contravention of the Endangered Species Act. (Riverside Irrigation District v. Andrews, Slip Opinion of March 26, 1985, Court of Appeals for the 10th Circuit, affirming 568 F. Supp. 583 (D. Colo. 1983). See also, MacDonnell, "The Endangered Species Act and Western Water Projects", found in the proceedings of this conference.)
II. State Instream Flow Protection Programs

A. Three basic strategies have been implemented by western state legislatures in order to protect instream flows.

1. The first strategy involves the removal of certain streams and rivers from further appropriation.

   a. This strategy was begun in Oregon in the 1920's for particular watercourses that had important fisheries. A typical statute conditionally removing a stream from further appropriation reads as follows:

   "The unappropriated waters of Milton Creek and its tributaries are withdrawn from appropriation except for domestic use through the year and storage during the period beginning November 1 and ending April 30 of each year. Nothing contained in this section shall impair the existing rights of any person to the use of such waters." Ore. Rev. Stat. 538.300.

   b. Some western states have expanded this concept into a comprehensive program for protecting wild and scenic rivers from further appropriation. For instance, in 1972 California declared that it was state policy "that certain rivers which possess extraordinary scenic, recreational, fishery, or wildlife values shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state." (Cal. Pub. Res. Code
5093.50). In Section 5093.55, the legislature then provided that no impoundment structures be built on certain rivers,

"nor shall any water diversion facility be constructed on any such river unless and until the secretary determines that such facility is needed to supply domestic water to the residents of the county or counties through which the river flows, and unless and until the secretary determines that facility will not adversely affect its free-flowing condition and natural character."

2. A second state strategy for protecting instream flows involves the denial or conditioning of a water permit application. For example:

"It is the policy of this state [Washington] that a flow of water sufficient to support game fish and food fish populations be maintained at all times in the streams of this state.

The director of ecology shall give the director of fisheries and the director of game notice of each application for a permit to divert water, or other hydraulic permit. The director of fisheries and director of game have thirty days after receiving the notice to state their objections to the application. The permit shall not be issued until the thirty-day period has elapsed.

The director of ecology may refuse to issue a permit if, in the opinion of the director of fisheries or director of game, issuing the permit might result in lowering the flow of water in a stream below the flow necessary to adequately support food fish and game fish populations in the stream." (Wash. Rev. Code 75.20.050)

Such consideration for protection of instream flows in the water permitting process is also embodied in California law:

"The use of water for recreation and preservation and enhancement of fish and wildlife resources is a beneficial use of water. In determining the amount of water available for appropriation for other beneficial uses, the board [responsible for issuing water use permits] shall take into
account, whenever it is in the public interest, the amount of water required for recreation and the preservation and enhancement of fish and wildlife resources.

The board shall notify the Department of Fish and Game of any application for a permit to appropriate water. The Department of Fish and Game shall recommend the amounts of water, if any, required for the preservation and enhancement of fish and wildlife resources and shall report its findings to the board." (Cal. Water Code 1243)

3. The third strategy for instream flow protection involves an outright appropriation of water for such purpose. In the State of Washington:

"The department of water resources may establish minimum water flows or levels for streams, lakes or other public waters for the purposes of protecting fish, game, birds or other wildlife resources, or recreational or aesthetic values of said public waters whenever it appears to be in the public interest to establish the same." (Wash. Rev. Code 90.22.010)

Another example of this concept is found in Oregon where:

"(1) The Department of Environmental Quality or the State Department of Fish and Wildlife may submit to the Water Resources Director applications for the establishment of minimum perennial stream flows...

(4) Within one year of the date an application recommending a minimum perennial stream flow is submitted to the Water Resources Director, the Water Policy Review Board shall:
(a) Adopt the recommended minimum perennial stream flow;
(b) Adopt a minimum perennial stream flow at some other rate after making a finding that such other rate is more appropriate for supporting aquatic life and minimizing pollution; or
(c) Reject the recommended minimum perennial flow after making a finding that establishment of a minimum flow is of lesser importance than other uses of the waters of the particular stream."

(Ore. Rev. Stat. 536.325)
B. The State of Colorado has followed this third
approach in establishing its instream flow program.

1. In 1973, the Colorado legislature modified the
definition of "beneficial use" to accommodate
instream flow protection:

"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

The legislation of 1973 then provided the means
for making such appropriations:

"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 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

2. The validity of this statute was soon
challenged on the basis that it contravened the
requirement that a physical diversion of the water
be made in order to establish a vested water
right. The Colorado supreme court, however,
struck down this assertion, stating that the legislature could in fact create an instream flow right without a diversion present. (Colorado River Water Conservancy District v. Colorado Water Conservation Board, 594 P.2d 570 (Colo. 1979). See also, State Dept. of Parks v. Dept. of Water Admin., 530 P.2d 924 (Idaho 1974).)

3. The statute was also attacked as being an impermissible delegation of authority, since "to preserve the natural environment to a reasonable degree" was unconstitutionally vague. The court, however, did not agree with this contention, stating that the standard is "such as could be implemented by agencies having specific expertise regarding the preservation of flora, fauna and other aspects of the natural environment." (594 P.2d at 576)

4. The way in which the Colorado Water Conservation Board initially implemented the program was criticized in its early years. In many instances, instream flow levels were selected with very little data and simply reflected the subjective opinions of Division of Wildlife personnel. The legislature reacted in 1981 by amending the statute to require that:

"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." (Colo. Rev. Stat. 37-92-102(3)(c))

The amendment also dealt with subordination to all existing uses and exchanges; with the issue of imported water; and with the fact that the instream flow rights in no way created rights-of-way across private lands in order to gain access to the appropriation. (Colo. Rev. Stat. 37-92-102(3))

III. Administrative Difficulties in Protecting Instream Flow Rights

A. Difficulties exist in protecting instream flow rights from upstream junior water users. Many streams have no gaging station on them, thereby making it difficult to know when to make a call against junior users. Also, even when a stream flow measurement device exists, it is usually only read periodically, resulting in extended periods when upstream junior diversions may be depleting the instream flow below the necessary level.

B. Instream flow rights often exist in basins in which there is no further unappropriated water. In such areas, new users must come up with augmentation water (e.g. buy out senior water rights, import transbasin water, provide additional storage) to offset the impact of their new use. In order to protect most existing
rights, such augmentation is needed only during the irrigation season when there is a call on the river. Instream flow rights, however, are generally yearround, and may require a new user to identify additional augmentation water during the non-irrigation season. Such a requirement imposed by instream flow rights can be very complicated and costly to the developer. Reservoir releases during the winter may be impossible due to icing, while the retiring of senior rights for winter augmentation may likewise be impractical since most senior rights extend only through the irrigation season.

C. Instream flow rights create other unique complications to new users in overappropriated basins. Take for instance the common example where a proposed mountain subdivision has bought out a senior irrigation right to offset the new consumptive use. Normally, the developer need only offset the consumptive use of the subdivision (about 5% to 10% of the total diversion needs) in order to satisfy downstream users. The majority of the subdivision diversion returns to the river and is available downstream. Many of these new mountain resorts, however, lie along a stretch of stream in which there exists an instream flow right - a right which will be diminished in the short
stretch between where the water is diverted for
the subdivision and where the return flow
reenters the stream. This stretch may only be aﬁew hundred feet, but the developer is nonetheless
lawfully required to prevent damage to this
instream flow segment. As a consequence, rather
than simply finding augmentation water for 10% of
the diversion, the developer may have to provide
100% augmentation - a result which may be too
costly to justify proceeding with the development.

D. Another dilemma facing those who must
administer and enforce instream flows involves
the level of injury caused by small-scale
developments to the instream flow right. For
instance, a well serving three mountain homes
upstream of the instream flow segment will consume
about 0.1 acre-feet of water per year. This
translates to less than an 0.0002 cfs depletion to
the stream which typically will have an instream
flow right of several cfs. Should the state
require augmentation for the 0.0002 cfs depletion?
What if the depletion were 0.02 cfs, or 0.2 cfs?
Would it make any difference if the well were in
an area in which hundreds of such developments
were planned? State officials who must enforce
instream flow rights are faced with having to
answer these difficult questions.
IV. Mechanisms for Improving Instream Flow Protection

A. In many instances, instream flow appropriations are merely paper rights with no practical impact.

B. In areas where junior users may be depleting the senior instream flow right, gaging stations need to be installed in order to make a call. Tying such stations into new state satellite monitoring networks can be an effective, although costly, means of asserting instream flow rights.

C. In overappropriated basins, senior rights can be bought out and dedicated to instream flow.

D. The state can work cooperatively with water distribution districts which control multi-reservoir networks in order to optimize storage and release schedules to facilitate instream flow protection.