

INSTREAM FLOW WATER RIGHTS:
ARIZONA'S APPROACH

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INSTREAM FLOW PROTECTION IN THE WESTERN UNITED STATES:
A PRACTICAL SYMPOSIUM

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Instream Flow Water Rights: Arizona's Approach

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The Arizona Legislature enacted the surface water code in 1919. The code specifies the basic procedures for obtaining rights to surface flows primarily through diversion of water from a stream or with storage in a reservoir. The water must be put to beneficial use on land owned by the appropriator. The code has been modified only slightly in the past 69 years. In spite of the fact that prior to 1919 almost all of the dependable surface flows had already been appropriated and in many cases their rights adjudicated by court decrees, the State Land Department followed now by the Department of Water Resources (DWR) has managed to issue over 6,300 surface water rights under the code. Not only that, but there are still 2,400 applications for water rights pending before the DWR at the present time.

The surface water law states that "any person or the state of Arizona or a political subdivision thereof may appropriate unappropriated water for domestic, municipal, irrigation, stock watering, water power, recreation, wildlife, including fish, artificial groundwater recharge, or mining uses, for his personal use or for delivery to consumers. The person or the state of Arizona or a political subdivision thereof first appropriating the water shall have the better right." The application to

appropriate requires the applicant to identify a number facts associated with the appropriation including: the source of the water supply, the nature and amount of the proposed use, and in the case of recreation or wildlife purposes the location and the character of the area to be used and the specific purposes for which such area will be used. In determining whether or not to grant an application the DWR is required to consider a number of factors such as if the proposed use conflicts with vested rights, is a menace to public safety, or is against the interests and welfare of the public. In approving an application the DWR cannot approve an application for more water than may be put to beneficial use.

Over the years the regulatory agencies developed rules and procedures to implement the statutes. For example, in order to determine impact with vested rights, a procedure which allows protest by other right holders was developed. Based on information provided by a protestant, a hearing could be required at which the applicant must demonstrate that vested rights would not be impacted. In determining the appropriate volume of water to achieve the desired beneficial use a value such as an irrigation water duty or a gallons per head per day requirement (for stockwatering) is used. These values are then compared with the amount of water being requested to make sure that no excessive appropriations were permitted.

These procedures worked satisfactorily for most conventional applications where there is a diversion from the stream and the water is consumed at another location. In 1979 the Department

was faced with two applications which did not meet the conventional standards. The Arizona Nature Conservancy and the Bureau of Land Management each applied for appropriative rights for recreation and wildlife purposes not based on a reservoir or a diversion of water, but rather for instream uses. The instream flow applications placed the DWR in the position of having to answer all of the regular questions about granting a new permit, but the context was entirely different.

Since the applications raised many legal issues the DWR decided to hold a hearing on one of the applications in order to help determine exactly what Arizona law would allow. The application by The Nature Conservancy for instream flows on Ramsey Creek and O'Donnell Creek was selected as the example case. The application was protested by other water users in the area and a hearing was held on the issues. The primary issue, whether or not a diversion was required in order to obtain an appropriative right, was discussed at length. Other issues were whether or not wildlife habitat preservation and retention of aesthetic values are beneficial uses for which instream flows may be appropriated and whether private parties and federal agencies, as well as state agencies, may file applications for such appropriations.

In April, 1983 the Department issued its decision and order on the application approving the permit to appropriate by concluding that and it is within the Arizona law to appropriate water for instream uses for wildlife and recreational purposes. This decision was not based on the direct reading of the statutes

which neither expressly authorize nor expressly exclude instream appropriations. However, the Arizona Court of Appeals did provide DWR with guidance. In 1976 they stated that waters could be appropriated for in situ use--without a diversion--for recreation and fishing purposes. McClellen v. Jantzen, 26 Ariz. App. at 225, 547 P.2d at 496. While the statement in that particular case was dictum, nevertheless, the McClellen court's reasoning was persuasive. The court conceded that "originally, the concept of 'appropriation of waters' consisted of the diversion of that water with the intent to appropriate it and put it to beneficial use." That concept, however, evolved. Prior to 1941 the requirement of a diversion was consistent with the purposes for which an appropriation was made, namely, domestic, municipal, irrigation, stock watering, water power and mining uses. With the addition of "wildlife, including fish" in 1941 and "recreation" in 1962 as permissible uses--uses that "could be enjoyed without a diversion"-- the concept of an in situ appropriation was introduced. The McClellen court reasoned that by authorizing beneficial uses that could be realized without a diversion the Legislature implicitly approved instream appropriations. Similarly, it could be argued that in many instances an instream appropriation is necessary to effect a particular wildlife or recreational use.

After concluding that the statutes allow for instream appropriations the DWR went on to note that there was nothing particularly unique about such applications. This means that if any individual person or the federal government could apply for a

diversion related right, then they could also apply for an instream right. Likewise, beneficial use must be demonstrated in order to obtain such a right, the right could be assigned to another person if property was sold. and the right could be subject to the change of use or the sever and transfer provisions of the surface code.

Because of these latter considerations a number of conditions were placed on the permit issued to The Nature Conservancy. The conditions which were agreed to at the hearing by The Nature Conservancy were intended to provide some certainty to the protestants that their senior rights would be protected from a change of use sometime in the future. The conditions, which may eventually be included in any instream appropriation were:

1. There shall be no impoundments of public waters other than by the existing dams;
2. There shall be no interference with the natural flow of Ramsey Creek and O'Donnell Creek other than by the existing dams;
3. There shall be no consumptive use of public waters other than is caused by the natural habitat; and,
4. There shall be no change in water quality by reason of the Applicant's use of these public waters other than as caused by natural habitat.

The order also made it clear that the new appropriation is subject to existing vested water rights. In order to determine that the water was being put to beneficial use, The Nature Conservancy is required to maintain a record of the continuous minimum instream flows of Ramsey Creek and O'Donnell Creek and to submit those records to the DWR as proof of appropriation.

Since the 1983 decision the DWR has received an additional 37 applications for instream flows. A current list of those applications is found in Table 1. In April 1986 the Arizona Game and Fish Department indicated to DWR that they had identified 188 stream sections with wildlife or recreational values which may be candidates for instream flow applications. They had not proceeded to make applications because of the potential costs of investigating and having to support that many applications. However, they would be prepared to commit the resources to make the filings if DWR would publish criteria for evaluating the applications and standards of proof for supporting claims. They went on to offer the expertise and assistance of their agency in helping the DWR develop those criteria. At the same time representatives of the Bureau of Land Management, Bureau of Reclamation, and the Forest Service indicated a similar willingness to provide help.

Before proceeding with a rulemaking process, the Department attempted to get a clearer understanding of the objectives which needed to be achieved. We first reviewed all applications to determine the kinds of information provided and the nature of the protests. All applications for instream flows were based on fish

Table 1
MINIMUM INSTREAM FLOW APPLICATIONS

(33) App. No.	Applicant	Source	Requested Flow in Acre Feet	Status
40240	Az. Game and Fish Dept.	Silver Sprs. (2)/Silver Crk.	2,244.40	Application
78418	Az. Nature Conservancy	Thomas Wash/Altar Wash	56.50	Application
78419	" " "	Ramsey Creek/San Pedro	347.52	Permit
78420	" " "	Sonoita Creek/Santa Cruz	403.30	Cand. for Permit
78421	" " "	O'Donnell Creek/San Pedro	325.80	Permit
86565	Coronado National Forest	Grant Creek	8.50	Withdrawn 8-3-83
87114	E L M - Safford District	Aravaipa Creek	10,860.00	Cand. for Permit
89090	Pima Cty. Flood Control Dist.	Cienega Creek/Pantano Wash	3,124.40	Protested
89109	Tonto National Forest	Pinto Creek/Salt River	1,810.00	Protested
89119	B L M - Safford District	Francis/Burro Crks./Big Sandy	5,430.00	Protested
90103	Huachuca Audubon Society As. to BLM w/cond. 5-28-86	San Pedro/Gila Rivers	553,491.00	Protested
90106	Coconino National Forest	Oak Creek/Verde River	4,344.00	Protested
90107	" " "	E. Clear Creek/Little Colo.	72.40	"
90108	" " "	Walker Crk./Wet Beaver Crk.	362.00	"
90109	" " "	Red Tank Draw/Wet Beaver Crk.	72.40	"
90110	" " "	W. Clear Creek/Verde River	8,688.00	"
90111	" " "	Sheepshead Crk./Oak Creek	144.80	"
90112	" " "	Wet Beaver Crk./Verde River	3,909.60	"
90113	" " "	Sycamore Crk./Verde River	2,389.20	"
90114	" " "	Spring Creek/Verde River	2,172.00	"
90249	B L M - Safford District	Buehman Canyon	723.00	Protested
90250	" " "	Bonita Creek	3,613.00	"
90251	" " "	San Francisco River	7,227.00	"
90252	" " "	Mescal Creek	1,445.00	"
90253	" " "	Apache Creek	500.40	"
90309	Tonto National Forest	Verde River	72,400.00	Protested 1-16-87
90310	" " "	East Verde River	2,896.00	" 1-16-87
90311	Navajo Cty. Parks & Recreation	Billy Creek/Little Colo.	1.00	Cand. for Permit
90410	B L M - Phx. District	People's Canyon Creek	72.40	Cand. for Permit
92304	The Nature Conservancy	Mainstream Hassayampa River	3,620.00	App. 1-20-87
92298	S/W Arboretum & State Parks Bd.	Queen Creek/Gila River	904.89	App. 1-20-87: defective
93232	Sierra Club	Sabino Creek	6,358.53	App. 7-28-87
93263	Coronado Nat'l. Forest	Sabino Creek/Rillito Creek	25,506.52	App. 8-3-87

(cont'd.)

MINIMUM INSTREAM FLOW APPLICATIONS

<u>(33)</u> <u>App. No.</u>	<u>Applicant</u>	<u>Source</u>	<u>Requested Flow</u> <u>in Acre Feet</u>	<u>Status</u>
93282	Az. State Land Dept.	Cargodera Canyon	73.1	App. 8-7-87
93283	" " " "	Montrose Canyon	362.7	" 8-7-87
93284	" " " "	Romero Canyon	543.7	" 8-7-87
93265	" " " "	Cargodera Canyon	73.1	" 8-7-87
93286	" " " "	Alamo Canyon	218.4	" 8-7-87
93227	" " " "	Sonoita Creek	1,200.0	" 6-7-87

and wildlife and/or recreation uses. For the most part the fish and wildlife uses were related to riparian habitat maintenance and fishery habitat. Recreational uses were geared much more to aesthetic values such as hiking or camping by a live stream rather than more quantifiable uses such as rafting, floating, or swimming. The length of stream reaches varied from less than a mile in several cases to more than 20 miles in the cases of the cases of the San Pedro and Verde Rivers. In the case of the longer reaches only a few of the applications request a different flow rate for different stream sections based on accretions or losses. Most applications are for a constant year round minimum flow although several ask for seasonal variations. At the time of the investigation all applications except a filing by the Arizona Game and Fish Department, were by the agency or landowner who controlled access to the stream.

Most of the applications provide information on the fish and wildlife habitat the instream flow is intended to preserve. One application, the BLM's Burro Creek application provided extensive technical and scientific information which evaluate instream flow requirements. Nearly all applications are based on historical minimum flows recorded at nearby USGS gaging stations rather than an in depth evaluation of habitat needs.

After reviewing the applications the DWR contacted the Department of Water Resources offices of several other western states to determine if their procedures for evaluating instream flows could be adapted to Arizona. We discovered that while many other states had specific statutes regulating instream flows,

only a few other states have adopted comprehensive procedures to deal with evaluating the issue of how much water was the correct amount to demonstrate beneficial use. The most advanced programs appeared to be in Washington and Oregon. Oregon has advanced their procedures through rules, but those rules pertain to a specific law governing instream flows. Oregon recognizes instream flows for fisheries and water quality purposes. Applications can be made only by the Department of Fish and Wildlife or the Department of Environmental Quality. The rules describe the information the applicant must provide, the review process for applications, the information base used in considering applications, and the review standards. Review is based on both hydrologic considerations (is the water likely to be available?) and beneficial use considerations (how much water is really needed to support the fish habitat?). Even with specific guidelines it appears from various reports that in most cases the final instream flow rights quantities were the result of a combination of technical information and a negotiated agreement with out of stream diversion users.

In order to move ahead effectively on instream flow applications, the DWR needed to take steps toward resolving remaining policy, legal, and technical considerations. The Department considered six options:

1. Sign an interagency memorandum of understanding with the Arizona Game and Fish Department for consultation.
2. Organize an interagency task force to work on the issues. The task force would be open to both

governmental and non-governmental entities.

3. Hire an independent consultant to prepare a report and recommendations on the issues.
4. Perform any technical analyses in-house using planning and hydrology staffs.
5. Approach the Legislature with a bill which would specifically deal with instream flow appropriations.
6. Do nothing in the form of comprehensive rules, but rather let the issues sort themselves out on a case by cases basis using the hearing process.

Considering the amount of support that the DWR had received from the applicants and their desire to assist in the formulation of rules, the Department decided to use the interagency task force approach.

The task force was organized in December 1986. Individuals in both the federal and state governments, from the universities, and the private sector were invited to participate. Two subcommittees were established to deal with technical issues. The Biological Subcommittee was charged with the investigation of various methodologies in use for evaluating flow requirements for wildlife habitat and to make a recommendation on those techniques which would be most useful in Arizona. The Hydrologic Subcommittee was tasked to investigate methods to estimate historic flows for streams where no gauge records exist. This information is intended to be used with the biological information to determine if the flow rates requested in the application are reasonable. The Biological Subcommittee met

several times and developed a report on the techniques and methods which could be used. Their analysis included consideration for the costs, manpower requirements, and the pitfalls inherent in each method. Their report also recognized that in many areas where there are no competing water users and therefore is less controversy, a less rigorous method of analysis may be acceptable. The Hydrologic Subcommittee has not yet completed a report, but the focus of their attention has been on correlative techniques and on the need to measure flows for a period of time after a permit is issued. In addition to the subcommittee efforts most of the participants of the Task Force have responded to a request that they provide their opinions on a number of legal and policy issues.

The original schedule established was to hold two or three meetings and conclude the effort within just a few months. Unfortunately, the DWR has not been able to live up to the original schedule. The Office of Water Management of the DWR, which is responsible for surface water rights and groundwater rights and groundwater rights, is faced with many crucial issues in addition to instream flows. The highest priorities had to be set for the preparation of the Second Management Plans early in 1988 and the enforcement of the First Management Plans. These plans are critical to the successful implementation of Arizona's Groundwater Management Code. In addition to these efforts there are a number of rule packages relating to the implementation of the groundwater code which were long overdue. With limited staff and resources available priorities had to be established and

therefore surface water rules including the instream flow rules had to be delayed. However, while these rules have been delayed they have by no means been abandoned. The DWR recognizes the need to act on the instream flow applications and is committed to do so.

The quality of the input which DWR received from the Task Force been outstanding and extremely valuable. Many of the members participated in preparation of technical materials while others have shared their opinions on legal and policy issues.

In conclusion, I want to reiterate that Arizona is working to complete its efforts to establish regulatory guidelines for processing instream flow applications. We believe that the guidelines will prove to be the important factor to allow DWR to proceed to make decisions on the existing applications and to provide the certainty to the land and wildlife resource management agencies for programing their efforts for later applications.

