

# STREAM NOTES

To Aid In Securing Favorable Conditions of Water Flows

Rocky Mountain Research Station

April 2002

## Still No Water for the Woods

by Lois G. Witte

In 1979 Sally K. Fairfax and A. Dan Tarlock published an article in the *Idaho Law Review* titled "No Water for the Woods: A Critical Analysis of *United States v. New Mexico*." This article analyzed the first Supreme Court opinion to answer the question of whether a federal land management agency, in this instance the United States Department of Agriculture, Forest Service, could assert the implied reserved theory of water rights to obtain instream flows for the protection of recreation, fish, and wildlife. The majority opinion in *New Mexico* narrowly construed the implied reserved water rights doctrine and denied instream flows to the United States.

As the Fairfax and Tarlock article pointed out, and as most everyone who lives in the Western United States knows, in the West, the availability of water determines the value of land. Given the importance of water to the value of land, it is timely today to take a look at the protections available to water on National Forest System (NFS) lands and to see how well the water resources on federal lands have been protected in our legal and judicial systems.

This article will look at how the Forest Service has fared in securing instream flows under the implied federal reserved water rights doctrine, state appropriate

water laws, federal land management statutes, and the Endangered Species Act.

The Organic Administration Act of 1897 establishing the National Forests recognized the importance of water and watershed management. There is even greater recognition today, with more than 30 federal statutes articulating federal responsibilities relative to management of water-dependent resources on NFS lands. Many people assume that the multiple-use purposes of outdoor recreation, range, timber, watershed, and wildlife and fish require surface water flowing on NFS lands.

These parties would be surprised to learn the position of most Western States: that water on NFS lands is not a part of the federal estate, and that all of the water within National Forests not already diverted and appropriated for a beneficial use is freely subject to appropriation and diversion by any private party.

### Federal Ownership of Instream Flow Water Rights for Recreation, Fish, and Wildlife Purposes Under Federal Law

In *New Mexico* the United States Supreme Court denied the fish, wildlife, and recreation claims of the United States made under an 1897 priority date,

*STREAM NOTES* is produced quarterly by the Stream Systems Technology Center, Rocky Mountain Research Station, Fort Collins, Colorado.  
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The *PRIMARY AIM* is to exchange technical ideas and transfer technology among scientists working with wildland stream systems.

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pursuant to the original Organic Administration Act of 1897. The Supreme Court narrowly construed the original purposes of the forest reserve to be conservation of favorable water flows and production of timber. In strongly worded dicta, it also stated that fish, wildlife, and recreation purposes were “secondary” forest purposes and should not be claimed with a 1960 date under the Multiple-Use Sustained Yield Act but that necessary water “should be acquired in the same manner as by any other public or private appropriators.” Many western states intervened in this litigation and asserted that various state laws could be used to protect water resources on NFS lands.

To date, the Forest Service has not received even one implied reserved instream flow water right for fish, recreation, or wildlife purposes in contested proceedings. The only instream flow protections received in adjudications were the result of negotiations in two water basins and a small basin closure in Utah.

### **Federal Ownership of Instream Flow Water Rights for Favorable Conditions of Water Flow Under Federal Law**

In *New Mexico*, the United States Supreme Court narrowly construed the primary purposes of the Forest Service to be twofold: maintaining favorable conditions of water flows and production of timber. And, since the Forest Service failed to claim water for these narrow purposes in the *New Mexico* case, the Forest Service received no implied reserved instream flows in New Mexico.

No court has ever granted the Forest Service an Organic Act reserved instream flow claim. Given the lack of success, coupled with the expense, difficulty, and complexity of making channel maintenance instream flow claims, it is becoming increasingly difficult for the Forest Service to justify continuing its efforts in this regard.

### **Federal Ownership of Instream Flow Water Rights for Fish, Recreation, and Wildlife Under State Law**

When western States intervened in the *New Mexico* litigation, they argued that a federal reserved Organic

Act water right was not necessary because the federal government had alternative ways to protect instream flows under state law. Partly relying on these arguments, the United States Supreme Court told the Forest Service it had to obtain water for secondary uses of the reservation — fish, recreation, and wildlife — “in the same manner as any other public or private appropriator.” Given the states’ arguments, it is appropriate to look at the federal government’s ability to protect instream flows on NFS lands under state law.

There is not much to examine here. With the exception of permits issued by the State of Arizona, the Forest Service does not yet have a single state based instream flow water right for fish, recreation, or wildlife, although it has filed hundreds of state-based instream flow claims in numerous state adjudications or administrative proceedings. In several states where the claims have been filed, the filings have aggressively been resisted by states as inconsistent with state law.

### **Federal Ownership of Instream Flow Water Rights for Federal Purposes on Federal Lands**

State instream flow programs, which define and limit the protection provided to instream flows, appear today to be the only alternative available to protect instream flows. However, basing federal protection of aquatic and aquatic dependent resources on NFS lands solely on the vagaries of individual state legislatures and programs, particularly when state laws are subject to state legislative changes, lack of state funding, or even extinguishment by state legislatures does not appear to provide adequate assurance that the instream flows necessary to protect and manage federal water dependent resources will be there when needed. To date, no state has agreed to cooperate with the federal government by sharing ownership of the instream flows on federal land with the federal government.

### **Federal Regulation of Private State Water Rights on Federal Lands**

It has long been Forest Service policy that special use permits authorizing water diversion facilities located on National Forest System lands incorporate



stipulations to protect aquatic habitat and/or maintain stream channel stability. Permits issued since the 1950s have incorporated bypass flow stipulations for these purposes.

The Forest Service's broad regulatory authority and special use process were cited by several states as an adequate mechanism for protecting NFS purposes, obviating the need for federally reserved instream flows. Today, however, it is the position of these states and others that neither the Organic Administration Act of 1897 nor the Federal Land Policy and Management Act of 1976 provide the Forest Service with authority to require bypass flows.

### **Endangered Species Act and Instream Flows on Federal Lands**

The Endangered Species Act (ESA) may be the most potent legal tool for reallocating water to meet instream flow needs on federal lands. Among other requirements, the ESA requires federal agencies to use their authority to further the purpose of the ESA and to conserve endangered and threatened species.

### **What Next? Finding Water for the Woods**

The Forest Service has tried numerous methods to protect instream flows in McCarran Amendment proceedings. Unfortunately, the federally reserved claims have generally failed for a variety of reasons. Some failures can be attributed to hostile state court forums, others to the stringent test established by the U.S. Supreme Court for implied reserved water rights, and others to the difficulty of quantifying an instream flow water right in flexible and dynamic hydrologic stream systems. Despite the direction by the Supreme Court in *New Mexico* to the Forest Service to obtain water for secondary purposes under state law in the same manner as other public or private appropriators, most states have prevented the Forest Service from obtaining instream flows for fish and recreation purposes either as a private or a public appropriator.

Most recently, the conflict over stream flows on federal lands has moved to a new arena — federal regulatory authority over private water diversion, storage, and transportation facilities located on federal

lands. Federal authority to regulate these facilities, through its express statutory authority to regulate use and occupancy of these lands, represents one of the last remaining tools available to the federal government to protect aquatic and aquatic-dependent resources on federal lands.

However, even this tool is at risk. Several courts are currently examining whether the Forest Service and the BLM have this authority at this time. The Department of Agriculture has received, and continues to receive, numerous letters and comments from Western representatives expressing concern about the use of Forest Service regulatory authority to protect instream flows on NFS lands and requesting that the Forest Service refrain from exercising this authority in a manner inconsistent with state water rights and state water primacy.

It is very clear, however, that absent the federal ability to regulate private water diversions on federal lands, there are few tools remaining to most federal land management agencies, other than denying all applications for the use of federal lands for private water diversions. It goes without saying that no one, including the federal agencies, would or should be pleased with this outcome.

The limited federal ability to protect aquatic resources on federal lands is greatly exacerbated by the disjunct between state water laws and federal laws. Most states water systems fail to recognize the need for aquatic resources on federal lands unless the need is articulated in a state-controlled water right. Most state water rights do not recognize the federal resource needs as “beneficial” and view flowing water not captured in a state water right as wasted. No state views wilderness preservation as a beneficial use which can be protected under state law. Many states grant private water rights on federal land without any concern for the aquatic needs and health of the federal land. Furthermore, for too long the state's litigation and policy efforts have been dominated by traditional irrigation and water extraction users, and many states have failed to consider the broad needs of other members of its citizenry who want and enjoy the instream resources federal agencies are obligated to steward and protect. Attempts by environmental groups to advocate for non-consumptive instream flow uses have had limited



success. These groups do not own water rights and have been found to either lack standing or lack an injury recognized by the water courts.

Clearly, protracted battles among federal and state governments have yielded little protection and are not the solution. Nor does turning all protection decisions relative to water and aquatic-dependent resources over to individual states provide a solution. Healthy aquatic resources and streams are vital to the American public and essential to aquatic biodiversity, but the question of how best to protect these national resources and lands has yet to be fully discussed at the national level. It has been more than 20 years since the United States Supreme Court decision in *New Mexico*, and still there is no fully accepted or appropriate method available to the Forest Service to protect water and water-dependent resources on NFS lands. It is time to fully open the national debate on this issue and have a full hearing from all sides.

Instream flow and aquatic resource protection on federal lands is one of the biggest public land issues facing public land administration today. One way or another, the issue must and will be resolved. It will either be resolved by states through their continued success in denying the federal government any ability to protect stream flows on federal lands, or it will be resolved when the present situation is acknowledged and addressed as a joint problem by the public and all parties. This will require the laying down of inflammatory rhetoric, historic posturing, and jurisdictional conflicts. It will require a sharing of responsibilities and authorities between state and federal governments.

There are possible solutions. A cooperative, jointly held water right may be a partial solution which protects the procedures and integrity of both federal and state governments. Integration of federal needs into state water permits and adjudications on NFS lands is another possible solution. Water needed for healthy watersheds or aquatic resources on NFS lands could simply be identified by the public, states, and Forest Service in a cooperative planning effort expressed in forest planning documents. At that time, the water identified as necessary for protection of the federal lands could be viewed as unavailable for appropriation under state law. All quantities of water

in excess of the needed amount would still be available on NFS lands, and all water originating on NFS lands would still be available for appropriation and diversion off NFS lands.

Three things are certain. One, water scarcity will be a bigger problem in the future than in the past as the West continues its unprecedented growth and as fresh water demand increases in the East. Second, water development pressures on NFS lands will continue to grow in intensity. And last, what Gifford Pinchot said many years ago remains true today:

“The connection between forests and rivers is like that between father and son: No forests, no rivers . . . Every river is a unit from its source to its mouth. Its uses are many and with our present knowledge, there can be no excuse for sacrificing one use to another if both can be served.”

Preserving healthy forests and watersheds, sustaining traditional beneficial uses, and addressing important instream flow needs on federal lands should be the mutual goal of federal, state, and local governments. In short, we need to ensure there is “water in the woods” for generations to come.

## References

Sally K. Fairfax and A. Dan Tarlock, 1979. No Water for the Woods: A Critical Analysis of United States v. New Mexico, 15 Idaho Law Review 509.

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This is an abbreviated version of the complete paper presented at the American Law Institute-American Bar Association Federal Lands Law Conference, Oct. 19, 2001, Salt Lake City, UT. The paper is available for downloading from the STREAM Web site ([www.stream.fs.fed.us](http://www.stream.fs.fed.us)) at “Download PDF Documents.”



# Protecting Wetland Improvement Investments

by Steven M. Spencer

*Suppose you have a riparian restoration project in a seemingly remote unsettled area in the West. You work hard and your efforts are rewarded. Your project is remarkably successful. An ephemeral stream becomes perennial. Remnant sedges, willows, and cottonwoods seemingly appear out of nowhere and begin to armor the stream banks. The channel deepens and narrows. Fish return. You organize tours and conduct monitoring. Your project is a textbook example of riparian resilience. Later, part of your stream mysteriously dries up. The water disappears. You investigate and discover a diversion structure and ditch taking all your water. You immediately think - lawsuit!*

What do water law and water rights have to do with restoring, rehabilitating, or otherwise enhancing streamside, riparian, and floodplain function and associated natural resources?

Numerous projects to protect, enhance, and manage these resources are funded each year and the Forest Service is keenly interested in the management of riparian and wetland habitats and their associated aquatic and resource values. The Forest Service is also equally interested in water availability and water uses on National Forest System lands. Most current attention on water rights is focused on the western United States where water is often scarce, over allocated, and governed by the “Prior Appropriation Doctrine.”

## The Doctrine of Prior Appropriation

The fundamental principle in western water law is the doctrine of prior appropriation – first in time, first in right. So long as unappropriated water is available, people can use it or appropriate it, governed by specific state water laws. Subsequent appropriators are simply junior in time or subordinate to earlier users, thus the concept of prior appropriation. Integral to the “Prior Appropriation Doctrine” is actual beneficial use of the water. This means the water must be taken from

the source and used on the land for a recognized beneficial purpose. As long as there is any unappropriated water in a stream that can be used, the “Doctrine of Prior Appropriation” is exercised under the laws of the state even to the point that the source is dry. In fact, many river and stream systems in the West are over appropriated (at least on paper).

When there is a conflict over the availability of water in accordance with laws of the state, a lawsuit is likely. Attorneys and a court become involved. Claims are made. Evidence is presented. The court determines who has which particular right to water and issues a ruling.

An interesting thing to consider is that regardless of how noble the cause, a private entity is unable to obtain a water right to leave water in a stream in the western United States. The two current exceptions are Arizona and Nevada. State law in all the remaining western states simply fails to recognize or provide for establishment of any type of water right that protects, maintains or assures that there will be water in the creeks, streams, and rivers in the West. Some states allow instream water rights to be held by a state natural resource agency and many provide for a State Water Control Board or similar entity to hold instream water rights.

When individual states initiate a basin-wide adjudication, the Forest Service files claims for both consumptive and non-consumptive uses. These include consumptive use claims where water is removed from a source and consumed by people at campgrounds or guard stations. The Forest Service also files non-consumptive instream flow claims to secure water for wilderness, wild and scenic rivers, national recreation areas, stream channel maintenance, fish habitat, and associated resource values. These non-consumptive activities are for a use of the water as it passes through a stream. Typically, the total amount of water is unaltered in quantity or timing by instream uses. The Forest Service, on behalf of the American public, files these instream flow claims to leave water in streams and to protect water dependent resources.



## Themes Common to Western Water Law

Water law has developed somewhat independently in each western state. However, there are many common roots and themes within the various laws. One common theme is that all water can be appropriated. In order to be appropriated, it must be diverted or removed from the stream and put to a beneficial use.

Water laws and associated water allocations are complex. Western water laws evolved during an era when resource use and extraction were valued and resources were thought to be limitless. To protect monetary investments and inherent resource values today, project managers must give due consideration to existing water rights and water uses in any stream, riparian, wetland, or floodplain management project.

*From the example we started with earlier, you learn that someone had an old water right. Attracted by the reappearance of water, they re-established an existing old diversion and cleaned out an old ditch. Your riparian restoration project resurrected an old water right. You did nothing wrong and neither did the holder of the old water right. Everything is legal but the reality differs from your expectations. What can you do? Or what should you have done?*

As wise stewards and astute managers, it is imperative for line officers and program managers to have a basic understanding of water law, especially if the project depends or relies on water for success and survival. Discussing the intricacies of water law for just one state is beyond the scope of this paper. But the principles are in concept similar, and I will focus on convincing you that water rights are vital to the success of your projects.

Water rights are a right to beneficially use a quantity of water for fixed time subject to availability and the relative seniority of the right holder. This is a usufructuary right but has some similarities to property rights in that the right can be bought and sold and relocated subject to state approval. Water rights are appurtenant to the beneficial use. Each western state has a department, division or other entity that manages water rights. A claim to a water right is established by making application or filing to the appropriate department and exercising due diligence in developing

the infrastructure and putting the water to beneficial use. If the application is approved, the applicant will receive a permit or other permission to develop and use the water. When the work described on the application is completed, the state must be contacted to inspect the work. If it meets state requirements, a water right certificate is issued. This certificate provides the “color” of a right. It must be exercised or it may be subject to forfeiture.

The quantity and seniority of the water right are still subject to adjustments. These adjustments take place in an administrative or court adjudication. In these proceedings, the precise quantity, timing, and seniority are determined relative to all others with a claim to water rights that are in the area being adjudicated. Adjudications typically involve geographic areas, such as watersheds, and courts settle disputes between water users or claimants and decree their respective water rights. At the end of these proceedings, an adjudicated right is provided. This is considered a “perfected” right, and because it is more certain, has greater value as a property right. (Essentially, the water right holder moves from having a “claim” to having a “title” to the water.)

Filing applications and claims for some water rights is optional for some uses. For example, in Idaho domestic uses and stockwater are exempt or deferrable because they are considered *de minimis*.

## Working With State Agencies

Generally, each state has a site on the Internet. From this site you can typically access the state statutes and locate the water law for the state.

If you are going to be working with a particular area or state for an extended period of time, make a personal visit to the nearest state water office. Establishing a personal one-on-one relationship with state water rights personnel is one of the most valuable things you can do. It is the state’s job to administer and manage water. It is also their job to understand, implement, and follow state law. If you have any business with water, you will need to work with them. It is important for both the line officer and project



manager to build a relationship based on professionalism and trust.

I am currently involved in one of the largest adjudications that has ever been undertaken, covering about 80% of the State of Idaho. This could conceivably place me in the middle of a huge conflict between states-rights and federal government supremacy. But it is also a fact that the U.S. Government, the state water rights folks, and the attorneys are all subject to the same state law or administrative rules. The laws, rules, and policies are already in place. Their foundations reach back more than 150 years. Most of us (including state water rights agents and attorneys) camp, fish, raft, boat, canoe, kayak, hike, and otherwise recreate and enjoy the benefits of having water in the stream and are sympathetic to the cause. But the current rules prevail.

It is vital that we avoid falling into the trap of characterizing other parties as the “enemy.” The key to success is to work closely with state and other interests.

### **Actions to Protect Wetland Restoration Investments**

I urge each project manager to become familiar with water rights with respect to various wetland, aquatic, riparian, and floodplain restoration projects. Use every means available to protect the water that is vital to the long-term success of your projects. To accomplish this:

- Learn about water law and water rights in your project area. Each state is unique. Use the Internet as a valuable reference source.
- Effectively use Forest Plan, NEPA process, and Record of Decision when authorizing water diversions and uses by others to assure water is available for present and foreseeable natural resource needs on NFS lands.
- Thoroughly inspect the project area on the ground for possible problems or conflicts, such as existing diversions, water uses, and old or apparently nonfunctional/unused structures.

- Consult with the state water rights administration agency regarding existing water rights and develop a personal working relationship with state personnel.
- Develop a case file of all facts, documents, and information pertaining to the particular problem if a potential conflict is identified. If there is a water right, consider state law and administrative policy options and come up with a resolution favorable to the project.
- Secure water rights, if possible, using options such as applying for and establishing a new water right, purchasing an existing water right, changing, or transferring or moving an existing water right.
- Consult with the Regional Office Water Uses and Needs staff and through them involve Office of the General Counsel attorneys as appropriate to develop viable options.

These are but a few of the avenues available to protect water dependent restoration projects. Be creative in searching for solutions. Explore novel applications of administrative rules, zoning and land use planning ordinances, and solicit multiple cooperators and philanthropy to support restoration efforts. Seek the advice of available legal counsel and work with them to identify options and legal strategies. By all means, avoid litigation and strive to find solutions using cooperation and partnerships.

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Oral presentation of this material was made at the Association of State Wetland Managers Conference, “Restoring Streams, Riparian Areas, and Floodplains in the Southwest,” October 29-31, 2001, Albuquerque, NM.



# STREAM NOTES



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April 2002

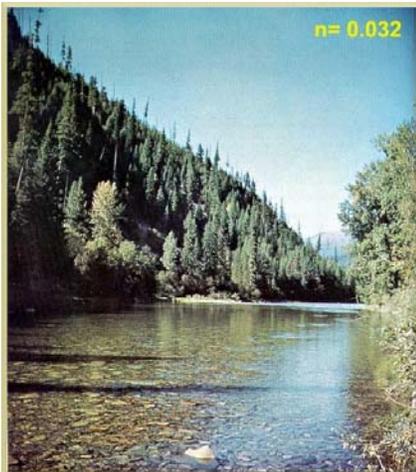
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# STREAM NOTES



## Roughness Characteristics of Natural Channels



Coeur d'Alene River near Prichard, ID

U.S. Geological Survey Water-Supply Paper 1849, *Roughness Characteristics of Natural Channels* by Harry H. Barnes, Jr., was published in 1967 and contains color photographs and descriptive data for 50 stream channels for which roughness coefficients have been determined. All hydraulic computations involving flow in open channels require an evaluation of the hydraulic characteristics of the channel. The ability to evaluate roughness coefficients must be developed through experience and remains chiefly an art. The photographs in Water-Supply Paper 1849 have been widely used in the past by hydrologists and engineers to help gain that experience but the book is now out of print and hard to find. However, the photographs are now available as a Web-based "Manning's n Pictorial" developed by Victor Ponce, Ampar Shetty, and Sezar Ercan of San Diego State University. The Web address is: <http://manningsn.sdsu.edu>.

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