

UNIVERSITIES COUNCIL ON WATER RESOURCES  
JOURNAL OF CONTEMPORARY WATER RESEARCH & EDUCATION  
ISSUE 133, PAGES 26-28, MAY 2006

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## General Stream Adjudications and the Environment

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An article on the relationship between general stream adjudications and the environment should be a short one. There is none. The basic purpose of adjudications is to sort through the conflicting claims of users to surface water (and sometimes ground water) under the prior appropriation doctrine. The most valuable rights – the most senior ones – are often enshrouded in the mysteries of the past. Adjudications subject these claims, frequently based on oral recounting or flimsy paper records, to proof in a court of law. It is hoped at the end of the day that the adjudication court will enter a judicial decree that establishes water rights to specific quantities of water with relative priority dates. Given this central mission, it is obvious that adjudications are not designed to protect rivers by keeping water in the rivers, unless a particular state protects rivers through instream flow rights or other doctrines such as the public trust.

### Public Trust Doctrine

The appeal of the public trust doctrine is that it trumps any water use in conflict with the trust. The modern birth of the public trust doctrine was the California Supreme Court's decision in 1983 in *National Audubon Society v. Superior Court*.<sup>1</sup> Although this decision is often cited, it has seldom been followed. Academics praise it; courts ignore it. The idea behind *National Audubon* was that even senior appropriation rights must be used consistently with the public trust. The consequence of the *National Audubon Society* case was quite stark. The city of Los Angeles, which had been diverting water from tributaries to Mono Lake for over 50 years, was told that the city could no longer do so.

Other states have mixed results in applying the public trust doctrine to adjudications. After the Idaho Supreme Court embraced the doctrine in two 1995 cases (*Selkirk-Priest Basin Ass'n v. State*, *Idaho Conservation League v. State*) the legislature passed a statute indicating that the doctrine does not apply to water rights. The Arizona legislature also attempted in 1995 to bar the application of the public trust doctrine in adjudications. The state supreme court, however, held in 1996 that the legislature could not order the courts to make the doctrine inapplicable to the adjudications (*San Carlos Apache Tribe v. Superior Court*).

### Federal Environmental Laws

Significant protection for the environment in the United States often comes through federal statutes, notably the Endangered Species Act (ESA) and the Clean Water Act (CWA). These laws can dramatically impact the ability to divert water under state prior appropriation systems. For example, the U.S. Supreme Court has held that harming the habitat of endangered species violates the ESA. For endangered fish, the diversion of water might violate the ESA. This is really what all of the fuss in the Klamath River Basin has been about.

Section 404 of the Clean Water Act requires a permit from the U.S. Army Corps of Engineers before introducing dredge or fill material into a navigable water course. To construct any dam or other diversion facility, the developer must obtain a National Pollution Discharge Elimination System (NPDES) permit. The City of Denver discovered this the hard way with its Three Forks Dam proposal in the 1990s. The city had rights under Colorado

law to divert water from the South Platte River, but was unable to obtain a federal permit. The CWA gives the Environmental Protection Agency (EPA) administrator power to veto a permit in any case that would have an “unacceptable” effect on fish or wildlife. The ESA and CWA have profoundly reshaped the landscape of water use in the American West, but have done so outside of the framework of general stream adjudications.

## Omission of Ground Water

A major problem with the ability of adjudications to protect the environment is that in some states adjudications are not comprehensive. Some states, such as Idaho, comprehensively administer surface water and ground water rights in a fully integrated priority system. Other states, such as Arizona, have competing rules that govern surface and ground water. There is a disconnect between ground water and surface water in Arizona law. Arizona’s Gila River General Adjudication is designed to adjudicate surface water rights, but the prior appropriation doctrine does not apply to ground water pumping. Instead, outside designated Active Management Areas, the “reasonable use” doctrine allows anyone to pump ground water in limitless quantities as long as the water is used on the land for a beneficial purpose, a loosely defined concept that embraces most anything as beneficial.

## Arizona’s San Pedro River

To understand the scope of this omission, let’s look at the San Pedro River in southern Arizona. The last free-flowing river in southern Arizona, the San Pedro provides habitat for an estimated 390 species of birds (almost two-thirds of all species seen in North America). The area is so special among birders that Birder’s Digest named it the premier bird watching site in the United States. Accordingly, Congress in 1988 created the San Pedro Riparian National Conservation Area, and charged the U.S. Bureau of Land Management (BLM) to manage and protect it. The San Pedro River, as a tributary to the Gila River, is part of the Gila River Adjudication.

In July 2005, the San Pedro went dry for the first time in recorded history. Some people blame the drought, but droughts have come and gone before in

the history of the Sonoran Desert. What has changed is growth. The population in nearby Sierra Vista and Cochise County is exploding and local politicians and developers fear that concern over environmental issues may retard growth. A dry San Pedro River, however, is not of great concern to Jason Jackson, a 31-year-old plumber whose business grows as the population increases. He concedes that, “the San Pedro has nice, pretty trees,” but admits candidly, “the business is more important to me.” Local officials are not interested in halting growth. In June 2004, the Mayor of Sierra Vista, Tom Hessler, commented that, “water problems are more legal issues than a reality. There’s plenty of water to support population growth in the valley.” Not if one cares about maintaining flows in the San Pedro River.

Arizona courts have recognized a tenuous connection between ground water and surface water under a curious category of water called “subflow,” water moving beneath the surface in known channels. The prior appropriation system rules govern such water and those who pump subflow through wells are subject to the jurisdiction of the Gila River Adjudication Court.

The Arizona Supreme Court has had a checkered history in dealing with this issue. Most recently in 2000, the court had an opportunity to modernize Arizona law to make it conform to the scientific reality that ground water is part of the hydrologic cycle that provides flows to rivers and streams (Gila River IV). Instead, the court adhered to the quaint notion of “subflow,” a doctrine developed in the late nineteenth century when the science of hydrology was in its infancy. Even though hydrology has matured into a sophisticated science, Arizona courts have not incorporated this new knowledge into Arizona law. Given that, in 2000, the Arizona Supreme Court held that wells that are located in the “saturated floodplain Holocene alluvium” and wells located outside of this area whose cone of depression (the draw-down effect of a well) has extended in to the Holocene alluvium are pumping “subflow.” These wells are within the jurisdiction of the Gila River Adjudication court.

Wells adjacent to the San Pedro River are pumping subflow and, when the general adjudication finally adjudicates water rights, the more junior pumpers may be required to cease pumping. This action would protect more senior users, including the federal government’s rights to water for the

San Pedro Riparian National Conservation Area. On the other hand, many wells that are supplying subdivisions in the City of Sierra Vista and the unincorporated areas of Cochise County are located 8 or 10 miles west of the San Pedro River. These wells intercept water that is moving subsurface down gradient from the foothills of the Huachuca Mountains toward the river. But for the pumping by these wells, this water would provide baseflow to the river. Yet, these wells are outside the younger alluvium and not deemed to be pumping surface water and are not within the jurisdiction of the general adjudication court.

### **The Protective Role of Federal Reserved Rights**

Although Arizona law has failed to protect the San Pedro River, federal law may play a role in protecting the San Pedro. Under the federal reserved rights doctrine, when the federal government sets aside land from the public domain for specific federal purposes, it implicitly reserved sufficient water for that land to accomplish the purposes of the reservation.

The U.S. Bureau of Land Management (BLM), with responsibility for the San Pedro Riparian National Conservation Area, has acted aggressively to protect it. The BLM has placed a moratorium on livestock grazing in the area and has retired 12,000 acre-feet of agricultural water rights in the region.

There is a particularly powerful arrow in BLM's quiver. Most federal reserved rights are implied interpretations of Congress's intent. In the enabling legislation that set up the Conservation Area, however, Congress expressly reserved water to protect the conservation area. Therefore, BLM has a strong position to argue that post-1988 pumping that interferes with water rights for the preserve is inconsistent with the federal legislation.

The Arizona Supreme Court has provided support for BLM in this regard, at least in theory. In 1999, the court held that federal reserved rights holders are entitled to greater protection from ground water pumping than are water users whose rights are based only on state law. The court also held that federal reserved rights extend to ground water that is not subject to prior appropriation under Arizona law.

BLM is now attempting to quantify its water

rights and, in January 2006, filed a petition with the Gila River Adjudication court that identifies the scope of its water rights claims. As of yet, these water rights remain rather theoretical and obviously fragile given that the river has dried up. BLM has asserted rights to the stream's base flow, flood flows, water for the evaporation/transpiration needs of the riparian habitat, and springs and seeps that are located within the Conservation Area.

The Arizona Gila River Adjudication is now over 30-years-old and has adjudicated very few water rights. So I am not confident that anything will happen quickly in this gargantuan proceeding. Nevertheless, there is a legal basis for the adjudication court to protect the San Pedro River, and its environmental abundance, through the federal reserved right doctrine.

### **Author Bio and Contact Information**

**ROBERT GLENNON** has taught law at the University of Arizona since 1985. In 1997, he was named the Morris K. Udall Professor of Law and Public Policy. He specializes in constitutional law, American legal history, and water law. In 2002, his book, *Water Follies: Ground Water Pumping and the Fate of America's Fresh Waters*, was published by Island Press. Since then, he has given more than 130 talks in over 30 states. *Water Follies* received accolades in more than 150 book reviews. Before joining the faculty at Arizona, Robert taught law at the University of Minnesota, the University of Illinois, and Wayne State University. He received his J.D. from Boston College and a M.A. and Ph.D. in American History at Brandeis University. Robert is a member of the bars of Arizona and Massachusetts.

### **Notes**

1. 658 P.2d 709 (Cal. 1983)