Respect for Rivers, Respect for Limits

12th Annual NM Water Dialogue Conference, 1-10-06
Presentation by Steve Harris, Rio Grande Restoration[1]

I'd like to touch briefly on a very unpopular topic in modern, imperial America; the concept of limits: whether our policy is to respect them and whether we ought to be having a conversation about improving our performance in this regard.

Obviously, we are painfully aware of the limits of what nature has provided us: we've effectively run out of new, developable water resources. We're also aware that there are legal limits: statutes, ordinances, treaties, compacts and other agreements, authorities and regulations and a certain ambiguity and tension over what it all means. The thrust of the conversation is about dividing the water.

I want to suggest that there are also ethical limits, which are not self-enforcing, like climate or explicitly enforceable in courts like legal arrangements and which, until very recently, were not much a part of the conversation. Now that we are beginning to realize that we've reached or exceeded the supply we can rationally expect from our rivers and aquifers, the ethical issues are beginning to muscle their way into the civic discourse disguised as, and propelled by, some tenuous legal hooks like the Endangered Species Act, Clean Water Act and the Reserved Rights Doctrine.

At issue is the legacy value of our present water supply, what the present generation of water users will leave to the future:

- There is a reasonably ascertainable supply of water that will be needed by our heirs in future generations. Will we draw down aquifer reserves; will we appropriate surface water beyond the physical limits? Will future generations enjoy the same opportunities that flowing waters now offer us? Can we even consider limiting ourselves in their favor?
- There is also some baseline flow of water needed to maintain the ecological viability of the hydrological system. There is a development threshold at which we will be making decisions, knowingly or not, between soccer fields and cattle feed and bird and fish habitat. The global experience with over-appropriated streams suggests that perhaps as much as 50% of a stream's natural discharge may be required to maintain the ecological services of which we and our fellow creatures are beneficiaries.

The water allocation policy which our generation has been bequeathed does not, at any level, explicitly recognize longer-term ethical limits on water use. In addition to our appropriation doctrine, our water policy is being influenced what Aldo Leopold called "the doctrine of ruthless utilitarianism", which is at least as influential in the evolution of our present predicament as the doctrine of prior appropriation. Leopold commends to us a principle of wholeness:

> *"Conservation, then, is keeping the resource in working order, as well as preventing overuse…Conservation… is a positive exercise of skill and insight, not merely a negative exercise of abstinence or caution"*

[1] Steve Harris, Rio Grande Restoration Pilar Box 3-C, Embudo, NM 87531. 505-751-1269. unclergr@laplaza.org

I believe that there is a growing consensus that the water legacy is a critical aspect of future allocation policy. As evidence I cite Arizona's enacting a safe yield policy for aquifer pumping and New Mexico's new strategic river reserve (allowing the state to lease or purchase water to help secure endangered species and Compact compliance water needs). Eventually, we may become wise enough to protect the interests of our heirs to the 7th Generation and to act upon the recognition that we are dependents of functioning ecosystems. Filling this policy vacuum cannot be avoided forever.

But the Dialogue assigned me another topic, that is: "The Appropriate Scale for Policy Setting on Overarching Issues", such as the unresolved issue of our water legacy. What institution, at what scale, will solve this type of issue? I've not left myself enough of my appointed ten minutes to analyze the systematics of this complex problem; instead I will cut to my conclusions:

- The most critical water allocation decisions are made at the most basic levels, the skills and insights individuals, families and communities bring to bear on land and water.
- New Mexico enjoys a rich tradition of cooperatively governed irrigation institutions which allocate local resources in a semi-formal, essentially equitable fashion.
- The most effectively implemented policies are made at the most local level possible.
- However, localities are subject to "tunnel vision". Their overriding incentive is to provide local water supply, not to make local resource use tally with the supplies of neighboring localities or the hydrologic system as a whole.
- The state government possesses the most compelling power in the allocation of resources, in its overarching role as trustee of the entire resource base, streams and aquifers, for the use of its citizenry.
- The state attends to the equitable apportionment duties it has agreed to in interstate stream compacts.
- The federal government, historically, has facilitated and financed the development of water within the state and maintains ownership of much of that water supply infrastructure.
- The federal government has set policy attempting to ensure interregional, intergenerational and international comity.
- The federal government has set in motion regulatory schemes such as the Endangered Species Act, to enforce its policies. While ESA seems to be a federal mandate, the national government needs state partners.

So, there are at least five legitimate levels at which water allocation policy is set and enforced. We sometimes think of these mandates and responsibilities as conflicting. I have heard this system described metaphorically as layers of an onion. In fact, these authorities are neither hierarchical nor opposed, rather they interdigitate into a whole system, which we are sometimes at pains to comprehend.

Collaboration is a term bandied about frequently these days, but thus far has found little application in this state. Conceptually, a well-set negotiating table can turn a maze of authorities into a whole managing system. To be effective, Collaboration would seem to require that:

- A compelling need for a decision to make change in order to resolve the issue.
- Deciding officials must cede substantial decision-making power to the whole.
- Everyone must be heard: someone must speak for the seventh generation.

- Negotiate first a definition of the problem (otherwise each party will be about solving their own hypothetical problem).
- Engage science as a group. Everyone has a hypothesis about the processes influencing the system. Collaborative science will find testable hypotheses and set about testing them as a route toward a decision.

Our challenge is to integrate authorities into a more seamless and thoughtful policy framework and a holistic management system. Planners and administrators at each level should:

- Identify the physical, legal and ethical limits of the water resource at every scale (a role perhaps for science).
- State common objectives (which satisfy, to the degree possible, existing uses, including the maintenance of ecosystem underpinnings, with economic aspirations.)
- Find some incentive besides a manifest crisis to accomplish this balancing act.

My conclusion is that today, the state is at the hub of the wheel in this multi-level system.

My "take home message" for New Mexico's water prime movers, (mssrs. D'Antonio and Lopez):

1. **Get the safe yield concept into policy.** Regional planners note: you have the County Comprehensive Plans in your tool box. Taos County is presently exploring tying permissible development zones to water budgets.
2. **Define Public Welfare.** Include river and community health measurables. The State Engineer should then begin using these measurables when deciding transfer cases. Note that public welfare determinations are the also province of regional planners and require our greater attention.
3. **Embrace Collaboration.** Get everyone to the table and keep them there; charge them with negotiating acceptable limits. Even partial collaboration would be a useful addition to the State Engineer's regulatory processes. Be scrupulous in including silent parties, like unborn generations, ordinary local users and water-dependent ecosystems, in the decisions.
4. **Use the Strategic River Reserve proactively.** Staff it; expand on the spirit of consultation required in the statute.[2] Maybe even establish, within the Interstate Stream Commission, an Office of River Health and Sustainability

I want to close with a quotation from one of the US' most eminent hydrologists (born in Albuquerque, as a matter of fact), Luna B. Leopold. In speaking to the Western Governors in 1977, Luna advised that:

> *"…a philosophy of water management must pay heed to the fact that the hydrologic system is a highly interconnected plumbing network. Changes made in one part of the system have influences downstream. The continued functioning of the system is of great importance. To test whether the system is operating satisfactorily by economic and legal criteria alone will not guarantee its continued health. What is needed is some deeper feeling."*

The title which Luna gave his speech was "A Reverence for Rivers".

[2] NMSA 72-14-3.3. Enacted in 2005 Legislative session.