

July 30, 1996

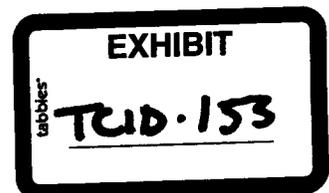
To: Interested persons  
Subject: TROA, simplified

The following is an idea of mine, that you might find interesting. Please be aware that it is ONLY an idea. It has NOT taken the form of any real proposal.

I think the operating scheme for the Truckee River could be simplified substantially, and made much more realistic and operationally feasible, by stepping back a bit and taking a look at the whole process.

The complexities of the operating scheme, as reflected in the extremely convoluted Negotiation Model, have largely to do with trying to track "my" parcel of water's location through the system. All of the intricate, almost impossible-to-follow exchanges are for exactly this purpose. All of the schemes to hold reservoir A's water in reservoir B are also for this purpose. The whole scheme has become so complex that it has taken on a "smoke-and-mirrors" quality that I think very few people can follow. Further, it is highly doubtful that operating the system this way results in optimal utilization of the reservoirs to capture, hold, and deliver as much water as possible.

I'd like to propose a simplified scheme: forget about where "your" water is in the system. Then all of the exchanges become moot. They simply disappear, and we can get on with operating the system in the most efficient way. The Tahoe-Prosser exchange, for example, is taken care of, because it doesn't matter whether the water is in Tahoe, Prosser (or any other reservoir, for that matter). There isn't any need to transfer credit from Boca to Stampede, because it doesn't matter whether the water is in Boca, Stampede (or, again, any other reservoir). Likewise, all the complex, nearly impossible-to-understand exchanges to maintain the new instream flows would disappear, because these exchanges track only the internal location of water in the network of reservoirs, which we would no longer care about.



**How could we do this? The TROA parties would simply agree to pool their reservoirs and operate them in the most efficient manner as an integrated reservoir network. The parties would maintain storage amounts and priorities as now, but they would just stop worrying about where their water is. For example, we could assign an amount of water equal to Sierra Pacific privately-owned stored water in Independence, but just not worry about exactly where the water actually is in the network of reservoirs.**

**This would allow the Water Master to operate the network of reservoirs in the most efficient, optimal way. If party A called for water, the Water Master could decide which would be the most effective valves to turn to deliver the water, unfettered by considerations of having to deliver it from a specific reservoir. Thus, he could carefully balance system-wide considerations of reservoir levels and instream flows, while still providing the demands of the system's water users. He could also operate the system to optimize the capture of water in times of high runoff.**

**This is a much more standard system, and as such, much more standard methods apply. We would no longer need the nearly impossibly complex Negotiation Model, but could use off-the shelf reservoir network optimization software instead.**

**Perhaps, as a post-script, it would also allow us to eliminate the nearly incomprehensible list of "types of water." We would simply have stored water, for some use or user, in some amount, at some priority.**

**I think that implementation of such a scheme would be extremely cost effective, both in the short and long term. In the short term, parties are faced with having to spend large sums to justify the complex system, which, in the end, may prove difficult or impossible. In the long term, I think the benefits of an understandable, operationally straightforward system are immense.**

**Best regards,**

*Bill Sikonia*

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