

State Water Resources Control Board  
Public Workshop Regarding Water Transfers  
May 4, 2000

Comments of Paul M. Bartkiewicz  
Bartkiewicz, Kronick & Shanahan  
Sacramento, California

---

My comments cover three subjects: (1) the role of water transfers from the Sacramento Valley in meeting California's water supply needs, (2) the ability to transfer incremental flows that are released to improve instream flow conditions, and (3) issues involving the transfer of water from storage.

**The Role of Water Transfers from the Sacramento Valley in Meeting California's Water Supply Needs**

I enclose with these comments a copy of a presentation on the role of water transfers from the Sacramento Valley in meeting California's water supply needs that I gave at a recent water law conference. In summary, the Department of Water Resources has projected that: (1) California's water shortages at a 1995 level of development are 1.6 million acre feet in average water years, and 5.1 million acre feet in drought years; (2) by the year 2020, demands will exceed supplies in California by 2.4 million acre feet in normal rainfall years and by 6.2 million acre feet per year in drought years, unless actions are taken to increase supplies, reduce demand or manage the use of water resources differently; and (3) there will be a shortage of 2.7 million acre feet during drought conditions by the year 2020, even assuming implementation of a number of water management options (many of which are highly controversial) that reduce demand and increase supply.

In recent years, water transfers from the Sacramento Valley have received increasing attention as a management tool for addressing statewide water supply needs. There are several important issues, however, that need to be addressed in order to determine whether water transfers can play a significant role in helping to meet California's water supply needs now and in the future.

The most significant obstacle to long-term transfers from north of the Delta to south of the Delta is the unreliability of Delta conveyance facilities. Conveyance capacity may be unavailable as a result of restrictions on diversions for the Central Valley Project and the State Water Project due to Endangered Species Act compliance requirements, or due to the lack of surplus capacity in conveyance facilities when they are being fully utilized for CVP and SWP purposes.

Water districts in the Sacramento Valley have shown a willingness to transfer water to the Water Bank to help alleviate statewide drought conditions. Unfortunately, there has been a growing concern among Sacramento Valley water districts that their water rights are under attack from the very state and federal agencies that want them to enter into long-term transfer agreements, as part of the CALFED program, for example. Sacramento Valley water districts are also concerned that

the CALFED process has inadequately identified the need to develop new storage supplies to meet California's needs. Sacramento Valley water users fear that their agricultural water supplies will eventually be reallocated for environmental and export uses as a substitute for developing new supplies.

One reason that DWR and Reclamation protest water transfer proposals is that they believe that many transfers to not actually produce new water to the system, and, as a result, would reduce the supplies that would otherwise have been available to the SWP and the CVP. DWR and Reclamation also believe that conservation practices in the Sacramento Valley produce only very limited supplies of new water.

Putting aside the merits of their positions, if water transfers and water conservation measures in the Sacramento Valley produce little or no new water supplies for other beneficial uses, then (1) Sacramento Valley water transfers and conservation practices should not be counted on to provide a significant quantity of water for California's water supply needs, unless they are part of a program to extensively reduce agricultural production in the Sacramento Valley (which would be strongly resisted), and (2) the CALFED process should focus on developing new supplies by other methods.

### **The Ability to Transfer Incremental Flows Released to Improve Instream Flow Conditions**

There are ongoing programs (such as the CALFED process and the Anadromous Fish Restoration Program) to improve instream flow conditions on tributaries to the Delta. In order for those programs to be successful, reasonable protections should be provided to the water right holders who release water to improve instream flow conditions. There is a concern among Sacramento Valley water right holders that regulatory proposals to increase instream flows on tributary streams are really a means of increasing flows to the Delta without providing compensation to the water right holders who would provide the incremental flows.

DWR Director Thomas Hannigan recently testified before a Congressional subcommittee that it was CALFED's intention to "acquire" not to "take" water for the Environmental Water Account. There are a number of ways that that approach can be put into practice.

The most direct approach would be to treat releases of water to improve instream flow conditions on a tributary stream as a water transfer for instream purposes, and to compensate the water right holder accordingly. Another approach would be to recognize that the water right holder (1) made the incremental flow release for the purpose of improving instream flows on the tributary stream, and did not abandon control over the incremental release, and (2) retained control over the incremental flows for water transfer purposes. Downstream water right holders would not be injured as a result of such a transfer because only the incremental instream flow release, and not the prior level of instream flow releases, would be transferable.

### **Issues Involving the Transfer of Water from Storage**

One of the problems with using water transfers as a means of dealing with shortages in water supplies is the level of scrutiny a proposed water transfer undergoes to determine whether it will

result in injury to other legal users. The fact that legal users like DWR and Reclamation are vigilant in protecting their water supplies is understandable. Their project yields continue to diminish as their obligation to make releases for environmental purposes increase. Attempting to ensure that every acre foot of transferred water meets a stringent "new water" test, however, significantly adds to the cost of and time for processing a water transfer. In addition, other measures intended to protect downstream legal users from injury, like imposition of a carriage water duty and reservoir refill criteria, make transfers more difficult and expensive, and less desirable to carry out.

Policy makers need to determine whether this level of protection of downstream water rights is at the expense of creating the flexibility in the water system that water transfers were intended to provide.

A greater effort needs to be made to simplify the process for quantifying the amount of transferable water and impacts to legal users. There should be a fair and objective process for calculating carriage water requirements, if there should be any and all. There should be a fair and objective process for determining the need for imposing reservoir refill criteria for transfers from storage. For example, the current procedure does not take into account at all the water supply benefits provided to downstream water users from the operation of nonproject upstream storage facilities. At least one commentator has suggested in a law review article that the no injury rule should not apply to transfers of water from storage facilities because they are analogous to imported water supplies that would not have been available to the downstream user in the absence of the efforts of the reservoir operator. (See Gould, "Conversion of Agricultural Water Rights to Industrial Uses", 27 Rocky Mountain Mineral Law Inst. 1791, 1849 (1982).)

## THE ROLE OF WATER TRANSFERS FROM THE SACRAMENTO VALLEY IN MEETING CALIFORNIA'S WATER SUPPLY NEEDS

Paul M. Bartkiewicz  
Bartkiewicz, Kronick & Shanahan  
Sacramento, California

CLE International  
California Water Law Conference  
San Francisco, California  
April 4, 2000

---

The California Department of Water Resources ("DWR") estimates that California's water shortages at a 1995 level of development are 1.6 million acre feet in average water years, and 5.1 million acre feet in drought years. DWR also projects significant future-year water shortages in California unless actions are taken to increase supplies, reduce demand or manage the use of water resources differently. DWR predicts that, by the year 2020, demands will exceed supplies in California by **2.4 million acre feet** in normal rainfall years and by **6.2 million acre feet** in drought years. Most of the growth in demand will come from the urban sector, where demand is projected to increase by more than 35 percent between 1995 and 2020, even with extensive water conservation, as the State's population increases by about 18 million people. Total urban water use in California is currently about 8.8 million acre feet per year, and is expected to increase by 3.2 million acre feet. During that same time period, irrigated agricultural acreage is expected to decline by 325,000 acres, due primarily to urban encroachment and land retirement due to poor drainage conditions in the western San Joaquin Valley. By the year 2020, annual agricultural water demands will be reduced by about 2.3 million acre feet. Water needs for environmental purposes are also projected to increase by the year 2020, overtaking agriculture as the largest water user in the State. (See, generally, DWR's *California Water Plan Update-Bulletin 160-98*, November 1998, and *The Role of Water Transfers in Meeting California's Water Needs*, a report issued by the California Legislative Analyst on September 8, 1999.)

DWR has identified a number of water management options that are likely to be implemented by the year 2020, including local water demand reduction, local water supply augmentation and statewide water supply augmentation. Even with the water management options likely to be implemented by the year 2020 (many of which are highly controversial), DWR projects a shortage of **2.7 million acre feet** during drought conditions.

Water transfers from the Sacramento Valley have been included as a potential source of water supply in numerous water supply augmentation/management proposals. A partial list includes the following:

1. The December 1996 State Water Project Supplemental Water Purchase Program Draft Program Environmental Impact Report.

2. The March 1997 water acquisition program of Mojave Water Agency.
3. The November 1997 United States Department of Interior Final Administrative Proposal on the Management of Section 3406(b)(2) water.
4. The January 1998 water acquisition program of the Alameda County Water District.
5. The July 1998 water acquisition program of the San Diego County Water Authority.
6. The December 1998 Natural Heritage Institute Feasibility Study of a Maximal Program of Groundwater Banking for the CALFED program.
7. The April 1999 Draft Environmental Assessment for the Acquisition of Water in Support of the 1999 Water Operations Plan by the United States Bureau of Reclamation.
8. The June 1999 CALFED Draft Programmatic Environmental Impact Statement/Environmental Impact Report.
9. The October 1999 CALFED Water Management Development Team proposal to purchase water for the CALFED environmental water account.
10. The December 1999 water acquisition program of the Metropolitan Water District of Southern California.
11. The January 2000 water acquisition program of the Contra Costa Water District.
12. The February 2000 groundwater management element of the CALFED Integrated Storage Investigation.

Clearly, in recent years, water transfers have received increasing attention as a management tool for addressing statewide water supply needs. Indeed, short-term water transfers played a significant role during the 1987-1992 drought in helping to mitigate for the water shortage, particularly to municipal and industrial supplies. Water transfers do not create new supplies, however. Rather, they are a means to reallocate existing supplies.

There are several important issues that need to be addressed in order to determine whether water transfers can play a significant role in helping to meet California's water supply needs now and in the future. I have focused my comments on water transfers from north of the Delta to south of the Delta, since those are the types of transfers that I have primarily worked on in the past. Transfers involving water that is already south of the Delta typically involve a different set of issues from transfers that go through the Delta. Water from short-term transfers has been made available in the past during drought conditions. I focus my comments on the potential for long-term water transfer commitments as an element of meeting California's water supply needs.

#### **Delta Conveyance Facilities.**

The most significant obstacle to long-term transfers from north of the Delta to south of the Delta is the unreliability of Delta conveyance facilities. Conveyance capacity may be unavailable as a result of restrictions on diversions for the Central Valley Project and the State Water Project due to Endangered Species Act compliance requirements, or due to the lack of surplus capacity in conveyance facilities when they are being fully utilized for CVP and SWP purposes. The unreliability of the availability of conveyance facilities through the Delta makes it difficult to enter into and implement a long-term transfer, the purpose of which would be to enhance the water supply reliability of the transferee.

North-to-south long-term water transfers would be limited, therefore, to instances where (1) the transferor had the operational flexibility to release transfer water at times when it could be conveyed through the Delta (which would probably require surface or underground storage capability), and (2) the transferee had access to south-of-Delta storage facilities to ensure uninterrupted deliveries when there were capacity restrictions in Delta conveyance facilities. Those circumstances would severely limit the amount of transfer water that could be conveyed through the Delta on a long-term, reliable basis.

### **The Willingness to Transfer Water.**

Some organizations that are interested in water transfers have expressed the belief that there are not long-term water transfers from north to south due to (1) a lack of control of the transfer by the end user (i.e., a water user, where the water district holds the water rights or contractual entitlement), and (2) an unwillingness on the part of water districts to transfer water. I believe that both of those assumptions are incorrect with respect to transfers from the Sacramento Valley. Hundreds of thousands of acre feet have been transferred by water districts from the Sacramento Valley to the Drought Water Banking during the last decade. Generally, water districts have gained local political support for water transfers by demonstrating that the transfers were conducted without adversely impacting local communities and that revenues from the transfers provided local benefits. In addition, the transfer of many thousands of acre feet has been accomplished through user-initiated transfers to the Water Bank with the consent of the affected water districts. In 1991, for example, 82,000 acre feet of water was transferred to the Water Banker from Yuba County Water Agency through user-initiated transfers involving groundwater substitution for surface water entitlement.

Unfortunately, there has been a growing concern among Sacramento Valley water districts that their water rights are under attack from the very state and federal agencies that want them to enter into long-term transfer agreements. For example, DWR and the Bureau of Reclamation are proposing in the Bay-Delta hearings that Sacramento Valley area of origin water right holders be ordered to provide a significant contribution of water to help satisfy Delta water quality standards, even though degraded environmental conditions in the Delta are primarily caused by the operation of the SWP and CVP. DWR and Reclamation routinely file protests to water right applications for beneficial uses of water within watersheds of origin. DWR, Reclamation and federal and state fishery resource agencies have routinely opposed proposals by Sacramento Valley water right holders to transfer water in accordance with provisions of California law and policy that require those agencies to support such water transfers. During the process of contract negotiations with Sacramento Valley water users, Reclamation has proposed to reduce the water supplies under renewed CVP water

contracts and Sacramento Rivers settlement contracts. Federal and state fishery resource agencies have abused the regulatory process in attempting to require excessive, unwarranted releases of water purportedly to enhance local instream flows, but for the real purposes of increasing flows to the Delta and acquiring operational control of projects developed to meet Sacramento Valley water needs. These types of actions have undermined confidence that water rights will be adequately protected in the water transfer process, irrespective of statutory water rights protection.

Sacramento Valley water districts are concerned that the CALFED process has inadequately identified the need to develop new storage supplies to meet California's needs. As noted above, DWR has projected that by the year 2020, demand will exceed supply by 2.4 million acre feet per year in normal rainfall years, and by 6.2 million acre feet per year in dry years, without further actions to increase water supplies or reduce demand. Sacramento Valley water users fear that their agricultural water supplies will eventually be reallocated for environmental and export uses as a substitute for developing new supplies.

### **The Need to Quantify the Realistic Amount of Water Available from Transfers.**

One reason that DWR and Reclamation protest water transfer proposals is that they believe that many transfers do not actually produce new water to the system, and, as a result, would reduce the supplies that would otherwise have been available to the SWP and the CVP. DWR and Reclamation also believe that conservation practices in the Sacramento Valley produce only very limited (if any) supplies of new water. For example, the March 1998 Draft Programmatic EIS/EIR for the CALFED Bay-Delta Program concluded "the Sacramento River region has no potential water savings [through water conservation measures] that can be reallocated to other beneficial water supply uses." (See Technical Appendix, Water Use Efficiency Component.)

Putting aside the merits of that position, if water transfers and water conservation measures in the Sacramento Valley produce little or no new water supplies for other beneficial uses, then (1) Sacramento Valley water transfers and conservation practices should not be counted on to provide a significant quantity of water for California's water supply needs, unless they are part of a program to extensively reduce agricultural production in the Sacramento Valley (which would be strongly resisted), and (2) the CALFED process should focus on developing new supplies through other methods.

For these reasons, I believe that the CALFED process would be well served if it undertook a realistic assessment of the quantity of new water that could be produced from the Sacramento Valley through water transfers and conservation, without impacting agricultural production within the Sacramento Valley. Such an assessment would help policymakers determine the best approach to meeting California's water needs.

### **Avoiding Third-Party Economic Impacts.**

Under existing law, a transfer's potential impacts to legal users and instream uses are evaluated, but there is generally no requirement to assess potential third-party economic impacts.

In assessing the potential for transfers to cause third-party economic impacts, it is important to look at how water is produced for transfer from the Sacramento Valley. There are basically three sources of water for transfer purposes from the Sacramento Valley: (1) transfers from storage reservoirs, (2) substitution of groundwater for transferred surface water, and (3) fallowing of agricultural land. In setting public policy on the role of water transfers, the potential for third-party impacts from different types of water transfers should be carefully considered.

Transfers from storage involve releasing surplus water that is not needed within the water district's service area during the term of the transfer. The water supply available to local water users is not affected, and no agricultural land goes out of production. Therefore, there would be no adverse local economic impacts. Transfers involving groundwater substitution raise different issues. Adverse local economic impacts can be avoided if the transfer does not change crop production. However, groundwater substitution transfers raise concerns whether additional groundwater pumping will impact others. There is also a great deal of concern whether there will be local control over significant conjunctive use programs that are part of a CALFED program. Transfers that rely on land fallowing have the greatest potential to cause significant economic and environmental impacts. There is a strong political consensus within the Sacramento Valley that transfers that rely upon widespread land fallowing must be avoided to prevent severe economic and environmental impacts.

Therefore, it might be appropriate to require an analysis of potential third-party, local economic impacts for transfers involving groundwater substitution (but not from storage), and declaring that it is not state policy to pursue land fallowing within the Sacramento Valley as a source of water to meet California's future needs.