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May 7, 2008

Mr. John Kirlin  
Executive Director, Delta Vision  
Blue Ribbon Task Force  
1416 9<sup>th</sup> Street, Suite 1311  
Sacramento, CA 95814

**RE: Invitation to Participate in Developing  
Elements of the Strategic Plan**

Dear John:

I have undertaken the preparation of a response to the BRTF's invitation (above) reflecting the Alternative Vision entitled "A Water Plan for the 21<sup>st</sup> Century: Regional Self-Sufficiency Scenario" submitted to you last summer by a group of "In-Delta" stakeholders. The short time frame associated with your invitation has not allowed an opportunity (yet) for more collaboration in advance of your May 9 "deadline."

I am simultaneously transmitting this draft document to a broader group, including all of those identified earlier as having participated in the preparation of the "Plan for the 21<sup>st</sup> Century," in the hopes that we will be able jointly to submit a completed document well prior to July 31.

Nevertheless, I hope this preliminary draft will be of some use to you in the interim.

Yours very truly,

  
THOMAS M. ZUCKERMAN

TMZ:csf  
Enclosure

## **A WATER PLAN FOR THE 21<sup>ST</sup> CENTURY: STRATEGIC PLAN**

In the summer of 2007, a group of stakeholders well versed in Delta issues and concerned about the future of water in California and the health of the Sacramento- San Joaquin River Delta, submitted a policy paper entitled "A Water Plan for the 21<sup>st</sup> Century: Regional Self-Sufficiency Scenario" ("21<sup>st</sup> Century Plan") to the Delta Vision Blue Ribbon Task Force ("BRTF").

The BRTF has published its policy statement entitled "Our Vision for the California Delta" incorporating many of the policies suggested by the 21<sup>st</sup> Century Plan, and now seeks independent viewpoints on strategies to implement its Vision. A similar group of Delta stakeholders submits herein its suggestions:

### **START WITH FLOOD MANAGEMENT**

Much of the water needed to carry California through dry cycles occurs as storm water in the Central Valley of California during wet periods. Rather than being detained in historic flood basins for groundwater replenishment and subsequent use, it is hurried by storm drains into "flood control" channels, to leveed rivers, to the Delta, where it threatens and causes floods. Existing dams and reservoirs do not have sufficient capacity to store those flows under current conditions and will prove further inadequate under anticipated conditions of global warming.

Figures presented to the BRTF illustrate the problem: in 1998 (a fairly typical wet year), over 8 million acre-feet of water flowed out of the San Joaquin Valley

and almost 29 million acre-feet from the Sacramento Valley, to the Delta. Some portion of these flows, surely at least 25%, could be utilized beneficially without adverse environmental consequences.

As yet we do not have a competent flood management plan for the Central Valley, although help may be on the way. Last year, legislation was enacted (notably SB 8 - Machado) directing the preparation of such a plan. This plan, presumably, will identify those low-lying parts of the Valley, once part of the flood plain, which should not be encroached by development and can be restored as flood retention basins and by-passes, thereby alleviating down stream flooding and conserving storm water for later use, while serving helpful environmental uses as well. A further study of these opportunities is being undertaken cooperatively by the University of the Pacific's Natural Resources Institute, U.C. Berkeley's Delta Initiative, and the Natural Heritage Institute.

#### **EXISTING RESERVOIR REOPERATION**

Reactivated flood basins can be operated in conjunction with upstream reservoirs to increase both flood control capacity and water conservation. Flood control space in upstream reservoirs can be created by releasing stored water to downstream flood plains without "losing" the water to the ocean. As the flood plains are used to stage ground water replenishment (see below), water storage is increased as well.

#### **GROUND WATER RECHARGE**

Historic ground water overdraft in the San Joaquin Valley and the Tulare Lake Basin has created an enormous vacated reservoir in an area that is screaming for more storage projects. Typically, the vacated aquifers were

originally filled as the tributaries flowed into the Valley and Basin over the gravels and sands that had been washed out of the mountains by previous storms. Locating and accessing those porous river fan and delta areas where the rivers and streams exit the mountains has been the key to ground water recharge efforts, such as the Kern Water Bank. Similar opportunities exist in connection with most of the tributaries from the mountains.

There are many opportunities for ground water recharge in the Central Valley that are recognized as "local" projects.

CAL FED reports that 128 Local Groundwater Assistance Act (AB 303) applications have been awarded funding for feasibility studies, of which 125 have been completed. Another 28 feasibility study/pilot projects have been funded under Proposition 13. Another 122 grant proposals have been received under AB 303, but available funding will cover only two dozen awards. A total of 32 of these projects, having an estimated total projected capacity of over 300 TAF have been awarded implementation grants under Proposition 13.<sup>1</sup>

Fear is pervasive that state or federal involvement in ground water projects will work to the disadvantage of the areas overlying the ground water basins. Local control under the concept of "regional self-sufficiency" is key to successful ground water recharge, as will be discussed again later under "Governance" and "Financing."

### ECOSYSTEM RESTORATION

Similar to the way we tend to separate flood control and water supply, we

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<sup>1</sup> CALFED Bay Delta Program, Draft "Storage Program Plan Year 9" (April 11, 2008)

also tend to separate "riverine" and "terrestrial" ecosystems instead of considering them together. Ultimately, riverine organisms depend on a food web that is land-based, and terrestrial organisms depend upon water and water-based nutrients.

Restoring historic flood basins in the Central Valley will benefit riverine and terrestrial organisms.

"Corridor" is an important concept in ecosystem restoration, for the fish that migrate up and down the system, but also for migrating insects, birds and animals. Paying attention to the corridors that the river systems of the Central Valley provide is essential to riverine and terrestrial organisms.

Historic flood plains were, and are, essential parts of those corridors. Some three to five million acres of historic wetlands in the Central Valley have been reduced to less than 300,000 acres today.

The flood swollen rivers of the Central Valley used to spill into the riparian wetlands, gradually draining back into the rivers as space appeared, providing nutrients to the system and prolonging fresh water outflow to the system. Now most of this water rushes out through "improved" flood control channels and is dumped into the Delta. Re-establishing some of the historic flood plain, where still appropriate, in the Central Valley will benefit terrestrial and riverine organisms, while conserving portions of our storm flows for later use during dry periods. Ground water recharge in the Valley would also reduce dependency on exports from the Delta during dry periods, thus relieving export impacts on the Delta fishes during those critical periods (as courts are currently requiring).

#### **WATER SUPPLY**

Southern California water agencies began to realize after the 1982 Peripheral Canal Referendum that they needed to "drought proof" themselves and reduce, or eliminate, reliance on imported water supplies in dry years. They embarked upon flood retention, ground water basin rehabilitation, ground water recharge, recycling, re-use, desalination and, especially, conservation projects and may soon reach their goal in spite of large population increase. It should be noted that dry-year decrease and/or elimination of State Water Project pumping over the Tehacpi Mountains will also avoid huge electrical power consumption which can be diverted to more power efficient water uses, like brackish water desalination.

For the Central Valley, conserving just 25% of the San Joaquin Valley wet year run-off for future dry year use could make up the 2 million acre-feet export reductions that may be necessary to comply with current court-ordered export reductions and to help endangered Delta fishes recover.

Better use of the flood by-pass system in the Sacramento Valley, plus use of the unused capacity of the current export facilities in the South Delta during wet years, could also make significant portions of the storm flows in the Sacramento Valley available south of the Delta once flood plains, re-operated reservoirs, and ground water storage projects become available.

### GOVERNANCE

Very little progress (and perhaps wisdom) seems to have appeared in governance discussions. The conflicts between local versus regional versus state-wide land use control and flood responsibility, and exporter versus area of origin versus environmental use water project control seem intractable and irresolvable.

We believe maximum progress can be made in the land-use control area by completing a comprehensive flood management plan for the Central Valley. Once the lands that are necessary to contain flood flows are designated, they can be removed from local land use authority, at least as far as designation for urban uses. Once local ability to intrude into the flood plain is precluded, state authority and responsibility for flood control can be resolved. This seems a fair and appropriate exchange, avoiding more controversial shifts in governance authority. The time is ripe for making this exchange as local governments are struggling with FEMA over flood plain designations.

Similarly, we believe that maximum progress can be made in developing reliable water supplies by developing "local" projects to control and preserve storm waters for dry year water supply, as is currently taking place in Integrated Regional Water Management planning and ground water feasibility and implementation projects, avoiding the specter of state or federal control over "local" water resources.

### **FINANCE**

Water development is expensive, and growing more so according to cost estimates recently released on Delta conveyance concepts. Most water development that has occurred recently has been sponsored by local agencies, often with cost-sharing from federal programs or state bonding.

For projects that reduce reliance on State Water Project deliveries from the Delta during dry years, State cost sharing might be based on dry-year "entitlement" reduction. Further bond authorization would be necessary and appropriate for these purposes. And for projects that improve flood protection,

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traditional non-reimbursable federal funding sources should be pursued.

**DELTA**

The preparation of this strategic plan has involved, inter alia, Delta Stakeholders who have been engaged in the "Delta As Place" effort for the Delta Vision BRTF, and who believe that the work product of that group fits into and complements this Strategic Plan. Hence, for brevity, the "Delta As Place" strategies, separately submitted, are not repeated here.