April 20, 1994

Mr. Douglas Wheeler
Secretary of Resources
1416 Ninth Street, Room 1311
Sacramento, CA 95814

Dear Doug,

As we embark on a new effort to address and resolve the "delta problem", I fear we are on the verge of skipping over the single most important question; it is in many ways, a threshold question. As we examine "re-engineering" the delta for the improvement of water management and the improvement of ecosystem conditions; what, specifically, are our biological objectives?

The physical problems associated with water management are reasonably well defined, but we cannot begin to identify solutions until we answer this threshold question. We have spent hundreds of millions of dollars trying to understand this complex ecosystem. Unfortunately, while many factors affect the delta, there has been, it seems, a nearly single minded focus on the water projects. Nonetheless, there is a huge body of biological data, much of which is incomplete or in conflict, and surely there is a platoon of biologists who agree on little about the delta. This level of biological uncertainty cannot be considered acceptable as the foundation for a "solution" that will impact the State to such a significant degree.

The delta has been altered dramatically since the gold rush and the onslaught of humanity over the past 150 years; altered physically with the construction of thousands of miles of levees; and altered biologically with the introduction of countless alien species. Any "solution" may involve a manipulation of the estuary to a similar magnitude.

So, when someone comes along with the simple slogan that we must "restore the delta", the question must be asked: restore to what? What is the biological objective, what exactly is our goal in terms of biological diversity, how many of what kinds of species are we striving for? What habitat conditions are required to support these species? Is this possible? Is this prudent?

We can't answer these questions.

If we don't know where we want to end up, how can we design a solution? If we don't know where we want to go, how can we measure our likelihood of success? How can we measure progress? How, with all of this biological uncertainty, can we balance human costs against biological improvement?
Some argue that by simply increasing the flow of fresh water to the ocean and eliminating the adverse impact of the export pumps, a "healthy environment" will be created and the fish will return and the "delta crisis" will be resolved. We cannot tolerate such simplistic wishful thinking, when on the other side of the coin we see a tremendous human, economic and social structure at risk. The "silver bullet" theorem of outflow ignores scores of physical and biological factors affecting the estuary and I fear will lead us directly to a whole new set of institutional, biological and economic uncertainties.

Surely we cannot have perfect knowledge of the ecosystem and the many factors that impact it before acting. But it is important that before moving forward with a major, serious initiative to resolve the many problems with the Sacramento-San Joaquin Delta, that we get a sound grip on what we want to accomplish biologically. What do you think?

Sincerely,

Jason Peltier