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| **From:** | Patricia Turner |
| **To:** | Delta Council Delta Plan Comments |
| **Subject:** | Additional Coalition Comments - Final Draft Delta Plan |
| **Date:** | Thursday, June 28, 2012 11:52:42 AM |
| **Attachments:** | 12_06_27 Additional Comments_ Final Draft Delta Plan.pdf |

Chairman Isenberg:

Please accept the attached additional comments from the Coalition for a Sustainable Delta to the Delta Stewardship Council regarding the Final Draft of the Delta Plan.

If you have any questions regarding the comments, or need additional information, please contact me at coalitioncoord@att.net or at 661-391-3790.

Respectfully,

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Coalition for a Sustainable Delta

June 27, 2012

**VIA E-MAIL AND U.S. MAIL**

Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, California 95814
eircomments@deltacouncil.ca.gov

Re: Comments on Final Draft Delta Plan

Dear Chairman Isenberg:

The Coalition for a Sustainable Delta had previously supplied comments on the Final Draft Delta Plan on June 13th. Here we provide additional comments, mostly pertaining to ecosystem restoration, which were not included in the earlier set of comments.

We appreciate the work and time invested by the DSC and staff in preparing the draft Delta Plan, and we acknowledge that the plan recognizes many of the elements needed to achieve the coequal goals of ecosystem health and water reliability. Unfortunately, having come a very long way, the delta plan fails to offer the necessary pathway and describe an outcome that might achieve the coequal goals. While the core strategies of the DSC Delta Plan sensibly seek to create more natural functional Delta flows, restore habitat, improve water quality, prevent and manage nonnative species impacts, and improve hatcheries and harvest management (p.145); it is not made clear how those strategies will combine to meet the fundamental purpose of the DSC's effort – actually achieving the elusive co-equal goals.

## The central tenet of co-equal goals

At its elemental base, the plan is unclear what sort of flow regime the DSC is actually advocating. The draft plan DSC states (p.146) that "The State Water Resources Control Board should update the Bay-Delta Water Quality Control Plan objectives -- as follows: a) By June 2, 2014, adopt and implement updated flow objectives for the Delta that are necessary to achieve the coequal goals." But in other places it appears that the DSC has actually abdicated its responsibility to achieve the co-equal goals and gives up on the goal of using run-off within the central valley to meet California's water supply needs. Indeed the draft plan states that: "Regions that use water from the Delta watershed will reduce their reliance on this water for reasonable and beneficial uses, and improve regional self-reliance, consistent with existing water rights and the State's area of origin statutes and Reasonable Use and Public Trust Doctrines. " (p.68).

Water from the Delta is an essential source of water for certain regions. Entities within those regions have contracts with either the state or federal government that require those governments to convey water through the Delta. Water planners recognize that more than three-quarters of the State's water supply is generated in the northern part of the state while about three-quarters of the population resides in the southern part of the state. It is naïve to think that California can meet water demands without transferring water from areas of comparative plenty to areas of need and shortage. To meet future demands, the draft plan is right, those regions certainly must be involved in "improving, investing in, and implementing projects and programs that increase water conservation and efficiency" and they will "increase water recycling and use of advanced water technologies, expand storage, improve groundwater management, and enhance regional coordination of local and regional water supply development efforts" (p.68). These are necessary and appropriate activities that regional water managers will be involved with regardless of what happens in the delta. But those regions also require water generated in the Central Valley, and can use it in wet years when diversions from the Delta result in very small alterations to outflow. None of the major water-user entities in California are suggesting diversions above their contractual rights; but, they do expect that contractual rights will be honored. In that light, the DSC and its Delta plan needs to take a far more discerning position on water management to achieve the co-equal goals. The challenge to be met in a plan for the Delta is development of a method for balancing benefits, such that circumstances for both the environment and water users improve. By necessity this involves, not omnibus undirected increases in Delta outflows in attempts to meet vaguely articulated ecosystem-level goals, but allocating water to demonstrated, explicit environmental benefits at select times and in specific places where it will do the greatest good. And, concomitantly, allowing greater diversions of water from the Delta when the impacts to the environment are shown to be limited. A decision on this process is correctly left to the State Board, but for the Delta plan to state that reliance on delta supplies should be reduced is tacitly inconsistent with the conceptual basis behind the stated commitment to co-equal goals.

**Balancing to achieve the coequal goals**

The draft plan advocates, as a fundamental objective, the creation of more natural (functional) Delta flows. The DSC correctly identifies the importance of a natural flow regime to an estuary, but fails to apply the concept in a scientifically defensible framework, and, in so doing, jeopardizes attainment of the co-equal goals.

Attainment of the co-equal goals requires a balancing – the kind of balancing that the SWRCB is obligated to undertake. It is a balancing of the limited benefits produced by the utilization of limited resource. Here, the limiting resource is water. The use of water, like so many other resources involves diminishing returns -- as more and more of an input

resource is utilized, beyond some level, the benefit from the use of that input decreases. As an example, crop yields increase as more water is applied, up to a point. Beyond that point, the marginal yield from applying an extra unit of water starts to decrease. If sufficient water is applied, the marginal yield will actually become negative, and, eventually, too much water will produce a yield of zero. This principle is well understood in farming and regulatory circles. It is embedded in the state constitution to prevent the application of water to non-beneficial uses. Irrigation of non-fertile land is discouraged. In a market-based sector, such as agriculture, the expense of farming, including the cost of water, typically results in resources being allocated beneficially.

When it comes to resource use in non-market-based applications, such as in ecosystem restoration efforts that involve flows, the principle of diminishing returns is still real, but is harder to discern. By way of example, the dedication of water to flows through a rip-rapped channel may have initial benefits. But, the incremental benefits may diminish as more and more water is diverted through that channel. Ultimately, the channel may over top and channel flows become flood flows. Productive land, homes, and lives are placed in jeopardy as the benefits of the incremental flow quickly approach zero. We do not discount the importance of high flows in certain ecosystems, but rather suggest that increasing flows in a variety of circumstances result in incrementally reduced benefits. In the world of co-equal goals, on any given day, the benefits of the last unit of water allocated for ecological purposes should equal the benefits of the last increment of water allocated for human consumption. The dilemma for the regulator is how to balance the allocation of water between competing uses when there are diminishing returns to all uses, when the benefits of some uses are difficult to quantify, and when the shape of the attending response function is poorly understood.

**Geographic targeting to facilitate attaining the co-equal goals**

The approach we suggest here is a strategic application of flows: the use of natural flow regimes through specific templates or landscapes to restore natural processes (see the draft plan p.123). The natural processes of concern to wildlife managers all involve deep channels meandering through seasonal floodplains or emergent marshlands, which experience seasonal and inter-annual variation in flows.

The draft plan correctly recognized that land elevation is important in habitat restoration (p.135). Due to the subsided nature of most delta islands, these landforms are not suitable for restoring processes or ecosystems to pre-settlement conditions. Rather, the focus of restoration efforts should be on rehabilitating areas that retain physical and biotic attributes of the pre-settlement estuary: these occur primarily in Yolo bypass, Suisun Marsh and the Mokelumne-Cosumnes confluence. We support the plan's recommendations for Suisun Marsh, including the restoration of significant portions of it to brackish marsh, with much improved marsh-bay connectivity, and complex food webs (p.151). We would

underscore the need for far more intensive monitoring of storm water from Suisun City and Fairfield to identify and prevent possible contamination associated with waste water discharge and storm events.

Our vision for the Yolo Bypass, however, varies from that presented in the draft plan. We strongly recommend the plan recommend a small perennial river for the Yolo Bypass (not a modification of the toe drain, but a meandering water course lined with appropriate riparian habitat, adjoined by enhanced floodplains at varying elevations). The river should be constructed in a corridor nominally situated along the northwest border of the contemporary bypass, such that its riparian vegetation communities do not unnecessarily interfere with flood protection. Natural flows to this area could be achieved through a fish-friendly diversion from the Sacramento River. With the addition of a cut west of Barker Slough, it may also be possible to divert regulated flows of freshwater to Suisun Marsh. The advantages of this approach are:

- It recreates or preserves more than 40,000 acres that approach historic environmental conditions; particularly deep channels running through seasonal and tidal marshlands.
- It is consistent and compatible with the rest of the Delta Plan (p. 151) in that it provides a multi-species dispersal (or migration) corridor that is rich in cover and food
- It provides permanent habitat for multiple species, providing isolation and buffering from waste waters and storm-water discharges on the Sacramento River
- It allows for the possibility of seasonal floodplains by modifying Freemont Weir, providing habitats and refugia for desired species in most years, not just wet years
- It provides a mechanism, if needed, to provide increased, regulated freshwater flows to Suisun Marsh.

The alternative to this approach to land management in the Yolo Bypass is to attempt to restore a "natural" flow regime to the entire estuary, which inarguably will seriously impact and constrain California's energy supplies, water supply reliability during consecutive dry years, and impact endangered salmonids. Restoring natural flows through the entire estuary, while benefiting portions of the estuary, will likely have marginal biological benefits for vast areas of it -- largely raising water levels in ecologically depauperate rip-rapped channels-- thus constituting a huge water expense with at best questionable benefits to much of the system. Providing enhanced flows to the entire Delta is akin to irrigating 1000 acres of unfertile land in order to derive benefits from100 acres of fertile land.

Our recommendation is to focus on restoring natural processes in selected areas, particularly Yolo Bypass and Suisun Marsh, rather than restoring natural flows throughout the Delta, by creating a perennial complex of river channels and greater marsh-bay connectivity.

**Habitat restoration in the right places**

The draft plan advocates as policy restoring habitat at appropriate elevations, protecting opportunities to restore habitat and expanding floodplains and riparian habitat in levee projects (p.148). We generally concur with the first two of these policies while noting that large parts of the San Joaquin River flood plain are identified as a priority restoration area, but are below sea level and not well connected with terrestrial linkages to other restoration areas. We believe the south and southeast Delta need a strategic re-evaluation involving a longer perspective (50+ years), with restoration focused more on areas near sea level and incorporating ecological corridors. We question the third policy. It suggests that desirable vegetation communities can be restored to provide habitats for desirable species in scattered patches throughout the Delta. That strategy is simply not economically feasible; isolated restoration efforts on isolated landscapes have little probability of meeting scientifically defensible ecological goals.

As the DSC identified, restoring a tidal connection to large areas of managed marsh land in Suisun Marsh is fundamental to ecosystem restoration in the estuary. Nearly half of the delta smelt observed in IEP monitoring surveys are found year-round in the waters within and adjoining Suisun Marsh. If there is a fundamental problem inhibiting the recovery of the native, pelagic fish species, it is plausible that it will be found here. The loss of connectivity between marshland and open water is likely to be a major impediment to recovery. The Suisun area also provides important habitat for a portion of the longfin smelt population. The Suisun Marsh restoration program calls for the tidal restoration of 5,000 to 7,000 acres of marsh land. While this would be a good start, we believe that acreage is not sufficient, and that the area should approach three times that.

The draft plan offers a number of recommendations that are consistent with the above policies. Of particular importance is the recommendation for the Delta Conservancy to lead an effort to investigate how to better use habitat credit agreements to support restoration efforts. But, the Delta Conservancy may be the wrong group to lead this effort. At the heart of a restored Delta environment reside the co-equal goals. In the draft plan, the goals remain effectively in competition with each other and disappointingly unlinked. If the co-equal goals are to be achieved, we believe it is essential that Delta stakeholders have incentives to work together and with the DSC. In its simplest form we propose that a fee on increased water diversions from the watershed (and not just from the Delta) be used to fund habitat restoration and associated resources management. With diversions funding habitat restoration mutual benefits accrue and the co-equal goals can be attained incrementally. It is incumbent on stakeholders to ensure that such funds are used judicially (we suggest in accordance with a generally accepted plan). Such diversions should be authorized and permitted if the habitats that support desired species are effectively restored; they should not be linked to the demographic status of the Delta's native fishes.

With multiple stressors responsible for population declines in the delta's it should be recognized that correction of some stressors may be beyond the ability of any entity to control. While the goal is recovery of endangered native fish, the objective is habitat restoration. The attainment of the coequal goal relies fundamentally on the attainment of that object. Setting as a requirement, the recovery of all endangered species in the ecosystem before improving water supply will likely derail the process and jeopardize meaningful improvements in habitat restoration.

**Improve Water Quality to Protect Human Health and the Ecosystem**

The DSC, while not proposing policies for the improvement of water quality, does make several recommendations encouraging the State and Regional Boards to complete existing efforts and to monitor water quality in a manner that provides useful information to manage toxic and nutrient stressors. We concur that the Regional Boards are best suited to oversee water quality in the estuary but feel that, to date, the level of monitoring has been at spatial and temporal resolutions that are inadequate to identify the problems and the sources of those problems.

**Prevent and Manage Nonnative Species Impacts**

The DSC identified a number of measures to prevent and manage non-native species. The first recommendation involved regulation of nonnative sport fish to protect native fish:

"The Department of Fish and Game should develop, for consideration by the Fish and Game Commission, proposals for new or revised fishing regulations designed to increase populations of listed fish species through reduced predation by introduced sport fish. The proposals should be based on sound science that demonstrates these management actions are likely to achieve their intended outcome." (p.153)

DFG has already complied with this recommendation for striped bass to no effect. It seems now there needs to be a stronger recommendation to address the blatant disregard of the intent of the ESA by the Fish and Game Commission and their subsequent inaction.

**Improve Hatcheries and Harvest Management**

We appreciate the need for a continued ocean harvest of salmon and that such a harvest of legal fish will result in the some take of endangered fish. We suggest that NMFS address take by harvest and by water operations equitably by limiting take in each circumstance to levels that will have the same effects of the population growth rate. If there is a percentage of allowable take of adult salmon associated with commercial harvest that does not jeopardize the species, then we would argue that an equivalent level of take of juveniles at pumping plants that also does not jeopardize the species can be established with reference

to the effect on the population growth rate. We also suggest that the fishing industry undertake its own HCP/NCCP.

Sincerely,

William D. Phillimore
Board Member