

To: Joe Grindstaff, Executive Officer
Delta Stewardship Council

From: Coalition of Environmental, Environmental Justice and Fishing Organizations

Subject: Comments on the First Staff Draft of the Delta Plan

February 24, 2011

We very much appreciate your openness and transparency in developing the Delta Plan under a very tight, legislatively mandated schedule. Attached are our comments in order to assist you with the next version of the Plan.

Please understand that the short turn around time that is provided between the releases of each of these drafts will preclude our thoroughly vetting our comments with each of our collaborating organizations. Therefore you may receive additional comment letters from some of our member organizations and, for that reason, you can expect us to refine our combined comments as the Delta Plan progresses.

There are three important overall comments that apply to this first Draft Delta Plan:

1. First is how the Council is putting off the financing plan. This vital piece would identify the magnitude of costs for the projects and management strategies identified in the Delta Plan and who can, and is willing to pay, for them. In putting off the financing piece until later the Council risks repeating the fatal errors of the Bay Delta Conservation Plan and the preceding CALFED process. Both multi year and multi million dollar efforts resulted in expectations that eventually were deemed unrealistic when the costs and available funds were disclosed. When costs, benefits, and beneficiaries are identified up front much more realistic proposals will emerge and more appropriate phasing of projects will occur.
2. Second, it is incumbent on the Delta Stewardship Council to define "water supply reliability." Many parties have informed you that there is significant disagreement over what that phrase means. Its definition is foundational for establishing objectives, targets and metrics. To leave it ambiguous perpetuates the uncertainty that fundamentally plagued the BDCP effort. Please refer to our previous submission for recommendations as to the appropriate definition.
3. The plan will be deficient if it does not deal with Environmental Justice considerations. The enabling legislation for the Delta Stewardship Council specifically calls for "... providing a reliable water supply for California ..." Yet nowhere in this first draft is there any indication of the need to provide drinkable water, especially to disadvantaged communities. This is especially egregious when high quality water is exported from the Delta to agricultural users using canals running adjacent to communities that cannot drink the water coming from

their own taps. It is appropriate for the Delta Plan to consider the needs of agriculture in the place of use for Delta waters; it would be unconscionable to ignore the needs of disadvantaged communities in those same areas.

We commit to continuing to provide constructive feedback and input in this important work.

**ATTACHMENT TO ENVIRONMENTAL COALITION COMMENTS
DELTA PLAN – FIRST STAFF DRAFT**

February 24, 2011

COMMENTS ON COVER LETTER, dated February 14, 2011se

Key preliminary staff findings:

**CALIFORNIA’S TOTAL WATER SUPPLY IS OVERSUBSCRIBED.
CALIFORNIA REGULARLY USES MORE WATER ANNUALLY THAN IS
PROVIDED BY NATURE.**

Response: We totally concur with these statements. We believe it is critical that Californian’s be continually reminded of the current over subscription of our natural water supply as well as the over subscription of legally designated surface water rights in the state, i.e. “paper water.” It is rare that a prominent public agency acknowledges this unfortunate reality and we compliment you for it. Although it may be hard for the public to accept, the public recognition may help current and future sustainability efforts. This could appropriately be considered the major water problem for California and the major hurdle for rationalizing our water systems.

CALIFORNIA’S WATER SUPPLY IS INCREASINGLY VOLATILE.

Response: This is another finding that we agree with and which is becoming more apparent with each passing year. Climate scientists indicate that, in addition to increasing volatility, total precipitation will decrease in the future and leave California with reduced natural supplies. This has significant implications for future water supply reliability and will prevent the coequal goals from being achieved if water supply “reliability” equates with increased exports through the Delta.

**EVEN WITH SUBSTANTIAL ECOSYSTEM RESTORATION EFFORTS, SOME
NATIVE SPECIES MAY NOT SURVIVE.**

Response: This is not acceptable or legal as a likely outcome. There is no justification for allowing extinction to occur as a result of – rather than despite – our actions and our inaction. The sad truth is that we are far from implementing anything approaching our best efforts and that “substantial ecosystem restoration efforts” exist more in our imagination than in reality. Restoring freshwater flows and physical habitat on a truly large scale would represent our best efforts, and proceeding down this path is the test of the DSC’s seriousness about achieving its legislative mandate to restore the Delta ecosystem.

The going forward concept that “some native species may not survive” is an abrogation of the responsibilities of the Delta Stewardship Council under state and federal endangered species laws. Every effort should be made, consistent with the FWS and

NMFS recovery plans for listed species, to recover all listed species to viable, self-sustaining populations” and to rehabilitate the ecosystem processes that support species recovery. The Delta Plan should define the recovery and restoration targets to be met and then identify the elements of aggressive restoration programs that are capable of recovering threatened and endangered species. How many iconic extinct wildlife images do we wish to add to our state flag?

THERE IS NO COMPREHENSIVE STATE OR REGIONAL EMERGENCY RESPONSE PLAN FOR THE DELTA.

Response: This statement is not wholly correct and we provide further comments as a part of our response in Chapter 8.

COMMENTS ON CHAPTER 5 – MANAGE WATER RESOURCES

Findings

CALIFORNIA'S TOTAL WATER SUPPLY IS FINITE.

Response: Significant changes are needed in how water is managed. These changes include:

- Adapting to the obvious water supply limits that confront us, including reducing water exports from the Bay Delta;
- Understanding that healthy aquatic environments, while representing far more than economic value, are also worth billions of dollars to our economy.
- Evaluation of full implementation of the Delta Flow Criteria as adopted by the State Water Resources Control Board in August of 2010 as one of the alternatives to be considered for all future environmental impact reports related to Delta water.
- Utilization of the SWRCB Delta Flow Criteria in establishing a level of flows that protect public trust resources of the Delta.
- In keeping with the first key finding in the cover letter (“water supply is oversubscribed”), the DSC should develop a plan to bring CVP and SWP contract amounts in line with historic firm yields and eliminate “paper water.”

CALIFORNIA’S WATER INFRASTRUCTURE IS INCREASINGLY VULNERABLE TO EXTERNAL FACTORS SUCH AS CLIMATE CHANGE.

Response: We agree. Even before long-term decisions can be made on adding new infrastructure to the system, existing essential infrastructure should be retrofitted to survive climate change. Failure to do so will result in the waste of money and heavy rate increases for less water. The people of California cannot afford the Delta Plan if it results in massive rate increases to pay for stranded assets. We hope the Council will follow the precautionary principle of ecosystem management, or at least follow the Hippocratic Oath: First, do no harm.

THE CONSTITUTION OF CALIFORNIA REQUIRES THAT WATER BE USED FOR BENEFICIAL PURPOSES, THAT WATER BE USED REASONABLY, AND THAT NO WASTING OF WATER SHALL OCCUR.

Response: We agree. However, California has only given lip service to this Constitutional provision previously. The State Water Board has failed for decades to grapple with unreasonable water uses. The recent report by the new Delta Watermaster may be a sign that the neglect is coming to an end. The Delta Plan should direct the State Water Resources Control Board to develop an agricultural reasonable use program based upon the Watermaster’s report as an important part of the Delta Plan

CALIFORNIA’S WATER SUPPLY IS PROVIDED BY LOCAL, REGIONAL, STATE AND FEDERAL DAMS, RESERVOIRS AND CONVEYANCE SYSTEMS.

HOWEVER, IMPROVED REGIONAL WATER SUPPLY SELF-RELIANCE IS ONE OF THE MAJOR WAYS WE CAN MEET OUR COEQUAL GOALS OVER THE COMING DECADES.

Response: Regional water supply self-reliance is the existing law. Relying on the resources of another region of California before making maximum use of local supplies puts supply reliability at great risk. The Delta Plan should mandate agricultural and urban compliance with existing law and reduce exports from the Delta watershed, thereby responding to its statutory requirements to preserve the Delta and make water supplies more reliable. The current unrealistic expectations should be removed and existing supply made reliable by realigning all water supply contracts to reflect the actual supply available. Water rights permits must be based on actual known available water supplies.

SURFACE AND GROUNDWATER SUPPLIES WILL ONLY BE RELIABLE ON A LONG-TERM BASIS IF GROUNDWATER OVERDRAFT IS ELIMINATED.

Response: We agree with this finding. There are three ways to deal with this overdraft. The first is to further overdraft Delta waters to temporarily prop up those largely San Joaquin Valley uses, including the irrigation of drainage contaminating areas. The second is to overdraft currently healthy Northern California groundwater (directly or indirectly) and ship that water to the San Joaquin Valley. The third approach is to either intentionally or unintentionally see agricultural water usage in the San Joaquin Valley change. It is unlikely that at least in the near to mid term government will require such changes in the San Joaquin Valley. Therefore what is most likely is that individual farmers will continue to deplete the aquifers, in many cases causing irreparable damage to their water holding capacity. Improving water supply reliability for the San Joaquin Valley cannot be permitted to overdraw or damage groundwater basins in northern California.

URBAN RESIDENTIAL WATER USE HAS NOT DECLINED FOR THE PAST 40 YEARS. AGRICULTURAL WATER USE HAS CONTINUED TO BE AT THE SAME STATEWIDE LEVEL OF APPROXIMATELY 33-34 MAF PER YEAR FOR MANY YEARS. WHAT REMAINS OF THE AVAILABLE WATER SUPPLY IS OFTEN CALLED ENVIRONMENTAL WATER. WITH POPULATION GROWTH AND LITTLE CHANGE IN WATER EFFICIENCY, CALIFORNIA'S WATER DEMANDS WILL CONTINUE TO INCREASE.

Response: We do not agree with this finding. As your finding indicates agriculture water use is not growing. The 2009 State Water Plan Update projects agricultural water use to actually decrease. There is a wealth of best available science identifying how water demands can actually be reduced by millions of acre-feet annually through water use efficiency. In addition there are opportunities to develop millions of acre feet of sustainable water supplies through local stormwater capture, ground water cleanup, floodplain storage and brackish water desalination.

The doctrine of waste and unreasonable use is an existing mechanism to reduce agricultural water usage in accordance with modern methods of agriculture. The recent report of the Delta Watermaster is a good place to start in designing a program to fit into the Council's Delta Plan. We note that your staff's first document supports the idea that the doctrine of reasonable use is the cornerstone of California water law. We look forward to your actual use of this California Constitutional provision to see how agricultural water use can be brought into compliance.

WATER CONSERVATION IN ALL SECTORS CAN BE SIGNIFICANTLY IMPROVED.

Response: Multiple studies conducted over the last decade show that a suite of aggressive conservation and water efficiency actions would reduce overall demand with cost-effective and existing technology. These measures will handle California's water needs well into the foreseeable future and will do so at far less financial and environmental cost than constructing more storage dams and reservoirs. The measures include:

- Establish a statewide oversight unit responsible for coordinating and monitoring accomplishment of enhanced conservation targets.
- Reduce average per capita urban water use to less than 100 gallons per day, with steeply tiered rates beyond that rate of consumption.
- Require implementation of specific water use reduction targets by agricultural water users.
- Implement statewide mandatory multiple tiered conservation rate structures as part of Urban Best Management Practices.
- Reform the current water rights systems, to comply with state constitutional provisions related to unreasonable use of water, beneficial use of water, use-efficiency, and the public trust doctrine.
- Reinstate the urban preference and the public ownership of the Kern Water Bank in order to meet the needs of southern California cities.

REUSE OF WATER, RECYCLING, GROUNDWATER MANAGEMENT, STORMWATER CAPTURE, TREATMENT AND REUSE OF IMPAIRED WATERS, SEA WATER DESALTING IS VITAL TO IMPROVING THE OVERALL RELIABILITY OF CALIFORNIA'S WATER SUPPLIES, BUT IS NOT LIKELY TO BE A MAJOR FACTOR FOR SEVERAL DECADES OR MORE.

Response: Two aspects of this finding are incorrect.

First, many of these sustainable strategies CAN BE, HAVE BEEN AND ARE being implemented just as fast as resources allow. A check with the Department of Water Resources and major water agencies will identify how much is already being conserved (likely well over 1 million acre feet of water annually). The Bureau of Reclamation, particularly the Colorado River Region Office, and the WateReuse Association can provide lists and capacities of water recycling projects that can be implemented in the

near to mid term. Large numbers of these projects can and will be implemented far before any changes in Delta conveyance (which will not themselves increase water supply) are actually implemented.

Secondly, sea water desalination, particularly using open sea water intakes, is not currently an environmentally sustainable water source. Best available science has documented its high toll on sea life resulting from intake entrapment and entrainment. In addition, with currently available technology it is the most energy and green house gas intensive method possible for providing water – most of which would be used for non-potable purposes. By contrast brackish water desalination is a viable source because it entirely avoids the sea life deaths caused by entrapment and entrainment and it uses far less energy due to significantly less salinity of the source water.

MANY OF CALIFORNIA'S WATER SUPPLY FACILITIES WERE INITIALLY PLANNED AND DESIGNED BASED ON CONDITIONS IN THE LATE 1800'S AND EARLY 1900'S, AND FACILITIES MAY REQUIRE MAJOR REPAIRS DUE TO AGE.

Response: We concur with this finding. These additional costs of billions of dollars reinforce the need to address financing sooner rather than later. Part of that prudence should include looking for opportunities as infrastructure needs to be upgraded, replaced or removed. For instance some dams may no longer be providing net benefits. In other cases retrofits for seismic safety or other purposes could incorporate state-of-the-art fish passage facilities.

STATE WATER PROJECT LONG-TERM AVERAGE WATER DELIVERY RELIABILITY HAS DECLINED SUBSTANTIALLY IN THE PAST SEVEN YEARS.

Response: Nothing has changed in the last seven years to reduce long term water delivery reliability except the enforcement of laws that have been on the books for many years. The projects (CVP-SWP) have over-appropriated water from the Delta watershed. Best available science has repeatedly and conclusively found this to be one of the major causes of the Pelagic Organism crash, and the courts have reduced export pumping in accordance with the law.

STORAGE CAPACITY MUST BE INCREASED AND RESERVOIR OPERATIONS MODIFIED TO IMPROVE WATER SUPPLY RELIABILITY.

Response: Storage capacity upstream of the Delta cannot be usefully or economically increased. The good locations have already had dams built upon them, and rivers and streams leading into the Delta are over-appropriated now. In the San Joaquin Valley, even when the Bureau of Reclamation grossly overestimated benefits of Temperance Flat dam and grossly underestimated many of its costs, they could only show the project barely providing a 1:1 cost benefit ratio. That is one of the reasons that not one of the beneficiaries has committed to putting up its fair share of the costs.

Present reservoir operations upstream of the Delta need to be changed to store less water in winter and spring months and to decrease deliveries during the dry part of the year to reestablish ecologic conditions that could recover species in the Delta and the Delta watershed. In addition “forecast based releases” for existing flood control dams can actually increase flood protection and result in some incremental increase in effective storage. However there is no scientific evidence that could rationally lead to a conclusion that more surface storage could help either the water supply or the environment.

Artificial recharge of groundwater basins in the San Joaquin Valley should only occur in basins that have been damaged or disconnected from surface waters. Healthy, connected groundwater basins must be preserved to support existing communities, orchards, streams, terrestrial habitat and dependent species.

One potential exception is storage in a portion of the Tulare Lake Bed. Because CALFED ignored this possibility there is no available analysis to determine whether it could actually have water supply and ecosystem benefits. This analysis needs to be accomplished.

CONVEYANCE MUST BE CHANGED AND RE-OPERATED TO IMPROVE WATER SUPPLY RELIABILITY.

Response: The last sentence in this finding is correct as far as it goes, *“In order to do this, it will be necessary to establish clear and enforceable criteria and constraints for Delta operations.”*

However this plan should be more forthcoming in describing how difficult it is to establish clear criteria and constraints that would actually be enforced. At the very moment we are drafting these comments there is a concerted effort in the United States Congress to prevent the federal government from implementing existing biological protections governing existing infrastructure. The question of assurances is not a new one.

Furthermore this statement gives no meaningful guidance on the nature, extent, or phasing of changes in conveyance. To provide effective guidance to the Bay Delta Conservation Plan, the Delta Plan should specifically call for environmental, engineering, financial and economic analyses, at an equal level of detail, for facility capacities from 3,000 c.f.s. to 15,000 c.f.s. as well as alternatives that would utilize existing conveyance without new major conveyance facilities.

LOCAL STORAGE PROGRAMS CAN IMPROVE CAPTURE AND SUBSEQUENT USE OF STORMWATER FLOWS, AND POSSIBLY DRY WEATHER RUNOFF, TO INCREASE WATER SUPPLIES.

Response: We agree with this finding and look to the Council for a practical program to achieve improvement in using these tools for reliability improvements.

To repeat our response from above: Artificial recharge of groundwater basins in the San Joaquin Valley should only occur in basins that have been damaged or disconnected from surface waters. Healthy, connected groundwater basins must be preserved to support existing communities, orchards, streams, terrestrial habitat and dependent species.

MANY LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AND ORGANIZATIONS COLLECT WATER DATA, BUT USE DIFFERING METHODOLOGIES AND LEVELS OF DETAIL WHICH SEVERELY LIMITS THE USEFULNESS OF THE INFORMATION. OR LAND OWNERSHIP PATTERNS.

Response: We agree, and look forward to your recommendations.

TO BETTER UNDERSTAND AND TRACK THE WAYS WATER IS USED IN THE URBAN, AGRICULTURAL AND THE ENVIRONMENTAL SECTORS, A RIGOROUS MANADATROY STATEWIDE WATER DATA COLLECTION AND ANALYSIS PROGRAM IS NEEDED.

Response: We agree, and look forward to your recommendations.

Responses to: WORKING CATEGORIES OF POTENTIAL POLICIES AND RECOMMENDATIONS

The Plan should explicitly specify that the State Water Resources Control Board shall expeditiously begin to develop and adopt public trust flow standards for existing Delta conveyance and that no new conveyance changes shall be approved until new public trust standards for those proposed changes are adopted.

Not only should “Further Water Supply Contracts” be under the jurisdiction of this plan, but also any amendments or extensions of existing contracts.

Per capita water use standards should be listed under Potential Policies and Recommendations.

Brackish water desalination should be included.

Research on how to avoid impacts of sea water desalination on sea life and to significantly reduce energy consumption and accompanying green house gas production should be included. Sea water desalination is not ready to be listed as an environmentally sustainable source.

It should be explicit that any “Future Water Transfer Programs – Short Term and Long Term,” that go through the Delta must comply with protective public trust flow standards and not contribute to the over allocation of source area surface or groundwater resources.

COMMENTS ON CHAPTER 6 – RESTORE DELTA ECOSYSTEM

Findings

HABITAT EXTENT AND COMPLEXITY HAVE BEEN SUBSTANTIALLY ELIMINATED IN THE DELTA AND SUSUIN MARSH.

Response: We agree.

THE DELTA ECOSYSTEM IS IRREVERSIBLY CHANGED.

Response: Change title to, “Parts of the Delta Ecosystems are irreversibly changed”. Change the forth sentence to read, “With this context, the expectations for success rest on development of a science based conservation and restoration plan, implemented on a timely basis, prioritized by best outcome analysis, and adapted based on these outcomes. Appropriate funding for this program will be essential to successful outcomes.”

NATURAL ECOSYSTEMS SELDOM CONFORM WITH POLITICAL BOUNDARIES OR LAND OWNERSHIP PATTERNS.

Response: We agree.

THE PROCESS FOR OBTAINING PROJECT SPECIFIC PERMITTING AND AUTHORIZATION ARE NOT WELL COORDINATED, WHICH COULD DELAY PROGRESS ON ECOSYSTEM RESTORATION.

Response: Developing a specific entity to coordinate this process would streamline the effort, and make it easier for both public agencies and private landowners to work effectively. Using the Partners program within FWS would be a good place to start for a model and help with design.

THE CURRENT SCIENTIFIC INFRASTRUCTURE AND EXPERTISE ARE NOT SUFFICIENT TO SUPPORT THE SCIENCE AND ADAPTIVE MANAGEMENT NEEDED FOR SUCCESSFUL ECOSYSTEM RESTORATION.

Response: We basically agree, although there has been local evaluation by experts in both academia and the private sector to identify both location and size of required restoration. Consulting these entities would make the process faster to develop, and could provide the basis for a science based oversight committee to develop and implement restoration.

We also suggest changing the finding to read: “....needed for successful conservation and ecosystem restoration.”

EVEN WITH SUBSTANTIAL RESTORATION EFFORTS, SOME NATIVE SPECIES MAY NOT SURVIVE.

Response: Change title to, “Even with substantial restoration efforts, some native species face continued threats to their viability and recovery.” We feel that predicting extinction is beyond our ability, and doing so sets the stage for failure. We would suggest adding, “Every effort will be made, consistent with the FWS and NMFS recovery plans for listed species, to recover all listed species to viable, self-sustaining populations.”

Having some unspecified number of species native to the Bay Delta go extinct is blatantly inconsistent with the co-equal objective of restoring the Delta Ecosystem. Water Code Section 85302©(1) requires that: *“The Delta Plan shall include measures that promote all of the following characteristics of a healthy Delta ecosystem ... Viable population of native and resident migratory species.”*

Best available peer-reviewed science has concluded that most of the reasons species such as salmon and delta smelt are nearing extinction are human caused. This first draft plan negates our responsibility to other species by concluding that even with “substantial” restoration effort some species may not survive. Not fully implementing actions we can take is a slippery ethical slope. There is no bright line showing how many parts of the ecosystem the earth can lose before we get added to the Endangered Species list.

If the Plan is to conclude some species may not survive, the Plan must identify which species and what is considered “substantial” restoration and what additional restoration would be required to avoid such extinctions.

We also note that changes in Delta conveyance that would contribute to species extinction are impermissible under the California Endangered Species Act, the Natural Communities Conservation Planning Act, the federal Habitat Conservation Plans as well as Sections 7 and 10 of the Federal Endangered Species act

RESTORING A HEALTHY ECOSYSTEM MAY REQUIRE DEVELOPING A MORE NATURAL SALINITY REGIME IN PARTS OF THE DELTA.

Response: We agree that restoring a healthy ecosystem will require salinity to decline in the late fall, winter and spring and to increase in the summer and early fall.

CONTAMINANTS DISCHARGED FROM MUNICIPAL, INDUSTRIAL, AND AGRICULTURAL SOURCES DIRECTLY OR INDIRECTLY INTO THE DELTA HAVE AFFECTED NATIVE SPECIES BY ALTERING FOOD WEBS, REDUCING FOOD WEB PRODUCTIVITY, AND PRODUCING TOXICITY.

Response: We agree with this finding and point out that there are many laws and regulations that could be immediately used to limit discharges from upstream water sources. We would welcome the Council using its authority to solve this problem, since the Water Boards have failed to do so for many decades.

We recommend adding this finding: **THE SWRCB FLOW CRITERIA WOULD IMPROVE WATER QUALITY, AND ENHANCE THE DELTA RESTORATION FOR LISTED FISH SPECIES.**

Response: Improved Delta flows will have a beneficial impact on toxicity in the Delta water system as toxicity concentration would be reduced, positively impacting all life forms in the Delta.

FLOOD MANAGEMENT ABOVE THE DELTA AND AT THE DELTA MARGINS HAS SUBSTANTIALLY REDUCED HABITAT FOR NATIVE SPECIES THAT USE FLOODPLAINS.

Response: We agree.

MOST FLOODPLAINS IN THE CENTRAL VALLEY LACK CONNECTIVITY WITH THE RIVERS TO THE DETRIMENT TO THE ECOSYSTEM.

Response: We agree. The present levee system does not take into account the need for annual flooding to benefit the environment. Where possible below rim dams, water diverters should be required to release enough water to over-top banks and reconnect floodplains with their associated rivers and streams.

We recommend adding this finding: **THE SWRCB FLOW CRITERIA MADE SPECIFIC RECOMMENDATIONS ON FLOWS TO RESTORE THE PUBLIC TRUST FISHERIES.**

Response: The SWRCB recommendations should be included as part of the process of evaluating the changes needed to restore the Delta and its fisheries.

CURRENT IN-STREAM STRUCTURES (E.G. DAMS, WEIRS, AND GATES) IMPAIR LOCAL AND MIGRATORY MOVEMENT OF NATIVE RESIDENT AND MIGRATORY SPECIES IN THE DELTA AND UP-STREAM REACHES.

Response: We agree with this finding and suggest that the Council develop a program within the Delta Plan to require all diversions to be screened and that all dams and weirs have fishways in accordance with state law. Any financial plan should require that users (beneficiaries) of projects that include dams, weirs, and gates are financially responsible for ensuring fish passage within 10 years, or cease diverting California's water.

INTRODUCTION OF EXOTIC PLANT AND ANIMAL SPECIES HAVE DEGRADED THE QUALITY OF HABITAT IN THE DELTA.

We agree. We feel that lax government enforcement of existing regulations has created much of this problem, and we encourage the Council to develop or provide direction to appropriate state agencies to tighten enforcement.

ENTRAINMENT AT WATER DIVERSIONS IN AND UP-STREAM OF THE DELTA ADVERSELY AFFECTS NATIVE AQUATIC SPECIES.

Response: We agree, and look forward to making recommendations on how to correct this continuing problem within the Delta Plan.

CURRENT FLOW REGIMES HARM NATIVE SPECIES AND ENCOURAGE NON-NATIVE SPECIES THROUGH THEIR EFFECTS ON TURBIDITY, SALINITY, AQUATIC PLANT COMMUNITIES, AND NUTRIENTS.

Response: We agree. The recent SWRCB Delta Flow Regime report provides a sound basis from which to develop delta flow regimes in the various water year types. New Delta flow regimes will need to be established to meet the legislative mandate of less reliance on the Delta and restoration of the Delta ecosystem.

CLIMATE CHANGE HAS ALTERED AND WILL CONTINUE TO ALTER FLOW REGIMES.

Response: We agree. All elements of Delta Plan development need to be evaluated with Climate Change as a major constraint. We also believe it must be factored into and diversion scenario considered.

We recommend adding this finding: **WATER TRANSFERS THROUGH THE DELTA ALTER THE FLOW REGIME OF THE DELTA IMPACTING THE ECOSYSTEM, AND CAN NEGATIVELY IMPACT UP-STREAM AQUIFERS.**

Response: We agree. It is imperative that a comprehensive process for evaluating permanent and serial short-term transfers be established within the Delta Plan, including its impact on groundwater and up-stream impacts.

**COMMENTS ON CHAPTER 8 – REDUCE RISKS TO PEOPLE, PROPERTY,
AND STATE INTERESTS IN THE DELTA**

Findings

THERE IS NO STATE EMERGENCY RESPONSE PLAN FOR THE DELTA.

Response: It is not quite correct to state that there is no State Emergency Response Plan for the Delta. California has a Flood Control Center that has been operating for years. It responds to flood fights with technical assistance and manpower throughout California, including the Delta. Under DWR's Levee Subvention Program, a certain amount of money has been allocated for sandbags and other materials for flood fighting. The State itself, through CAL EMA has a very comprehensive structure for responding to all emergencies - flood, fire, earthquake. It organizes into area-wide command centers with pooled resources of the Army Corps, county Office of Emergency Services, county sheriffs, DWR and reclamation districts all working together when there is a flood emergency.

However, we agree that there is room for improvement.

We disagree that no individual county has completed a delta-specific emergency response plan. San Joaquin County, with few resources from the State and federal governments, has developed a comprehensive emergency response plan that can be used for a Delta flood emergency. It includes flood contingency maps, flood fight stockpiles, urban evacuation maps, equipment acquisitions, a unified flood fight command response structure and other actions.

**EMERGENCY PREPAREDNESS IS THE FIRST LINE OF FLOOD DEFENSE
AND LOCAL AGENCIES ARE THE PRIMARY RESPONSIBLE AGENTS.**

Response: We agree.

**RECENT FLOODS STIMULATE EMERGENCY RESPONSE PLANNING, BUT
THE PROCESS IS FAR TOO SLOW.**

Response: We agree, but as a practical matter when you get hit on the ground, local agencies are the best prepared to respond. There needs to be a clear State commitment along with funding to fix levee breaks and dewater flooded Delta islands. There should be establishment of a state-funded Delta Emergency Response Fund that can be used to distribute funds to local agencies for flood fighting.

**SUBSIDED DELTA ISLANDS ARE AT THE HIGHEST RISK OF FLOODING
AND ARE LIKELY TO SUCCUMB TO FLOOD OVER THE COMING
DECADES.**

Response: There has been tremendous subsidence of Delta islands since they were first constructed. Organic soil was originally spread throughout the Delta, but it was relatively shallow and has subsequently been largely oxidized or burned to the point that subsidence is not active on most Delta islands. LIDAR surveys indicate that few Delta areas are actively subsiding. Surveys and geotechnical evaluations show that subsidence rarely occurs close enough to levees to pose a significant risk. A “toe berm” design on existing levees can provide adequate protection. Source: Delta Engineers’ letter to Senator Lois Wolk (August 4, 2009).

THE DELTA IS FLOOD PRONE.

Response: We agree.

DELTA LEVEES ARE ALSO THREATENED BY EARTHQUAKES.

Response: We agree that Delta levees are threatened by earthquakes and that more should be done to reduce that risk. However we do not agree with the language in the Draft Delta Plan which overstates the risk of earthquake hazards and susceptibility. Based on the Delta Risk Management Strategy, the flood risk to Sherman Island, the capstone of Delta water quality is 5-7% (mean annual frequency), compared to an earthquake risk of 3-5% (mean annual frequency). The Delta Engineers’ letter to Senator Lois Wolk (August 4, 2009) states numerous times that 21 years of DWR’s Delta Levees Program has significantly reduced the vulnerability of Delta levees to failure. We know of no known Delta levee failure due to earthquakes.

LEVEES DO NOT ELIMINATE RISK – LEVEES REDUCE RISK.

Response: We agree.

LEVEE SAFETY STATUS QUO IS UNACCEPTABLE.

Response: We agree that improvements are needed, but we disagree that Delta levee safety is as stark as it is painted in the draft Delta Plan. The Delta Engineers’ letter states that an acceptable level of protection (P.L. 84-99 and State Bulletin 192-82) can be met for a cost of \$1 billion. Furthermore, they indicate that nearly all non-project levees could be brought up to the agricultural standards with existing Proposition 84 and 1E bond funds combined with local cost sharing requirements.

SETBACK LEVEES PROVIDE MULTIPLE BENEFITS.

Response: We agree. However, to construct a setback levee in the Delta lowlands is a monumental task because it moves the levee away from existing foundations that have been consolidated since the early levees were first built. Constructing setback levees in the upper reaches of the Delta where drainage is better than in the lowlands is much more feasible.

THE DELTA IS A CRITICAL UTILITY AND TRANSPORTATION CORRIDOR.

Response: We agree.

THE DELTA PROVIDES CRITICAL CORRIDORS FOR INFRASTRUCTURE SERVING POPULATIONS AND MARKETS BEYOND THE DELTA.

Response: We agree.

INLAND PORTS CONNECTED TO THE DELTA ARE IMPORTANT TO THE REGION'S ECONOMY.

Response: We agree.

THE MOKELUMNE AQUEDUCT, WHICH CROSSES THE DELTA, IS A MAJOR SOURCE OF WATER FOR THE EAST BAY.

Response: We agree.

MAJOR INTERSTATE, STATE, AND COUNTY ROADS CROSS THROUGH THE DELTA.

Response: We agree.

CRITICAL FREIGHT AND PASSENGER RAIL INFRASTRUCTURE CROSSES THE DELTA.

Response: We agree.

WATER DISTRIBUTION SYSTEMS WITHIN AND CROSSING THE DELTA ARE CRITICAL TO THE STATE'S WATER SUPPLY.

Response: We agree.

CLIMATE CHANGE THREATENS IMPORTANT INFRASTRUCTURE IN THE DELTA.

Response: We agree that climate change **can** threaten infrastructure, but we believe that the Draft Delta Plan overstates the problem. Sea level rise occurs at a slow pace and a consistent, long-term maintenance program would enable levee systems to be upgraded to keep up with sea level rise. According to the Delta Engineers' letter, if current Delta levees are brought up to existing P.L. 84-99 and State Bulletin 192-82 standards there is already adequate annual maintenance funding from levee districts to upgrade levees over time to meet projected sea level rise.

WORKING CATEGORIES OF POTENTIAL POLICIES AND RECOMMENDATIONS

Response: We recommend that the Delta Stewardship Council include policies and recommendations for a Delta Emergency Response Fund that can be used to distribute funds to local agencies for flood fighting.

COMMENTS ON CHAPTER 9 – PROTECT AND ENHANCE THE UNIQUE CULTURAL, RECREATIONAL, NATURAL RESOURCES, AND AGRICULTURAL VALUES OF THE CALIFORNIA DELTA AS AN EVOLVING PLACE.

Findings

THE DELTA SUPPORTS A UNIQUE COMBINATION OF ENVIRONMENTAL AND ECONOMIC RESOURCES THAT PROVIDE THE BASIS FOR MUCH OF ITS LOCAL ECONOMY.

Response: In a discussion of the local economy, water facilities, except for those which provide local beneficial use, actually contribute to environmental degradation resulting in the decline of outdoor recreation, tourism, and local agriculture. A full economic analysis, as that underway by the Delta Protection Commission, is necessary to evaluate the impact of conveyance on local economies.

THE COMPLEX SYSTEM OF DELTA GOVERNANCE COMPLICATES COORDINATED AND INTEGRATED PLANNING EFFORTS IN THE DELTA.

Response: Governance issues that require a regional coordinated effort should be handled by the Delta Protection Commission. Governance issues regarding flows, export levels, and water quality should continue to be addressed by the State Water Resources Control Board. SB x7, and the resulting creation of the Delta Stewardship Council, new Delta Protection Commission authorities, and new Delta assessments for flow standards by the State Water Resources Control Board, should streamline past governance issues.

AGRICULTURE IS THE PRINCIPAL LAND USE IN THE DELTA BUT HAS DECLINED FROM 80 PERCENT OF THE DELTA’S TOTAL LAND AREA IN 1984 TO 74 PERCENT IN 2008.

Response: A distinction needs to be made between parceling of land in the secondary zone of the Delta versus the primary zone. Is the reduction in Delta agricultural land area attributed to local projects approved after the creation of the secondary zone? The Delta Protection Commission is working through its primary zone study, which can be used as a regional guide for future land use planning in regard to agriculture.

LEVEE CONSTRUCTION AND CONVENTIONAL AGRICULTURAL PRACTICES HAVE RESULTED IN SUBSIDENCE ON DELTA ISLANDS.

Response: Delta engineers via responses to the DREAMS study, and in response to Delta Vision, and in 2009 reports to Senator Lois Wolk, have repeatedly affirmed that subsidence is not continuing to occur on much of the Delta’s land surface. According to local engineering estimates, of the islands marked as subsiding on the Dreams report, about 10% of their total land mass shows current subsidence. The majority of Delta

subsidence occurred during the first half of the last century, and many areas of land have become packed and are simply not subsiding at the same rate as in the past.

In addition, Delta farmers have moved and continue to move toward sustainable cultivation practices in order to conserve soil levels. During the recommendation process, sustainable agricultural practices and promotion of crops that contribute to the addition, or building up of land mass, should be emphasized. DSC staff should look into rice studies conducted by the San Joaquin County Ag Extension program conducted on various Delta islands over the last four years. In these studies, land mass increased through rice farming. Work has also been done on the cultivation of grapes as a tool to manage soil subsidence.

A governance tool for managing and reversing subsidence is the creation and promotion of agricultural programs that conserve and help to build soil levels in the Delta.

THE ACQUISITION OF FARMLAND AND SUBSEQUENT RETIREMENT OF THAT LAND AFFECTS THE ECONOMIC BASE FOR FARM SUPPORT INDUSTRIES.

Response: Other Delta processes, most notably the Bay Delta Conservation Plan, call for between 40,000 and 100,000 acres of prime Delta farmland to be returned to wetlands habitat. Such calls for a conversion of farmland to habitat is already having a less than desirable impact on land values, real estate transactions, and long term planning for farming families. Habitat restoration should focus on rewarding farmers for integrating wetland habitat into current farming landscapes. In addition, as favored by Congressman John Garamendi, research should be conducted to examine possibilities for habitat restoration as part of setback levees.

Additionally, lands already owned by the state should be considered for restoration, and research should be conducted to examine the viability of restoring and converting lost islands like Franks Track into wetland habitat.

RISKS TO THE DELTA MUST BE REDUCED TO ALLOW FOR ITS EVOLUTION, PROTECTION, AND ENHANCEMENT.

Response: Climate change will lead to increases in the flood threat, varied with decreased flows and sea level rise. These are events for which planning must be completed. New resulting infrastructure will lead to changes in levee construction and flow management in an adaptive management scheme. Such Delta planning, however, cannot take place in a vacuum. Decisions will need to be made regarding the sustainability and management of the San Francisco Bay. These policy decisions regarding the San Francisco Bay will have a direct impact on Delta climate change management plans and will need to be integrated into implementation of the Delta Plan.

We suggest changing the finding to read: “Risks to the Delta *and its watersheds*.....”