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August 19, 2008

Public Comment on August 14, 2008 Staff Draft of Delta Vision Strategic Plan  
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## Introduction

The Delta Vision Task Force has requested public comment on their Staff's draft Strategic Plan. This technical critique of the Plan will be submitted at the 8/28 public meeting in Stockton.

This draft Strategic Plan provides a lot of thought and information on a very complex subject, and it includes many worthy proposals. The worthy proposals include, for example, the need for regional storage and regional self sufficiency, (pages 16, 18); also, the need for an independent Science and Engineering Board rather than just a Science Board (pages 73, 78, 79); the integration of measures for flood management, water supply management, and Delta protection (page 34), etc. However, some of the goals and strategies are somewhat conflicting, are not well defined, have not been determined to be technically feasible, have not been quantified as to approximate water need and water availability, and probable unintended consequences have not been considered.

The Vision Task Force was given a largely impossible assignment. It was to "describe a future in which the Delta can continue thriving over coming generations" (page 3). It was to do this while also meeting a co-equal goal of providing "a reliable state water supply" that is "adequate for its future population" (Figure 2 and page 81). Conflicting with this, the Task Force's assignment included great political pressure to assure that the Strategic Plan would include some form of an isolated canal, which would be physically capable of intercepting and exporting most or all of the remaining fresh water inflow to the Delta during low river flows (pages 18, 44-46, 82). The doubtful feasibility (page 6) of a dual conveyance system and the potential for a greatly improved through-Delta system without a canal was therefore ignored.

## What level of Delta protection is intended?

There is no definition of what would constitute a "thriving" Delta, and no discussion of the amount and reliability of fresh water inflow to the Delta that this would require. There is no indication of how this inflow would be provided and distributed throughout Delta channels, and

how it would be assured, particularly if an isolated canal is used to further deplete and destroy inflow. The Task Force may have relied on DWR analyses that are based on average summer river flows into the Delta including wet year flows. The DWR has apparently not analyzed what would happen if summer river flows were as low as they have been during three of the last four summers.

#### What constitutes an adequate water supply?

The Task Force has also not quantified even in principle what will constitute an adequate State water supply, and over what time frame. The State's population is growing at a rate of about 5 million people in 10 years. A developed water supply that would be adequate now will not be adequate in 10, 20, or 30 years. It would also not be adequate when our 2 million acre feet overdraft of groundwater becomes unsustainable. The State legislature adopted Agriculture Code 411 (2002) which states that the State Water Plan must provide enough farm water so that the State and the Nation do not become dependent on a net importation of food. DWR ignored the intent of this legislated policy and adopted, without comment, a de facto policy of future dependence on a net importation of food. DWR's attitude was apparently that agriculture was only important for farmers, and that the domestic production of food was not an activity of social importance. Does the Vision Task Force define an adequate water supply based on legislated policy or on DWR de facto policy?

#### Unexplained proposals

It is not clear whether the co-equal Delta preservation and water supply goal is to be achieved statewide or also within the Delta (pages 76, 80, and 83). It is not clear how water will be provided for the flows per pages 46 and 50. It is not clear how the substantial increase in water consumption will be provided when farm lands are converted to open water or marshes (pages 27, 46, 47, 60-61, 66, 71). (Testimony before CALFED or before the SWRCB long ago explained and quantified the increase in evaporation from an acre of open water as compared to an acre of farmland, and the further increase in water consumption for an acre of tulle marsh). These conversions of ag land also appear to be at odds with the statement on page 11 that the strategic plan does not abandon the unique character of the Delta which includes "support for sustainable agriculture". If those conversions combine with other features of the Strategic Plan to substantially reduce Delta farms, the remaining farms may be lost due to loss of food processors and other farm services. Preservation of the unique Delta also appears to require preservation of the channel system rather than an open water Delta.

Neither the State Water Plan nor the Vision Plan adequately distinguishes between water that is used but not consumed, and water that is consumed. Most indoor water is not used consumptively. In the Central Valley most unconsumed water is treated, if necessary, and then either returned to the stream system or percolated to recoverable groundwater. However, a majority of the developed water supply is consumed by farm crops and other plants. Plants must take up a rather fixed amount of water through their root systems and evaporate it through their leaves in order to grow a pound of plant biomass. Farm crops cannot, therefore, be grown without this consumed water, and in the Central Valley excess applied water is almost all

recovered as either surface water or groundwater. The consumed water can not be recovered. Some excess water must be applied to flush from the root zone the salt that is removed by the roots from the consumed water.

On page 51 it is proposed to “reconfigure Delta waterway geometry to increase variability of circulation patterns”. This proposal is not sufficiently defined to determine its merit or unintended consequences.

#### Some strategies would create paperwork bureaucracies

Some of the proposed Strategies would create a lot of expensive paperwork but could do little to increase farm water use efficiency (page 31, Strategy 1). The Strategies should all be examined to determine whether they are needed and whether potential benefits would justify the cost and regulatory burdens.

The proposal on page 33 to “reduce or eliminate any return flows” is unreasonable and unwise. Salt in a water user’s source water could then only be disposed of by percolating to groundwater which would then become too salty to use. There must be a salt balance in each watershed. That can only be achieved if both indigenous and imported salt is conveyed to the ocean or some other permanent salt sink.

#### Restoration of flood plain overflow

On page 69 (see also p. 47 and 50) it is proposed that there be “non-structural floodplain management” in seven of the sixteen Reclamation Districts in the South Delta Water Agency (SDWA). This apparently means no levees. Two more districts, including an urban district, would also be inundated by any adjacent flood plain overflow. This was never discussed with SDWA. Furthermore, the SDWA Flood Conveyance plan is ignored. This is a prime example of “brainstorming” by people outside the Delta without examination of efficacy and consequences. These lands are above channel water level except during floods. They have an area-wide slope from south to north and drain out quickly after a flood if flooded. They are levied farm lands. If not protected by levees some portions would flood on average about once in ten years and other portions once in fifty or more years. There would be no wetland habitat. Any upland habitat would be dry and subject to fire. Minor floods would cover county roads including the south end of Airport Way which is a major travel route that crosses the river. Major floods would inundate several large dairies and flood rural housing beyond the reclamation district boundaries. The proposal would provide no benefit that is not better provided by the SDWA Flood Conveyance Plan which includes increasing the flood conveyance capacity of the Paradise Cut bypass.

The Strategies do not include the restoration of natural flood overflow during major floods onto about 100,000 acres of existing dedicated wildlife refuges and other wetlands in the Los Banos area. The flat terrain lends itself to water retention for transient storage. A U. S. Corps reconnaissance survey established that up to 200,000 acre feet of flood water could be retained until the river went down. It might be possible to transfer some of this to storage.

## The Delta cannot be preserved if there is an isolated canal

The Vision Plan does not explain that a major cause of Delta degradation in the last 60 years has been the very substantial decrease in fresh water inflow to the Delta. Exports from rivers upstream of the Delta and increased consumptive use of water in the watersheds have largely eliminated any effective fresh water inflow from the San Joaquin, Calaveras, and Mokelumne Rivers during summer months of most years. (The San Joaquin inflow has at times been down to about 600 cfs this year, and has been less than needed in the South Delta for farm diversions in many months during the last four years). This low inflow has resulted in increased salinity in Delta channels, and causes stagnant channel reaches where neither salinity nor dissolved oxygen (for fish) can be controlled. The Vision Task Force and others illogically assume that these impacts of low inflow can be corrected by using an isolated canal to further reduce inflow by capturing and exporting most of the remaining Sacramento inflow before it enters the Delta. The canal would also destroy the channel flows that now distribute Sacramento inflow through most Delta channels. They talk vaguely about correcting this impact of low inflow by releases from the canal. Where would that extra canal water come from, how would it be disbursed, and, if the water is available, why is it better to put it in a canal instead of letting it flow into the Delta? To believe that a canal can operate while also restoring and maintaining the Delta as a “special place” is like believing in Santa Claus.

There are no publicly released analyses that show that a canal can be operated during typical summer months of average and drier years without increasing salinity far above salinity standards in most Delta summer months. This would put farmers out of business, and exporters would not want high salinity water taken through the Delta. Furthermore, farmers are the primary maintainers of non-urban levees. When the farm income is lost, the levees will not be maintained, and failed levees will not be restored. This will lead to a salty open water Delta. It will not be much better than San Francisco Bay for endangered fish habitat.

Page 55 discusses “adaptive management”. Building a canal is a very expensive, irreversible measure. It could only adaptively manage the tradeoff between preserving the Delta versus sacrificing the Delta for exports. It can do nothing to increase overall water supply.

The Strategic Plan also does not discuss or acknowledge the enormous havoc that a canal would have on the Delta and its preservation as a “special place”. It would necessarily go through the Delta and divide it into two parts. It would sever waterways, roads, farms, irrigation systems, drainage systems, recreational boating routes, vistas, evacuation routes, utility lines and pipes, etc., and it would increase flood levels south and east of the canal. It would be vulnerable to the same seismic, wave erosion, seepage problems, etc. as would upgraded nearby levees.

## The non-canal alternative is ignored

The Comprehensive Water Management Plan which was developed and presented by in-Delta experts solves many problems without the costs, construction times, irreversible features, uncertainties and havoc that could be caused by a canal. It would provide an Old River Corridor which would keep all San Joaquin fish away from fish screens and exports. It would provide a means for eliminating the “dead end” problem with the existing export screens. Sacramento fish that would still be screened in the South Delta could be provided with a pumped flushing flow past the screens. This flushing flow with its screened fish would then be discharged into the old River Corridor. If multiple levee failures ever caused Bay water to reach the Central Delta, it could be pumped back to the Bay via the Old River Corridor.

No plan, including a canal, can guarantee that there will never be levee or canal bank failures. The In-Delta Group’s Plan would minimize that risk and prepare for a quick repair of key levees so that export and in-Delta water needs can be restored within about a year.

The In-Delta Group’s Plan covers much more, including measures to reduce peak flood inflows. However, this critique focuses on the reasons why this plan is a much better alternative than a canal plan.

### Governance

Other sections of the Vision Strategy deal with how a Vision Plan would be refined, and how its implementation would be governed, and who would pay. The choice is like the choice between the efficiency of a dictatorship and the protections of a democracy. We need a democratic solution. We cannot agree to a governance system in which the people who work and live and produce food, and recreate in the Delta would have little effective voice. We have already seen that people outside the Delta think they know best how to manage the Delta. And we don’t want the DWR to decide whether farmers are the primary beneficiaries of farming, or whether there is an overriding social interest in the production of food, and in the future price of food if we don’t have enough water to grow enough food.

It is suggested that we should trust that the SWRCB will have the wisdom, the knowledge, and the political independence to protect the Delta from exporters, and that the DWR and USBR will abide by SWRCB mandates. There is no basis for such trust. For example, the Congress authorized the CVP with a stipulation that no water would be delivered until a valley drain was built. We still have no drain. The SWRCB stipulated that compliance with salinity standards by DWR and USBR is a condition of their export permits. The exporters have not complied. DWR and USBR alleged to the SWRCB again this year that there was no way they could comply. The SWRCB did not then enforce the requirement. SDWA and DWR and USBR technical personnel know and have described how the standards could be met, and SWRCB is aware of that fact. Until very recently, DWR has widely and frequently distributed forecasts of South Delta channel salinity which predicted that salinity standards would be met. They knew that these forecasts were wrong; as much as 40% below measured salinity. DWR and SDWA engineers have known for a long time that the model used to make these erroneous forecasts was wrong because it was incorrectly calibrated. These are just examples of many reasons for distrust. We have cordial relations with DWR and USBR engineers. It is the organizations that

we can't trust.

### Conclusion

We do not criticize the individual members of the Task Force. They were given a largely impossible assignment and supplied with erroneous and misleading information. They were not provided with analyses that would reveal what is and what is not physically feasible.

If billions of dollars are spent on a canal, it will be an irreversible monster that cannot preserve the Delta and cannot increase the state's developed water supply. The population has already outgrown the developed water supply to a degree that makes environmental protection and development of an adequate water supply as difficult as it is urgent. We cannot do it with a canal. The alternative proposed by the In-Delta Group would move us in the right direction with less time, less cost, more adaptability, and more potential for further progress.