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BCDP Comments
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RE: COMMENTS AND QUESTIONS ON THE BAY DELTA CONSERVATION PLAN (BCDP) AND RELATED EIR/S

The City of Rio Vista occupies a pivotal place in terms of the California Delta. It is the western transportation gateway to the Delta and serves as an important access portal and regional economic and infrastructure support center for western Delta agriculture, the gas well and mining industry there, and recreation and boating enterprises in the Delta. Furthermore portions of the City and its population are vulnerable to flooding by the Sacramento River.

In light of these conditions, the City and its citizenry and its regional population have a long history of involvement in planning and governance of the Delta including membership and participation in: the Delta Protection Commission; the earlier CalFed program; the Delta Vision program; among others. Thus the following City comments about the proposed Bay Delta Conservation Plan (BCDP) and its associated Environmental Impact Report are of necessity regional as well as local in character and based on long experience and understanding of Delta economic circumstances as well as environmental concerns.

Goals

A primary goal of the BDCP is to ensure a reliable water supply “for people, communities, agriculture, and industry” (draft BDCP EIR/S, p.2-1). We are impelled to ask “Reliable water for whom?” The plan calls for removal of large amounts of water from the Sacramento River north of Rio Vista. Setting aside provisions to modify habitat for fish and other organisms to adapt to changes in river flow and water quality, the Plan and its EIR/S do not provide information from which the City of Rio Vista can infer a more reliable future water supply for itself and the surrounding region of human activity. Comments below indicate local water quality may decline with the implementation of the plan. What modifications to the plan does DWR intend to develop to ensure a long-term reliable water supply for Rio Vista and Agriculture in the region?

Salinity Impacts

The Plan’s proposed preferred alternative of Twin Tunnels would remove large amounts of fresh water up-river from Rio Vista and transport it to intakes of the State Water Project and Central Valley project for export south. This proposed system would facilitate the greater intrusion of salt water into the Delta than is currently the case. The increase in salinity in the Delta in general, and near Rio Vista in particular, is of great concern to our community. Figure 8-5 of the BDCP EIR/S clearly indicates that higher salinity level (lines of 1000 parts of chloride per million parts
of water) has been increasingly moving approximately 3-15 miles farther east into the Delta to approximately Rio Vista (from the 1950's to 1990). It will intrude further still under the proposed preferred alternative.

East and north of Rio Vista many new vineyards have been planted. The region south and west of Rio Vista is experiencing a growth of new high value agriculture including new development of high quality wine vineyards. There is also promise of olive orchards, almonds, and other tree crops. Under existing current drought conditions increased salinity is already threatening this emerging agricultural economy. Salinity levels in the Sacramento River are now several orders of magnitude above the 1,000 micro-siemans/centimeter threshold for irrigating grapes and will increase throughout the summer.

It is very worthwhile noting that BDCP impacts on Sacramento River water quality will affect the regions west of the Delta and not only in the statutory Delta. The Plan and its EIR/S do not address these impacts.

The BDCP is clear on the impending impacts of climate change. The interaction of climate change with the proposed export system will greatly increase salinity concentrations during future droughts. However, the plan and its EIR/S do not address how balancing local reliable water quality with environmental constraints and water exports will be achieved.

Although the report offers an illustration of the salinity levels into Delta from 1991-2010, a serious lack of the BDCP and its EIR/S are figures showing projected future salinity levels and how they will vary under projected future climate scenarios and project alternatives. Of particular importance are illustrations of future salinity under drought conditions. For example, an illustration showing projected "Salinity Intrusion into the Delta", with the preferred water conveyance facility for the BDCP (Alternative 4 – Twin Tunnels Modified) from 2010 through 2060 vs. the proposed alternative Sacramento Deep Water Channel enhancements and shorter tunnel), particularly near ranches and farms immediately south and north of Rio Vista.

Furthermore, the plan fails to project the increased regional reliance on ground water as local river water supply decreases in its reliability (contrary to the stated goal of the plan). In the long term, implementation of the plan threatens a repeat in the Delta the problems of ground water extraction in the southern San Joaquin Valley.

**Budgetary, Financial and Administrative Impacts**

The massive environmental changes proposed by the BDCP will impose huge planning and infrastructure development and modification burdens on Rio Vista and other Delta Communities. Adjusting to the changes in local and regional economic activity, modifying existing and developing new infrastructure to cope with changes in transportation and flood protection while at the same time likely reducing local tax revenues will impose significant and possibly irreversible financial burdens on the city and its region. The Plan and its EIR/S are woefully inadequate in describing these impacts and the solution to avoiding or mitigating them.

This silence about local fiscal impact is made more serious by the great deal of uncertainty inherent in the budget for the BDCP. Out of the estimated $24.7 billion of funding (in 2012 dollars) to implement the BDCP, the funding structure includes at least $16 billion from the State Water Contractors and about $6.5 billion from a proposed bond issue to be considered on the November 2014 ballot. The BDCP proposes that all of the State Water Contractors funds would be used entirely for the conveyance system and that the state bond issue would be used not for construction but for mitigation purposes.

2
Many reports, committees, and organizations such as: the Legislative Analyst’s Office report entitled “Governance and Financing of the Bay Delta Conservation Plan,” dated August 13, 2013; the testimony presented at the recent State Assembly Accountability and Administrative Review Committee on February 12, 2014; and non-profit organizations such as Restore the Delta believe that the total project cost would be more in the range of about $50 - $60 billion when all project costs, enhancements, mitigation and bond financing is factored into the BDCP budget.

The City of Rio Vista believes the Plan cannot be valid with uncertain costs and funding stream. The BDCP is not a valid plan with high levels of budget uncertainty. It will not be valid without a budget that removes uncertainties and adequately addresses and resolves the differences in estimated cost with a mechanism that ensures that such estimates should be kept up-to-date before implementing any project activities.

Even if the budget were more reliable, the plan does not make explicit contingencies if one of the proposed state bonds does not pass. Contingencies and alternatives are simply not provided for providing funds for required mitigation measures like flood protection in the case that proposed and iffy bond measures do not pass.

In large scale, long term projects mitigation and enhancement costs often prove much more costly than current estimates. If this were to be the case with the proposed conveyance system (i.e. for the Preferred Alternative 4 – the twin tunnels concept), how would the BDCP proceed without sufficient funds?

Flooding Potential Caused by Modification to Yolo Bypass

Because of its vulnerable location immediately south of the Mellin Levee and in the proximity of the Yolo Bypass and the Sacramento River, and because of a combination of daily tidal action from the San Francisco Bay and winds from the southeast, the City of Rio Vista is very concerned about its potential for significant flooding during high water events with additional risks caused by the BDCP and the proposed Yolo Bypass Fisheries Enhancements. The City also believes that the Plan and associated EIR/S will cause an economic impact on the local economy from agricultural land being converted to habitat in the Yolo Bypass area.

Besides providing approximately 55,000 to 65,000 acres of additional tidal restoration and habitat opportunities for endangered fish, we believe the other main purpose of the Yolo Bypass expansion is to relieve pressure on upper Sacramento River levees (near West Sacramento) and causing some of those high event flood waters to enter the southerly Sacramento River and Delta areas immediately adjacent to Rio Vista.

It is our understanding that the BDCP and all of its proposals are based on an out-of-date 2010 flood model. Also, the draft “Lower Sacramento River/ Delta North Region” maps developed by the California Flood Safe program in 2013, provide minimal information on the flood potential and improvements needed to protect the levees and waterfront areas in Rio Vista.

Particular levees and locations that the City is concerned could be impacted by increased flooding potential as a result of the BDCP include:

Mellin Levee
In March 2013, the Mellin Levee located immediately north of the City of Rio Vista was inspected by the U.S. Corps of Engineers and was rated as “minimally acceptable.” It is our understanding that this levee needs to have a major expansion to provide the City of Rio Vista
adequate flood protection, particularly from the proposed Yolo Bypass Fisheries Enhancements and improvements to Cache Slough (Conservation Zone 2).

The draft Plan and EIR/S are silent on the need for such protection should the plan be implemented. Below are specific flood threats posed by proposed modification put forth in the BDCP and not addressed in the EIR/S.

Army Base Site
The former Rio Vista Army Reserve Center site contains 28.16 acres, has two-tiers that rise from the Sacramento River to about 30 feet above sea level. It is located in the southeast portion of the City of Rio Vista, between Beach Drive and the Sacramento River (A.P.N. 0049-320-060). The Federal Emergency Management Agency (FEMA) 100-year Flood Hazard Zone maps indicate that the southeasterly edge of the lower tiered portion of the site is partially located in an “Area of Special Flood Hazard” at about the 10-11 foot elevation above sea level.

This site is an important resource for future economic development in Rio Vista. The Plan does not provide flood protection for this site.

Downtown and Residential areas
In 1986, the easterly portion of downtown Rio Vista (near the Helen Madere or Rio Vista Bridge and Front Street properties) as well as residential areas along Edgewater drive were flooded from an approximately 65 or 70-year flood event. Projected sea level rise along with levee modifications of river drastically increase flood risks in and near Rio Vista. It is a serious oversight of the plan that these risks are not described and considered.

Highway 84
Highway 84 north of Rio Vista is an important local thoroughfare for local industry and provides access to Ryer Island a local agricultural prosperous region. Serious flooding will be exaggerated by proposed modifications to Yolo bypass. The Plan and its EIR/S are silent in addressing this impact.

Highway 12 Traffic Impacts
Highway 12 from Lodi-Rio Vista-Suisun City remains one of the most heavily congested and dangerous state highways in the Delta, with the existing Highway 12/Front Street underpass also very vulnerable to a 100+ year flood event. The recent State Route 12 Corridor Study (completed by Solano Transportation Authority and Caltrans in 2012) recommended the long-term need to improve this key highway from I-5 to I-80 to a 4-lane divided highway to meet projected regional traffic demand, including a new high level Rio Vista Bridge as well as the widening or replacement of the other two bridges along Highway 12 from Rio Vista to I-5 (i.e. the Mokelume and the Potato Slough bridges).

Highway 12 is also the only east-west corridor providing access to the proposed Delta Research Station proposed at the former Army Base site. About 150 state and federal research scientists and staff would be relying on improved, safer and reliable access to this project site as well as visitors to a proposed Delta Interpretive Center, commencing as soon as 2017-18.

Table 19-9 of the Transportation Chapter of the BDCP identified SR 12 (Rio Vista Bridge) segment as being mitigated with TRANS 1-a and TRANS 1-c mitigation measures. TRANS 1-c requires that “Prior to commencement of construction activities affecting transportation facilities, the BDCP proponents will make a good faith effort to enter into mitigation agreements with affected state, regional, or local agencies (“affected agencies”) to verify the location, extent,
timing, and fair share cost to be paid for capacity enhancements to the identified roadway segments specified in Table 19-9.

Table 19-25 of the BDCP identified SR 12 (Rio Vista Bridge) as currently having a "LOS C" threshold (970 vehicles per hour). In fact the SR-12 Realignment/Rio Vista Bridge Preliminary Study, completed by the Solano Transportation Authority in September 2010, determined that the bridge, a key east-west Delta bridge, is currently a Level of Service "F" (excessive delays) (Pg. 16) and that only with a new 4-lane high level bridge would it operate at LOS "D" (tolerable delays) by 2030. The serious problems along Highway 12 that will develop because of the BDCP need to be understood and addressed before the proposed implementation. Vague assurances of "good faith efforts" are not sufficient, especially under vague and uncertain budget conditions.

Because of new traffic impacts resulting in unacceptable level of service from the construction and operation of the proposed conveyance systems (and related activities), the BDCP Mitigation Plan must be regarded as inadequate without appropriate agreements and committed funding with Caltrans, the City of Rio Vista and the three adjoining Highway 12 transportation authorities (i.e. Solano, Sacramento and San Joaquin) to develop and implement a mitigation plan before the proposed project implementation.

Also, the Plan and its EIR/S must address how the export of the substantial amount of soil from the excavation of the twin tunnels, particularly from trucks using the Highway 12 Corridor between Lodi and Suisun City would be accommodated. Those impacts must be more fully addressed and viable proposals for mitigation developed before in the Final Plan and its EIR/S can be considered adequate.

**Alternatives**

Rio Vista's comments on assessments of BDCP alternative project plans may be broken down into comments on local and statewide alternatives. First, we will mention specific local concerns.

It does not appear that the Plan and its EIR/S authors considered alternatives to the Yolo Bypass Fisheries Enhancement to reduce the potential for flooding in the lower Delta near Rio Vista as well as providing improved habitat for endangered fish. Available options are: not flooding additional Yolo and Solano County agricultural land, but providing new fish screens; operating a new Fremont Weir gate more frequently; and providing enhancements to the Sacramento Deep Water Channel are there other options available that could provide increased enhancement for covered species?

On a more general level, our observations are that the Bay Delta Conservation Plan is the result of a proposal to facilitate enhanced water exports from the Delta while attempting to mitigate very serious and complicated environmental problems caused by the operation of the current water export system. The focus of the Plan is based on the continuing operation, as they now exist, of the State Water Project (SWP) and Central Valley Project (CVP) and the water districts and users they supply. The two explicit goals of the proposal are: (1) to create a water supply for these two great water transfer systems unencumbered by problems resulting from legal and legislative responses to the environmental damage caused by their current operation and to make them more secure from threats of levee failure and the effects of climate change; and, (2) to correct environmental conditions that threaten vulnerable species in the Delta and protect them from future damage from system operations. In short, the goals are to create a more reliable water supply for the CVP and SWP and protect and enhance the Delta environment.
The proposal is based on the assumption that reliability in California's water supply is only to be achieved by modifying the existing conveyance system to remove large amounts of fresh water from the Sacramento River in the northern reaches of Delta, allowing greater intrusion of seawater into the Delta, modifying selected levees, and removing affected farmland from production, and establishing environmental reserves. Thus the conveyance systems would be accompanied by massive environmental changes in the region presumed to be consistent with protecting and enhancing the situation of selected species but also wreaking massive havoc on local economies and human activities. In a sense, it is a proposal to modify the existing design principles for the SWP and CVP: to reinstate the equivalent of a peripheral canal considered and defeated by the voters in 1982. In the proposed BDCP, the preferred alternative would not be a canal, but very large underground tunnels. The only other alternatives considered are variations on a through Delta conveyance system of tunnels or surface water canals.

The a priori assumption of the alternative selection process was, and is, that reliability in water supply for the users of the SWP and CVP could only be cost effectively achieved by their continuing operation even though a major factor in the environmental degradation of the Delta has been and would continue to be the continuing export of water on the order of 50% to 60% of the inflow to the system. It appears that this assumption has not been thoroughly and systematically examined in the draft BDCP or its Draft EIR/S, nor have reasonable alternatives based the viability of non-conveyance investment been considered.

Thus, at the outset, alternatives were excluded from consideration that would have immediate second goal impacts of improving water flow through the Delta and holding off salinity intrusions and reducing takes of endangered species by reducing flow through pumps. This is a serious oversight and creates a de facto inadequacy of the BDCP EIR/S.

Since the BDCP process began, almost a decade ago, great progress has been made in technology and systems for the local capture, storage, recycling and distribution of water in urban settings. For example, Andy Lipkis, founder and president of Tree People, an urban forestry and water conservation NGO in Los Angeles, pointed out at the 2010 meeting of the American Association for the Advancement of Science in San Diego that with massive investment in prototype technology and systems his organization was designing and operating with the support of the Metropolitan Water District, Los Angeles could be entirely self-reliant in water on its 10 inches of annual rainfall.

Investing in new technologies for local capture and supply while also investing in new statewide large scale storage could drastically increase the reliability of statewide water supply and reduce the impetus for massive untested environmental modification of the Delta. Alternatives based on this sort of approach which do not rely on through Delta conveyance were not considered.

Other alternatives to be included in the draft BDCP must also include investment strategies such as those proposed by U.S. Representative John Garamendi's "Comprehensive Water Plan for All of California" released March 28, 2013. His proposals epitomize what is known as a "portfolio approach" encompassing a coherent set of diverse actions that lead to distributed and reliable statewide water system with much reduced dependency on Delta water. In his white paper, Congressman Garamendi states that the BDCP "... does not create any new water nor does it provide the water and the ecological protection that the Golden State must have."

In his plan he proposes:
• Providing more upstream storage facilities such as the 1.9 million acre-foot Sites Reservoir in Colusa County as proposed jointly by U.S. Representative Garamendi D-Fairfield and Doug LaMalfa, R-Richvale;

• Raising Shasta Dam to provide more fresh water in the Delta later in the season;

• Including an additional alternative conveyance system providing enhancements to the 25-mile long Sacramento Deep Water Channel with improvements such as intakes and fish screens. This could allow an additional 3000 cfs of Sacramento River water to flow south to a 12-mile long pipe beneath the Sacramento and San Joaquin Rivers into the existing Delta Channels that lead to the Tracy pumps. The threatened Delta fish could be protected by sealing the channel from the Delta. This alternative conveyance system would also substantially reduce the approximately 22 million cubic yards of tunnel muck that would have to be stored, barged or trucked to appropriate locations; and

• New desalination plants to convert irrigation run-off and ocean saltwater into fresh water using the latest technology to lower costs. [For instance, recent news articles have suggested the use of solar to recirculate and desalinate irrigation run-off into reusable farmland water at a quarter of prior costs by using a “solar thermal desalination” process invented by the WaterFX Company, as well as the use of new desalination filter material called “Perforene” that was just patented in 2013 by Lockheed Martin and is also expected to substantially reduce the cost of desalination to a fraction of prior such technology].

It may well be that the $25 to $50 billion estimated BDCP investment distributed statewide in local capture, storage and recycling technologies would preclude even the desirability of the construction of a smaller 3000 cfs conveyance and might lead to reductions in water flows to the Tracy pumps. Such an approach of reducing or even eliminating Delta imports in the long term (50 years or more) and implementing proposed bond funding for large scale storage, environmental restoration, levee strengthening, and better management of Delta resources would enhance, and put on a truly equal footing, efforts to achieve the second goal of the BDCP. It would create a truly resilient statewide water system. Not incidentally, such an approach would free up the enormous energy consumption now used by the SWP and CVP and make great contributions to the availability of "green" energy for other uses. The energy savings need to be included in any assessment of non- or reduced-conveyance alternatives in the BDCP.

As the BDCP process continues, it is understood that before the federal EIS document can be fully completed, NEPA requires that a Section 7 Biological Opinion be conducted separately by the USFWS and that a “Least Environmentally Damaging Preferred Alternative” (LEDPA) be conducted and approved by the federal agencies.

We believe this requires that an alternative conveyance system such as described above in U.S. Representative Garamendi’s comprehensive water plan and described as “enhancements to the 25-mile long Sacramento Deep Water Channel with improvements such as intakes and fish screens ...and a 12-mile long pipe beneath the Sacramento and San Joaquin Rivers into the existing Delta Channels that lead to the Tracy pumps,” be included as an additional alternative for analysis in the LEDPA analysis (plus adding this alternative into a supplemental EIR that should be prepared before the CEQA document is certified).
Furthermore other approaches that would increase state water reliability by investing in local technologies and systems statewide and which would increase flows through the Delta and not decrease them as the current alternatives would, must be considered.

**Governance**

The above comments, especially those on alternatives, reflect a continuing concern of Rio Vista of the City's relative lack of voice in the governance of the BDCP process. If implemented, the BDCP proposals clearly would have enormous impacts on Rio Vista and its region. Yet the structure of the governance of BDCP and its proposed implementation structure are based on overwhelming control by agencies with interests outside the region. Indeed these are the funders of the project and the lead agencies that administer the export of water. Not only is Rio Vista excluded from governance but also many other local agencies in the region are also excluded. The project is being developed and funded outside the legislative budget process and many Delta local agencies and their legislative representatives have been given minor voice in the development of the current plan and in the proposed future governance structure.

The opportunity for Rio Vista to comment on decisions reached by others is not sufficient or appropriate participation in project of this magnitude of local importance. As a local entity Rio Vista and its citizens have special unique knowledge and concerns of the Delta and the people and communities in it. The plan and its EIR/S must provide assessment of alternative governance structures to ensure local concerns and knowledge are included in substantive ways. The EIR/S is inadequate in considering these alternatives.

**Summary and Conclusion**

We support the need to develop a comprehensive water program for California to achieve greater reliability in water availability. We also believe strongly in the second goal of the BDCP and that protecting and enhancing the Delta be truly on an equal footing with the first goal of a reliable water supply. We believe the inclusion of an additional alternative conveyance system proposal such as that recommended by U.S. Representative Garamendi in his “Comprehensive Water Plan for All Californians” must be included in the development of the Final Plan and Final EIR/S. Consideration of widespread distributed investment in local capture, storage, reuse, and distribution is also warranted along with programs to correct past practices, which have damaged the Delta ecology.

We also support an appropriate governance structure for the BDCP that provides Rio Vista and other local agencies a rightful significant place in the decision making structure.

On a more detailed level, alternatives to the Yolo Bypass Fisheries Enhancement and Cache Slough improvements need to be included in the plan to reduce flooding potential on Rio Vista.

The plan needs to include more detailed and reliable strategies and planned actions to ensure that communities like Rio Vista have reliable access to clean and sufficient water from wells and groundwater and that local farms, even those not in the Delta but adjacent to it, do not suffer from BDCP actions.

The Plan also needs to provide assurance that water quality and salinity levels, in particular, do not impede the development of the local farm economy of high value crops both in the statutory Delta and for non-Delta farms dependent on the Sacramento River.
A greater recognition of the current condition and importance of improving Highway 12 through Rio Vista and the entire Delta contribution should be addressed in the Plan.

The recreational and agricultural communities need to be protected. Salinity levels in the Delta should be decreased. Science that measures and informs decision-makers must govern the process.

If you have any questions, please contact me at (707) 374-6451 Ext. 1105, or Dan Christians, Adjunct Staff Member at (707) 580-0905 (cell phone).

Sincerely,

[Signature]
Norman Richardson, Mayor
City of Rio Vista

Cc: U.S. Representative Garamendi
    State Senator Lois Wolk
    State Assembly Member Frazier
    City Council
    City Clerk
    City Manager
    Army Base Steering Committee