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BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

HEARING IN THE MATTER OF CALIFORNIA DEPARTMENT OF WATER RESOURCES AND UNITED STATES BUREAU OF RECLAMATION REQUEST FOR A CHANGE IN POINT OF DIVERSION FOR CALIFORNIA WATER FIX	**PART 2 SUR-REBUTTAL TESTIMONY OF RUSSEL VAN LOBEN SELS ON BEHALF OF LOCAL AGENCIES OF THE NORTH DELTA**

I. INTRODUCTION

In 1876, my great grandfather came to the Delta and began to reclaim and farm land in the Courtland area. Today, my brother and I farm some of the same land he did. Except for four years of college at Stanford where I earned a bachelor's degree in economics and three years in the U.S. Army, I have lived in the Delta and have been farming for 48 years.

My brother and I are fourth generation farmers and own and operate Amistad Ranches. My brother's son joined the company several years ago and represents the fifth generation. This year, during the pear harvest two members of the sixth generation worked during their summer vacation. We farm approximately 2,400 acres of pears, tomatoes, corn, wheat, safflower, alfalfa and wine grapes.

Currently, I am the VP/CFO of Amistad Ranches, CFO/Secretary of Esperanza Enterprises, and a Trustee of Reclamation District 744. I also chair the Delta Caucus, an informal organization comprised of the five Delta County Farm Bureaus, which joined together in 2008 to protect, promote, and enhance the viability and resiliency of Delta agriculture. I participated as an alternate in the Delta Vision Blue Ribbon Task Force, and more recently participated in the Delta Dialogues process hosted by the Delta Conservancy. Through these and other processes and my experience as a farmer in the Delta, I have become familiar with the operation of the current state ("SWP") and federal ("CVP") water diversions in the Delta, as well as the project proposed in the Petition that is the subject of this Hearing.

I previously provided testimony for LAND in Part 1 pertaining to injury to legal users of water as well as Part 2 pertaining to public interest considerations. (LAND-30, LAND-130.)

II. TESTIMONY

As explained in my Part 2 Case in Chief testimony, the Delta Tunnels (a.k.a. "California Waterfix") would impact the lives of Delta people on many levels, and therefore would not be in the public interest. This testimony focuses on the inadequacy of disclosure and mitigation for key effects of the project that would affect Delta communities, as described in the Administrative Draft Supplemental EIR ("ADSEIR") (SWRCB-113). (See also LAND-309 [LAND Comments on DSEIR].) Since no new mitigation measures appear to be included in

the ADSEIR, this testimony references the adopted Mitigation Monitoring and Reporting Program ("MMRP") (SWRCB-111). In addition, I explain my concerns with the possibility of expanding the conveyance capacity beyond 9,000 cfs and my concerns about the high level of coordination between the CVP and SWP that the revised Project would require.

A. Impacts of the Revised Project Remain Unacceptable and Mitigation Fails to Protect the Public Interest

1. Water Quality Mitigation Is Inadequate to Protect the Public Interest

As explained in previous testimony (LAND-30, LAND-130), communities and farms in the Delta rely on high quality surface water currently available from the Sacramento River and other sloughs in the Delta. The CEQA Findings for the Project adopted in July 2017 do not identify water quality impacts such as salinity and harmful algal blooms as significant and unavoidable. (SWRCB-110.) But I believe the mitigation proposed for these and other water quality impacts would be ineffective. For instance, Impact WQ-11e, Implement Real-time Operations, Including Adaptively Managing Diversions at the North and South Delta Intakes, to Reduce or Eliminate Water Quality Degradation in the Western Delta (SWRCB-111, pp. 2-13 to 2-14) appears unlikely to be effective. Mitigation Measure WQ-11e states that "Modeling results for Alternative 4A indicate water quality degradation for electrical conductivity (EC) in the Sacramento River at Emmaton in the months of July through September of below normal, dry and critical water year types, relative to the No Action Alternative (ELT)." (SWRCB-111, p. 2-13.) The mitigation measure commits to meeting various Water Quality Control Plan objectives, which are based on averages, and references management of upstream reservoir releases to address water quality issues when those objectives do not apply.

As a farmer dependent on high quality water, this kind of vague mitigation measure is not reassuring. No additional compliance points are provided for the area in which I farm. Moreover, testimony presented by the North Delta Water Agency indicates that modeling results that show an average increase in salinity at the North Delta Water Agency's Three Mile Slough compliance point of 7 percent on average, and there are also a lot of times when the increase in salinity, based on the model, would be quite a bit higher than the 7 percent

average. (See, e.g., NDWA-500 through NDWA-504.) As a farmer, I depend on good quality water in real time, meaning at the time my crops need it, not on any average.

The mitigation measure for salinity (WQ-11e) also makes a passing reference to microcystis, stating: "This mitigation measure is consistent with the adaptive management and real-time operations that would be utilized to minimize the project alternative's water quality effects to Microcystis in the summer months. This mitigation measure also is consistent with the Other (Non-Environmental) Commitment to address reverse flows in the Sacramento River at Freeport that may occur with the project alternative, which are most likely to occur in low flow months of dry and critical years." (SWRCB-111, p. 2-14.) I believe that removing significant portions of the flow of the Sacramento River also could increase the incidence of microcystis bloom formation in the same time periods when modeling indicates higher average salinity, July through September. (See, e.g., NDWA-500 through NDWA-504.) For the impact of increases microcystis blooms (WQ-32), no specific mitigation is provided other than "water flow through Delta channels would be managed through real-time operations." (SWRCB-102, p. 8-979 to 8-982.) These vague and unenforceable measures provide no assurances that water quality for irrigation and other beneficial uses by the public will in fact be protected.

2. Groundwater Mitigation Is Inadequate to Protect the Public Interest

The ADSEIR claims that the changes to the Project footprint of the tunnels will "avoid crossing under the community and to avoid affecting municipal water wells." (SWRCB-113, ADSEIR, p. 3-7; see also DWR-1303.) Yet the ADSEIR fails to provide any information supporting this opinion, or to address whether the newly proposed tunnel alignment and Project changes would result in impacts to different water and groundwater resources. Neither does the ADSEIR include analysis of the hydrogeological effects of the tunnels on wells in the area surrounded by the newly aligned tunnels and facilities. (SWRCB-113, ADSEIR, Ch. 7.)

Similarly, the ADSEIR/S does not identify existing wells in the proximity of the new tunnel alignment, or any analysis of impacts to well owners even though that information is readily available. (See SJC-70, SJC-72R, SJC-73, SJC-74, SJC-75.) Instead, the ADSEIR broadly concludes that the new alignment will either have beneficial effects (ADSEIR, p. 3-7) or

no effects (ASEIR, p. 7-1) on groundwater resources. This approach is not credible as no investigation has been done with respect to wells and other water resources impacted by the new alignment. The Project footprint has significantly changed, yet DWR has failed to consider the impacts of those changes. (See SJC-327R, SJC-328, SJC-329, SJC-330.)

The ADSEIR also fails to disclose or analyze how the changes in tunnel muck placement would impact groundwater wells. (See SJC-328.) Further, there is no information regarding the location of borrow pits, which will be necessary at each intake site, per the Incidental Take Permit ("ITP"). (See SWRCB-107, p. 17.) The ADSEIR does not disclose where the material will come from or provide maps of their potential locations. Both Project features could adversely impact groundwater wells and other resources, yet the ADSEIR does not even address, let alone analyze, them.

DWR has also failed to include any mitigation measures to address the significant groundwater impacts of the Project. Specifically, the duration of groundwater monitoring under Mitigation Measures GW-1 and GW-2 (just 5 years into operation) is far too short to determine whether changes to groundwater are occurring as a result of the Project. (See SCWA-302; see also SJC-227; Hearing Transcript, August 3, 2018, pp. 87–91.) DWR should be required to monitor groundwater throughout Project operations and commit to addressing any reductions in groundwater recharge to the adjacent subbasins.

As explained in previous testimony, I am concerned about project impacts on local wells and irrigation and drainage systems during construction and operation. (LAND-30, LAND-130, and cited references.) Nothing the ADSEIR allays these concerns. Moreover, the decision to move the tunnel alignment away from the town of Hood indicates that the Petitioners may believe that the tunnels would interfere with groundwater uses. The failure to analyze and provide mitigation for these impacts indicates a lack of concern for local communities, agriculture and the public interest.

3. Agricultural Impacts Would Increase and Mitigation Is Inadequate to Protect the Public Interest

The revised Project described in the ADSEIR would require the permanent conversion of 684 more acres of important farmland than the approved Project. (SWRCB-113, ADSEIR, p. 14-1.) The ADSEIR attributes this increase primarily to changes in tunnel muck storage and the new Byron Tract Forebay construction. (SWRCB-113, ADSEIR, p. 14-3.) The revised Project would also interfere with nine additional miles of agricultural delivery and drainage systems. (SWRCB-113, ADSEIR, p. 14-5.) The locations of these new impacts are not disclosed. (SWRCB-113, ADSEIR, pp. 14-4 to 14-6.) These agricultural impacts are classified as significant and unavoidable.

The discussion of Impact AG-2 in the ADSEIR does not disclose the broad range of potential impacts on agriculture the revised Project would have. The ADSEIR notes that the conversion of farmland and construction of Project facilities would "create indirect but adverse effects on agriculture" yet does not discuss any of these impacts in detail. (SWRCB-113, ADSEIR, p. 14-5.) There is a passing reference to "effects related to seepage from forebays" as well as "changes to groundwater elevation" but neither of these impacts are analyzed, nor is specific mitigation discussed. (SWRCB-113, ADSEIR, p. 14-5.)

No new or improved mitigation is provided for the significant and unavoidable impacts to agricultural resources in the ADSEIR/ despite the increase in severity of agricultural impacts. (SWRCB-113, ADSEIR, pp. 14-5 to 14-6.) Continuing to rely on the same flawed mitigation measures from the approved Project fails to protect the public interest, given the revised Project's more severe agricultural impacts.

I also do not believe that Mitigation Measure AG-1, the proposed Agricultural Land Stewardship ("ALS") mitigation program will be effective in ensuring impacts to agriculture are actually reduced. Mitigation Measure AG-1 does not provide a clear explanation of the decisionmaking process for determining when the ALS approach will be applied over the conventional mitigation approach that is also suggested, nor does the measure include enforceable performance standards. (SWRCB-111, MMRP, pp. 2-41 to 2-50.) AG-1 appears

to defer out decisions as to the feasibility of the actions it suggests may help mitigate the Project's impacts on agriculture. Mitigation Measure GW-5, which calls for the future development of measures to address seepage, also defers formulation of mitigation such that there is no guarantee that agricultural uses would be protected if the Project proceeds. (SWRCB-111, MMRP, pp. 2-7 to 2-9.)

Especially when combined with water quality, transportation and other negative effects, the Project, even with planned mitigation, would interfere with the ability of the Delta to continue its agricultural productivity. (See, e.g., RTD-301 [Delta Economic Sustainability Plan].) This is contrary to the public interest.

4. Transportation Impacts Remain Severe and Mitigation Is Inadequate to Protect the Public Interest

The revised Project would continue to increase traffic delays and degrade road conditions in the Delta to significant and unavoidable levels, with some changes to the locations of those impacts. (ADSEIRS, Chapter 19 and Appendices.) Previous testimony has established the interference with agricultural and other activities that rely on Delta roadways if traffic levels increased as anticipated during construction of the Project. (See, e.g., SACO-18, SJC-323, Yolo-1, Yolo-8, Yolo-9, Yolo-11.)

The ADSEIR fails to offer any comparison between the approved and proposed Project with respect to levels of service. (See SWRCB-113, ADSEIR, pp. 19-19 to 19-28.) As a result, it is difficult to ascertain whether some segments would have increases in traffic under the proposed Project. The ADSEIR claims that the number of segments with unacceptable levels of service would decrease by 4 roadway segments, and exacerbation of inacceptable pavement surfaces would decrease by 5 roadway segments. (SWRCB-113, ADSEIR, p. 19-1.) As a Yolo County resident and Delta farmer, however, I am concerned that some of the conclusions regarding lesser impacts are incorrect.

For instance, while the ADSEIR claims that "construction traffic to a local jurisdiction's roadway segment with a pavement rating below the threshold stated below would constitute a significant impact" (SWRCB-113, ADSEIR, Appendix 19A, p. 34), two roadway segments with

deficient pavement on River Road and Courtland Road in Yolo County (YOL 02 and YOL 03, shown in YOLO-4, see esp. slides 3 and 5) are projected to have 520–580 increased vehicles per hour (SWRCB-113, ADSEIR, p. 19-28), yet the ADSEIR determined that there would be no significant effect (SWRCB-113, ADSEIR, p. 19-35). As a result, no mitigation would be provided for effects on these roadway segments. I am concerned that while there would still be a large increase in traffic for these roadways (see SWRCB-113, ADSEIR, p. 19-28), now no mitigation would be required at all. These roadways are essential for agriculture and the community.

The ADSEIR (Chapters 19: Transportation, 20: Public Services and Utilities, and 25: Public Health) also does not disclose or discuss how increases in traffic would impede emergency responders. (See LAND-188 errata [Testimony of David Robinson].) The Project's traffic increases throughout the Delta would prevent fire departments and law enforcement from effectively responding to emergencies, potentially endangering public health and safety. Traffic was only analyzed considering raw traffic levels and road quality (see ADSEIR, Ch. 19), while utilities were analyzed with an eye towards increased demand (see ADSEIR, Ch. 20). I believe that the Project would interfere with the effectiveness of emergency responders, which would not be in the interest of the local community or workers who may be injured on the job.

5. Cultural Resources Mitigation Is Inadequate to Protect the Public Interest

The ADSEIR incorrectly characterizes important cultural resources in the Delta. Many historic Delta homes, including the Rosebud Rancho, would be destroyed or otherwise damaged by the Project. The ADSEIR incorrectly asserts that the Rosebud Rancho "has lost integrity" and recommends initiating delisting procedures and not applying any mitigation to the site. (SWRCB-113, ADSEIR, p. 18A-2.)

Rosebud Rancho is a 150 year old Italianate Victorian home, located between the Delta towns of Freeport and Hood. (See LAND-309, Exhibit 4, p. 3 [National Register of Historic Places Nomination Form]; see also SACO-4, slide 8.) It was designed by renowned architect, Nathaniel Goodell, for William Johnston in 1868. (LAND-309, Exhibit 4, p. 6.) Once part of a

1,200 acre working ranch with a 400' dock that served as port to ship fresh produce and dairy to the gold fields as well as to San Francisco, it continues to be a private residence and important to the local history and culture of the area. (LAND-309, Exhibit 4, p. 6.) In addition to being a prominent farmer, Johnston was also a founding member of the Grange, a State Legislator and he served with distinction as California Senator Pro Tem. (LAND-309, Exhibit 4, p. 8.) In 1979, Rosebud was accepted by the National Register of Historic Places, citing its magnificent architecture as well as the importance of its architect and prominence of the original owner. (See LAND-309, Exhibit 4, p. 1.)

Contrary to the false information in the ADSEIR, Rosebud Rancho has not "lost integrity", and in fact has been restored to its Victorian magnificence. Following a fire in 1989, a local architect supervised the painstaking work of repairing Rosebud after the fire. After providing photographs and documented details of the restoration it was recertified and in 1993 Rosebud won the California Preservation Foundation's award for Craftsmanship. LAND-309, Exhibit 5 is an excerpt from the tenth annual California Preservation Foundation Awards, including the submitted photographs detailing the perseveration effort. It states: "Their decision to retain as much of the original historic fabric as possible was pursued with an impressive zeal. Burned structural members were retained and encapsulated; burned sections of the original doors and woodwork were repaired with inlays and regrained. This project showed great dedication and skills on the part of all involved." (LAND-309, Exhibit 5, p. 1.)

The ADSEIR conclusions regarding the Rosebud Rancho are unfounded and impacts to this and other irreplaceable Delta resource should not be ignored. The Project's destruction of this irreplaceable historic cultural resource (ADSEIR, p. 18A-2) would not be in the public interest.

B. The Tunnels Design Could Allow for More Than 9,000 cfs To Be Diverted, Further Harming the Public Interest

According to the ADSEIR, the capacity of the tunnels would remain at 9,000 cfs. under the revised project. (SWRCB-113, ADSEIR, p. 3-3 [listing 9,000 cfs capacity].) Newly available information indicates that the tunnels could convey more than 9,000 cfs. For

instance, during the time period under which a single or phased tunnel project was being considered, engineers for the Metropolitan Water District explained that "In order to accommodate a higher flow rate in the tunnels, the original 2015 concept design of the pumping facilities, the facilities included in the Final EIR/EIS was modified. Examples included utilizing larger pumps and deepening the pump well structure to accommodate the larger pumping equipment." (See LAND-309, Exhibit 1, MWD Email, February 2, 2018; see also the 2018 Conceptual Engineering Report ("CER"), DWR-1304, PDF pp. 406-407 [discussing potential to transport up to 7,500 cfs in 40 foot diameter tunnels].) If a 4,500 cfs tunnel can be modified to carry up to 6,000 cfs or more of water, that means the project might ultimately divert up to much more water than the diversions described in the ADSEIR.

Based on my understanding of the demand for Delta water exports, there would be enormous pressure to deliver as much water as possible if a major investment in the tunnels was made. This pressure could be particularly intense if Metropolitan Water District or other participating water districts try to sell Project water to pay back borrowed funds. While current plans may reflect a 9,000 cfs maximum diversion rate, I am concerned that even more water may be diverted in the future if the Delta Tunnels were built. The MWD email and the 2018 CER appear to indicate there is the possibility of increasing exports beyond the design maximum stated in the ADSEIR with certain adjustments.

C. The Participation of CVP Contractors Is Uncertain and the Revised Project Operations Would Be Difficult To Carry Out

The 2018 CER (DWR-1304, DWR-1305, DWR-1306) describes a new Project design where water from the tunnels would be conveyed to a new forebay located in Byron Tract, rather than to an expanded Clifton Court Forebay, as previously planned. (DWR-1304, p. ES-2.) The 2018 CER describes a complicated daily schedule for integration of operation of the proposed North Delta Diversions, the new Byron Tract Forebay, and the existing CVP and SWP pumps in the South Delta. (DWR-1304, pp. 5-5 to 5-14.) These operations appear to be influenced by a variety of factors, including: Sacramento River flows and stage, tides, water surface elevations in the Intermediate Forebay, Byron Tract Forebay ("BFF"), pumping

schedules in the South Delta attributable to the CVP (Jones) and SWP (Banks) pumps and power availability and cost. According to the 2018 CER, this will change current CVP and SWP operations as follows:

- Receiving water from Byron Tract Forebay will require a greater level of daily operational coordination between DWR and Reclamation
- Common scheduling of individual pump operations at both Banks and Jones PP will be needed to manage the water surface elevations and volumes in both Byron Tract Forebay and Clifton Court Forebay and associated conveyance facilities.

(DWR-1304, p. 5-14.)

In my experience with the Delta Dialogues and other Delta processes, it is my understanding that the relationship between the CVP and the SWP to coordinate Delta exports, including responsibility for meeting regulatory requirements, is already very complex. That relationship was formally defined in the 1986 Coordinated Operating Agreement ("COA"). (GCID-1.) Reclamation notified DWR in August 2018 that it is ready to renegotiate the COA. (LAND-310.) Renegotiation of the COA may result in different SWP obligations to satisfy minimum flow, environmental and carriage water requirements. In addition, there appears to be very little willingness of CVP agricultural contractors to participate in funding the Delta Tunnels, possibly because the water costs would be so high. (See SDWA-321 revised.) The additional complexity associated with interoperation of the various SWP and CVP components and proposed in the revised Project decribed in the 2018 CER, combined with the complex existing background conditions, would appear to make successful operation of the revised Project even more difficult than before.

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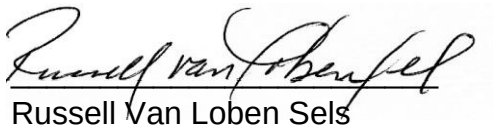
III. CONCLUSION

The changes to the Delta Tunnels project described in the ADSEIR do not improve conditions for Delta communities, and may in fact worsen the Project's impacts. The mitigation and other commitments provided by the Petitioners would not, in my opinion, ensure continuation of healthy and vibrant communities and productive farming in the Delta. As a result, the revised Project would not be in the public interest.

Executed on the 21st day of September, 2018, at Sacramento, California.



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